

THE MUNICIPAL AUTHORITY OF THE TOWNSHIP OF ROBINSON

ALLEGHENY COUNTY, PENNSYLVANIA

ANNUAL REPORT – FISCAL YEAR ENDING 6-30-17

BUDGET FISCAL YEAR ENDING 6-30-18



NIRA Consulting Engineers, Inc.
950 Fifth Avenue
Coraopolis, Pennsylvania 15108
Telephone: (412) 262-3970
Facsimile: (412) 262-1938
Email: mail@niraengineers.com
Web Site: www.niraengineers.com

**THE MUNICIPAL AUTHORITY OF THE
TOWNSHIP OF ROBINSON
ALLEGHENY COUNTY, PENNSYLVANIA
ANNUAL REPORT – FISCAL YEAR ENDING 6-30-2017
BUDGET FISCAL YEAR ENDING 6-30-2018**

MEMBERS OF THE AUTHORITY BOARD

	<u>Term Expires</u>
Nicholas A. Bonesso, Chairman	December 31, 2017
Stanley E. Celich, Secretary	December 31, 2018
Prospero Castelluccio, Treasurer	December 31, 2020
Kathaleen Swish, Asst. Sec/Treasurer	December 31, 2019
Richard Young, Member	December 31, 2019
Larry Byrge, Member	December 31, 2022
Samuel F. Reichl III, Member	December 31, 2022

MANAGEMENT AND ADVISORS

Yukevich, Marchetti, Fischer & Zangrilli, Solicitor
Case Sabatini – Auditor
U.S. Bank, Trustee
NIRA Consulting Engineers, Inc., Engineer
Anthony T. Lenze, Executive Director
Joseph Alvarez, III, Manager, Water System Operations
Leo Gismondi, Manager, Wastewater System Operations

June 2017

NIRA Consulting Engineers, Inc.
950 Fifth Avenue
Coraopolis, Pennsylvania 15108
Telephone: (412) 262-3970
Facsimile: (412) 262-1938

THE MUNICIPAL AUTHORITY OF THE TOWNSHIP OF ROBINSON
County of Allegheny, Commonwealth of Pennsylvania

ANNUAL REPORT – FISCAL YEAR ENDING JUNE 30, 2017
BUDGET – FISCAL YEAR ENDING JUNE 30, 2018

TABLE OF CONTENTS

	<u>Page Number</u>
Letter of Transmittal	
Trust Indenture Requirements	1 - 3
Synopsis of Revenues and Expenses for Period Ending June 30, 2017	4
Projected Versus Budget	
Water System – Operating Revenues, Table 1	5
Water System – Operating Expenses, Table 1 (continued)	6 - 8
Sewer System – Operating Revenues, Table 2	9
Sewer System – Operating Expenses, Table 2 (continued)	10 - 12
Proposed FY 17/18 Budget	
Water System – Operating Revenues, Table 1	13
Water System – Operating Expenses, Table 1 (continued)	14 - 16
Sewer System – Operating Revenues, Table 1	17
Sewer System – Operating Expenses, Table 1 (continued)	18 - 20
Budget Test	
Summary of Revenues, Expenses and Debt Service Payments	21
Engineer's Report	
Sales and Rate Review	22
Proposed Fiscal Year 2017/2018 Budget	22
Bond Capital Projects	22
2016/2017 BRIF Projects and Capital Expenditures	23
Tapping Fees	24
Appendix A: Capital Improvement Plan Project Cost and Schedule	
Appendix B: Debt Service Schedule	
Appendix C: Current Tap Fee Schedule	
Appendix D: Insurance Coverage Information	
Appendix E: Compliance with Authority's Continuing Disclosure Agreement	

TRUST INDENTURE REQUIREMENTS

Rate Covenant and Particular Covenants

The Authority covenants that it will annually adopt, maintain, charge and collect, from the customers served by its System, so long as any bonds remain outstanding and funds for their payment have not been provided, in accordance with the Act, which, after making due and reasonable allowances for delinquencies, contingencies and a margin of error in the estimates, together with all other anticipated Receipts and Revenues of the Authority, are at all times at least sufficient with respect to the System to provide annually funds to pay: (i) the current expenses incurred by the Authority, (ii) annual debt service requirements on Subordinate Debt, and (iii) an amount equal to 110% of the annual debt service requirements with respect to its outstanding bonds issued pursuant to this Indenture.

The Authority further covenants with the owners of the bonds that it will provide that the water and sewer rates and other charges will be set in accordance with the Act. The Authority also covenants that it will not contract with any public body or customer for the furnishing of water and sewer service at prices less than its reasonable worth or at prices less than those approved by the Consulting Engineer.

The Authority also covenants with the owners of the bonds that if at any time the revenues collected by the Authority are not sufficient to enable the Authority to comply with the provisions of this Section 9.01, the Authority will promptly revise its schedule so to comply with this Section 9.01 and any deficiencies in transfers of funds required to be made pursuant to this Article will be remedied before the end of the next ensuing fiscal year. Before the adoption of any revision of the rate schedule, all computations and estimates upon which such revision are based must be approved by the Consulting Engineer. Forthwith, upon the adoption of such revision, the Authority must cause certified copies of the revised rate schedule to be filed with the Consulting Engineer and the Trustee.

The Authority covenants that it will employ the Consulting Engineer to perform the duties that are imposed on the Consulting Engineer by the provisions of this Indenture. In addition to the other duties prescribed elsewhere herein, the Consulting Engineer shall prepare and file with the Authority, the Representative of the Purchasers of each series of bonds of the Authority then outstanding, the Bond Insurer and the Trustee on or before June 15, 2009, and on or before June 15 of each year thereafter, an Annual Report on the System.

The Annual Report of the Consulting Engineer shall set forth:

(a) advice and recommendations as to:

- (i) the proper current expenses of the Authority with respect to the System during the next fiscal year of the Authority;
- (ii) the Capital Additions that should be made during said fiscal year to keep the System in good condition, repair and working order;
- (iii) any necessary or advisable revision of the rate schedule;

TRUST INDENTURE REQUIREMENTS

(CONTINUED)

Consulting Engineer Report

- (b) an estimate for the fiscal year of the amounts of money that should be expended to comply with the recommendations set forth in the Annual Report;
- (c) an estimate of the Receipts and Revenues to be derived during the fiscal year from the System;
- (d) a report as to compliance by the Authority with its covenants concerning insurance under Article IX and advice and recommendations as to the Authority's future obligations thereunder; and
- (e) information required by the Authority's continuing disclosure agreement in compliance with Rule 15c2-12.

The fees and expenses incurred by the Consulting Engineer in connection with the services performed under this Article shall be payable out of moneys in the Revenue Fund. The aforesaid Annual Report of the Consulting Engineer is to be used by the Authority as the basis for the preparation of the budget for the next succeeding fiscal year.

The Authority covenants that, at the written request of any Registered Owner of the bonds, it will furnish to such Registered Owner a copy of the Annual Report of the Consulting Engineer and any revision thereof.

Within thirty (30) days after the authentication and delivery of additional bonds, a revised Report for the balance of the then current fiscal year must be prepared by the Consulting Engineer and filed with the Authority, the Representative of the Purchasers of all outstanding bonds, Bond Counsel and the Trustee.

The Authority covenants that it will on or before June 30 of each year, beginning June 30, 2009, prepare and adopt a budget for the next fiscal year in accordance with the advice and recommendations of the Consulting Engineer, which budget must contain an estimate of the gross revenues to be derived from the System for the period covered by such budget and of current expenses to be incurred; a copy of the budget must be promptly filed with the Representative of the Purchasers of all outstanding bonds, the Bond Insurer and the Trustee. Any budget may be amended from time to time with the approval of the Consulting Engineer and the amended budget must be promptly filed with the Trustee, the Bond Insurer and the Representative of the Purchasers of all outstanding bonds. The Authority further covenants that within ninety (90) days after the authentication and delivery of any additional bonds under this Indenture, it will adopt a revised budget for the balance of the current fiscal year in accordance with the recommendations of the Consulting Engineer and will immediately file a copy of the

TRUST INDENTURE REQUIREMENTS

(CONTINUED)

Consulting Engineer Report

budget, after it has been adopted, with the Representative of the Purchasers of all outstanding bonds, the Bond Insurer and the Trustee.

Until the adoption of the annual budget for a particular fiscal year, the budget for the preceding fiscal year will be deemed to be in force for such particular fiscal year.

The Authority covenants that all compensation, salaries, fees or wages paid by it in connection with the administration of the Authority will be reasonable; that it will not incur any indebtedness for current administrative expenses in excess of the appropriate budget of current administrative expenses unless such debt is approved by the Consulting engineer; that no more persons will be employed by it than are necessary; and that it will operate and administer the System in an efficient and economical manner.

The Authority will duly and punctually pay, or cause to be paid, but only from the Net Revenues pledged under and by this Indenture, the principal of, the interest on and the premium (if any) due upon the redemption of, every bond issued hereunder and secured hereby, at the place and on the dates and in the manner specified herein and in the bonds, according to the true intent and meaning hereof.

