

City of Grand Rapids, Michigan

Water/Sewer

Rate Study

2012

Final

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: February 1, 2013

TO: Eric DeLong
Deputy City Manager

FROM: Linda Wagenmaker *LW*
Utility Financial Officer

SUBJECT: 2012 WATER/SEWER RATE REVIEW – CALENDAR YEAR 2013 RATES

This is the final report for water and sewer rates effective January 1, 2013 for Grand Rapids and all customer communities. The report continues to be two-tiered in nature, calculating recommended rates for customer communities based upon: (a) adherence to the rate-making methodology established in 1976-1977 for customer communities not party to the uniform water and sewer service agreements; (b) rate methodology changes, based upon the uniform service agreements with our Utility Advisory Board (UAB) partners.

This rate review continues to incorporate provisions of the third amendment to the uniform service agreements with our UAB Partners; specifically, the elimination of penalty fee credits from retail revenue requirements to fund the Individual Circuit Breaker (ICB) and the City and Customer Community Circuit Breaker (CCCB). Revenue from penalty fees was down 14% in the fiscal year ended June 30, 2012, a result of the conversion to a new customer information system. The amount generated to support the ICB, the program aimed at addressing retail users requiring assistance in payment of their water/sewer bills, was \$143,655. The third amendment also provides a funding mechanism, if sufficient funding is available, to limit each retail service area revenue requirement change to a level in line with the overall systems' initial average change, i.e., the City and Customer Community Circuit Breaker. Adequate funds were available to achieve that goal in the water system and full relief was provided to Grand Rapids, Walker and Tallmadge Township. The sewage system provided partial relief to Grand Rapids, Tallmadge and Wright Townships.

The 2013 water and sewer rates reflect decreases resulting from lower operating costs and declining interest rates. Also contributing to the decrease were increased surcharges, integrated connection fees and other revenue credits. Both systems saw increases as a result of declining average billed volume and fewer customers.

Summaries of overall revisions for the systems are as follows:

1. Water Supply System revenue requirements decreased \$1,812,756 or 4.41% less than revenues generated by existing rates and charges.
2. Sewage Disposal System revenue requirements decreased \$1,216,435 or 2.46% less than revenues generated by existing rates and charges.

Attached is a schedule of comparative 2012/2013 water/sewer approximate quarterly billings based on system consumption averages for a typical domestic user in Grand Rapids and retail customer communities. That schedule also includes a comparison of the approximate 2012/2013 monthly charges for Wright Township's REU (Residential Equivalent Unit) rate structure. Comparative rate adjustments are also noted for our wholesale customer communities.

Announcement of proposed 2013 water and sewer rates to our UAB partners and other customer communities was made Thursday, November 8, 2012. Revised water rates were distributed to our UAB partners on Thursday, November 15, 2012. The City Commission approved customer community rates by resolution on December 18, 2012.

Public hearings for water and sewer rates and charges in Grand Rapids were held on December 4, 2012. The City Commission approved final adoption of water and sewer rate ordinances on December 18, 2012.

LW

Attachment

T:\Water\Accountant\Rate Study\WSRS\12Final-Cover Memo.doc

**CITY OF GRAND RAPIDS, MICHIGAN
2012 FINAL WATER/SEWER RATE STUDY
IMPACT OF RATE ADJUSTMENTS ON DOMESTIC USERS
BY CUSTOMER COMMUNITY *
December 10, 2012**

| | <u>APPROXIMATE QUARTERLY BILL</u> | | <u>CHANGE</u> | |
|--|-----------------------------------|------------------|-------------------|----------------|
| | <u>2012</u> | <u>2013</u> | <u>DOLLARS</u> | <u>PERCENT</u> |
| GRAND RAPIDS | | | | |
| WATER | \$ 73.74 | \$ 70.68 | \$ (3.06) | -4.15% |
| SEWER | 99.18 | 98.25 | (0.93) | -0.94% |
| | <u>\$ 172.92</u> | <u>\$ 168.93</u> | <u>\$ (3.99)</u> | -2.31% |
| BASE RATIO | 1.00 | 1.00 | | |
| WALKER | | | | |
| WATER | \$ 78.55 | \$ 75.11 | \$ (3.44) | -4.38% |
| SEWER | 139.98 | 134.52 | (5.46) | -3.90% |
| | <u>\$ 218.53</u> | <u>\$ 209.63</u> | <u>\$ (8.90)</u> | -4.07% |
| RATIO TO GR | 1.26 | 1.24 | | |
| KENTWOOD | | | | |
| WATER | \$ 87.17 | \$ 82.10 | \$ (5.07) | -5.82% |
| SEWER | 63.36 | 60.33 | (3.03) | -4.78% |
| | <u>\$ 150.53</u> | <u>\$ 142.43</u> | <u>\$ (8.10)</u> | -5.38% |
| RATIO TO GR | 0.87 | 0.84 | | |
| CASCADE TWP | | | | |
| WATER | \$ 116.60 | \$ 110.82 | \$ (5.78) | -4.96% |
| SEWER | 143.49 | 136.05 | (7.44) | -5.19% |
| | <u>\$ 260.09</u> | <u>\$ 246.87</u> | <u>\$ (13.22)</u> | -5.08% |
| RATIO TO GR | 1.50 | 1.46 | | |
| GRAND RAPIDS TWP- Contribution of \$7,200 for 2012, \$5,600 for 2013. | | | | |
| WATER | \$ 92.61 | \$ 87.67 | \$ (4.94) | -5.33% |
| SEWER | 132.27 | 121.02 | (11.25) | -8.51% |
| | <u>\$ 224.88</u> | <u>\$ 208.69</u> | <u>\$ (16.19)</u> | -7.20% |
| RATIO TO GR | 1.30 | 1.24 | | |
| TALLMADGE TWP- Contribution of \$17,758 for 2012, \$0 for 2013. | | | | |
| WATER | \$ 112.60 | \$ 106.88 | \$ (5.72) | -5.08% |
| SEWER | 284.22 | 281.85 | (2.37) | -0.83% |
| | <u>\$ 396.82</u> | <u>\$ 388.73</u> | <u>\$ (8.09)</u> | -2.04% |
| RATIO TO GR | 2.29 | 2.30 | | |

* THE COMPARISONS ABOVE ARE BASED ON SYSTEM AVERAGE DOMESTIC CUSTOMER QUARTERLY CONSUMPTION OF : WATER- 23.00 UNITS OR 17,204 GALLONS
SEWER - 18.00 UNITS OR 13,464 GALLONS
NO. OF MONTHS: 3

Note: The average water consumption depicted above is the same as in last year's rate study.

REU (RESIDENTIAL EQUIVALENT UNIT) CUSTOMER COMMUNITY- APPROXIMATE QUARTERLY BILL

WRIGHT TWP- Contribution of \$5,000 for 2012, \$0 for 2013.

| | | | | |
|-------------------------|------------------|------------------|------------------|--------|
| SEWER (No. of REU 1.00) | <u>\$ 187.02</u> | <u>\$ 185.64</u> | <u>\$ (1.38)</u> | -0.74% |
|-------------------------|------------------|------------------|------------------|--------|

CITY OF GRAND RAPIDS, MICHIGAN
2012 FINAL WATER/SEWER RATE STUDY
IMPACT OF RATE ADJUSTMENTS ON WHOLESALE USERS
December 10, 2012

| | <u>2012</u> | <u>2013</u> | <u>PERCENTAGE CHANGE</u> |
|---------------------------|--------------|--------------|------------------------------|
| EAST GRAND RAPIDS | | | |
| WATER - SERVICE (MONTHLY) | \$ 17,894.00 | \$ 15,702.00 | -12.25% |
| - COMMODITY (100 CF) | 1.24 | 1.18 | -4.84% |
| SEWER - SERVICE (MONTHLY) | 1,679.00 | 1,604.00 | -4.47% |
| - COMMODITY (MG) | 1,534.00 | 1,396.00 | -9.00% |
| | | | |
| ADA TWP | | | |
| WATER - SERVICE | \$ 37,090.00 | \$ 34,722.00 | -6.38% |
| - COMMODITY | 1.36 | 1.30 | -4.41% |
| SEWER - SERVICE | 49,052.00 | 45,912.00 | -6.40% |
| - COMMODITY | 1,918.00 | 1,763.00 | -8.08% |
| | | | |
| OTTAWA COUNTY | | | |
| WATER - SERVICE | \$ 231.00 | \$ 170.00 | -26.41% |
| - COMMODITY | 1.31 | 1.26 | -3.82% |
| | | | |
| GAINES TWP | | | |
| SEWER - SERVICE | \$ 1,468.00 | \$ 1,574.00 | 7.22% |
| - COMMODITY | 1,384.00 | 1,310.00 | -5.35% |

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ANNUAL RATE REVIEW**

Table of Contents

| <u>Task No.</u> | | <u>Page</u> |
|-----------------|--|-------------|
| 1 | Inventory of Plant and Equipment | W 1 |
| 2 | Cost of Plant and Equipment | W 1 |
| 3 | Source of Funding for Plant and Equipment | W 1 |
| 4 | Operating Costs for the Test Period | W 2 |
| 5 | Adjustments to Operating Costs | W 4 |
| 6 | Water Volumes and Revenues | W20 |
| 7 | Other Operating Revenues | W23 |
| 8 | Changes in Operating Levels | W24 |
| 9 | Changes in Operating Revenues | W25 |
| 10 | System Additions and Retirements | W26 |
| 11 | Fixed Assets-Cost, Accumulated Depreciation and Depreciation | W27 |
| 12 | Working Capital Needs | W28 |
| 13 | Joint Use Facilities-Zonegated | W29 |
| 14 | Update Water Map | W30 |
| 15 | Construction Cost Rate Base | W31 |
| 15a | Integrated Water Connection Fees | W32 |
| 16 | Future Non-Integrated Improvements | W35 |
| 17 | Tabulation of Bonds | W36 |
| 18 | Water System Equity | W37 |
| 19 | Rate of Return-Bond Buyer's Index | W38 |
| 20 | Composite Rate of Return | W39 |
| 21 | Rate of Return by Governmental Entity | W40 |
| 22 | Adjusted Operating Cost by Government Entity-Zonegated | W44 |
| 23 | Other Operating Revenues by Governmental Entity | W45 |
| 24 | Depreciation Expense by Governmental Entity | W46 |
| 25 | Revenue Requirement Summary by Governmental Entity | W47 |
| 25a | Revenue Requirements-Bond Ordinance Provision | W48 |
| 26 | Comparative Summary of System Revenue Levels | W50 |
| 26 / 27 | Revenue Levels / Rate Schedules by Governmental Entity | W52 |
| 28 | Front Foot Charges | W71 |
| 29 | Water Service Charges | W72 |
| 30 | Water System Rates & Regulations – Miscellaneous Rates/Charges | W73 |
| 32 | Water Main Oversizing | W78 |
| 33 | Utility Service District Areas | W79 |
| 34 | Circuit Breaker- Individual and City & Customer Community | W80 |

