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March 6th, 2018

Mr. Michael Wilson Executive Director Water & Sewer Authority of Cabarrus County 232 Davidson Hwy Concord, NC 28027

Dear Mr. Wilson:

Raftelis has completed its assignment to develop cost-justified wastewater system development fees for the Water & Sewer Authority of Cabarrus County ("WSACC"). This letter documents the results of the analysis which is based on a cost-justified and industry standard approach for establishing system development fees and is also consistent with the methods for establishing such fee as set forth in North Carolina General Statute §162A Article 8 "System Development Fees". Raftelis is a qualified, financial professional firm that has provided rate and financial consulting to public water and wastewater utilities since 1993, has edited or contributed content for the Seventh Edition of the American Water Works Association "Principles of Water Rates, Fees and Charges M-1 Manual" (a manual that is used by the water industry to set rates, including system development fees), and has calculated system development fees for utilities in North Carolina and across the country since 1993.

Background

System development fees are defined as one-time charges assessed against new development as a way to recover a proportional share of the costs of capital facilities constructed to provide service capacity for new customers connecting to the water and wastewater utility systems. Typically, the cost basis for setting system development fees is based on the major system components, or core system assets, that are necessary to serve, and that provide benefit to, all customers. These components typically include reservoirs, water treatment plants, storage tanks, major water transmission lines, wastewater treatment plants, and major wastewater interceptors.

In general, Raftelis recommends that system development fees should be developed to be consistent with the common legal consideration in setting system development fees in the water/wastewater industry – the Rational Nexus Test. The Rational Nexus test requires that: 1) the need for capacity is a result of new development; 2) the costs are identified to accommodate

new development; and 3) the appropriate apportionment of that cost to new development in relation to the benefit the new development reasonably receives¹.

There are three approaches for calculating water and wastewater development fees that are recognized in the industry as cost-justified² and meet the requirement of the Rational Nexus standard applied by the courts, as described below.

Buy-In Approach

The Buy-In Methodology is most appropriate in cases where the existing system assets provide adequate capacity to provide service to new customers. This approach calculates a fee based upon the proportional cost of each user's share of existing plant capacity. The cost of the facilities is based on fixed assets records and usually includes escalation of the depreciated value of those assets to current dollars. All core assets that provide benefit to the general transmission/collection and treatment systems are included, such as water and wastewater treatment plants, storage, major water transmission mains and wastewater interceptors, and pump/lift stations.

Incremental Cost Approach

The second method used to calculate water and wastewater capital facilities fees is the Marginal/Incremental Cost Methodology. This method focuses on the cost of adding additional facilities to serve new customers. It is most appropriate in a situation where existing facilities do not have adequate capacity to provide service to new customers, and the cost for new capacity can be tied to an approved capital improvement plan (CIP).

Combined Approach

A combined approach, which is a combination of the Buy-In and Marginal Incremental approaches, can also be used when the existing assets provide some capacity to accommodate new customers, but where the capital improvement plan also identifies significant capital investment to add additional infrastructure to address future growth and capacity needs.

Calculation of the System Development Fee

To perform the update of the system development fee calculation, Raftelis requested and was provided with the following data from WSACC staff:

- Wastewater fixed asset data as of June 30th, 2017;
- Outstanding utility debt and associated debt service;
- Construction work in progress;
- Contributed capital;
- Ten-year capital improvement plan;

¹ See the AWWA M-1 7th Edition Manual –System Development Charges, Chapter VII2; pp.324.

² See the AWWA M-1 Manual –System Development Charges, Chapter VII.2; pp.329-330.

- Capacity in existing and future sewer system;
- History of system development fees collected; and
- Inflow and infiltration factor for the wastewater collection system.