SYNOPSIS OF REVENUES AND EXPENSES

2016/2017 OPERATING YEAR

The following summary indicates the projected revenues and budgeted revenues for the fiscal year ending June 30, 2017, the projected operating expenses and budgeted expenses for the same period, and the net income available for debt service and other costs:

Water System

	<u>Projected to 6/30/17</u>	<u>Budgeted to 6/30/17</u>	<u>Favorable or Unfavorable</u>
Total Operating Revenues	\$5,505,799	\$5,087,300	\$418,499
Total Operating Expenses	<u>\$2,620,292</u>	<u>\$2,715,390</u>	<u>\$95,098</u>
Net Operating Income	\$2,885,507	\$2,371,910	\$513,597

Comprehensive Sewer System Including Groveton

	<u>Projected to 6/30/17</u>	<u>Budgeted to 6/30/17</u>	<u>Favorable or Unfavorable</u>
Total Operating Revenues	\$4,592,575	\$4,540,300	\$52,275
Total Operating Expenses	<u>\$3,018,616</u>	<u>\$3,083,700</u>	<u>\$65,084</u>
Net Operating Income	\$1,573,959	\$1,456,600	\$117,359

TABLE 1
MUNICIPAL AUTHORITY OF THE TOWNSHIP OF ROBINSON
REVENUES AND EXPENSES
WATER SYSTEM - OPERATING REVENUES

	<u>Projected To 6/30/17</u>	<u>Budgeted FY 16/17</u>	<u>Difference Projected</u>
<u>METERED SALES</u>			
Domestic	\$1,631,272	\$1,705,000	(\$73,728)
Commercial	\$2,265,426	\$2,270,000	(\$4,574)
Wholesale (Moon & FTWA)	<u>\$1,217,200</u>	<u>\$795,000</u>	<u>\$422,200</u>
Total Metered Service	\$5,113,898	\$4,770,000	\$343,898
<u>UNMETERED SALES</u>			
Fire Protection (Public) [Kennedy Twp]	\$5,892	\$4,100	\$1,792
Fire Protection (Private)	<u>\$225,566</u>	<u>\$190,000</u>	<u>\$35,566</u>
Total Unmetered Sales	\$231,458	\$194,100	\$37,358
<u>MISCELLANEOUS REVENUES</u>			
Penalties	\$38,932	\$42,000	(\$3,068)
Interest on Investments	\$520	\$200	\$320
Merchandise & Job Revenue	\$36,221	\$4,000	\$32,221
Other Income Verizon, Sprint (Water Tower Lease)	\$67,304	\$57,000	\$10,304
Miscellaneous	<u>\$17,466</u>	<u>\$20,000</u>	<u>(\$2,534)</u>
Total Miscellaneous Revenue	\$160,443	\$123,200	\$37,243
TOTAL OPERATING REVENUES	\$5,505,799	\$5,087,300	\$418,499

TABLE 1
MUNICIPAL AUTHORITY OF THE TOWNSHIP OF ROBINSON
REVENUES AND EXPENSES
WATER SYSTEM - OPERATING EXPENSES

	<u>Projected To 6/30/17</u>	<u>Budgeted FY 16/17</u>	<u>Difference Projected</u>
<u>STANDBY SERVICE</u>			
Water Purchases	\$17,388	\$2,000	\$15,388
Power Costs	<u>\$8,196</u>	<u>\$28,060</u>	<u>(\$19,864)</u>
Total Standby Service	\$25,584	\$30,060	(\$4,476)
<u>WATER TREATMENT PLANT</u>			
Operating Labor	\$326,400	\$325,000	\$1,400
Sludge Disposal Labor	\$5,324	\$1,200	\$4,124
Power – Treatment Plant	\$276,288	\$270,000	\$6,288
Power – Raw Water Station	\$51,332	\$41,000	\$10,332
Heating – Treatment Plant	\$6,262	\$8,000	(\$1,738)
Heating – Raw Water Station	\$0	\$800	(\$800)
Chemicals	\$173,423	\$154,230	\$19,193
Supplies	\$13,904	\$10,000	\$3,904
Laboratory	\$7,643	\$20,000	(\$12,357)
General Maintenance	\$58,928	\$40,000	\$18,928
Maintenance - GAC Filters	\$0	\$30,000	(\$30,000)
Sludge Truck Operation	\$2,171	\$4,000	(\$1,829)
Sludge Removal	\$13,164	\$24,000	(\$10,836)
Miscellaneous	<u>\$26,246</u>	<u>\$5,000</u>	<u>\$21,246</u>
Total Treatment & Pumping	\$961,085	\$933,230	\$27,855

TABLE 1
MUNICIPAL AUTHORITY OF THE TOWNSHIP OF ROBINSON
REVENUES AND EXPENSES
WATER SYSTEM - OPERATING EXPENSES

	<u>Projected</u> <u>To 6/30/17</u>	<u>Budgeted</u> <u>FY 16/17</u>	<u>Difference</u> <u>Projected</u>
<u>DISTRIBUTION SYSTEM</u>			
Operating Labor	\$349,633	\$347,000	\$2,633
D.S. Vehicle Expense	\$30,205	\$29,000	\$1,205
D.S. Equipment, Supplies	\$95,220	\$91,000	\$4,220
Meter Reading / Repair /Replacement Labor	\$57,877	\$60,000	(\$2,123)
Sand & Gravel	\$36,282	\$16,000	\$20,282
Asphalt	\$50,513	\$85,000	(\$34,487)
Misc. Meals, Mileage, Training, Etc.	\$0	\$1,000	(\$1,000)
Water Storage & Pumping Maint & Materials	\$2,624	\$1,000	\$1,624
Power / Water Storage & Pumping	<u>\$9,026</u>	<u>\$5,000</u>	<u>\$4,026</u>
Total Distribution System	\$631,380	\$635,000	(\$3,620)

TABLE 1
MUNICIPAL AUTHORITY OF THE TOWNSHIP OF ROBINSON
REVENUES AND EXPENSES
WATER SYSTEM - OPERATING EXPENSES

	<u>Projected To 6/30/17</u>	<u>Budgeted FY 16/17</u>	<u>Difference Projected</u>
<u>GENERAL AND ADMINISTRATION</u>			
Trustee Fees	\$15,180	\$17,000	(\$1,820)
Director's Fees & Expenses	\$4,183	\$5,000	(\$817)
Administrative Salaries	\$140,629	\$150,000	(\$9,371)
Office Salaries	\$102,412	\$102,600	(\$188)
Professional Services – Legal	\$24,848	\$20,000	\$4,848
Professional Services – Engineering	\$30,196	\$10,000	\$20,196
Professional Services - Auditing	\$9,428	\$10,000	(\$572)
Professional Services – Accounting Services	\$13,824	\$16,000	(\$2,176)
Retirement	\$201,799	\$194,000	\$7,799
Employee Benefits	\$240,066	\$280,000	(\$39,934)
Insurance	\$27,122	\$121,000	(\$93,878)
Payroll Taxes	\$77,140	\$80,000	(\$2,860)
Office Supplies	\$65,861	\$60,000	\$5,861
Office Complex Utilities	\$37,513	\$32,000	\$5,513
Conferences, Training, Memberships, Etc,	\$4,550	\$3,500	\$1,050
Miscellaneous	<u>\$7,492</u>	<u>\$16,000</u>	<u>(\$8,508)</u>
Total General & Administrative	\$1,002,243	\$1,117,100	(\$114,857)
TOTAL WATER SYSTEM OPERATING EXPENSES	\$2,620,292	\$2,715,390	(\$95,098)

TABLE 2
MUNICIPAL AUTHORITY OF THE TOWNSHIP OF ROBINSON
REVENUES AND EXPENSES
SEWER SYSTEM - OPERATING REVENUES

	<u>Projected To 6/30/17</u>	<u>Budgeted FY 16/17</u>	<u>Difference Projected</u>
<u>Operating Revenues</u>			
<u>Metered Sales</u>			
Domestic	\$1,808,532	\$1,825,000	(\$16,468)
Commercial	\$2,365,126	\$2,400,000	(\$34,874)
Sewer Surcharge	<u>\$353,035</u>	<u>\$250,000</u>	<u>\$103,035</u>
Total Metered Sales	\$4,526,693	\$4,475,000	\$51,693
<u>Miscellaneous Revenues</u>			
Penalties	\$28,574	\$30,000	(\$1,426)
Interest on Investments	\$312	\$300	\$12
Miscellaneous	<u>\$36,996</u>	<u>\$35,000</u>	<u>\$1,996</u>
Total Miscellaneous Revenues	\$65,882	\$65,300	\$582
TOTAL OPERATING REVENUES	\$4,592,575	\$4,540,300	\$52,275

TABLE 2
MUNICIPAL AUTHORITY OF THE TOWNSHIP OF ROBINSON
REVENUES AND EXPENSES
SEWER SYSTEM - OPERATING EXPENSES

	<u>Projected To 6/30/17</u>	<u>Budgeted FY 16/17</u>	<u>Difference Projected</u>
<u>SEWAGE TREATMENT PLANT</u>			
Plant Operating Labor	\$511,022	\$382,000	\$129,022
Sludge Disposal Labor	\$68,029	\$70,000	(\$1,971)
Power	\$129,019	\$132,000	(\$2,981)
Natural Gas at Moon Run Sew.Treat. Plant	\$11,850	\$14,000	(\$2,150)
Chemicals	\$49,316	\$55,000	(\$5,684)
Supplies	\$21,520	\$25,000	(\$3,480)
Laboratory	\$28,235	\$30,000	(\$1,765)
General Maintenance	\$67,399	\$40,000	\$27,399
Sewage Treatment Services			
ALCOSAN	\$257,202	\$275,000	(\$17,798)
MTMA	\$397,326	\$407,000	(\$9,674)
CORAOPOLIS	\$77,324	\$65,000	\$12,324
Sludge Disposal	\$146,490	\$115,000	\$31,490
Miscellaneous	<u>\$0</u>	<u>\$1,000</u>	<u>(\$1,000)</u>
Total Sewage Treatment Plant	\$1,764,733	\$1,611,000	\$153,733