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ANNUAL RATE REVIEW**

Table of Contents

| <u>Task No.</u> | | <u>Page</u> |
|-----------------|--|-------------|
| 1 | Inventory of Plant and Equipment | S 1 |
| 2 | Cost of Plant and Equipment | S 1 |
| 3 | Source of Funding for Plant and Equipment | S 1 |
| 4 | Operating Costs for the Test Period | S 2 |
| 5 | Adjustments to Operating Costs | S 4 |
| 6 | Sewer Volumes and Revenues | S18 |
| 7 | Other Operating Revenues | S21 |
| 8 | Changes in Operating Levels | S22 |
| 9 | Changes in Operating Revenues | S23 |
| 10 | System Additions and Retirements | S24 |
| 11 | Fixed Assets-Cost, Accumulated Depreciation & Depreciation | S25 |
| 12 | Working Capital Needs | S26 |
| 13 | Joint Use Facilities-Zonegated | S27 |
| 14 | Update Sewer Map | S32 |
| 15 | Construction Cost Rate Base | S33 |
| 15a | Integrated Sewer Connection Fees | S34 |
| 16 | CSO Debt Service Requirements | S38 |
| 16A | Future Non-Integrated Improvements | S39 |
| 17 | Tabulation of Bonds | S40 |
| 18 | Sewer System Equity | S41 |
| 19 | Rate of Return-Bond Buyer's Index | S42 |
| 20 | Composite Rate of Return | S43 |
| 21 | Rate of Return by Governmental Entity | S44 |
| 22 | Adjusted Operating Cost by Government Entity-Zonegated | S50 |
| 23 | Other Operating Revenues by Governmental Entity | S51 |
| 24 | Depreciation Expense by Governmental Entity | S52 |
| 25 | Revenue Requirement Summary by Governmental Entity | S53 |
| 25a | Revenue Requirements-Bond Ordinance Provision | S54 |
| 26 | Comparative Summary of System Revenue Levels | S56 |
| 26 / 27 | Revenue Levels / Rate Schedules by Governmental Entity | S58 |
| 28 | Front Foot Charges | S79 |
| 29 | Sewer Lateral Charges | S80 |
| 30 | Surcharges for BOD, TSS, Phosphorus & Ammonia | S81 |
| 31 | Industrial Pretreatment Permit & Laboratory Fees | S86 |
| 32 | Sanitary Sewer Oversizing | S92 |
| 33 | Utility Service District Areas | S93 |
| 34 | Circuit Breaker- Individual and City & Customer Community | S94 |
| 35 | Footing Drain Opt Out | S95 |

**CITY OF GRAND RAPIDS, MICHIGAN
FINAL CONSIDERATIONS
ANNUAL WATER-SEWER RATE REVIEW**

Table of Contents

| <u>Description</u> | <u>Page</u> |
|--|--------------------|
| Preliminary Rate Recommendation | 1 |
| Proposed Grand Rapids Ordinances | 5 |
| Notice of Public Hearing | 18 |
| Public Hearings - Grand Rapids Rate Ordinances | 20 |
| Final Adoption of Grand Rapids Rate Ordinances | 22 |
| Introduction of Resolution Approving Customer Communities' Rates | 33 |
| Grand Rapids Township – Sewer Contribution | 36 |
| Approval of Customer Communities' Rates | 37 |
| Retail Rates Summary - Calendar Year 2013 | 66 |
| Wholesale Rates Summary - Calendar Year 2013 | 67 |

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**CITY OF GRAND RAPIDS, MICHIGAN
 WATER SUPPLY SYSTEM FUND
 SYSTEM ADDITIONS AND IMPROVEMENTS
 FOR THE YEAR ENDED JUNE 30, 2012
 TASKS NO. 1, 2, & 3**

| COMMUNITY | LOCAL | | INTERMEDIATE | | PRIMARY | | TOTALS | |
|-----------------------|--------------|-------------|--------------|-------------|----------|-------------|---------------|-------------|
| | FEET | MILES | FEET | MILES | FEET | MILES | FEET | MILES |
| Grand Rapids | | | | | | | | |
| Construction | (83) | (0.02) | 768 | 0.15 | 0 | 0.00 | 685 | 0.13 |
| Abandonment | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| CSO Construction | 14,068 | 2.66 | 1,239 | 0.23 | 0 | 0.00 | 15,307 | 2.89 |
| CSO Abandonment | (7,668) | (1.45) | 0 | 0.00 | 0 | 0.00 | (7,668) | (1.45) |
| | <u>6,317</u> | <u>1.19</u> | <u>2,007</u> | <u>0.38</u> | <u>0</u> | <u>0.00</u> | <u>8,324</u> | <u>1.57</u> |
| Kentwood | | | | | | | | |
| Construction | 15 | 0.00 | 1,649 | 0.31 | 0 | 0.00 | 1,664 | 0.31 |
| Abandonment | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| | <u>15</u> | <u>0.00</u> | <u>1,649</u> | <u>0.31</u> | <u>0</u> | <u>0.00</u> | <u>1,664</u> | <u>0.31</u> |
| Cascade Twp. | | | | | | | | |
| Construction | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Abandonment | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| | <u>0</u> | <u>0.00</u> | <u>0</u> | <u>0.00</u> | <u>0</u> | <u>0.00</u> | <u>0</u> | <u>0.00</u> |
| G.R. Twp. | | | | | | | | |
| Construction | 1,138 | 0.22 | 1,065 | 0.20 | 0 | 0.00 | 2,203 | 0.42 |
| Abandonment | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| | <u>1,138</u> | <u>0.22</u> | <u>1,065</u> | <u>0.20</u> | <u>0</u> | <u>0.00</u> | <u>2,203</u> | <u>0.42</u> |
| Tallmadge Twp. | | | | | | | | |
| Construction | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Abandonment | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| | <u>0</u> | <u>0.00</u> | <u>0</u> | <u>0.00</u> | <u>0</u> | <u>0.00</u> | <u>0</u> | <u>0.00</u> |
| Walker | | | | | | | | |
| Construction | 8 | 0.00 | (17) | 0.00 | 0 | 0.00 | (9) | 0.00 |
| Abandonment | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| | <u>8</u> | <u>0.00</u> | <u>(17)</u> | <u>0.00</u> | <u>0</u> | <u>0.00</u> | <u>(9)</u> | <u>0.00</u> |
| *TOTAL* | <u>7,478</u> | <u>1.41</u> | <u>4,704</u> | <u>0.89</u> | <u>0</u> | <u>-</u> | <u>12,182</u> | <u>2.30</u> |

WATER COSTS-CONTRIBUTIONS

| COMMUNITY | COMMUNITY COST |
|-------------------|-------------------|
| Grand Rapids | \$ 106,706 |
| Kentwood | 0 |
| Cascade Twp. | 0 |
| Grand Rapids Twp. | 173,249 |
| Tallmadge Twp. | 0 |
| Walker | 9,396 |
| *TOTAL* | <u>\$ 289,351</u> |

CITY OF GRAND RAPIDS, MICHIGAN
 WATER SUPPLY SYSTEM FUND
 OPERATING EXPENSE ALLOCATION BY COST CENTER - TASK #4, PART 1
 FISCAL YEAR ENDED JUNE 30, 2012

| ACTIVITY CODE | ACTIVITY | EXPENSE BY ACTIVITY | PUMPING STATIONS | | | FILTRATION PLANT | WATERMAINS | | | RETAIL CUSTOMER METERING | ENGIN. SERVICES | ADMIN. EXPENSE |
|---------------|----------------------------|---------------------|------------------|--------------|-------------------|------------------|---------------------|--------------------|--------------|--------------------------|-----------------|----------------|
| | | | PRIMARY | INTERM. | PRIMARY TRANSPORT | | INTERMED. TRANSPORT | LOCAL DISTRIBUTION | | | | |
| 0430 | TREASURER-CUSTOMER SERVICE | \$ 421,578 | | | | | | | \$ 421,578 | | | |
| 4312 | WATER-CUSTOMER SERVICE * | 2,457,559 | | | | | | | 2,457,559 | | | |
| 4315 | ENGINEERING | 1,050,412 | | | | | | | | 1,050,412 | | |
| 4320 | COLDBROOK CONTROL | 1,317,445 | 1,317,445 | | | | | | | | | |
| 4322 | COLDBROOK DISTRIBUTION | 2,189,875 | 688,583 | 1,501,292 | | | | | | | | |
| 4331 | FIELD OPERATIONS | 5,767,082 | | | | 288,873 | 1,478,507 | 3,999,702 | | | | |
| 4342 | FILTRATION | 6,823,168 | | | 6,823,168 | | | | | | | |
| | SUBTOTAL OPERATING EXPENSE | 20,027,119 | 2,006,028 | 1,501,292 | 6,823,168 | 288,873 | 1,478,507 | 3,999,702 | 2,879,137 | 1,050,412 | - | |
| 4311 | ADMINISTRATION | 2,445,569 | | | | | | | | | 2,445,569 | |
| | TOTAL | \$ 22,472,688 | \$ 2,006,028 | \$ 1,501,292 | \$ 6,823,168 | \$ 288,873 | \$ 1,478,507 | \$ 3,999,702 | \$ 2,879,137 | \$ 1,050,412 | \$ 2,445,569 | |

* Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

METHOD OF DISTRIBUTION

| | | | | | | | | | | | |
|------|----------------------------|----------|----------|---------|----------|--------|---------|---------|----------|----------|----------|
| 0430 | TREASURER-CUSTOMER SERVICE | 100.000% | | | | | | | 100.000% | | |
| 4312 | WATER-CUSTOMER SERVICE | 100.000% | | | | | | | 100.000% | | |
| 4315 | ENGINEERING | 100.000% | | | | | | | | 100.000% | |
| 4320 | COLDBROOK CONTROL | 100.000% | 100.000% | | | | | | | | |
| 4322 | COLDBROOK DISTRIBUTION | 100.000% | 31.440% | 68.560% | | | | | | | |
| 4331 | FIELD OPERATIONS | 100.000% | | | | 5.009% | 25.637% | 69.354% | | | |
| | TOTAL MILES OF MAIN | 1,163.40 | | | | 58.28 | 298.26 | 806.86 | | | |
| 4342 | FILTRATION | 100.000% | | | 100.000% | | | | | | |
| 4311 | ADMINISTRATION | 100.000% | | | | | | | | | 100.000% |