When Raftelis was engaged to conduct this study, WSACC had made substantial investments in the existing system to provide capacity to new and existing customers, but also planned several expansion-related projects based on its master plan to address future growth in the next 10 to 20 years. To recognize the existing and future capacity to be provided by the wastewater system, the Combined Approach was used to calculate the system development fees. This involved calculating the fees using the Buy-In methodology and then the Incremental Cost methodology, and finally combining the two approaches. This calculation of system development fees for WSACC covers a planning horizon of ten years.

Buy-In Methodology

To calculate the Capacity Buy-In approach, Raftelis calculated the estimated cost, or investment in, the current capacity available to provide utility services to existing and new customers. This analysis was based on a review of fixed asset records and other information as of June 30, 2017. The depreciated value of the assets was first adjusted to reflect an estimated replacement cost to determine the "replacement cost new less depreciation" (RCNLD) value for the assets. The asset values were escalated using the Handy Whitman Index of Public Utility Construction Costs (for the South Atlantic Region). The RCNLD value of the assets excludes equipment, vehicles, and computer systems.

Several adjustments were then made to the RCNLD value, which were as follows:

• Subtraction of Contributed Assets – Typically, assets contributed by or paid for by developers are deducted from the calculation since these costs were not "paid" by the existing customers. Since WSACC provides wholesale wastewater service, there are no assets contributed by developers. However, in 2003, Charlotte Water contributed several assets with an RCNLD value of \$68.2 million in exchange for 6 MGD of WSACC's treatment capacity. Because WSACC did not pay for the asset itself and does not collect system development fees from Charlotte Water, and because the 6 MGD of capacity is not available to WSACC customers, both the assets contributed by Charlotte Water and the 6 MGD were excluded from the calculation. In addition, when WSACC was formed in July 1992, the merging members transferred all of their former sewer assets to the Authority. Because WSACC took ownership of these assets were included in the calculation

Debt Service Credit - Utilities often borrow funds to construct assets, and revenues from
retail rates and charges can be used to make the payments on these borrowed funds.
Typically, to ensure that new customers are not being double charged for these assets,
once through the system development fee and again through retail rates and charges, the
proportion of the outstanding principal debt that is anticipated to be paid for through retail
rates and charges is deducted from the system development fee calculation. Since
WSACC's debt service payments are recovered entirely through wholesale rates and
charges (and since the retail customers of the wholesale customers are assessed system
development fees for these same assets), the entire balance of WSACC's outstanding
principal debt was deducted from the calculation.

The adjusted RCNLD value was then converted to a unit cost of capacity by dividing the RCNLD value by a basic unit measure of cost per gallon per day (GPD) for wastewater capacity, as shown in Exhibit 1.

	Wastewater		
Adjusted Cost of Capacity	\$143,622,438		
Total Capacity (gallons per day)	20,650,000		
Cost Per Gallon per Day	\$6.96		

Exhibit 1 - Cost per GPD of Core Utility Assets

This measure becomes the basic building block or starting point for determining the *maximum cost-justified level* of the wastewater system development fees. Fees for different types of customers are based on this cost of capacity multiplied by the amount of capacity needed to serve each type or class of customer.

The next step is to define the level of demand associated with a typical, or average, residential customer, often referred to as an Equivalent Residential Unit, or ERU. The level of demand associated with a typical residential customer is often estimated using wastewater design flow rates as specified by the North Carolina Administrative Code Title 15A (Department of Environment and Natural Resources) Subchapter 2T, which states that the sewage from dwelling units is 120 gallons per day per bedroom. However, WSACC completed a Master Plan in 2014, which conducted an analysis and determined that the *average* daily consumption per ERU was 200 gallons per day. To be consistent with WSACC's planning documents and because this number is more conservative than the state guidelines, 200 gallons per day was used as the average daily consumption per ERU for this study. The ERU was adjusted to account for inflow and infiltration (I&I), which was provided by WSACC. Exhibit 2 demonstrates the calculation of the adjusted ERU.