TABLE 2
MUNICIPAL AUTHORITY OF THE TOWNSHIP OF ROBINSON
REVENUES AND EXPENSES
SEWER SYSTEM - OPERATING EXPENSES

	<u>Projected</u> <u>To 6/30/17</u>	<u>Budgeted</u> <u>FY 16/17</u>	<u>Difference</u> <u>Projected</u>
<u>COLLECTION SYSTEM</u>			
Mechanical Maintenance	\$0	\$160,000	(\$160,000)
Pump Station Power	\$42,782	\$43,000	(\$218)
Sludge Truck Operation	\$28,256	\$20,000	\$8,256
General Maintenance – Sewers	\$60,200	\$35,000	\$25,200
General Maintenance Pump Stations	\$38,814	\$35,000	\$3,814
Supplies	\$834	\$2,200	(\$1,366)
Vehicle Expenses	\$19,919	\$25,000	(\$5,081)
Miscellaneous, Meals	\$4,142	\$1,000	\$3,142
Labor – Meter Reading & Repairs	<u>\$58,636</u>	<u>\$60,000</u>	<u>(\$1,364)</u>
Total Collection System	\$253,584	\$381,200	(\$127,616)

TABLE 2
MUNICIPAL AUTHORITY OF THE TOWNSHIP OF ROBINSON
REVENUES AND EXPENSES
SEWER SYSTEM - OPERATING EXPENSES

	<u>Projected To 6/30/17</u>	<u>Budgeted FY 16/17</u>	<u>Difference Projected</u>
<u>GENERAL AND ADMINISTRATION</u>			
Trustee Fees	\$15,180	\$15,000	\$180
Director's Fees & Expenses	\$4,183	\$5,000	(\$817)
Administrative Salaries	\$140,628	\$150,000	(\$9,372)
Office Salaries	\$102,042	\$105,000	(\$2,958)
Professional Services – Legal	\$27,770	\$20,000	\$7,770
Professional Services – Engineering	\$47,533	\$23,000	\$24,533
Professional Services – Accounting Services	\$24,425	\$27,000	(\$2,575)
Retirement	\$201,751	\$194,000	\$7,751
Employee Benefits	\$240,565	\$300,000	(\$59,435)
Insurance	\$24,216	\$75,000	(\$50,784)
Payroll Taxes	\$63,277	\$72,000	(\$8,723)
Office Supplies	\$66,240	\$65,000	\$1,240
GE Office Maintenance & Repairs	\$4,052	\$3,000	\$1,052
Office Complex Utilities	\$28,858	\$31,000	(\$2,142)
Conferences, Training, Memberships, etc.	\$2,077	\$3,000	(\$923)
Miscellaneous	<u>\$7,500</u>	<u>\$3,500</u>	<u>\$4,000</u>
Total General and Administrative	\$1,000,298	\$1,091,500	(\$91,202)
TOTAL OPERATING EXPENSES	\$3,018,616	\$3,083,700	(\$65,084)

TABLE 1
MUNICIPAL AUTHORITY OF THE TOWNSHIP OF ROBINSON
PROPOSED FY 17/18 BUDGET
WATER SYSTEM - OPERATING REVENUES

	<u>Proposed FY 17/18 Budget</u>
<u>Operating Revenues</u>	
<u>Metered Sales</u>	
Domestic	\$1,639,530
Commercial	\$2,273,670
Wholesale (FTWA, Moon, West View)	<u>\$848,000</u>
Total Metered Sales	\$4,761,200
<u>Unmetered Sales</u>	
Fire Protection (Public) [Kennedy Twp.]	\$5,800
Fire Protection (Private)	<u>\$224,600</u>
Total Unmetered Sales	\$230,400
<u>Miscellaneous Revenues</u>	
Penalties	\$40,100
Interest on Investments	\$500
Merchandise & Job Revenue	\$5,000
Other Income-Verizon, Sprint Tower Leases	\$69,000
Miscellaneous	<u>\$24,500</u>
Total Miscellaneous Revenues	\$139,100
TOTAL OPERATING WATER SYSTEM REVENUES	5,130,700.00

TABLE 1
MUNICIPAL AUTHORITY OF THE TOWNSHIP OF ROBINSON
PROPOSED FY 17/18 BUDGET
WATER SYSTEM - OPERATING EXPENSES

	<u>Proposed FY 17/18 Budget</u>
<u>Standby Service</u>	
Water Purchases	\$3,000
Interconnections	<u>\$28,060</u>
Total Standby Service	\$31,060
<u>Water Treatment Plant</u>	
Operating Labor	\$291,392
Sludge Disposal Labor	\$5,065
Power—Treatment Plant	\$265,000
Power—Raw Water Station	\$40,000
Heating—Treatment Plant	\$6,000
Heating—Raw Water Station	\$500
Chemicals	\$195,430
Supplies	\$12,000
Laboratory	\$15,000
General Maintenance	\$50,000
GAC Filter Replacement	\$0
Sludge Truck Operation	\$3,000
Sludge Disposal	\$18,000
Misc., Meals, Mileage, Training, Etc.	<u>\$5,000</u>
Total Water Treatment Plant	\$906,387

TABLE 1
MUNICIPAL AUTHORITY OF THE TOWNSHIP OF ROBINSON
PROPOSED FY 17/18 BUDGET
WATER SYSTEM - OPERATING EXPENSES

	<u>Proposed FY 17/18 Budget</u>
<u>Distribution System</u>	
Operating Labor	\$344,924
Vehicle Expenses	\$30,000
Equipment & Supplies & Paving	\$95,000
Meter Reading/Repair-Labor	\$62,098
Water Storage & Pumping Labor	\$56,205
Sand & Gravel	\$36,000
Asphalt	\$51,000
Misc., Meals, Mileage, Training, Etc.	\$500
Water Storage & Pumping Maint. & Material	\$1,500
Power / Water Storage & Pumping	<u>\$8,000</u>
Total Distribution System	\$685,227

TABLE 1
MUNICIPAL AUTHORITY OF THE TOWNSHIP OF ROBINSON
PROPOSED FY 17/18 BUDGET
WATER SYSTEM - OPERATING EXPENSES

	<u>Proposed FY 17/18 Budget</u>
<u>General & Administrative</u>	
Trustee Fees	\$15,000
Director's Fees & Expenses	\$4,000
Administrative Salaries	\$145,700
Office Salaries	\$104,770
Legal Services	\$20,000
Engineering Services	\$10,000
Auditing Services	\$10,000
Accounting Services	\$15,000
Retirement	\$200,000
Employee Benefits	\$275,000
Insurance	\$125,000
Payroll Taxes	\$80,000
Office Supplies	\$65,000
Office Complex Utilities	\$38,000
Office Maintenance	\$3,000
Miscellaneous	\$8,000
Conferences, Training Memberships, Etc.	<u>\$4,000</u>
Total General & Administrative	\$1,122,470
 TOTAL WATER SYSTEM OPERATING EXPENSES	 \$2,745,144

TABLE 1
MUNICIPAL AUTHORITY OF THE TOWNSHIP OF ROBINSON
PROPOSED FY 17/18 BUDGET
SEWER SYSTEM - OPERATING REVENUES

	<u>Proposed FY 17/18 Budget</u>
<u>Operating Revenues</u>	
<u>Metered Sales-Sewer Division</u>	
Domestic	\$1,800,600
Commercial	\$2,381,200
Sewer Surcharge	<u>\$252,000</u>
Total Metered Sales	\$4,433,800
<u>Miscellaneous Revenues</u>	
Penalties	\$30,000
Interest on Investments	\$400
Miscellaneous/Billed Labor	<u>\$68,100</u>
Total Miscellaneous Revenues	\$98,500
 TOTAL SEWER SYSTEM OPERATING REVENUES	 \$4,532,300

TABLE 1
MUNICIPAL AUTHORITY OF THE TOWNSHIP OF ROBINSON
PROPOSED FY 17/18 BUDGET
SEWER SYSTEM - OPERATING EXPENSES

	<u>Proposed FY 17/18 Budget</u>
<u>Sewage Treatment Plant</u>	
Plant Operating Labor	\$300,869
Sludge Disposal Labor	\$73,768
Power	\$125,000
Natural Gas	\$12,000
Chemicals	\$55,000
Supplies	\$20,000
Laboratory	\$31,000
General Maintenance	\$75,000
Sewage Treatment Services - Alcosan	\$263,000
Sewage Treatment Services - Moon Twp.	\$405,000
Sewage Treatment Services - Coraopolis	\$60,000
Sludge Disposal	\$90,000
Miscellaneous	<u>\$1,000</u>
Total Sewage Treatment Plant	\$1,511,637

TABLE 1
MUNICIPAL AUTHORITY OF THE TOWNSHIP OF ROBINSON
PROPOSED FY 17/18 BUDGET
SEWER SYSTEM - OPERATING EXPENSES

	<u>Proposed FY 17/18 Budget</u>
<u>Collection System</u>	
Mechanical Maintenance	\$148,367
Pump Station Power	\$46,000
Sludge Truck Operation	\$12,000
General Maintenance - Sewers	\$90,000
General Maintenance - Pump Stations	\$40,000
Supplies	\$1,000
Vehicle Expenses	\$20,000
Miscellaneous-Meals-Etc.	\$3,000
Meter Reading/Repair-Labor	<u>\$62,098</u>
 Total Collection System	 \$422,465