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
OPERATING EXPENSE ALLOCATION BY GOVERNMENTAL UNIT - TASK #4, PART 2
FISCAL YEAR ENDED JUNE 30, 2012**

| COST CENTER | EXPENSE BY COST CENTER | INTEGRATED SYSTEM | RETAIL | | | | | WHOLESALE | | | | | |
|-----------------------------------|------------------------|----------------------|---------------------|---------------------|---------------------|-------------------|-------------------|--------------------|-----------------|------------------|--------------|-------------|-------------|
| | | | CITY OF GR | CITY OF WALKER | CITY OF KENTWOOD | CASCADE TOWNSHIP | GR TOWNSHIP | TALLMADGE TOWNSHIP | CITY OF EAST GR | COUNTY OF OTTAWA | ADA TOWNSHIP | | |
| FILTRATION PLANT | \$ 6,823,168 | \$ 6,823,168 | | | | | | | | | | | |
| PUMPING STATIONS: | | | | | | | | | | | | | |
| A. PRIMARY TRANSPORT | 2,006,028 | 2,006,028 | | | | | | | | | | | |
| B. INTERMEDIATE TRANSPORT | 1,501,292 | | 1,114,956 | 50,321 | 336,015 | | | | | | | | |
| WATERMAINS: | | | | | | | | | | | | | |
| A. PRIMARY TRANSPORT | 288,873 | | 237,374 | 15,960 | 22,601 | 8,328 | 4,610 | | | | | | |
| B. INTERMEDIATE TRANSPORT | 1,478,507 | | 565,544 | 310,664 | 268,526 | 192,635 | 120,809 | 20,329 | | | | | |
| C. LOCAL DISTRIBUTION | 3,999,702 | | 2,953,460 | 310,817 | 271,260 | 213,664 | 238,622 | 11,879 | | | | | |
| RETAIL CUSTOMER METERING | 2,879,137 | | 2,180,197 | 233,498 | 187,605 | 123,371 | 148,794 | 5,672 | | | | | |
| SUBTOTAL OPERATING EXPENSE | 18,976,707 | 8,829,196 | 7,051,531 | 921,260 | 1,086,007 | 537,998 | 512,835 | 37,880 | | | | | |
| ENGINEERING SERVICES | 1,050,412 | 488,714 | 390,323 | 50,998 | 60,115 | 29,779 | 28,382 | 2,101 | | | | | |
| ADMINISTRATIVE EXPENSE | 2,445,559 | 1,137,826 | 908,749 | 118,732 | 139,960 | 69,332 | 66,079 | 4,891 | | | | | |
| TOTAL | \$ 22,472,688 | \$ 10,455,736 | \$ 8,350,603 | \$ 1,090,990 | \$ 1,286,082 | \$ 637,109 | \$ 607,296 | \$ 44,872 | \$ - | \$ - | \$ - | \$ - | \$ - |

METHOD OF DISTRIBUTION

| | | | | | | | | | | | | | |
|-------------------------------------|-----------|----------|-----------|----------|----------|----------|----------|--------|--|--|--|--|--|
| FILTRATION PLANTS | 100.00% | 100.00% | | | | | | | | | | | |
| PUMPING STATIONS | | | | | | | | | | | | | |
| A. PRIMARY TRANSPORT | 100.00% | 100.00% | | | | | | | | | | | |
| B. INTERMEDIATE TRANSPORT | 100.00% | | 74.266% | 3.352% | 22.382% | | | | | | | | |
| MEMO | | | | | | | | | | | | | |
| WATERMAINS | | | | | | | | | | | | | |
| TOTAL MILES: | 1,163.40 | | | | | | | | | | | | |
| A. PRIMARY TRANSPORT | | 100.000% | 82.172% | 5.525% | 7.824% | 2.883% | 1.596% | | | | | | |
| MILES | 58.28 | | 47.89 | 3.22 | 4.56 | 1.68 | 0.93 | | | | | | |
| B. INTERMEDIATE TRANSPORT | | 100.000% | 38.251% | 21.012% | 18.162% | 13.029% | 8.171% | 1.375% | | | | | |
| MILES | 298.26 | | 114.09 | 62.67 | 54.17 | 38.86 | 24.37 | 4.10 | | | | | |
| C. LOCAL DISTRIBUTION | | 100.000% | 73.842% | 7.771% | 6.782% | 5.342% | 5.966% | 0.297% | | | | | |
| MILES | 806.86 | | 595.80 | 62.70 | 54.72 | 43.10 | 48.14 | 2.40 | | | | | |
| RETAIL CUSTOMER METERING (1) | | 100.000% | 75.724% | 8.110% | 6.516% | 4.285% | 5.168% | 0.197% | | | | | |
| NUMBER OF METERS | 78,616.00 | | 59,530.00 | 6,376.00 | 5,123.00 | 3,369.00 | 4,063.00 | 155.00 | | | | | |
| ENGINEERING SERVICES (2) | | 100.000% | 37.159% | 4.855% | 5.723% | 2.835% | 2.702% | 0.200% | | | | | |
| ADMINISTRATIVE EXPENSE (3) | | 100.000% | 37.159% | 4.855% | 5.723% | 2.835% | 2.702% | 0.200% | | | | | |

NOTES:
 (1) ALLOCATION BASED ON NUMBER OF METERS.
 (2) ALLOCATION BASED ON DIRECT OPERATING EXPENSE.
 (3) ALLOCATION BASED ON DIRECT OPERATING EXPENSE, ADJUSTED FOR ANY COST ASSIGNABLE EXCLUSIVELY TO GR OR RETAIL COMMUNITIES, IF APPLICABLE.

CITY OF GRAND RAPIDS, MICHIGAN
 WATER SUPPLY SYSTEM FUND
 ADJUSTED OPERATING EXPENSE ALLOCATION BY COST CENTER - TASK #5, PART 1
 FISCAL YEAR ENDED JUNE 30, 2012

| ACTIVITY CODE | ACTIVITY | ADJUSTED EXPENSE BY ACTIVITY | PUMPING STATIONS | | WATERMANS | | RETAIL CUSTOMER METERING | ENGIN. SERVICES | ADMIN. EXPENSE |
|---------------|----------------------------|------------------------------|------------------|--------------|-------------------|---------------------|--------------------------|-----------------|----------------|
| | | | PRIMARY | INTERM. | PRIMARY TRANSPORT | INTERMED. TRANSPORT | | | |
| 0430 | TREASURER-CUSTOMER SERVICE | \$ 423,031 | | | | | \$ 423,031 | | |
| 4312 | WATER-CUSTOMER SERVICE * | 2,608,873 | | | | | 2,608,873 | | |
| 4315 | ENGINEERING | 1,028,012 | | | | | | 1,028,012 | |
| 4320 | COLDBROOK CONTROL | 1,324,887 | 1,324,887 | | | | | | |
| 4322 | COLDBROOK DISTRIBUTION | 2,193,701 | 688,786 | 1,503,915 | | | | | |
| 4331 | FIELD OPERATIONS | 5,782,888 | | | 289,662 | 1,482,546 | | | |
| 4342 | FILTRATION | 6,814,800 | 6,814,800 | | | | | | |
| | SUBTOTAL OPERATING EXPENSE | 20,176,142 | 6,814,800 | 2,014,673 | 1,503,915 | 1,482,546 | 3,031,904 | 1,028,012 | - |
| 4311 | ADMINISTRATION | 2,459,915 | | | | | | | 2,459,915 |
| | TOTAL | \$ 22,636,057 | \$ 6,814,800 | \$ 2,014,673 | \$ 1,503,915 | \$ 1,482,546 | \$ 3,031,904 | \$ 1,028,012 | \$ 2,459,915 |

* Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

METHOD OF DISTRIBUTION

| | | | | | | | | | |
|------|----------------------------|----------|----------|---------|--------|---------|----------|----------|----------|
| 0430 | TREASURER-CUSTOMER SERVICE | 100.000% | | | | | 100.000% | | |
| 4312 | WATER-CUSTOMER SERVICE | 100.000% | | | | | 100.000% | | |
| 4315 | ENGINEERING | 100.000% | | | | | | 100.000% | |
| 4320 | COLDBROOK CONTROL | 100.000% | 100.000% | | | | | | |
| 4322 | COLDBROOK DISTRIBUTION | 100.000% | 31.440% | 68.560% | | | | | |
| 4331 | FIELD OPERATIONS | 100.000% | | | 5.009% | 25.637% | 69.354% | | |
| | TOTAL MILES OF MAIN | 1,163.40 | | | 58.28 | 298.26 | 806.86 | | |
| 4342 | FILTRATION | 100.000% | | | | | | | |
| 4311 | ADMINISTRATION | 100.000% | | | | | | | 100.000% |

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ADJUSTED OPERATING EXPENSE ALLOCATION BY GOVERNMENTAL UNIT - TASK #5, PART 2
FISCAL YEAR ENDED JUNE 30, 2012**

| COST CENTER | ADJUSTED EXPENSE BY COST CENTER | INTEGRATED SYSTEM | RETAIL | | | | | | WHOLESALE | | | | |
|-----------------------------------|---------------------------------|-------------------|--------------|----------------|------------------|------------------|-------------|--------------------|-----------------|------------------|--------------|--|------|
| | | | CITY OF GR | CITY OF WALKER | CITY OF KENTWOOD | CASCADE TOWNSHIP | GR TOWNSHIP | TALLMADGE TOWNSHIP | CITY OF EAST GR | COUNTY OF OTTAWA | ADA TOWNSHIP | | |
| FILTRATION PLANT | | | | | | | | | | | | | |
| | \$ 6,814,800 | \$ 6,814,800 | | | | | | | | | | | |
| PUMPING STATIONS: | | | | | | | | | | | | | |
| A. PRIMARY TRANSPORT | 2,014,673 | 2,014,673 | | | | | | | | | | | |
| B. INTERMEDIATE TRANSPORT | 1,503,915 | | 1,116,904 | 50,409 | 336,602 | | | | | | | | |
| WATERMAINS: | | | | | | | | | | | | | |
| A. PRIMARY TRANSPORT | 289,662 | | 238,021 | 16,004 | 22,663 | | 8,351 | 4,623 | | | | | |
| B. INTERMEDIATE TRANSPORT | 1,482,546 | | 567,088 | 311,513 | 269,260 | | 193,161 | 121,139 | | 20,385 | | | |
| C. LOCAL DISTRIBUTION | 4,010,630 | | 2,961,529 | 311,666 | 272,001 | | 214,248 | 239,274 | | 11,912 | | | |
| RETAIL CUSTOMER METERING | 3,031,904 | | 2,295,879 | 245,887 | 197,559 | | 129,917 | 156,689 | | 5,973 | | | |
| SUBTOTAL OPERATING EXPENSE | 19,148,130 | 8,829,473 | 7,179,421 | 935,479 | 1,098,085 | | 545,677 | 521,725 | | 38,270 | | | |
| ENGINEERING SERVICES | 1,028,012 | | 385,443 | 50,218 | 58,956 | | 29,298 | 28,013 | | 2,056 | | | |
| ADMINISTRATIVE EXPENSE | 2,459,915 | | 922,321 | 120,167 | 141,076 | | 70,108 | 67,033 | | 4,920 | | | |
| TOTAL | \$ 22,636,057 | \$ 10,437,791 | \$ 8,487,185 | \$ 1,105,864 | \$ 1,298,117 | | \$ 645,083 | \$ 616,771 | | \$ 45,246 | | | \$ - |

METHOD OF DISTRIBUTION

FILTRATION PLANTS 100.00%

PUMPING STATIONS 100.00%

A. PRIMARY TRANSPORT 100.00%

B. INTERMEDIATE TRANSPORT 100.00%

MEMO

WATERMAINS 74.266%

TOTAL MILES: 1,163.40

A. PRIMARY TRANSPORT 82.172%

MILES 47.89

B. INTERMEDIATE TRANSPORT 38.251%

MILES 114.09

C. LOCAL DISTRIBUTION 73.842%

MILES 595.80

RETAIL CUSTOMER METERING (1) 75.724%

NUMBER OF METERS 59,530.00

ENGINEERING SERVICES (2) 37.494%

ADMINISTRATIVE EXPENSE (3) 37.494%

5.525%

3.22

21.012%

62.67

7.771%

62.70

8.110%

6.376.00

4.885%

4.885%

7.824%

4.56

18.162%

54.17

6.782%

54.72

6.516%

5.123.00

5.735%

5.735%

2.883%

1.68

13.029%

38.86

5.342%

43.10

4.285%

3,369.00

2.850%

2.850%

1.596%

0.93

8.171%

24.37

0.297%

48.14

5.168%

4,063.00

2.725%

2.725%

1.375%

4.10

0.197%

155.00

0.200%

0.200%

NOTES:
 (1) ALLOCATION BASED ON NUMBER OF METERS.
 (2) ALLOCATION BASED ON DIRECT OPERATING EXPENSE.
 (3) ALLOCATION BASED ON DIRECT OPERATING EXPENSE, ADJUSTED FOR ANY COST ASSIGNABLE EXCLUSIVELY TO GR OR RETAIL COMMUNITIES, IF APPLICABLE.