Exhibit 2: Wastewater Demand per Residential ERU

	Wastewater – gallons per day per ERU
ERU	200
Inflow and Infiltration Factor	1.28
Adjusted ERU	255

The calculation of the system development fee is based on the cost per gallon per day multiplied times the number of gallons per day required to serve each ERU, as shown below in Exhibit 3. The analysis provides a maximum cost-justified level of system development fees under the Buy-In Approach that can be assessed by WSACC.

Exhibit 3 – Maximum	Residential System	Development	Fee – Buy-In	Approach
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Residential	Wastewater
Cost per GPD	\$6.96
GPD per ERU	255
Total Calculated Capacity Fee per ERU	\$1,774
Existing Capacity Fee per ERU	\$1,432

Incremental Cost Methodology

To calculate the fee under the Incremental Cost Approach, Raftelis used the project costs identified in WSACC's master plan that were identified by WSACC as providing additional wastewater capacity. The aggregate project costs must be reduced by a revenue credit, according to North Carolina General Statute §162A-207 "Minimum requirements" of Article 8. The revenue credit is applied to ensure that new customers are not paying twice for the capacity (once through the system development fee and then again through rates which are used to pay debt service issued for the projects that provided capacity). WSACC plans to fund 20% of capital projects using revenue from system development fees, while the remaining 80% is planned to be funded with debt issuances, with a term of 20 years and an estimated interest rate of 2.56% (estimated based on WSACC's weighted average cost of existing debt). The revenue credit was calculated by taking the net present value of the expected principal debt to be issued for the capital projects funded through debt. Since the net present value calculation is higher than the minimum credit of 25% of the total project costs, the net present value of principal debt (\$84.1 million) was subtracted from the aggregate project costs to derive the net project costs of approximately \$79.3 million. The net project costs are then divided by the additional capacity to be provided by the capital projects which is 7,650,000 gallons per day to derive a cost per gallon per day (GPD) for wastewater capacity, as shown in Exhibit 4.

	Wastewater	
Total Project Costs	\$163,513,201	
Less: Credit	-(\$80,739,634)	
Adjusted Cost of Capacity	\$82,773,567	
Total Capacity (gallons per day)	7,650,000	
Cost Per Gallon per Day	\$10.82	

Exhibit 4 - Cost per GPD of Planned Future Core Utility Assets

Using the same methodology and level of demand used for the Buy-In calculation, the system development fee for the Incremental Cost approach is based on the cost per gallon per day multiplied times the number of gallons per day required to serve each ERU, as shown below in Exhibit 5.

Exhibit 5 - Maximum Residential System Development Fee - Incremental Cost Approach

Single-Family	Wastewater
Calculated Cost per GPD	\$10.82
GPD per ERU	255
Total Calculated Capacity Fee per ERU	\$2,759
Existing Capacity Fee per GPD	\$1,432

Combined Approach

The combined approach is calculated by weighting the Buy-In and Incremental Cost results. The adjusted RCNLD values and the net project costs are added together, representing the cost of existing and future capacity. This combined cost is divided by the existing and future wastewater capacity which results in a weighted cost per gallon per day, as shown in Exhibit 6.

Exhibit 6 - Cost per GPD - Combined Approach

	Buy-In	Incremental-	Combined
		Cost	
Adjusted Cost of Capacity	\$143,622,438	\$82,773,567	\$226,396,005
Total Capacity (gallons per day)	20,650,000	7,650,000	28,300,000
Cost Per Gallon per Day	\$6.96	\$10.82	\$8.00

Similar to the previous approaches, the cost per gallon per day is then multiplied by the same GPD per adjusted ERU. This calculation is demonstrated in Exhibit 7, and results in a combined fee of \$2,098.85 per ERU.