TABLE 1
MUNICIPAL AUTHORITY OF THE TOWNSHIP OF ROBINSON
PROPOSED FY 17/18 BUDGET
SEWER SYSTEM - OPERATING EXPENSES

	Proposed FY 17/18 Budget
<u>General & Administrative</u>	
Trustee Fees	\$15,000
Director's Fees & Expenses	\$4,000
Administrative Salaries	\$154,000
Office Salaries	\$104,770
Legal Services	\$20,000
Engineering Services	\$23,000
Auditing Services	\$10,000
Accounting Services	\$17,000
Retirement	\$205,000
Employee Benefits	\$264,000
Insurance	\$60,000
Payroll Taxes	\$72,000
Office Supplies	\$66,000
Office Complex Utilities	\$30,000
Office Maintenance	\$3,000
Miscellaneous	\$5,000
Conferences, Training, Memberships, Etc.	\$3,000
	<hr/>
Total General and Administrative	\$1,055,770
 TOTAL SEWER SYSTEM OPERATING EXPENSES	 \$2,989,872

BUDGET TEST

SUMMARY OF REVENUES, EXPENSES, AND DEBT SERVICE PAYMENTS

<u>Operating Revenues</u>	<u>Revenues</u>
Water System	\$5,130,700
Sewer System	<u>\$4,532,300</u>
TOTAL OPERATING REVENUES	\$9,663,000
 <u>Operating Expenses</u>	 <u>Expenses</u>
Water System	\$2,745,144
Comprehensive Sewer System	<u>\$2,989,872</u>
TOTAL OPERATING EXPENSES	\$5,735,016
NET OPERATING REVENUES (Before Debt Service)	\$3,927,984
 <u>Debt Service Payments</u>	
Debt Service	\$3,459,934
Debt Service Coverage 10%	\$345,993
Total Debt Service + Cover	\$3,805,927
Net Operating Revenues	<u>\$3,927,984</u>
Difference	\$122,057

SALES AND SYSTEM REVIEW

The last rate increase became effective November 15, 2014. Water and sewer rates were increased at that time by 12.6% for water and 5.2% for sewer.

The latest 12 month water production rates are at 3.13 million gallons per day (MGD). This production rate is much higher than the 2.5 MGD rate reported in last year's Engineer Report. Approximately, one third of the increased production rate was due to an increase in bulk sales to Findlay Township Municipal Authority (FTMA) during December 2016 and January 2017. The increase in bulk sales is directly responsible for an increase of approximately \$400,000 in meter sales over the budgeted wholesale metered sales figure.

Generally, the 2016 – 2017 monthly water production rates are in the following range in comparison to the applicable 8/9 year averages:

AVERAGE = Less than 7% to 2% greater

PEAK = Less than 17% to 3% greater

The reported ranges are without the December 2016 or January 2017 data, as this data is reflective of large bulk water sales.

The Authority's water system demonstrates continued improvement in efficiency and water loss mitigation.

PROPOSED FISCAL YEAR 2017/2018 BUDGET AND RATE REVIEW

The proposed budget was compiled utilizing the following data:

1. Projected Revenues and Expenses based upon actual Revenues and Expenses for the nine months ending March 2017.
2. An increase in labor wages per contract.
3. An increase in Alcosan rates for Sewage Treatment Services.
4. Awarded unit bid costs for water and sewer chemicals.

The debt service schedule for the next fiscal year is \$3,459,934. The budget allows for meeting "Debt Service Coverage" of 10% or \$345,993. Therefore, a rate increase for water and sewer is not necessary for the 2017/2018 Fiscal Year.

BOND CAPITAL PROJECTS

In 2014, the Authority issued new Water and Sewer Revenue Bonds limited in aggregate principal amount of \$8,740,000 to finance capital projects.

All of the projects listed in the Construction Stage in last year's Engineer Report have been completed. In addition, the Water Treatment Plant Roof Replacement and the Bayer Waterline Abandonment Projects have been completed.

As of this writing, the following projects are in the construction phase:

1. Sludge Tank Addition at Campbells Run STP (June 2017).
2. Keiners Lane Subsewershed Repairs (June 2017).
3. Mason Drive Waterline Replacement.
4. Baldwin Road Sewer Rehabilitation 2017 Demonstration Project.
5. Pittsburgh Street Lateral Flow Control Project.

The following projects are no longer in the design phase:

1. FTMA Flow Control and Metering System Vault.
2. Park Manor Waterline Loop.
3. WTP Window and Door Replacement.

The Vista Park Drive waterline replacement project is waiting for one (1) easement.

The following projects are in the design phase:

1. Water Treatment Plant Filter and Control Replacement.
2. SCADA Sewerage System Upgrades: Moon STP and Pump Stations.

2016/2017 BRIF PROJECTS AND CAPITAL EXPENDITURES

Projects listed below are large/noteworthy expenditures:

1. Groveton Ballfield Pump Replacement.
2. Two (2) Ford F250 Trucks.
3. Covi and Moon Run UV System Repairs.
4. DiCicco P.S. Compressors with Unloaders.
5. WTP Chemical Feed Pump.
6. Campbells Run STP Wet Well Pump Motor Repairs.
7. Campbells Run STP Pipe and Spool Repair.
8. 2017 Ford Traverse.
9. VFD for Blower at Campbells Run STP.
10. Grundomat 3" Basic Package Hole Hog.
11. TVSS at Campbells Run STP.
12. Water Compound Meters.
13. Water Meter Interface Units.
14. Thornberry Pump Station Impellers.
15. Computers.

TAPPING FEES

The Tapping Fee Study (Act 203 with Act 57 Amendments) has been prepared to assess fees for private sanitary sewer and water connection to the public sewerage and water system.

The adopted fees for Single Family Residences using a ¾" water service connection and meter are as follows:

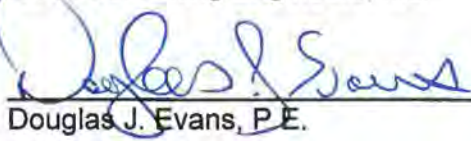
1. Water - \$2,940.00
2. Sewer - \$2,360.00

The most recent approved Tapping Fee Schedule is provided in Appendix C.

The Water and Sewer Systems have continued to be operated and maintained in a manner consistent with insuring the maximum useful life of the facilities.

Sincerely,

NIRA Consulting Engineers, Inc.

A handwritten signature in blue ink, appearing to read "Douglas J. Evans", is written over a horizontal line.

Douglas J. Evans, P.E.

Appendix A

Capital Improvement Plan Project Cost and Schedule

**TABLE 1:
PROJECT COSTS AND SCHEDULES**

BOND FINANCED PROJECTS	PROJECT COST					
	2017	2018	2019	2020	2021	TOTAL
Vista Park Drive Waterline Replacement	\$500,000					\$500,000
WTP Filter and Control Replacement	\$2,000,000					\$2,000,000
Baldwin Road Sewer Rehabilitation	\$100,000					\$100,000
Pittsburgh Street Lateral Control	\$100,000					\$100,000
Mason Drive Waterline Replacement	\$250,000					\$250,000
Wastewater SCADA Construction (Phase 1)	\$300,000	\$300,000				\$600,000
WTP Exterior Site Improvements		\$320,000				\$320,000
WTP Upgrades (Windows/Doors)		\$300,000				\$300,000
Petrie Road Generator Replacement		\$75,000				\$75,000
Wastewater Samplers	\$45,000					\$45,000
TOTAL ANNUAL PROJECT COSTS	\$3,295,000	\$995,000				\$4,290,000

Appendix B

Debt Service Schedule

Summary of Outstanding Debt Service

30-Jun	Outstanding Debt				Series of 2015		Total
Year	2007	2007A*	2007B*	2014	Series A	Series B	Requirements
2016	1,615,646	172,491	157,730	349,600	232,845	166,480	2,694,791
2017	1,614,909	344,981	315,460	349,600	459,709	375,378	3,461,036
2018	1,615,946	344,981	315,460	349,600	463,409	370,478	3,459,874
2019	1,618,490	344,981	315,460	349,600	461,309	370,036	3,459,878
2020	1,616,940	344,981	315,460	349,600	464,209	369,538	3,460,728
2021	1,616,610	344,981	315,460	349,600	461,959	373,938	3,462,548
2022	1,312,230	529,981	315,460	349,600	584,709	368,173	3,460,153
2023	0	1,297,119	315,460	349,600	1,131,709	372,373	3,466,260
2024	0	1,301,319	315,460	349,600	1,125,509	371,360	3,464,248
2025	0	1,303,104	315,460	349,600	1,125,309	365,230	3,458,753
2026	0	1,302,429	315,460	349,600	1,127,909	369,280	3,464,678
2027	0	1,304,523	315,460	349,600	1,129,109	362,818	3,461,509
2028	0	1,304,143	315,460	349,600	1,127,709	361,518	3,458,429
2029	0	1,296,563	315,460	349,600	1,125,559	375,218	3,462,399
2030	0	47,003	1,570,460	349,600	1,117,659	578,430	3,463,151
2031	0	0	1,614,613	349,600	1,122,971	371,480	3,458,664
2032	0	0	1,619,315	349,600	1,125,959	364,693	3,459,566
2033	0	0	1,616,125	349,600	1,127,299	372,968	3,465,991
2034	0	0	1,614,525	349,600	1,131,956	365,898	3,461,979
2035	0	0	0	349,600	0	3,109,000	3,458,600
2036	0	0	0	349,600	0	3,112,400	3,462,000
2037	0	0	0	349,600	0	3,108,000	3,457,600
2038	0	0	0	3,454,600	0	0	3,464,600
2039	0	0	0	3,465,000	0	0	3,465,000
2040	0	0	0	2,480,400	0	0	2,480,400
Total	11,010,771	11,583,578	12,293,748	17,101,200	16,647,802	16,155,732	64,792,831

*Non-refunded portion of bonds

Appendix C

Current Tap Fee Schedule

Municipal Authority of the Township of Robinson
Tapping Fee Analysis
September 2016

Introduction

The Municipal Authority of the Township of Robinson owns and maintains both water and sewerage systems that serve Robinson Township. Act 57 of 2003, which amends Act 203 of 1990, provides Municipalities and Authorities with the power to charge initial fees (connection/tapping fees) to property owners who desire to receive water and/or wastewater service. Costs to serve new customers should not be borne by existing customers. The fees that are charged to new customers should reflect the initial costs which are required to provide the service. In addition, the fees are established to recover a portion of the embedded capacity available to provide service. These fees must be developed on an equitable basis for all customers.