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2012
RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 4301, 4311 & 4480 - ADMINISTRATION

| EXPENDITURE SUB-OBJECT | | OPERATING | ADJUSTED | ADJUSTED |
|------------------------|--------------------------------------|-----------------|--------------|-----------------|
| NO. | DESCRIPTION | EXPENSES | COST | CURRENT |
| | | | FACTORS | ANNUAL |
| | | | | EXPENSES |
| 7020 | PERMANENT EMPLOYEES | \$ 533,179.44 | \$ - | \$ 533,179.44 |
| 7105 | EMPLOYERS SOCIAL SECURITY | 36,971.13 | - | 36,971.13 |
| 7110 | HOSPITALIZATION INSURANCE | 79,000.04 | (7,860.50) | 71,139.54 |
| 7115 | RETIREE HEALTH CARE | 67,931.52 | 6,691.25 | 74,622.77 |
| 7120 | RETIREMENT FUND CONTRIBUTION | 73,740.86 | (3,642.80) | 70,098.06 |
| 7125 | SPECIAL PENSION BENEFITS | 8,570.44 | - | 8,570.44 |
| 7135 | UNEMPLOYMENT COMPENSATION | 720.63 | - | 720.63 |
| 7150 | LONGEVITY PAY | 2,633.00 | - | 2,633.00 |
| 7175 | FOOD/CLEAN/CAR ALLOW | 832.00 | - | 832.00 |
| | TOTAL PERSONAL SERVICES | 803,579.06 | (4,812.05) | 798,767.01 |
| 7260 | SUPPLIES | 1,184.76 | - | 1,184.76 |
| | TOTAL SUPPLIES | 1,184.76 | - | 1,184.76 |
| 8140 | COMPUTER SERVICES | 177,958.99 | (150,673.99) | 27,285.00 |
| 8180 | CONTRACTUAL SERVICES | 93,111.53 | - | 93,111.53 |
| 8355 | GENERAL LIABILITY INSURANCE / CLAIMS | 391,835.68 | (153,997.68) | 237,838.00 |
| 8360 | MEDICAL/SUPPORTIVE CHARGES | (38.75) | - | (38.75) |
| 8450 | INSURANCE PREMIUMS | 152,862.00 | - | 152,862.00 |
| 8500 | TELEPHONE | 1,415.03 | - | 1,415.03 |
| 8800 | COMMUNITY PROMOTION | 150.00 | - | 150.00 |
| 9300 | MAINTENANCE SERVICE | 4,568.83 | - | 4,568.83 |
| 9420 | EQUIPMENT RENTALS OR LEASE | 286.41 | - | 286.41 |
| 9430 | LAND RENTAL OR LEASE | 2,543.80 | - | 2,543.80 |
| 9440 | VEHICLE RENTAL/CAR MILEAGE | 3,165.61 | - | 3,165.61 |
| 9550 | PROFESSIONAL DEVELOPMENT | 5,121.32 | - | 5,121.32 |
| 9552 | OTHER TRAVEL AND TRAINING | 26,360.20 | - | 26,360.20 |
| 9554 | LOCAL BUSINESS EXPENSE | 15.00 | - | 15.00 |
| 9556 | MEMBERSHIPS | 24,005.88 | - | 24,005.88 |
| 9558 | PUBLICATIONS AND SUBSCRIPTIONS | 457.90 | - | 457.90 |
| 9610 | FEES | 36,360.93 | - | 36,360.93 |
| 9616 | ADMINISTRATIVE SERVICES | - | - | - |
| 9620 | BAD DEBT WRITE-OFFS | 663.99 | - | 663.99 |
| | TOTAL OTHER SERVICES & CHARGES | 920,844.35 | (304,671.67) | 616,172.68 |
| 9760 | EQUIPMENT | 2,504.86 | - | 2,504.86 |
| | TOTAL CAPITAL | 2,504.86 | - | 2,504.86 |
| 9990 | OPERATING TRANSFERS OUT | 717,456.00 | 323,830.00 | 1,041,286.00 |
| | TOTAL TRANSFERS/FEES | 717,456.00 | 323,830.00 | 1,041,286.00 |
| | ORGANIZATIONAL UNIT TOTAL | \$ 2,445,569.03 | \$ 14,346.28 | \$ 2,459,915.31 |

CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2012
RATE STUDY- TASKS NO. 4 & 5

ORGANIZATIONAL UNIT: 4312- CUSTOMER SERVICES

| EXPENDITURE SUB-OBJECT | | OPERATING | ADJUSTED | ADJUSTED |
|------------------------|------------------------------------|------------------------|----------------------|------------------------|
| NO. | DESCRIPTION | EXPENSES | COST | CURRENT |
| | | | FACTORS | ANNUAL |
| | | | | EXPENSES |
| 7020 | PERMANENT EMPLOYEES | \$ 1,895,505.94 | \$ - | \$ 1,895,505.94 |
| 7025 | ACT.ASSIGNMENT | 13,970.61 | - | 13,970.61 |
| 7040 | TEMPORARY EMPLOYEES | 3,644.79 | - | 3,644.79 |
| 7055 | TIME & ONE-HALF | 74,956.34 | - | 74,956.34 |
| 7105 | EMPLOYERS SOCIAL SECURITY | 146,443.53 | - | 146,443.53 |
| 7110 | HOSPITALIZATION INSURANCE | 539,994.67 | (53,729.47) | 486,265.20 |
| 7115 | RETIREE HEALTH CARE | 248,390.17 | 24,466.43 | 272,856.60 |
| 7120 | RETIREMENT FUND CONTRIBUTION | 379,500.70 | (18,747.33) | 360,753.37 |
| 7135 | UNEMPLOYMENT COMPENSATION | 2,835.56 | - | 2,835.56 |
| 7150 | LONGEVITY PAY | 24,092.13 | - | 24,092.13 |
| 7165 | SHIFT DIFFERENTIAL | 873.89 | - | 873.89 |
| | TOTAL PERSONAL SERVICES | <u>3,330,208.33</u> | <u>(48,010.37)</u> | <u>3,282,197.96</u> |
| 7260 | SUPPLIES | 97,881.49 | - | 97,881.49 |
| 7300 | POSTAGE | 188,801.77 | - | 188,801.77 |
| | TOTAL SUPPLIES | <u>286,683.26</u> | <u>-</u> | <u>286,683.26</u> |
| 8140 | COMPUTER SERVICES | 420,541.12 | (246,113.00) | 174,428.12 |
| 8140 | COMPUTER SERVICES (CIS-DEPR & ROI) | | 295,636.00 | 295,636.00 |
| 8180 | CONTRACTUAL SERVICES | 590,836.70 | - | 590,836.70 |
| 8500 | TELEPHONE | 10,364.56 | - | 10,364.56 |
| 9000 | PRINTING & PUBLISHING | 4,242.34 | - | 4,242.34 |
| 9300 | MAINTENANCE SERVICE | 305,499.40 | - | 305,499.40 |
| 9420 | EQUIPMENT RENTALS OR LEASE | 140,402.25 | - | 140,402.25 |
| 9440 | VEHICLE RENTAL/CAR MILEAGE | 11,823.06 | - | 11,823.06 |
| 9552 | OTHER TRAVEL AND TRAINING | 1,848.00 | - | 1,848.00 |
| 9616 | ADMINISTRATIVE SERVICES | 167,859.00 | (167,859.00) | - |
| | TOTAL OTHER SERVICES & CHARGES | <u>1,653,416.43</u> | <u>(118,336.00)</u> | <u>1,535,080.43</u> |
| 9760 | EQUIPMENT | 5,829.72 | - | 5,829.72 |
| | TOTAL CAPITAL | <u>5,829.72</u> | <u>-</u> | <u>5,829.72</u> |
| 9995 | OPERATING TRANS-MISC | | 292,161.00 | 292,161.00 |
| | TOTAL TRANSFERS/FEEES | <u>-</u> | <u>292,161.00</u> | <u>292,161.00</u> |
| | ORGANIZATIONAL UNIT TOTAL (GROSS) | \$ 5,276,137.74 | \$ 125,814.63 | \$ 5,401,952.37 |
| | LESS: SDSF CONTRIBUTION * | (2,818,578.61) | 25,499.08 | (2,793,079.53) |
| | ORGANIZATIONAL UNIT TOTAL (NET) | <u>\$ 2,457,559.13</u> | <u>\$ 151,313.71</u> | <u>\$ 2,608,872.84</u> |

* Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER SUPPLY SYSTEM FUND
 ADJUSTED ACTUAL EXPENSE
 YEAR ENDED JUNE 30, 2012
 RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 4315- ENGINEERING

| NO. | EXPENDITURE SUB-OBJECT DESCRIPTION | OPERATING EXPENSES | ADJUSTED COST FACTORS | ADJUSTED CURRENT ANNUAL EXPENSES |
|------|---------------------------------------|------------------------|-----------------------------|---|
| 7020 | PERMANENT EMPLOYEES | \$ 461,221.69 | \$ - | \$ 461,221.69 |
| 7025 | ACT.ASSIGNMENT | 811.32 | - | 811.32 |
| 7040 | TEMPORARY EMPLOYEES | 25,397.21 | - | 25,397.21 |
| 7055 | TIME & ONE-HALF | 36.55 | - | 36.55 |
| 7105 | EMPLOYERS SOCIAL SECURITY | 35,924.94 | - | 35,924.94 |
| 7110 | HOSPITALIZATION INSURANCE | 108,335.52 | (10,779.38) | 97,556.14 |
| 7115 | RETIREE HEALTH CARE | 58,025.73 | 5,715.53 | 63,741.26 |
| 7120 | RETIREMENT FUND CONTRIBUTION | 85,876.93 | (4,242.32) | 81,634.61 |
| 7125 | SPECIAL PENSION BENEFITS | 4,570.00 | - | 4,570.00 |
| 7135 | UNEMPLOYMENT COMPENSATION | 1,609.38 | - | 1,609.38 |
| 7150 | LONGEVITY PAY | 3,832.88 | - | 3,832.88 |
| | TOTAL PERSONAL SERVICES | <u>785,642.15</u> | <u>(9,306.17)</u> | <u>776,335.98</u> |
| 7260 | SUPPLIES | 4,543.31 | - | 4,543.31 |
| | TOTAL SUPPLIES | <u>4,543.31</u> | <u>-</u> | <u>4,543.31</u> |
| 8140 | COMPUTER SERVICES | 57,432.04 | (13,094.04) | 44,338.00 |
| 8160 | ENGINEERING SERVICES | 315.00 | - | 315.00 |
| 8180 | CONTRACTUAL SERVICES | 112,457.07 | - | 112,457.07 |
| 8500 | TELEPHONE | 4,354.54 | - | 4,354.54 |
| 9000 | PRINTING & PUBLISHING | 470.40 | - | 470.40 |
| 9300 | MAINTENANCE SERVICE | 14,473.94 | - | 14,473.94 |
| 9420 | EQUIPMENT RENTALS OR LEASE | 43,500.32 | - | 43,500.32 |
| 9440 | VEHICLE RENTAL/CAR MILEAGE | 1,140.00 | - | 1,140.00 |
| | TOTAL OTHER SERVICES & CHARGES | <u>234,143.31</u> | <u>(13,094.04)</u> | <u>221,049.27</u> |
| 9760 | EQUIPMENT | 313.07 | - | 313.07 |
| | TOTAL CAPITAL | <u>313.07</u> | <u>-</u> | <u>313.07</u> |
| 9990 | OPERATING TRANSFERS OUT | 25,770.00 | - | 25,770.00 |
| | TOTAL TRANSFERS/FEEES | <u>25,770.00</u> | <u>-</u> | <u>25,770.00</u> |
| | ORGANIZATIONAL UNIT TOTAL | <u>\$ 1,050,411.84</u> | <u>\$ (22,400.21)</u> | <u>\$ 1,028,011.63</u> |

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER SUPPLY SYSTEM FUND
 ADJUSTED ACTUAL EXPENSE
 YEAR ENDED JUNE 30, 2012
 RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 4320- COLDBROOK CONTROL

| EXPENDITURE SUB-OBJECT | | OPERATING | ADJUSTED | ADJUSTED |
|------------------------|--------------------------------|------------------------|--------------------|------------------------|
| NO. | DESCRIPTION | EXPENSES | COST | CURRENT |
| | | | FACTORS | ANNUAL |
| | | | | EXPENSES |
| 7020 | PERMANENT EMPLOYEES | \$ 727,703.17 | \$ - | \$ 727,703.17 |
| 7025 | ACT.ASSIGNMENT | 1.31 | - | 1.31 |
| 7050 | REGULAR HOURLY RATE | 4,988.41 | - | 4,988.41 |
| 7055 | TIME & ONE-HALF | 35,006.65 | - | 35,006.65 |
| 7105 | EMPLOYERS SOCIAL SECURITY | 56,579.94 | - | 56,579.94 |
| 7110 | HOSPITALIZATION INSURANCE | 170,632.41 | (16,977.92) | 153,654.49 |
| 7115 | RETIREE HEALTH CARE | 94,913.70 | 9,349.00 | 104,262.70 |
| 7120 | RETIREMENT FUND CONTRIBUTION | 130,344.70 | (6,439.03) | 123,905.67 |
| 7135 | UNEMPLOYMENT COMPENSATION | 1,024.23 | - | 1,024.23 |
| 7150 | LONGEVITY PAY | 9,845.00 | - | 9,845.00 |
| 7165 | SHIFT DIFFERENTIAL | 7,365.49 | - | 7,365.49 |
| | TOTAL PERSONAL SERVICES | <u>1,238,405.01</u> | <u>(14,067.95)</u> | <u>1,224,337.06</u> |
| 7260 | SUPPLIES | 8,382.71 | - | 8,382.71 |
| 7680 | CLOTHING/CLEANING ALLOWANCE | 118.95 | - | 118.95 |
| | TOTAL SUPPLIES | <u>8,501.66</u> | <u>-</u> | <u>8,501.66</u> |
| 8140 | COMPUTER SERVICES | 13,570.00 | 21,510.00 | 35,080.00 |
| 8500 | TELEPHONE | 29,566.41 | - | 29,566.41 |
| 9300 | MAINTENANCE SERVICE | 1,276.00 | - | 1,276.00 |
| 9420 | EQUIPMENT RENTALS OR LEASE | 24,001.54 | - | 24,001.54 |
| 9440 | VEHICLE RENTAL/CAR MILEAGE | 570.00 | - | 570.00 |
| 9552 | OTHER TRAVEL AND TRAINING | 150.00 | - | 150.00 |
| 9610 | FEES | 465.00 | - | 465.00 |
| | TOTAL OTHER SERVICES & CHARGES | <u>69,598.95</u> | <u>21,510.00</u> | <u>91,108.95</u> |
| 9760 | EQUIPMENT | 939.30 | - | 939.30 |
| | TOTAL CAPITAL | <u>939.30</u> | <u>-</u> | <u>939.30</u> |
| | TOTAL TRANSFERS/FEES | - | - | - |
| | ORGANIZATIONAL UNIT TOTAL | <u>\$ 1,317,444.92</u> | <u>\$ 7,442.05</u> | <u>\$ 1,324,886.97</u> |

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER SUPPLY SYSTEM FUND
 ADJUSTED ACTUAL EXPENSE
 YEAR ENDED JUNE 30, 2012
 RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 4322- COLDBROOK DISTRIBUTION

| EXPENDITURE SUB-OBJECT | | OPERATING | ADJUSTED | ADJUSTED |
|------------------------|--------------------------------|------------------------|--------------------|------------------------|
| NO. | DESCRIPTION | EXPENSES | COST | CURRENT |
| | | | FACTORS | ANNUAL |
| | | | | EXPENSES |
| 7020 | PERMANENT EMPLOYEES | \$ 433,488.70 | \$ - | \$ 433,488.70 |
| 7055 | TIME & ONE-HALF | 1,432.90 | - | 1,432.90 |
| 7105 | EMPLOYERS SOCIAL SECURITY | 31,182.34 | - | 31,182.34 |
| 7110 | HOSPITALIZATION INSURANCE | 104,160.23 | (10,363.94) | 93,796.29 |
| 7115 | RETIREE HEALTH CARE | 53,305.86 | 5,250.63 | 58,556.49 |
| 7120 | RETIREMENT FUND CONTRIBUTION | 89,017.41 | (4,397.46) | 84,619.95 |
| 7135 | UNEMPLOYMENT COMPENSATION | 605.10 | - | 605.10 |
| 7150 | LONGEVITY PAY | 4,975.02 | - | 4,975.02 |
| | TOTAL PERSONAL SERVICES | <u>718,167.56</u> | <u>(9,510.77)</u> | <u>708,656.79</u> |
| 7260 | SUPPLIES | 52,964.88 | - | 52,964.88 |
| 7300 | POSTAGE | 113.04 | - | 113.04 |
| 7680 | CLOTHING/CLEANING ALLOWANCE | 1,055.20 | - | 1,055.20 |
| | TOTAL SUPPLIES | <u>54,133.12</u> | <u>-</u> | <u>54,133.12</u> |
| 8140 | COMPUTER SERVICES | 793.00 | 13,337.00 | 14,130.00 |
| 8180 | CONTRACTUAL SERVICES | 3,828.00 | - | 3,828.00 |
| 9210 | ELECTRICITY | 1,251,660.84 | - | 1,251,660.84 |
| 9220 | WATER | 4,320.10 | - | 4,320.10 |
| 9230 | NATURAL GAS | 64,916.13 | - | 64,916.13 |
| 9300 | MAINTENANCE SERVICE | 17,687.40 | - | 17,687.40 |
| 9330 | PAVEMENT REPAIR | 419.99 | - | 419.99 |
| 9420 | EQUIPMENT RENTALS OR LEASE | 64,448.36 | - | 64,448.36 |
| 9622 | REFUSE COLLECTION CHARGES | 4,878.65 | - | 4,878.65 |
| 9624 | PROPERTY TAXES | 4,397.63 | - | 4,397.63 |
| | TOTAL OTHER SERVICES & CHARGES | <u>1,417,350.10</u> | <u>13,337.00</u> | <u>1,430,687.10</u> |
| 9760 | EQUIPMENT | 224.10 | - | 224.10 |
| | TOTAL CAPITAL | <u>224.10</u> | <u>-</u> | <u>224.10</u> |
| | ORGANIZATIONAL UNIT TOTAL | <u>\$ 2,189,874.88</u> | <u>\$ 3,826.23</u> | <u>\$ 2,193,701.11</u> |

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER SUPPLY SYSTEM FUND
 ADJUSTED ACTUAL EXPENSE
 YEAR ENDED JUNE 30, 2012
 RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 4331- FIELD OPERATIONS