Exhibit 7 - Maximum Residential System Development Fee - Combined Approach

Single-Family	Wastewater	
Calculated Cost per GPD	\$8.00	
GPD per ERU	255	
Total Calculated Capacity Fee per ERU	\$2,040	
Existing Capacity Fee per GPD	\$1,432	

For non-residential customers with larger meters, the fees for the smallest residential meter can be used and then scaled up by the flow ratios for each meter size³, as specified in the AWWA M-I Manual⁴, the results of which are shown in Exhibit 8. This method provides a straightforward approach that is simple to administer and reasonably equitable for most new customers.

Exhibit 8 shows the resulting maximum cost-justified system development fees by meter size for meters ranging from 5/8 inches to 12 inches. For these calculations, the system development fees have been rounded to the nearest dollar.

³ The smallest residential meter size was assumed to be 5/8 inches.

⁴ See the AWWA M-1 Manual - Appendix B- Equivalent Meter Ratios; pp.326

Meter Size	Existing Fee	Maximum Cost Justified System Development Fee If Assessed by Meter Size
5/8"	\$1,397	\$2,040
1"	\$3,492	\$5,100
1 ½"	\$6,985	\$10,200
2"	\$11,176	\$16,320
3"	\$22,352	\$30,601
4"	\$34,925	\$51,001
6"	\$69,850	\$102,002
8"	\$111,760	\$163,203
10"	\$160,655	\$244,804
12"	\$300,355	\$540,610
		a

Exhibit 8 - Calculated Maximum System development fees

WSACC may elect to charge a cost per gallon that is less than the maximum cost justified cost documented in this report. If WSACC elects to charge a fee that is less, all customers must be treated equally, meaning the same reduced cost per gallon per day must be used for all customers.

Please contact me at your convenience if you have any questions regarding this report. We appreciate the opportunity to assist the Water & Sewer Authority of Cabarrus County with this important engagement.

Very truly yours,

RAFTELIS FINANCIAL CONSULTANTS, INC.

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Elaine Conti Senior Manager

Appendix

Supporting Schedules From the System Development Fee Model

	Replacemen	nt Cost New
Fixed Asset Summary (1)	Less Dep	reciation
BUILDING & IMPR	\$	1,163,869
Buildings		101,547
BIOSOLIDS HANDL		9,051,360
EQUIPMENT		843,264
LAND ONLY		4,216,423
LAND & IMPROVEM		112,302
SOFTWARE & TRAI		438,805
OFFICE FURNITUR		
OFFICE EQUIPMEN		508,507
DATA PROCESSING		67,520
SEWER LINES		153,836,527
SEWER PLANT		42,094,345
SEWER PUMP STAT		14,866,224
VEHICLES		179,120
Total Fixed Assets	\$	227,479,814
Adjustments to Fixed Assets (2)		
Less: Vehicles		(179,120)
Less: Software & Training & Data Proces:		(506,326)
Less: Equipment & Office Equipment		(1,351,771)
Less: Contributed Capital		(68,199,915)
Total: Net Assets Eligible for Inclusion	\$	157,242,682
Additions/Subtractions to Fixed Assets		
Less: Outstanding Principal Debt (3)		(13,620,244)
Net Value	\$	143,622,438
Divided by Capacity		
Total Capacity (Gallons per Day) (4)		20,650,000
Net Cost per Gallon per Day	\$	6.96
Calculation of ERU		
Average Daily Consumption per ERU (5)		200
Inflow and Infiltration Factor (6)	<u>.</u>	1.28
Equivalent Residential Unit		255
Maximum System Development Charge	\$	1,774
Current System Development Charge	\$	1,432

Schedule 1 – Buy-In Calculation

(1) Fixed asset information was provided by WSACC and the net book value was escalated to 2017 to calculate the replacement cost new less depreciation (RCNLD).

(2) The RCNLD is adjusted to exclude meters, vehicles, and computers. Contributed capital relates to assets paid for by Charlotte Water in exchange for 6 MGD of capacity. WSACC only collects SDFs within the County. Since Charlotte Water's service area is outside of the County, no SDFs are collected for the 6 MGD reserved for Charlotte Water. It should be noted all assets transferred to WSACC during the formation of the Authority are included because these assets are no longer owned by the cities that transferred these assets and instead are owned by WSACC.