Within the Act, three (3) significant components are addressed. These components include the following:

- Connection Fee
- Customer Facilities Fee
- Tapping Fee

The Tapping Fee is further split into three (3) components:

- Capacity Portion Fee
- Collection/Distribution Portion Fee
- Special Purposes Fee

Municipalities and Authorities may periodically review and update their tapping fees. The Municipal Authority of the Township of Robinson adopted its current tapping fees for its service area in 2004 and has authorized NIRA Consulting Engineers to review and propose updates to the fees in accordance with the requirements of Act 57 of 2003.

Water System

The current water system tapping fees were calculated in 2004 after the tapping fee legislation in Pennsylvania was amended by Act 57 of December 30, 2003, which required all Municipalities and Authorities to recalculate their tapping fees by June 2005. The fees are based on capacity, infrastructure costs, and debt for all of the Municipal Authority's water system service area. The residential tapping fee is \$2,790 and is based on five components: connection fee, customer facilities fee, capacity portion fee, distribution portion fee, and special purpose portion fee.

Current Residential Water Tapping Fees

Connection Fee:	\$1,350
Customer Facility Fee:	\$375
Capacity Portion Fee:	\$780
Distribution Portion Fee:	\$285
Special Purpose Fee:	\$0
Total:	\$2,790

This analysis will re-evaluate each component of the tapping fee and calculate updated values based on current available information.

Connection Fee

The connection fee is based on the average cost to install a service line from the water main to the property line or easement line and includes the cost of the corporation stop, the customer service line, and the curb stop/box; and includes materials, labor, equipment, and overhead. The average Connection Fee for a ¾" residential service is \$1,430.84, calculated as follows:

Connection Fee for 3/4-inch Residential Service Line*

MATERIALS:

3/4" Copper Pipe (25 LF):	\$94.19
3/4" Corporation Stop:	\$54.35
3/4" Curb Stop	\$80.38
Curb Box	<u>\$70.20</u>
Subtotal:	\$299.12

EQUIPMENT:

4 hours @ \$100/hr:	\$400.00
---------------------	----------

RESTORATION:

Topsoil, stone, asphalt:	\$225.00
--------------------------	----------

LABOR:

4 man crew @ \$126.68/hr, 4 hours	\$506.72
-----------------------------------	----------

Total:	\$1,430.84
--------	------------

*Costs based on actual material purchase prices from recent installations (2016), estimated equipment costs, and direct labor costs plus overhead for an average length of installation.

Customer Facilities Fee

The customer facility fee is based on average Authority costs incurred during installation of the customer's portion of the service line from the property line to the structure. The Authority does not install these facilities but incurs inspector's fees and provides/installs the meter. Labor, materials, equipment, and

overhead costs are included within the numbers, which are based on a ¾" service. The average Customer Facility Fee for a ¾" residential service is \$441.63, calculated as follows:

<u>Customer Facilities Fee for 3/4-inch Residential Service Line</u>	
Inspection Fee(1 hr):	\$47.82
Meter Installation Fee (1 hr):	\$47.82
Meter and MXU:	<u>\$345.99</u>
Total:	\$441.63

Tapping Fee

The purpose of the tapping fee component is to recover the cost of capacity and distribution facilities required to serve each new customer. The Act requires that certain minimum data be included in the calculation of these fees:

- The original cost of capital plant facilities by year installed and by function.
 - Replacement cost method can only be used if historical costs are not ascertainable. An engineer's estimate is required based on a listing of those components of the actual facilities for which historical costs are not available.
 - Historical costs may be trended to current costs.
- Contributions-in-aid-of-construction by year received and by function.
 - Grants and contributions must be deducted before trending historical costs to current costs.
- Outstanding debt distributed by function.
 - Debt may only be ignored in calculating the initial tapping fee for the facilities exclusively serving new customers.
- System design capacity
- Average daily use of an Equivalent Dwelling Unit (EDU)

The Act also excludes certain costs from being included in the calculation of these fees:

- Costs to reduce I/I cannot be included in the tapping fee calculation unless it results in an increase in design capacity.
- Costs to expand, replace, update, or upgrade facilities that only serve existing customers cannot be included in the tapping fee calculation.
- Maintenance and Operation expenses cannot be included in the tapping fee calculation.

Capacity Portion Fee

The capacity portion fee is based on recovery of the costs incurred to construct and upgrade capacity facilities, which include the water filtration plant, storage tanks, booster pump stations, and transmission mains. Costs are based on the minimum data defined by the tapping fee amendment as described above.

The water filtration plant, located in Groveton, has a capacity of 6 MGD.

The capacity portion fee has been re-evaluated to be \$690.13, as detailed in Table 1 in the Appendices at the end of the report.

Distribution Portion Fee

The distribution portion fee is based on recovery of the costs incurred to construct and upgrade distribution facilities. Costs are based on the minimum data defined by the tapping fee amendment as described above.

The above-noted system capacity (6.0 MGD) as described in the capacity portion will also be utilized in calculating the distribution portion fee.

The distribution portion fee has been re-evaluated to be \$388.12, as detailed in Table 2 in the Appendices at the end of the report.

Special Purposes Fee

A special Purpose Fee can be applied to special districts where only a portion of customers in the system are impacted by the fee or a special purpose fee can be applied as a means of separately accounting for planned future capacity facilities that are not yet constructed.

Fire Service Lines Fee: Specific groups of customers such as commercial or industrial customers may have a special purpose fee applied to them. The Authority will be applying a fire service line fee to those commercial and industrial users that require a fire connection tap for a building fire protection system. The connection and facilities fees for the fire service line fee are based on actual construction and material costs incurred by the Authority. The capacity and distribution fees for the fire service line are based on an assumed 25% usage multiplied by the "equivalent meter factor" for the size line installed. Table 5 in the Appendices at the end of the report includes a more detailed breakout of this calculation.

Future Facilities Fee: Advance recovery of future costs to be incurred to construct or upgrade capacity facilities can be applied if a known future project is planned for construction, but, must be refunded to the customers if the facility is not built within a specified time period. Certain actions must be taken by the Municipality or Authority in order to include the estimated costs. These actions are detailed within Act 57 of 2003. The cost for future distribution facilities is not permitted. The future facilities fee will not be evaluated for this analysis and will remain at \$0.

Outstanding Debt

The Authority's outstanding debt has been calculated based on reviewing the Authority's existing borrowings for remaining balances. Current borrowings includes the following Water and Sewer System Revenue Bonds: 2015 Series A, 2015 Series B, 2014, 2007 Series T, and 2007 Series A. The current status of debt attributable to water and sewer facility projects is \$43,253,281.55. The debt has been distributed

between Water and Sanitary Sewer Capacity and Collection projects based on a ratio of projects that were funded through the Revenue Bonds. The distribution has been calculated as follows:

Total Outstanding Water and Sewer Project Debt: \$43,253,281.55

Water System Capacity Debt: \$17,733,910.03 (41.00% of total)

Water System Distribution Debt: \$9,158,586.25 (21.17% of total)

Basis for Calculation of Water Usage

Residential water use can be calculated by one of two methods:

- 65 gallons per day times the census figure
- Substantiated water consumption study completed within the last five (5) years

For these calculations, the census method is followed. According to the 2010 U.S. Census, the average household size in Robinson Township is 2.31 people. The household size was utilized to calculate the average residential water use, which is $65 \text{ gpd/cap} \times 2.31 \text{ cap/EDU} = 150.15 \text{ gpd/EDU}$. One household is one equivalent dwelling unit (EDU).

Tapping Fee Summary

The Authority is required to adopt its tapping fee in accordance with the information presented. The adopted fee can be up to the calculated maximum. Based on the calculations as outlined in this study, and in accordance with Act 57, the maximum water tapping fee which the Authority can charge to a residential customer (1 EDU) is summarized below:

Maximum Allowed ¾" Residential Water Tapping Fees (no meter pit)

Connection Fee: \$1,430.84

Customer Facility Fee: \$441.63

Capacity Portion Fee: \$690.13

Distribution Portion Fee: \$388.12

Special Purpose Fee: \$0

Total: \$2,950.72

The recommended residential water tapping fee should be adopted as follows:

Recommended ¾" Residential Water Tapping Fees (no meter pit)

Connection Fee: \$1,430

Customer Facility Fee: \$440

Capacity Portion Fee: \$690

Distribution Portion Fee: \$380

Special Purpose Fee: \$0

Total: \$2,940

As anticipated, this is an increase from the previously adopted fee of \$2,790. Residential customers will be charged based on four (4) scenarios, which are calculated in the Appendices at the end of the report – ¾" service with no meter pit, ¾" service with meter pit, 1" service with no meter pit, 1" service with meter pit.