| NO. | EXPENDITURE SUB-OBJECT DESCRIPTION | OPERATING EXPENSES | ADJUSTED COST FACTORS | ADJUSTED CURRENT ANNUAL EXPENSES |
|------|---------------------------------------|------------------------|-----------------------------|---|
| 7020 | PERMANENT EMPLOYEES | \$ 1,473,081.89 | \$ - | \$ 1,473,081.89 |
| 7025 | ACT.ASSIGNMENT | 262.23 | - | 262.23 |
| 7055 | TIME & ONE-HALF | 157,678.95 | - | 157,678.95 |
| 7105 | EMPLOYERS SOCIAL SECURITY | 120,748.98 | - | 120,748.98 |
| 7110 | HOSPITALIZATION INSURANCE | 388,556.73 | (38,661.39) | 349,895.34 |
| 7115 | RETIREE HEALTH CARE | 190,048.42 | 18,719.77 | 208,768.19 |
| 7120 | RETIREMENT FUND CONTRIBUTION | 302,218.40 | (14,929.59) | 287,288.81 |
| 7135 | UNEMPLOYMENT COMPENSATION | 2,092.42 | - | 2,092.42 |
| 7150 | LONGEVITY PAY | 16,208.56 | - | 16,208.56 |
| 7165 | SHIFT DIFFERENTIAL | 1,175.60 | - | 1,175.60 |
| | TOTAL PERSONAL SERVICES | <u>2,652,072.18</u> | <u>(34,871.21)</u> | <u>2,617,200.97</u> |
| 7260 | SUPPLIES | 101,584.68 | - | 101,584.68 |
| 7680 | CLOTHING/CLEANING ALLOWANCE | 104.95 | - | 104.95 |
| | TOTAL SUPPLIES | <u>101,689.63</u> | <u>-</u> | <u>101,689.63</u> |
| 8140 | COMPUTER SERVICES | 27,817.00 | 50,627.00 | 78,444.00 |
| 8180 | CONTRACTUAL SERVICES | 80,981.41 | - | 80,981.41 |
| 8500 | TELEPHONE | 18,340.32 | - | 18,340.32 |
| 9210 | ELECTRICITY | 45,929.69 | - | 45,929.69 |
| 9220 | WATER | 448.01 | - | 448.01 |
| 9230 | NATURAL GAS | 23,810.16 | - | 23,810.16 |
| 9300 | MAINTENANCE SERVICE | 713,375.49 | - | 713,375.49 |
| 9330 | PAVEMENT REPAIR | 1,207,781.26 | - | 1,207,781.26 |
| 9420 | EQUIPMENT RENTALS OR LEASE | 856,030.89 | - | 856,030.89 |
| 9440 | VEHICLE RENTAL/CAR MILEAGE | 1,710.00 | - | 1,710.00 |
| | TOTAL OTHER SERVICES & CHARGES | <u>2,976,224.23</u> | <u>50,627.00</u> | <u>3,026,851.23</u> |
| 9760 | EQUIPMENT | 37,095.93 | - | 37,095.93 |
| | TOTAL CAPITAL | <u>37,095.93</u> | <u>-</u> | <u>37,095.93</u> |
| | ORGANIZATIONAL UNIT TOTAL | <u>\$ 5,767,081.97</u> | <u>\$ 15,755.79</u> | <u>\$ 5,782,837.76</u> |

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER SUPPLY SYSTEM FUND
 ADJUSTED ACTUAL EXPENSE
 YEAR ENDED JUNE 30, 2012
 RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 4342- LAKE MI. FILTRATION

| EXPENDITURE SUB-OBJECT | | OPERATING | ADJUSTED | ADJUSTED |
|------------------------|---------------------------------|------------------------|----------------------|------------------------|
| NO. | DESCRIPTION | EXPENSES | COST | CURRENT |
| | | | FACTORS | ANNUAL |
| | | | | EXPENSES |
| 7020 | PERMANENT EMPLOYEES | \$ 1,894,854.59 | \$ - | \$ 1,894,854.59 |
| 7025 | ACT.ASSIGNMENT | 2,902.67 | - | 2,902.67 |
| 7050 | REGULAR HOURLY RATE | 1,904.77 | - | 1,904.77 |
| 7055 | TIME & ONE-HALF | 39,183.05 | - | 39,183.05 |
| 7060 | COMP PAY-OFF | | - | - |
| 7105 | EMPLOYERS SOCIAL SECURITY | 141,660.96 | - | 141,660.96 |
| 7110 | HOSPITALIZATION INSURANCE | 457,329.16 | (45,504.25) | 411,824.91 |
| 7115 | RETIREE HEALTH CARE | 242,270.09 | 23,863.60 | 266,133.69 |
| 7120 | RETIREMENT FUND CONTRIBUTION | 375,102.79 | (18,530.08) | 356,572.71 |
| 7135 | UNEMPLOYMENT COMPENSATION | 2,655.48 | - | 2,655.48 |
| 7150 | LONGEVITY PAY | 16,608.48 | - | 16,608.48 |
| 7165 | SHIFT DIFFERENTIAL | 7,677.06 | - | 7,677.06 |
| | TOTAL PERSONAL SERVICES | <u>3,182,149.10</u> | <u>(40,170.73)</u> | <u>3,141,978.37</u> |
| 7260 | SUPPLIES | 1,102,234.11 | - | 1,102,234.11 |
| 7300 | POSTAGE | 93.03 | - | 93.03 |
| 7680 | CLOTHING/CLEANING ALLOWANCE | 386.00 | - | 386.00 |
| | TOTAL SUPPLIES | <u>1,102,713.14</u> | <u>-</u> | <u>1,102,713.14</u> |
| 8140 | COMPUTER SERVICES | 76,363.04 | 31,801.96 | 108,165.00 |
| 8180 | CONTRACTUAL SERVICES | 178,454.37 | - | 178,454.37 |
| 8500 | TELEPHONE | 16,471.32 | - | 16,471.32 |
| 9210 | ELECTRICITY | 1,698,168.99 | - | 1,698,168.99 |
| 9230 | NATURAL GAS | 221,173.59 | - | 221,173.59 |
| 9300 | MAINTENANCE SERVICE | 218,877.51 | - | 218,877.51 |
| 9330 | PAVEMENT REPAIR | 505.50 | - | 505.50 |
| 9420 | EQUIPMENT RENTALS OR LEASE | 100,624.12 | - | 100,624.12 |
| 9440 | VEHICLE RENTAL/CAR MILEAGE | 1,140.00 | - | 1,140.00 |
| 9556 | MEMBERSHIPS | 1,300.00 | - | 1,300.00 |
| 9610 | FEES | 123.00 | - | 123.00 |
| 9622 | REFUSE COLLECTION CHARGES | 1,379.56 | - | 1,379.56 |
| | TOTAL OTHER SERVICES & CHARGES | <u>2,514,581.00</u> | <u>31,801.96</u> | <u>2,546,382.96</u> |
| 9740 | BOOKS/OTHER MATERIALS - LIBRARY | 129.50 | - | 129.50 |
| 9760 | EQUIPMENT | 23,595.61 | - | 23,595.61 |
| | TOTAL CAPITAL | <u>23,725.11</u> | <u>-</u> | <u>23,725.11</u> |
| | ORGANIZATIONAL UNIT TOTAL | <u>\$ 6,823,168.35</u> | <u>\$ (8,368.77)</u> | <u>\$ 6,814,799.58</u> |

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER SUPPLY SYSTEM FUND
 ADJUSTED ACTUAL EXPENSE
 YEAR ENDED JUNE 30, 2012
 RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 0430- TREASURER- CUSTOMER SERV'S

| EXPENDITURE SUB-OBJECT | | OPERATING | ADJUSTED | ADJUSTED |
|------------------------|--------------------------------------|----------------------|--------------------|----------------------|
| NO. | DESCRIPTION | EXPENSES | COST | CURRENT |
| | | | FACTORS | ANNUAL |
| | | | | EXPENSES |
| 7020 | PERMANENT EMPLOYEES | \$ 135,853.02 | \$ - | \$ 135,853.02 |
| 7025 | ACT.ASSIGNMENT | 17.26 | - | 17.26 |
| 7055 | TIME & ONE-HALF | 74.96 | - | 74.96 |
| 7105 | EMPLOYERS SOCIAL SECURITY | 10,067.10 | - | 10,067.10 |
| 7110 | HOSPITALIZATION INSURANCE | 37,278.55 | (3,709.22) | 33,569.33 |
| 7115 | RETIREE HEALTH CARE | 29,261.97 | 2,882.30 | 32,144.27 |
| 7120 | RETIREMENT FUND CONTRIBUTION | 24,558.61 | (1,213.20) | 23,345.41 |
| 7125 | SPECIAL PENSION BENEFITS | 147.08 | - | 147.08 |
| 7135 | UNEMPLOYMENT COMPENSATION | 193.65 | - | 193.65 |
| 7150 | LONGEVITY PAY | 1,308.61 | - | 1,308.61 |
| | TOTAL PERSONAL SERVICES | <u>238,760.81</u> | <u>(2,040.12)</u> | <u>236,720.69</u> |
| 7260 | SUPPLIES | 4,792.90 | - | 4,792.90 |
| | TOTAL SUPPLIES | <u>4,792.90</u> | <u>-</u> | <u>4,792.90</u> |
| 8140 | COMPUTER SERVICES | 25,911.00 | 3,493.00 | 29,404.00 |
| 8180 | CONTRACTUAL SERVICES | 7,022.91 | - | 7,022.91 |
| 8355 | GENERAL LIABILITY INSURANCE / CLAIMS | 5,120.00 | - | 5,120.00 |
| 9300 | MAINTENANCE SERVICE | 971.54 | - | 971.54 |
| 9410 | BUILDINGS RENTALS OR LEASE | 7,158.42 | - | 7,158.42 |
| 9440 | VEHICLE RENTAL/CAR MILEAGE | 4,259.79 | - | 4,259.79 |
| 9610 | FEES | 71,939.26 | - | 71,939.26 |
| | TOTAL OTHER SERVICES & CHARGES | <u>122,382.92</u> | <u>3,493.00</u> | <u>125,875.92</u> |
| 9760 | EQUIPMENT | 55,641.49 | - | 55,641.49 |
| | TOTAL CAPITAL | <u>55,641.49</u> | <u>-</u> | <u>55,641.49</u> |
| | ORGANIZATIONAL UNIT TOTAL | <u>\$ 421,578.12</u> | <u>\$ 1,452.88</u> | <u>\$ 423,031.00</u> |

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 18, 2012
TO: Eric R. DeLong
Deputy City Manager
FROM: Scott Saindon *SS*
Financial Analyst

SUBJECT: 2012 WATER RATE STUDY- TASK #4- BACKGROUND INFORMATION

The following are the Water System's operating expenses for the test period, as reported in the City's adjusted expenditure ledger for the period ended June 30, 2012.

NON-INTEGRATED

| | |
|-------------------------|-------------|
| 4311- Administration | \$2,445,569 |
| 4312- Customer Services | 5,697,716 |
| 4315- Engineering | 1,050,412 |
| 4331- Field Operations | 5,767,082 |

INTEGRATED

| | |
|---------------------------|-----------|
| 4342- Lake Mi. Filtration | 6,823,168 |
|---------------------------|-----------|

INTEGRATED & NON-INTEGRATED

| | |
|------------------------------|-----------|
| 4320- Coldbrook Control | 1,317,445 |
| 4322- Coldbrook Distribution | 2,189,875 |

Attached is the calculation of integrated and non-integrated adjusted expenses for Coldbrook Distribution (4322) for 2012.