(3) Revenue from capital recovery fees are used to pay for capital improvement projects, not used to pay off debt service. Thus, all outstanding principal debt is used to reduce the net assets.

(4) The capacity for the system excludes 6 MGD of capacity reserved exclusively for the City of Charlotte.

(5) The average daily consumption per ERU is based on the 2014 Master Plan analysis. This is a reduction from the 250 gpd used in earlier CRF studies.

(6) Estimate of I&I provided by WSACC.

Schedule 2 -	Incremental	Cost	Calculation
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Expansion Related Projects	P	roject Costs
Cost of Expansion-Related Projects	\$	163,513,201
Adjustments - the Greater of:		
A) Revenue Credit (1)	\$	(80,739,634)
B) 25% of Projects		(40,878,300)
Total Adjustment	\$	(80,739,634)
Net Value of Capital Projects	\$	82,773,567
Additional Capacity from Projects		7,650,000
Cost per Gallon per Day	\$	10.82
Average Daily Consumption per ERU (2)		200
Inflow and Infiltration Factor (3)		1.28
		255
Maximum System Development Charge per ERU	\$	2,759
Current System Development Charge	\$	1,432

 The revenue credit is the net present value of the principal debt expected to be issued for expansion-related projects identified in the CIP. The discount factor used was 2.56%, derived from WSACC's weighted average cost of debt.
 The average deily expression per EPULie based on the 2014 Master Plan.

(2) The average daily consumption per ERU is based on the 2014 Master Plan analysis. This is a reduction from the 250 gpd used in earlier CRF studies.(3) 1&I factor provided by WSACC staff.

Schedule 3 – Combined Approach

Summary of 3 Approaches	S	ystem Buy-In	Margi	inal Incremental		Combined
RCNLD	\$	143,622,438		82,773,567	\$	226,396,005
Capacity (gallons)		20,650,000		7,650,000		28,300,000
Cost per Gallon per Day	\$	6.96	\$	10.82		8.00
Fee per ERU	\$	1,774	\$	2,759	\$	2,040
Existing Fee per ERU					\$	1,432

Schedule 4 – Project Included in Incremental Approach - Capital Improvement Plan

Expansion-Related Capi	tal Improvement Projects	Estimated Costs	Year of Issue	% Debt Funded
RRRWWTP				
Primary Clarifier	Build Additional Primary Clarifiers	\$ 10,000,000	2026	80%
Aeration Basins	Build Additional Aeration Basins	\$ 57,100,000	2026	80%
Flume 3	Build Larger Effluent Flume	\$ 750,000	2026	80%
Disinfection	Build Additional Contact Basin	\$ 2,880,000	2026	80%
Disinfection	Install Additional Sodium Hypochlorite Pumps	\$ 200,000	2026	80%
Gravity Thickeners	Additional Gravity Thickeners #3, #4, and Pump Station	\$ 9,000,000	2022	80%
Dewatering	Add Third Centrifuge, Sludge Bunker, and Cake Pump	\$ 3,000,000	2022	80%
O2 Plant	Expand O2 Plant	\$ 2,000,000	2028	80%
General	Ash Handling Expansion	\$ 250,000	2021	80%
General	Chemical Feed Expansion	\$ 2,000,000	2026	80%
Muddy Creek WWTP				
General*	Expansion to 300,000 gpd	\$ 5,162,201	2018	80%
General	Expansion from 300,000 gpd to 1,000,000 gpd	\$ 10,000,000	2025	80%
Collection System				
General	Three Mile Branch Parallel Interceptor	\$ 2,800,000	2024	80%
General	New Upper Rocky River Interceptor	S 7,000,000	2024	80%
General	Lower Coddle Creek Parallel Interceptor	S 19,500,000	2023	80%
General	Lower Muddy Creek Parallel Interceptor	\$ 4,700,000	2025	80%
General	Muddy Creek Interceptor Extension	\$ 3,800,000	2025	80%
General	Back Creek Interceptor Parallel Interceptor / Extension	\$ 8,100,000	2021	80%
General	New Caldwell Creek Interceptor	\$ 9,200,000	2023	80%
General	Lower Rocky River Pump Station Expansion	\$ 2,200,000	2023	80%
General	Install Parallel Force Main for Mt. Pleasant Pump Stations #1 and #2	S 1,740,000	2027	80%
General *	Mt. Pleasant Pump Station Improvement-Expanding Pump Capacity	\$ 2,131,000	2027	80%