Non-residential customers will be charged based on actual materials and installation costs for the Connection Fee and the Customer Facilities Fee; and a multiple of the Capacity Portion Fee and the Distribution Portion Fee based on the number of proposed EDUs. Several example calculations are provided in the Appendices at the end of the report.

Reimbursement Component

Where a property owner constructs or causes to be constructed, at the property owner's expense, an extension of a Municipal Authority of the Township of Robinson's waterline, the Authority shall provide for the reimbursement to the property owner when the owner of another property, not in the development for which the extension was constructed, connects a service line directly to the extension within ten (10) years of the date of the dedication to the Authority. The following provisions are pertinent:

- The reimbursement fee charged to the "owner of another property" shall be equal to the distribution part of the tapping fee
- The Authority shall be entitled to deduct from the reimbursement payment in the amount equal to five (5) percent, for administrative expenses and service.
- A written agreement shall be provided between the Authority and such person at whose expense the facilities were constructed.

Sanitary Sewer System

The current sanitary sewer system tapping fees were calculated in 2004 after the tapping fee legislation in Pennsylvania was amended by Act 57 of December 30, 2003, which required all Municipalities and Authorities to recalculate their tapping fees by June 2005. The fees are based on capacity, infrastructure costs, and debt for all of the Municipal Authority's sanitary sewer system service area, which includes six sewer sheds (Riverview, Montour Run, Covi-Douglas, Moon Run, Campbells Run, and Alcosan). The residential tapping fee is \$1,436 and is based on five components: connection fee, customer facilities fee, capacity portion fee, collection portion fee, and special purpose portion fee.

Current Residential Sewer Tapping Fees

Connection Fee:	\$0
Customer Facility Fee:	\$36
Capacity Portion Fee:	\$1,190
Collection Portion Fee:	\$210
<u>Special Purpose Fee:</u>	<u>\$0</u>
Total:	\$1,436

This analysis will re-evaluate each component of the tapping fee and calculate updated values based on current available information.

Connection Fee

The connection fee is based on the average cost to install a lateral tee from the sewer main to the property line or easement line and includes the cost of the wye, the pipe, stone backfill, and surface restoration (paving and vegetation); including materials, labor, equipment, restoration, and overhead. In Robinson Township, the Authority typically does not install these facilities for the sanitary sewer system (it is typically done by the Developers), so no calculation has been done and a \$0 charge allocated. In the event that these facilities were installed by the Authority, a fee for actual materials/installation costs would be charged.

Customer Facilities Fee

The customer facility fee is based on average Authority costs incurred during installation of the customer's portion of the lateral from the property line to the structure. The Authority does not install these facilities but incurs inspector's fee and administrative fees.

Customer Facilities Fee for Residential Lateral Connection

Inspection Fee (2-hrs):	<u>\$95.64</u>
Total:	\$95.64

Tapping Fee

The purpose of the tapping fee component is to recover the cost of capacity and collection facilities required to serve each new customer. The Act requires that certain minimum data be included in the calculation of these fees:

- The original cost of capital plant facilities by year installed and by function.
 - Replacement cost method can only be used if historical costs are not ascertainable. An engineer's estimate is required based on a listing of those components of the actual facilities for which historical costs are not available.
 - Historical costs may be trended to current costs.
- Contributions-in-aid-of-construction by year received and by function.
 - Grants and contributions must be deducted before trending historical costs to current costs.
- Outstanding debt distributed by function.
 - Debt may only be ignored in calculating the initial tapping fee for the facilities exclusively serving new customers.
- System design capacity
- Average daily use of an Equivalent Dwelling Unit (EDU)

The Act also excludes certain costs from being included in the calculation of these fees:

- Costs to reduce I/I cannot be included in the tapping fee calculation unless it results in an increase in design capacity.
- Costs to expand, replace, update, or upgrade facilities that only serve existing customers cannot be included in the tapping fee calculation.
- Maintenance and Operation expenses cannot be included in the tapping fee calculation.

Capacity Portion Fee

The capacity portion fee is based on recovery of the costs incurred to construct and upgrade capacity facilities, which include sewage treatment plants and interceptor sewers. Costs are based on the minimum data defined by the tapping fee amendment as described above.

The geography of Robinson Township creates a natural delineation of six (6) separate sewer sheds with discrete discharge points. Figure 1 at the end of the report shows the delineation of the sewer sheds, which are identified as follows:

1. Riverview (Coraopolis) Sewer Shed
2. Montour Run Sewer Shed
3. Covi-Douglas Sewer Shed (0.21 MGD)
4. Moon Run Sewer Shed (0.60 MGD)
5. Campbells Run Sewer Shed (1.0 MGD)
6. Alcosan Sewer Shed

Sewage treatment facilities for the Riverview, Montour Run, and Alcosan Sewer Sheds are owned and operated by others. System "tapping fees" were not charged to the Authority under the service agreements for these systems. Fees are recuperated from the downstream systems as part of the regular customer usage billings. There are no facilities that are owned by the Authority that are considered to be capacity facilities within these sewer sheds, therefore the capacity calculations only account for the three sewer sheds that do have capacity facilities owned by the Authority.

The Covi-Douglas, Moon Run, and Campbells Run Sewer Sheds include sewage treatment facilities that are owned and operated by the Authority. The Covi-Douglas STP is permitted to treat an average daily flow of 210,000 gpd. The Moon Run STP is permitted to treat an average daily flow of 600,000 gpd. The Campbells Run STP is permitted to treat an average daily flow of 1,00,000 gpd. Additional capacity facilities include certain interceptor sewers, which were primarily constructed in 1971. The total system capacity used for the capacity fee calculations is 1,810,000 gpd.

The capacity portion fee has been re-evaluated to be \$1,818.68, as detailed in Table 3 in the Appendices at the end of the report.

Collection Portion Fee

The collection portion fee is based on recovery of the costs incurred to construct and upgrade collection facilities, which include branch sewers and pumping stations. Costs are based on the minimum data defined by the tapping fee amendment as described above.

The above-noted system flow rates ($0.21 + 0.60 + 1.00 = 1.81$ MGD) for the Covi-Douglas, Moon Run, and Campbells Run Sewer Sheds as described in the Capacity Portion will also be utilized in calculating the Collection Portion Fee. However, collection capacities for the Riverview (0.11 MGD), Montour Run (0.75 MGD), and Alcosan (0.28 MGD) Sewer Sheds will also be added to this calculation based on the capacity of the sewers that connect to the downstream systems. The total system capacity used for the collection fee calculations is 2,950,000 gpd.

The collection portion fee has been re-evaluated to be \$461.38, as detailed in Table 4 in the Appendices at the end of the report.

Special Purposes Fee

A special Purpose Fee can be applied to special districts where only a portion of customers in the system are impacted by the fee or a special purpose fee can be applied as a means of separately accounting for planned future capacity facilities that are not yet constructed.

Special Districts Fee: No special districts have been designated for the sanitary sewer system.

Future Facilities Fee: Advance recovery of future costs to be incurred to construct or upgrade capacity facilities can be applied if a known future project is planned for construction, but, must be refunded to the customers if the facility is not built within a specified time period. Certain actions must be taken by the Municipality or Authority in order to include the estimated costs. These actions are detailed within Act 57 of 2003. The cost for future distribution facilities is not permitted. The future facilities fee will not be evaluated for this analysis and will remain at \$0.

Outstanding Debt

The Authority's outstanding debt has been calculated based on reviewing the Authority's existing borrowings for remaining balances. Current borrowings includes the following Water and Sewer System Revenue Bonds: 2015 Series A, 2015 Series B, 2014, 2007 Series T, and 2007 Series A. The current status of debt attributable to water and sewer facility projects is \$43,253,281.55. The debt has been distributed between Water and Sanitary Sewer Capacity and Collection projects based on a ratio of projects that were funded through the Revenue Bonds. The distribution has been calculated as follows:

Total Outstanding Water and Sewer Project Debt: \$43,253,281.55
Sanitary Sewer System Capacity Debt: \$10,239,109.01 (23.67% of total)
Sanitary Sewer System Collection Debt: \$6,121,676.26 (14.15% of total)

Basis for Calculation of Sewage Flows

Residential sewage use can be calculated by one of three methods:

- 90 gallons per day times the census figure
- Average water consumption plus 10%
- Measured average wastewater flow

For these calculations, the census method is followed. According to the 2010 U.S. Census, the average household size in Robinson Township is 2.31 people. The household size was utilized to calculate the average residential sewage use, which is $90 \text{ gpd/cap} \times 2.31 \text{ cap/EDU} = 207.90 \text{ gpd/EDU}$. One household is one equivalent dwelling unit (EDU).