SS

Attachment

wrs\wtask4 2012

ALLOCATION OF COLDBROOK PUMPING TO WATER PUMPING FACILITIES

| STATION | ENERGY COST | PERCENT | EXPENDITURE ALLOCATION | |
|-------------|---------------------|----------------|------------------------|---------------------|
| | | | ACTUAL | ADJUSTED |
| ALGER | \$ 53,434 | 4.27% | \$ 93,487 | \$ 93,650 |
| BOOSTER A | 7,504 | 0.60% | 13,129 | 13,152 |
| BOOSTER D | 16,258 | 1.30% | 28,445 | 28,494 |
| BRISTOL | 28,762 | 2.30% | 50,321 | 50,409 |
| COLDBROOK | 294,402 | 23.52% | 515,079 | 515,978 |
| COVELL | 27,196 | 2.17% | 47,581 | 47,665 |
| EAST PARIS | 192,055 | 15.34% | 336,015 | 336,602 |
| FRANKLIN | 306,107 | 24.46% | 535,557 | 536,493 |
| LEFFINGWELL | 3,910 | 0.31% | 6,841 | 6,853 |
| LIVINGSTON | 162,531 | 12.99% | 284,360 | 284,857 |
| WILSON | 86,421 | 6.90% | 151,200 | 151,464 |
| BURTON | 12,749 | 1.02% | 22,305 | 22,344 |
| DEAN LAKE | 60,332 | 4.82% | 105,555 | 105,740 |
| TOTAL | <u>\$ 1,251,661</u> | <u>100.00%</u> | <u>\$ 2,189,875</u> | <u>\$ 2,193,701</u> |

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 4, 2012

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Scott Buhner 
Chief Financial Officer

SUBJECT: 2012 WATER RATE STUDY ANNUAL EXPENSE ADJUSTMENTS-TASK #5

Attached are adjustments to test period actual operating expenses to be included in Task #5 of the Water Rate Study.

Attachment

**CITY OF GRAND RAPIDS
WATER SUPPLY SYSTEM FUND
RATE STUDY TASK NO. 5
NOTES TO ADJUSTED CURRENT ANNUAL EXPENSES
FOR THE YEAR ENDED JUNE 30, 2012**

Object Level 3 - 7115

The factor to establish calendar year 2013 retiree health care cost is 9.85%. Increase total of fiscal year 2012's retiree health care by this percent to establish the cost for calendar year 2013.

Object Level 3 – 7060, 7020, 7040, 7055, 7025, 7045, 7050, 7030, 7035, 7190

The wage increase factor to translate FY2012 actual costs to estimated calendar 2013 will be 0.0%. No wage increases are anticipated.

Object Level 3 - 7105

Increase FY2012 actual FICA expense by 0.0% to account for the effect of the wage increases.

Object Level 3 - 7110

Decrease FY2012 health insurance actual by 9.95% to reflect rate changes effective in calendar year 2013.

Object Level 3 - 7120

Decrease FY2012 actual expense by 4.94% to reflect the effect of a General Pension rate change increase from FY2012 20.63% to calendar year rate of 19.61% and an estimated wage increase of 0.0%.

Object Level 3 – 8140/8355/9990

Administration - Adjust FY2012 actual cost to reflect adjustments in charges for central services rendered by the Information Technology Fund, the Insurance Payment Fund and the General Operating Fund.

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 25, 2012

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Joellen Thompson
Water System Manager 

SUBJECT: **2012 WATER RATE STUDY - TASK #5-KNOWN COST INCREASES/DECREASES**

Known cost increases by which to adjust FY12 operating costs include initial development funds for the 3-1-1 Customer Service Center as detailed below (BA 13-6). In addition, the computer services account (4312-8140) within Customer Services has been adjusted by \$295,636 for depreciation and return on investment (ROI) related to the August 22, 2011 CIS implementation.

| <u>ACCOUNT</u> | <u>DESCRIPTION</u> | <u>AMOUNT</u> |
|----------------|--|---------------|
| 43121001-9995 | 3-1-1 Customer Service Center – Phase II | \$292,161 |

JT/SS

wrs\wtask5 2012

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MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 2, 2012

TO: Eric R. DeLong
Deputy City Manager

FROM: Linda Wagenmaker *LW*
Utility Financial Officer

SUBJECT: 2012 WATER RATE STUDY - TASK #6

Attached are the Water Supply System Fund's revenues and volumes by governmental unit for the year ended June 30, 2012, and volume comparisons for the past five (5) years by governmental unit and for the total system.

LW

Attachment

wrs\wtask6 2012

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
2012 RATE STUDY TASK NO. 6**

VOLUME COMPARISONS FOR FIVE (5) YEARS BY GOVERNMENTAL UNIT *
VOLUME = 1,000 GALLONS

| MUNICIPALITY | FY08 | | FY09 | | FY10 | | FY11 | | FY12 | | FY08 - FY12 % CHANGE |
|---|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|-------------------------|
| | VOL BILLED | % CHANGE | |
| GRAND RAPIDS | 7,378,202 | -8.79% | 6,729,621 | -8.79% | 6,488,180 | -3.59% | 6,225,309 | -4.05% | 6,354,409 | 2.07% | -13.88% |
| WALKER | 1,060,320 | -10.06% | 953,606 | -10.06% | 875,586 | -8.18% | 850,755 | -2.84% | 866,427 | 1.84% | -18.29% |
| KENTWOOD | 1,377,939 | -13.00% | 1,198,808 | -13.00% | 1,164,972 | -2.82% | 1,214,620 | 4.26% | 1,284,088 | 5.72% | -6.81% |
| CASCADE TWP | 749,885 | -12.57% | 655,587 | -12.57% | 576,850 | -12.01% | 581,868 | 0.87% | 599,311 | 3.00% | -20.08% |
| GRAND RAPIDS TWP | 575,872 | -8.42% | 527,389 | -8.42% | 479,671 | -9.05% | 455,087 | -5.13% | 493,252 | 8.39% | -14.35% |
| TALLMADGE TWP | 19,337 | 5.53% | 20,407 | 5.53% | 17,420 | -14.64% | 17,173 | -1.42% | 18,149 | 5.68% | -6.14% |
| EAST GRAND RAPIDS | 504,268 | -12.99% | 438,786 | -12.99% | 418,797 | -4.56% | 449,849 | 7.41% | 454,722 | 1.08% | -9.83% |
| OTTAWA COUNTY | 737,951 | -7.78% | 680,543 | -7.78% | 706,518 | 3.82% | 666,164 | -5.71% | 763,172 | 14.56% | 3.42% |
| ADA TWP | 556,923 | -6.08% | 523,082 | -6.08% | 479,072 | -8.41% | 480,928 | 0.39% | 495,797 | 3.09% | -10.98% |
| TOTAL | 12,960,697 | -9.51% | 11,727,829 | -9.51% | 11,207,066 | -4.44% | 10,941,753 | -2.37% | 11,329,327 | 3.54% | -12.59% |
| VOLUME PUMPED % BILLED TO PUMPED | 14,419,000 89.9% | | 13,172,000 89.0% | | 12,488,000 89.8% | | 12,488,000 87.6% | | 13,176,000 86.0% | | |
| GRAND RAPIDS VOLUME COMPARED TO CUSTOMER COMMUNITIES | | | | | | | | | | | |
| VOLUME = 1,000 GALLONS | % OF TOTAL | % OF TOTAL | VOL BILLED | % OF TOTAL | % OF TOTAL |
| GRAND RAPIDS | 56.93% | 57.38% | 6,729,621 | 57.38% | 6,488,180 | 57.89% | 6,225,309 | 56.89% | 6,354,409 | 56.09% | |
| CUSTOMER COMMUNITIES | 43.07% | 42.62% | 4,998,208 | 42.62% | 4,718,886 | 42.11% | 4,716,444 | 43.11% | 4,974,918 | 43.91% | |
| TOTAL | 100.00% | 100.00% | 11,727,829 | 100.00% | 11,207,066 | 100.00% | 10,941,753 | 100.00% | 11,329,327 | 100.00% | |

* Volumes were restated from previous Rate Studies to reflect actual billings without adjustment for accrued revenues.

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER RATE STUDY
 WATER SUPPLY SYSTEM FUND
 TASK NO. 7**

OPERATING REVENUES OTHER THAN FROM SALES OF WATER:

| | | |
|-------------|----------------------------------|----------------------|
| 4311-451006 | CONTRACTOR UNDERGROUND LICENSE | \$ 7,260.00 |
| 4311-476012 | TAPPING PERMITS | 7,200.00 |
| 4311-607001 | MISCELLANEOUS SERVICE FEES | 469,685.00 |
| 4311-607050 | INSPECTION FEES - UTILITIES | 36,125.00 |
| 4311-607003 | MONTHLY STATEMENT SERVICE FEES * | - |
| 4311-607031 | PRELIM/DESIGN/CONSTR ENGINEERING | 989.90 |
| 4311-607052 | METER SETTING FEES | 36,035.00 |
| 4311-642024 | UNMETERED WATER | 128,853.13 |
| 4311-659002 | PENALTY FINES ** | - |
| | | <u>\$ 686,148.03</u> |

CREDIT: UNDERUTILIZATION OF PENALTY CREDIT FROM PREVIOUS YEAR \$ 232,046.00

OTHER OPERATING REVENUES NOT INCLUDED:

CAPITAL CONTRIBUTION & LAKELINE CREDIT

| | | |
|-------------|-----------------------------|----------------------|
| 4311-607051 | WATER FRONT FOOTAGE | \$ 57,161.55 |
| 4311-607053 | INTEGRATED WATER CONNECTION | 676,538.50 |
| | | <u>\$ 733,700.05</u> |

OFFSETTING CREDIT TO CUSTOMER ACCOUNTING ACTIVITY EXPENSES:

| | | |
|-------------|--|------------------------|
| 4311-699001 | BILLABLE EXPENSE - SEWAGE DISPOSAL SYSTEM ** | <u>\$ 2,818,578.61</u> |
|-------------|--|------------------------|

* Reflects discontinuance of monthly payment option fee.

** Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 18, 2012

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Joellen Thompson
Water System Manager 

SUBJECT: **2012 WATER RATE STUDY- TASK #8**

Although we continue to reduce expenditures, no significant changes in operating levels are anticipated to take effect by January 1, 2013, which would require adjustments to operating costs for the test period.

JT\SS

wrslwtask8 2012

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 18, 2012

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Joellen Thompson
Water System Manager 

SUBJECT: **2012 WATER RATE STUDY- TASK #9**

No significant changes in water revenues are anticipated to take effect by January 1, 2013, which would require an adjustment to operating revenue estimates as a whole.