Total Capacity-Related Projects (excluding Construction in Progress)	\$	156,220,000
Total Capacity-Related Construction in Progress		7,293,201
Total	S	163,513,201

Schedule 5 – Debt Issuances for Revenue Credit

(Only years 2018 – 2029 are shown below for illustration purposes. Years 2018 – 2048 are included towards to Revenue Credit)

Year of Issue		Amount Term	Int Rate			2018		2019		2020		2021		2022		2023		2024		2025		2026		2027		202.8		2029
2018	s	4,130,000 20	2.81%	Principal	\$	+	\$	206,500	\$	206,500	s	206,500	5	206,500	\$	206,500	s	206,500	s	206,500	\$	206,500	5	206,500	\$	206,500	ş	206,500
				Interest	_	4	. 2	115,941	_	111,541	62	107,017	_	102,366		97,585	_	92, 570	_	87,617	1	82,421	_	77,080	<u>_</u>	71,589	1	65,944
				Total	5	14	\$	322,441	\$	318,041	\$	313,517	\$	308,865	\$	304,085	\$	299,170	s	294,117	\$	288,921	\$	283,580	\$	278,089	\$	272,444
2019	\$	- 20	2.81%	Principal	s	. 4	\$	4.1	\$	1	\$		\$	3	\$	1	\$		\$	1.4	\$	-	s	-	\$	9	s	14
				Interest				100	2		-	- K	_		-	1.1	-		_	1.0	-	-	-		-		_	
				Total	s	4	\$		\$		\$	1	\$		\$	14	\$		\$		\$		5	*	\$	10	\$	8
2920	\$	- 20 -	2.81%	Principal	\$	×.	s		s		5		\$		s	×.	s		\$	1125	\$		\$		\$		5	
				Interest			-	10.1	-	10		1.1	-	1		10	-	-	_		-				-	11	-	
				Total	\$	4	\$	9.1	\$	1	\$		5	÷	\$		\$		\$	1	\$		S		\$		\$	3
2021	5	6,680,000 20	2.81%	Principal	\$		s	3	\$	<u>e</u>	\$	10	\$	334,000	\$	334,000	\$	334,000	s	334,000	\$	334,000	\$	334,000	Ş	334,000	s	334,000
				Interest		4	-	-	-	-	-	-	_	187,526	<u>. </u>	180,409	_	173,093	-	165,571	-	157,838	-	149,887	-	141,714	-	133,311
				Total	\$	×	\$		s	. *	s		\$	521,526	\$	514,409	s	507,093	\$	499,571	\$	491,838	\$	483,887	\$	475,714	\$	467,311
2022	\$	9,600,000 20	2.81%	Principal	\$		s		\$		\$	1.4	5	-	s	480,000	\$	480,000	\$	480,000	\$	480,000	s	480,000	\$	480,000	\$	480,000
				Interest	-		-		_		÷		_			269,499	-	259,271	-	248,756	-	237,946	-	226,833	_	215,407	-	203,661
				Total	\$		s	12	s		\$	1	\$	r.	5	749,499	\$	739,271	\$	728,756	\$	717,946	\$	706,833	\$	695,407	s	683,661
2023	5	24,720,000 20	2.81%	Principal	s	4	5	1	s	1.54	s		s	1	s	140	s	1,236,000	s	1,236,000	s	1,236,000	s	1,236,000	\$	1,236,000	s	1,236,000