Tapping Fee Summary

The Authority is required to adopt its tapping fee in accordance with the information presented. The adopted fee can be up to the calculated maximum. Based on the calculations as outlined in this study, and in accordance with Act 57, the maximum sewer tapping fee which the Authority can charge to a residential customer (1 EDU) is summarized below:

Maximum Allowed Residential Sewerage Tapping Fees

Connection Fee:	\$0
Customer Facility Fee:	\$95.64
Capacity Portion Fee:	\$1,818.68
Collection Portion Fee:	\$461.38
<u>Special Purpose Fee:</u>	<u>\$0</u>
Total:	\$2,375.70

The recommended residential tapping fee should be adopted as follows:

Recommended Residential Sewerage Tapping Fees

Connection Fee:	\$0
Customer Facility Fee:	\$90
Capacity Portion Fee:	\$1,810
Collection Portion Fee:	\$460
<u>Special Purpose Fee:</u>	<u>\$0</u>
Total:	\$2,360

As anticipated, this is an increase from the previously adopted fee of \$1,436. Non-residential customers will be charged based on the number of proposed EDUs. Several example calculations are provided in the Appendices at the end of the report.

Reimbursement Component

Where a property owner constructs or causes to be constructed, at the property owner's expense, an extension of an Municipal Authority of the Township of Robinson's sewer, the Authority shall provide for the reimbursement to the property owner when the owner of another property, not in the development for which the extension was constructed, connects a service line directly to the extension within ten (10) years of the date of the dedication to the Authority. The following provisions are pertinent:

- The reimbursement fee charged to the "owner of another property" shall be equal to the collection part of the tapping fee
- The Authority shall be entitled to deduct from the reimbursement payment in the amount equal to five (5) percent, for administrative expenses and service.
- A written agreement shall be provided between the Authority and such person at whose expense the facilities were constructed.

Appendix D

Insurance Coverage Information

Appendix E

Compliance with Authority's Continuing Disclosure Agreement

APPENDIX B
THE MUNICIPAL AUTHORITY OF THE TOWNSHIP OF ROBINSON
DESCRIPTION OF THE AUTHORITY'S WATER AND SEWER SYSTEM AND
FINANCIAL INFORMATION
FOR FISCAL YEAR 2016

DESCRIPTION OF THE AUTHORITY'S WATER AND SEWER SYSTEM

The existing water distribution system facilities include about 106.8 miles of water lines ranging in size up to thirty inches and related facilities including a 1.0 million gallon, a 1.5 million gallon elevated storage tank and a 500,000 gallon standpipe. Additionally, the Authority maintains three metered connections with booster pumping stations to pump water from the Pennsylvania-American Water System, two (2) metered connections with the Moon Township Municipal Authority, and one metered connection with the Western Allegheny County Municipal Authority, West View Water Authority, and the Coraopolis Water and Sewer Authority. All of the foregoing connections are for the purpose of purchasing and/or supplying emergency water. Waterline sizes are predominantly six inch, eight inch and ten inch diameter.

Water System

The water supply system services Robinson Township and provides for bulk sales of water to the Findlay Township Municipal Authority. The water treatment plant is located in the Groveton area of the Township, approximately 400 feet south of the Ohio River. The plant currently has an output capacity of 6.0 million gallons per day. The projected average daily demand is 2.82 mgd, and peak daily demand is 4.14 mgd. Incorporated into the plant are five conventional rapid sand filters with granular carbon media, four reactor clarifiers of the upflow type incorporating flocculating chambers, a rapid chemical mix chamber, and a finished water clearwell storage. The building housing the rapid sand filters also houses chemical feed and storage facilities, an office-laboratory and high service pumping facilities. The water treatment process utilizes coagulation, followed by settling and filtration. Other normal chemical additions include sodium permanganate and post-chlorination for disinfection. The granular carbon in the filter's facilitates taste and odor control. The treatment system also includes a processing facility consisting of backwash equalization and recycle basin, clarifier blowdown storage and equalization basin, sludge thickener with polymer fixed systems, backwash water recycling pumps and waste sludge pumping facilities.

The water supply, transmission, distribution, treatment and storage facilities are owned and operated by the Authority.

Sewer System

The Authority owns and operates a comprehensive sewer system which dates back to the 1950's. This system services the watersheds of Montour Run, Campbells Run, Moon Run and Chartiers Creek. The Village of Groveton is served by a sewage system constructed in 1964 which is owned and operated by the Authority, and ultimately transfers sewage for treatment by Coraopolis.

The sewage system serving Robinson Township consists of about 117 miles of gravity sewer, a series of pumping stations, three wastewater treatment plants (Campbells Run, Covi/Douglas and Moon Run) and other such related and required facilities. In addition to the Authority's treatment plants serving Robinson Township, sewage collected in the Montour Run Drainage Area is discharged to an interceptor owned by the Moon Township Municipal Authority. The Moon Township Municipal Authority owns and operates the treatment plant which treats the sewage collected in the comprehensive Montour Run Drainage Area. Additionally, sewage collected in the Groveton (Ohio River) area is pumped into the system owned and operated by the Borough of Coraopolis, and the Allegheny County Sanitary Authority provides for the treatment of sewage collected in the Chartiers Creek Drainage Area and Lower Campbells Run Road area of Robinson Township.

The Campbells Run drainage basin serves a section of Robinson Township and small areas of North Fayette and Collier Townships. All sewage generated within the basin is conveyed to the Authority owned Campbells Run Sewage Treatment Plant via 27 miles of sewer and three pumping stations. The Campbells Run Facility has a capacity of 1.0 million gallons per day and is currently operating at 54 percent of the plant's hydraulic capacity and approximately 70 percent of its organic capacity.

The system tributary to the Covi/Douglas Treatment Plant consists of approximately 9.8 miles of sanitary sewers and three pumping facilities which convey sewage to the Covi/Douglas Treatment Plant. The treatment plant has a capacity of 0.210 million gallons per day and is currently operating at about 75 percent of the plant's hydraulic capacity and 80 percent of its organic capacity.

The sewer system tributary to the Moon Run Treatment Plant consists of approximately 13 miles of sanitary sewers and one pumping station. The treatment plant has a capacity of 0.600 million gallons per day and is currently operating at approximately 36 percent of the plant's hydraulic capacity and 74 percent of its organic capacity.

Laws and Permits

All of the Authority's sewage treatment plants, pump stations and sewage collection systems are currently in compliance with all laws and permit conditions. Occasional minor exceedence of discharge permit conditions do, however, occur, which are the result of equipment failure, power outages or other extreme weather conditions or circumstances. These conditions of temporary non-compliance are reported in accordance with the NPDES Permit requirements and corrective actions noted. The Authority's water treatment plant and distribution system has consistently met all of the requirements of the Safe Drinking Water Act.

WATER AND SEWER CUSTOMERS

WATER CUSTOMERS		
Fiscal Year End	Residential	Commercial and Industrial
2012	3,972	721
2013	3,983	723
2014	4,061	728
2015	4,095	739
2016	4,124	748

SEWER CUSTOMERS		
Fiscal Year End	Residential	Commercial and Industrial
2012	4,024	693
2013	4,048	750
2014	4,124	751
2015	4,160	765
2016	4,189	769

Ten Highest Customers – Water/Sewer

Water – Fiscal Year Ending 2015

Findlay Township	\$1,060,103.00
Ventana	115,028.00
Chestnut Ridge	104,800.00
Shemin Nurseries	93,786.00
Westpointe Apts	73,916.00
Bayer Corporation	68,941.00
Quala	64,421.00
Allegheny County Housing	59,281.00
Mall at Robinson	58,428.00
Settler's Ridge	50,625.00

Water – Fiscal Year Ending 2016

Findlay Township	\$830,744.12
Ventana	115,704.52
Chestnut Ridge	107,406.70
Bayer Corporation	76,282.49
Westpointe Apts	73,380.73
Allegheny County Housing	70,567.62
Shemin Nurseries	66,907.90
Mall at Robinson	64,141.73
Quala	56,500.09
Settler's Ridge	52,179.78

Sewer – Fiscal Year Ending 2015

Ventana	\$131,171.00
Chestnut Ridge	119,525.00
Westpointe Apts	96,697.00
Quala	93,748.00
Bayer Corporation	77,000.00
Allegheny County Housing	73,210.00
Mall at Robinson	69,643.00
Settler's Ridge	62,117.00
Stevenson Williams	43,681.00
Giant Eagle	33,486.00

Sewer – Fiscal Year Ending 2016

Ventana	\$128,129.60
Chestnut Ridge	118,606.76
Westpointe Apts	93,275.72
Allegheny County Housing	85,474.66
Bayer Corporation	83,585.80
Mall at Robinson	75,249.36
Quala	71,530.64
Settler's Ridge	62,792.12
Stevenson Williams	41,484.40
Giant Eagle	32,883.28

WATER AND SEWER RATES

Water and sewer services are sold by meter to 99.5% of the Authority's customers. The remaining .5% are flat-rate, sewer-only customers. Accounts are computed and the bills rendered monthly in the case of commercial customers and quarterly in the case of residential customers.

Collection of past due accounts is processed by sending out a delinquent notice to each customer approximately 15-20 days after the account is due. At this time the notice gives the customer 30 days in which to remit the balance or make schedule arrangement. If the delinquent customer does not respond within the required 30 days, a notice is delivered informing the property owner of service termination within 10 days of receipt of the notice and a property lien is filed promptly thereafter.

Meter Size	Water Rates		Sewer Rates	
	Residential	Commercial	Residential	Commercial
	Quarterly	Monthly	Quarterly	Monthly
5/8"	\$30.78	\$10.26	\$23.73	\$7.91
3/4"	60.06	20.02	46.20	15.40
1"	92.79	30.93	71.42	23.81
1½"	180.15	60.05	138.61	46.20
2"	Not applicable	100.05	Not applicable	77.01
3"	Not applicable	181.91	Not applicable	140.01
4"	Not applicable	300.15	Not applicable	231.01
6"	Not applicable	545.72	Not applicable	420.02
8"	Not applicable	909.25	Not applicable	700.04
Unmetered Well	Not applicable	Not applicable	132.33	Not applicable

Volumetric Charges		
	Water Rate	Sewer Rate
Residential	\$5.57 per 1,000 gallons	\$7.24 per 1,000 gallons
Commercial	\$5.57 per 1,000 gallons	\$7.24 per 1,000 gallons
Wholesale	\$3.86 per 1,000 gallons	Not applicable

Fire Protection Charges	
Fire Hydrants	Annual Rate
Public	\$369.00
Private	369.00
Fire Lines:	
5/8"	266.00
1"	306.00
1½"	346.00
2"	394.00
3"	507.00
4"	667.00
6"	1,065.00
8"	1,544.00
10"	2,103.00
12"	3,716.00

Miscellaneous Charges	
Service	Customer Charge
Lien Letter Fee	\$38.00
Dye Test	55.00
Water Turn-On Fee	50.00
Water Turn-Off Fee	56.00
Returned Check Fee	38.00
Non-Payment Penalty	10% of Current Bill
Residential Fire Suppression	250.00
Tenant Deposit (Refundable)	250.00

THE MUNICIPAL AUTHORITY OF THE TOWNSHIP OF ROBINSON
SUMMARY OF BALANCE SHEETS
AS OF JUNE 30, 2013, 2014, 2015 AND 2016

ASSETS	2013	2014	2015	2016
Current Assets				
Cash	\$2,510,252	\$2,204,024	\$2,461,035	\$3,039,737
Accounts Receivable, net of Allowance for Doubtful Accounts	1,375,088	1,130,236	1,415,313	1,304,093
Other Receivables	78,182	62,902	66,924	75,605
Inventory	181,668	168,024	190,193	174,915
Prepaid Expenses	21,544	19,985	92,402	185,811
Deposits	1,000	1,000	1,000	1,000
Total Current Assets	4,167,734	3,586,081	4,226,867	4,781,161
Restricted Assets				
Trustee Funds - Cash and Investments	5,255,666	4,163,593	11,841,081	12,108,084
Developers' Escrow - Cash	201,486	250,239	266,359	228,788
Bond Redemption and Improvement Fund	551,573	1,018,603	781,203	1,134,988
Total Restricted Assets	6,008,725	5,432,435	12,888,643	13,471,860
Capital Assets, net of Accumulated Depreciation	52,591,403	53,195,520	53,814,382	54,107,203
Other Assets				
Bond Issuance Costs	336,946	310,974	286,757	97,852
Total Other Assets				
TOTAL ASSETS	\$63,104,808	\$62,525,010	\$71,216,649	\$72,458,076
LIABILITIES AND NET ASSETS				
Current Liabilities (Payable from Restricted Assets)				
Accounts Payable	290,847	203,151	269,391	271,456
Deposits Payable	172,517	181,518	196,258	256,243
Line Extension				
Accrued Compensated Absences	212,379	235,255	228,734	202,926
Other Liabilities and Accrued Expenses	170,313	178,264	186,906	170,477
Current Portion of Leases Payable				
Total Current Liabilities (Payable from Restricted Assets)	846,056	798,188	881,289	901,102
Current Liabilities (Payable from Restricted Assets)				
Developers' Advances	201,486	250,239	266,359	228,788
Accrued Interest Payable	272,474	273,028	270,463	253,714
Current Portion of Water and Sewer Revenue Bonds	1,030,000	1,085,000	1,140,000	1,300,000
Total Current Liabilities (Payable from Restricted Assets)	1,503,960	1,608,267	1,676,822	1,782,502
Long-Term Liabilities				
Revenue Bonds Payable	43,530,691	42,524,171	50,093,120	51,054,065
Net Pension Liability				2,116,572
Total Long-Term Liabilities	43,530,691	42,524,171	50,093,120	53,170,637
TOTAL LIABILITIES	45,880,707	44,930,626	52,651,231	55,854,241
Net Assets				
Invested in Capital Assets, net of Related Debt	10,383,620	11,367,864	12,786,973	12,613,360
Restricted for Capital Activity and Debt Service	5,270,028	4,909,167	3,937,646	4,296,262
Unrestricted	3,658,624	3,107,203	3,632,330	2,523,749
Total Net Assets	19,312,272	19,384,234	20,056,949	19,433,371
TOTAL LIABILITIES AND NET ASSETS	\$65,192,979	\$64,314,860	\$72,708,180	\$75,287,612

Source: The Municipal Authority of the Township of Robinson audited Financial Statements for the Years Ended June 30, 2013, 2014, 2015 and 2016.

THE MUNICIPAL AUTHORITY OF THE TOWNSHIP OF ROBINSON
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET ASSETS
FOR THE YEARS ENDED JUNE 30, 2013, 2014, 2015 AND 2016

Operating Revenues:	2013	2014	2015	2016
Water	\$4,359,656	\$4,204,193	\$4,733,237	\$4,685,201
Sewer	4,285,580	4,178,043	4,316,181	4,505,520
Hydrant and Fire Protection	173,520	174,797	178,732	204,163
Penalties	72,625	90,005	70,565	69,849
Water Tower Rental	60,356	60,353	60,353	51,846
Other	58,299	55,514	119,198	65,636
Total Operating Revenues	9,010,036	8,762,905	9,478,266	9,582,215
Operating Expenses:				
Water	2,944,135	3,038,884	2,961,435	2,846,653
Sewer System	2,542,511	2,646,173	2,862,547	3,044,583
Bad Debt Expense				
Depreciation	896,060	904,061	900,292	900,576
Total Operating Expenses	6,382,706	6,589,118	6,724,274	6,791,812
Operating Income	2,627,330	2,173,787	2,753,992	2,790,403
Non-Operating Revenues and Expenses:				
Interest on Investments	3,213	2,473	1,474	1,369
Gain on Sale of Fixed Assets				
Connection Fees	463,208	364,927	506,969	801,019
Federal Grants				
WACMA Settlement				
Interest	(2,521,415)	(2,455,121)	(2,564,823)	(2,753,239)
Authorization of Debt Discount and Issuance Expenses	(25,972)	(25,972)	(24,897)	(55,878)
Other		11,868		
Total Non-Operating Revenues and Expenses	(2,080,966)	(2,101,825)	(2,081,277)	(2,006,729)
Increase in Net Assets	546,364	71,962	672,715	783,674
Net Assets - Beginning of Year	18,765,908	19,312,272	19,384,234	18,649,697
Net Assets - End of Year	\$19,312,272	\$19,384,234	\$20,056,949	\$19,433,371

Source: The Municipal Authority of the Township of Robinson audited Financial Statements for the years ended June 30, 2013, 2014, 2015 and 2016.

**THE MUNICIPAL AUTHORITY OF THE TOWNSHIP OF ROBINSON
PROJECTED REVENUE AND EXPENSES
FOR THE YEAR ENDING JUNE 30, 2016**

Operating Revenues	Water System	Sewer System	Total
Metered Sales - Domestic	\$1,626,429	\$1,769,158	\$3,395,587
Metered Sales - Commercial	2,217,758	2,366,776	4,584,534
Metered Sales - Wholesale	804,836	0	804,836
Sewer Surcharge	0	347,977	347,977
Fire Protection	193,995	0	193,995
Other Revenues and Miscellaneous	135,236	66,696	201,932
Total Operating Revenue	4,978,254	4,550,607	9,528,861
Operating Expenses			
Standby Service	16,085	0	16,085
Treatment Plant	1,035,122	1,621,439	2,656,561
Collection System	0	377,437	377,437
Distribution System	704,566	0	704,566
General and Administration	1,117,143	1,083,756	2,200,899
Total Operating Expenses	2,872,916	3,082,632	5,955,548
NET OPERATING REVENUE (Before Debt Service)	\$2,105,338	\$1,467,975	\$3,573,313
Debt Service			\$2,694,791

Source: The Municipal Authority of the Township of Robinson Annual Consulting Engineer's Report for the fiscal year ending June 30, 2017.

**THE MUNICIPAL AUTHORITY OF THE TOWNSHIP OF ROBINSON
OPERATING BUDGET
FOR THE YEAR ENDING JUNE 30, 2017**

Operating Revenues	Water System	Sewer System	Total
Metered Sales - Domestic	\$1,705,000	\$1,825,000	\$3,530,000
Metered Sales - Commercial	2,270,000	2,400,000	4,670,000
Metered Sales - Wholesale	795,000	0	795,000
Sewer Surcharge	0	250,000	250,000
Fire Protection	194,100	0	194,100
Other Revenues and Miscellaneous	123,200	65,300	188,500
Total Operating Revenue	5,087,300	4,540,300	9,627,600
Operating Expenses			
Standby Service	30,060	0	30,060
Treatment Plant	933,230	1,611,000	2,544,230
Collection System	0	381,200	381,200
Distribution System	640,000	0	640,000
General and Administration	1,120,100	1,091,500	2,211,600
Total Operating Expenses	2,723,390	3,083,700	5,807,090
NET OPERATING REVENUE (Before Debt Service)	2,363,910	1,456,600	3,820,510

Source: The Municipal Authority of the Township of Robinson Annual Consulting Engineer's Report for the fiscal year ending June 30, 2017.