				Interest				- Q -		÷				÷				693,959		667,623		640,547		612,711		584,094		554,673
				Total	\$		s		s		\$	1.00	s	*	5	34 ⁰	s	1,929,959	\$	1,903,623	s	1,876,547	s	1,848,711	\$	1,820,094	\$	1,790,673
2024	\$	7,840,000 20	2.81%	Principal	s	4	\$		\$		\$	(å.	\$	3	s		\$		s	392,000	\$	392,000	Ś	392,000	s	392,000	\$	392,000
				Interest								(M)		-		17.5			_	220,091		211,738		203,151	_	194, 323	_	185,247
				Total	s	+	\$	- 14	\$		\$		\$		\$	- 187	\$	-	s	612,091	s	603,738	\$	595,151	\$	586,323	\$	577,247
2025	\$	14.800.000 20	2.81%	Principal	\$	¥	\$		s	1.4	5		s		s		s		s		\$	740,000	5	740,000	\$	740,000	\$	740,000
				Interest				N 1												1913		415,477		399,709		383,499		366,834
				Total	\$	Ł	\$	1	5		S	10	s	4	s	10	5	.+	\$		5	1,155,477	\$	1,139,709	\$	1,123,499	5	1,106,834
2026	5	58,344,000 20	2.81%	Principal	s	*	\$	21	\$		\$	(e.	s	×.	s	(41)	\$	10	s) (e:	s	1	\$	2,917,200	\$	2,917,200	ş	2,917,200
				Interest		+		04		(4.1				14		æ.,				Dec.				1,637,879	_	1,575,720	-	1,511,816
				Total	S	7	\$	1	\$	1	\$	1	\$	*	\$	100	\$	-	5	. 156	\$		\$	4,555,079	\$	4,492,920	\$	4,429,016
2027	5	3,097,000 20	2.61%	Principal	\$	÷.	s		\$	¥.(\$	14	\$		s	-	s		\$		\$	1.1	\$	-	5	154,850	s	154,850
				Interest		10		41,	_		_	121	2		_		<u> </u>	1		La La	_		_	÷.,	_	86,941	-	83,642
				Total	\$	*	\$	3	\$	1.91	\$		s	20	\$	100	\$	(#) 11	5		\$	· · ·	\$		\$	241,791	\$	238,492
2028	ś	1.600,000 20	2.85%	Principal	s		\$	14.5	\$	10.00	\$		5		s		s	-	\$	-	\$		5	~	\$		\$	30,000
				Interest			- N	- 6 -	_	1.8.	_		-		-		_	-	_	- 1 e - 1	-	- C. A.	_		_		_	44,916
				Total	5	8.	\$.4	5	24	\$		\$	+	\$	4.0	\$		s	100	\$		\$		5		\$	124,915
			4111																									
			All I	Principal	s		s	206,500	s	206,500	\$	206,500	s	\$40,500	s	1.020.500	\$	2,256,500	\$	2,648,500	\$	3, 388, 500	s	6,305,700	s	6,460,550	\$	6,540,550
				Interest				115,941	Ĩ.	111.541		107,017	-	289,893		547,493	-	1,218,993		1,389,657	Ű.	1,745,968		3,307,251		3,253,287		3,150,044
				Total	s	v.	\$	322,441	s	318,041	s	313,517	s	830,393	s	1,567,993	s	3,475,493	s	4,038,157	s	5,134,468	s	9,612,951	\$	9,713,837	\$	9,690,594
					777						100		- GY ()														1.112	

PV 2.81% Principal \$80,739,634 Revenue Credit