JT\SS

wrs\wtask9 2012

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 18, 2012

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Wayne Jernberg *WJ*
Assistant Water System Manager

SUBJECT: 2012 WATER RATE STUDY- TASK #10

The following are major water system projects that for rate study purposes should be considered operative as of January 1, 2013.

| <u>Description</u> | <u>Location</u> | <u>Amount</u> |
|---|-----------------|---------------|
| Eastside CSO-Contract No. 20 | Grand Rapids | 450,000 |
| Burton-Eastern/Plymouth | Grand Rapids | 393,570 |
| Eastside CSO-Contract No. 23A | Grand Rapids | 603,900 |
| Eastside CSO-Contract No. 23B | Grand Rapids | 474,439 |
| LMFP-VFD at Low Lift Station No. 2 | Grand Rapids | 552,636 |
| Dean Lake Service Center | Grand Rapids | 930,568 |
| Patterson Watermain | Kentwood | 515,711 |
| Eastside CSO-Contract No. 18 | Grand Rapids | 240,300 |
| Eastside CSO-Contract No. 26A | Grand Rapids | 175,000 |
| Eastside CSO-Contract No. 26B | Grand Rapids | 925,000 |
| Plainfield-3 Mile Road to I-96 | Grand Rapids | 225,900 |
| Ionia-Buckley to Wealthy (Urban Market) | Grand Rapids | 927,000 |

WJSS

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**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
TASK NO. 11**

COMPUTE ACCUMULATED COST, DEPRECIATION AND DEPRECIATION EXPENSE AS OF JUNE 30, 2012

INTEGRATED SYSTEM

| | ORIGINAL COST | ACCUMULATED DEPRECIATION | DEPRECIATION EXPENSE |
|------------------------------|-----------------------|-----------------------------|-------------------------|
| LAND | \$ 2,507,974 | \$ - | \$ - |
| LAND IMPROVEMENTS | 1,987,789 | 1,240,776 | 69,855 |
| BUILDINGS & STRUCTURES | 46,991,540 | 20,906,924 | 872,691 |
| STORAGE | 7,584,993 | 5,113,452 | 208,204 |
| PROCESS EQUIPMENT | 57,236,343 | 30,233,523 | 1,742,384 |
| AUXILIARY EQUIPMENT | 14,701,826 | 12,035,926 | 273,675 |
| METERS | 7,375,481 | 7,375,481 | - |
| MACHINERY & EQUIPMENT | 2,961,961 | 2,491,827 | 106,015 |
| OFFICE EQUIPMENT & FURNITURE | 622,184 | 622,184 | - |
| WATERMAINS | 55,592,968 | 16,556,454 | 741,240 |
| | <u>\$ 197,563,059</u> | <u>\$ 96,576,547</u> | <u>\$ 4,014,064</u> |

NON-INTEGRATED SYSTEM

| | ORIGINAL COST | ACCUMULATED DEPRECIATION | DEPRECIATION EXPENSE |
|-------------------------------|-----------------------|-----------------------------|-------------------------|
| LAND | \$ 1,568,968 | \$ - | \$ - |
| LAND IMPROVEMENTS | 1,192,503 | 779,882 | 41,033 |
| BUILDINGS & STRUCTURES | 11,393,099 | 2,937,772 | 244,285 |
| STORAGE | 9,461,759 | 4,721,193 | 213,079 |
| PROCESS EQUIPMENT | 4,476,690 | 2,517,292 | 122,116 |
| AUXILIARY EQUIPMENT | 4,433,260 | 1,839,469 | 114,047 |
| MACHINERY & EQUIPMENT | 2,257,526 | 2,086,260 | 56,399 |
| OFFICE EQUIPMENT & FURNITURE | 533,805 | 443,966 | 25,522 |
| WATERMAINS - GRAND RAPIDS | 122,254,233 | 26,923,736 | 1,567,561 |
| WATERMAINS - WALKER | 21,897,261 | 6,069,801 | 288,464 |
| WATERMAINS - KENTWOOD | 24,430,442 | 6,677,507 | 325,751 |
| WATERMAINS - CASCADE TWP | 20,150,425 | 4,851,601 | 269,889 |
| WATERMAINS - GRAND RAPIDS TWP | 17,048,859 | 3,559,706 | 225,315 |
| WATERMAINS - TALLMADGE TWP | 2,014,737 | 279,827 | 26,863 |
| | <u>\$ 243,113,567</u> | <u>\$ 63,688,012</u> | <u>\$ 3,520,324</u> |
| TOTAL | <u>\$ 440,676,626</u> | <u>\$ 160,264,559</u> | <u>\$ 7,534,388</u> |

SOURCE: GENERAL LEDGER, AS ADJUSTED, FOR JUNE 30, 2012.

**CITY OF GRAND RAPIDS, MICHIGAN
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
TASK NO. 12**

TASK 12A DETERMINE WORKING CAPITAL NEEDS FOR MATERIALS AND SUPPLIES ON HAND.

MATERIALS AND SUPPLIES INVENTORY AS OF JUNE 30, 2012: \$ 2,013,082

TASK 12B DETERMINE WORKING CAPITAL NEEDS FOR PREPAYMENT OF OPERATING COSTS.

NO REQUIREMENT FOR PREPAYMENT OF OPERATING COSTS IS CALLED FOR IN THE ORDINARY CYCLE OF BUSINESS.

TASK 12C DETERMINE CASH WORKING CAPITAL NEEDS & DETERMINE TOTAL WORKING CAPITAL NEEDS.

MINIMUM CASH WORKING CAPITAL IS DEFINED AS THE SUM OF 90 DAYS ADJUSTED OPERATING EXPENSES.

ADJUSTED CURRENT ANNUAL EXPENSES = \$ 22,636,057 @ 90/365 = \$ 5,581,494

TOTAL WORKING CAPITAL NEEDS CONSIST OF THE FOLLOWING:

| | |
|--------------------------------------|---------------------|
| 12A INVESTMENT IN INVENTORY | \$ 2,013,082 |
| 12B PREPAYMENT OF OPERATING EXPENSES | - |
| 12C 90 DAY OPERATING EXPENSES | <u>5,581,494</u> |
| | <u>\$ 7,594,576</u> |

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
ZONEGATED FACILITIES
TASK #13
November 2, 2012**

Lengths and cost of all primary and intermediate transmission mains that are jointly used were prorated based on billed flow. Jointly used storage tanks and pumping stations were also prorated based on billed flow. All zonegating work papers are on file at Oak Industrial Drive and a revised map is also on file there.

LW

wrslwtask13 2012

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 18, 2012

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Wayne Jernberg, P.E. *WJ*
Assistant Water System Manager

SUBJECT: 2012 WATER RATE STUDY- TASK #14

Base maps and zonegating maps for the water rate study, adjusted and revised to reflect changes are presently being updated to reflect 2012 zonegating information. The water maps will be completely updated by the end of calendar year 2012.

WJ/SS

wrs\wtask14 2012

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER RATE STUDY
 WATER SUPPLY SYSTEM FUND
 TASK NO. 15**

COMPUTE CONSTRUCTION COST RATE BASE (DEPRECIATED PLANT, PLUS WORKING CAPITAL, LESS CONTRIBUTIONS BY OTHERS).

| | | | |
|--------------------------------|------------|-----------------------------|------------------------------|
| ORIGINAL CONSTRUCTION COST | - TASK #10 | \$ 6,414,024 | |
| | - TASK #11 | 440,676,626 | |
| | | <u> </u> | \$ 447,090,650 |
| LESS: ACCUMULATED DEPRECIATION | - TASK #11 | \$ 160,264,559 | |
| | - TASK #10 | <u> </u> | (160,264,559) |
| | | | <u>286,826,091</u> |
| WORKING CAPITAL REQUIREMENT | - TASK #12 | \$ 7,594,576 | |
| | | <u> </u> | <u>7,594,576</u> |
| | | | 294,420,667 |
| CONTRIBUTIONS BY OTHERS | - TASK #21 | \$ 84,111,665 | |
| LESS: AMORTIZATION | | (26,335,482) | |
| | | <u> </u> | <u>(57,776,183)</u> |
| CONSTRUCTION COST RATE BASE | | | <u><u>\$ 236,644,484</u></u> |

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 9, 2012

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Scott Saindon 
Financial Analyst

**SUBJECT: 2012 WATER RATE STUDY TASK #15A
INTEGRATED WATER CONNECTION FEES**

Attached is the Integrated Water Connection Fee Schedule as currently provided for in Chapter 26 of the City Code, with the addition of rates to be effective on January 1, 2013. The City Commission on June 27, 2000 established fees through calendar year 2004. Beginning January 1, 2005, the integrated water connection fees are to be calculated on a yearly basis as part of the annual Water/Sewer Rate Study. The Consumer Price Index used to determine rates effective January 1, 2013 is as follows:

| | |
|--------------------------------|---------|
| August, 2012 Index | 230.379 |
| August, 2011 Index | 226.545 |
| Increase (decrease) | 3.834 |
| Percentage increase (decrease) | 1.69% |

SS

Attachment

wrslwtask15a 2012

Section 2.35 Integrated Water Connection Fee Schedule

When a property owner or user is requested or required to connect to the System and has not previously paid or been assessed a connection fee, the following connection fee schedule shall apply:

Integrated Connection Base Fee Schedule

| Water Meter Size (inches) | <u>1/01/12</u> | <u>1/01/13</u> |
|------------------------------|----------------|----------------|
| 3/4 or less | \$ 2,780 | \$ 2,830 |
| 1 | 4,640 | 4,730 |
| 1 ½ | 9,260 | 9,420 |
| 2 | 14,820 | 15,080 |
| 3 | 32,440 | 33,030 |
| 4 | 58,380 | 59,430 |
| 6 and over | 129,740 | 132,080 |

Except as otherwise provided in the immediately succeeding paragraph, the foregoing integrated water connection base fee schedule for single-family and multi-family residential dwelling units shall be adjusted upward and downward as follows: A single-family residential dwelling unit located on a parcel containing twenty thousand (20,000) square feet shall pay the applicable integrated connection fee in accordance with the forgoing schedule. When determining the square footage of a residential parcel for the purposes of determining the appropriate integrated connection fee, parcel size may be adjusted downward to take into consideration such things as wetlands, lakes, streams and other unusual characteristics of the parcel in accordance with policies approved from time to time by the Utility Advisory Board. To the extent the size of a parcel, as adjusted, is greater than or less than twenty thousand (20,000) square feet, one-half the applicable integrated connection fee will increase or decrease by the same percentage increase or decrease in the parcel above or below twenty thousand (20,000) square feet. In the case of multi-family residential dwellings, in order to determine the size of the parcel assigned to each dwelling unit for purposes of calculating the integrated connection fee to be paid by each multi-family residential dwelling unit, the total square footage of the parcel, as adjusted, on which the multi-family residential dwelling is located shall be divided by the total number of residential units. Notwithstanding any other provision in this subsection, the integrated connection fee for a single-family residential dwelling unit or multi-family residential dwelling unit shall not exceed four and one-half times the applicable base integrated connection fee set forth in foregoing schedule.

There shall be no upward adjustment in the integrated water service connection fee payable for a single-family residential dwelling unit connecting to the Water System if (a) each of the following conditions are met (1) a building permit shall have been obtained, (2) the dwelling unit shall have been constructed, and (3) a certificate of occupancy shall have been issued prior to January 1, 2000 or (b) local building permit fees have been paid to the local governmental unit prior to January 1, 2000 for a single-family residential dwelling unit to be

constructed on or after January 1, 2000. When connecting to the Water System, Users living in or owning such single-family residential dwelling units shall pay the applicable base integrated connection fee set forth in the Integrated Connection Base Fee Schedule adjusted downward, if applicable, in accordance with the immediate preceding paragraph.

Effective January 1, 2005 and January 1st of every year thereafter, the Integrated Water Connection Base Fees shall be adjusted by a percentage, which is determined by the annual change in the Consumer Price Index (the "index") calculated as follows:

- (1) The Consumer Price Index shall be that Index referred to as the Consumer Price Index, US City Average, All Urban Consumers, published by the U.S. Department of Labor-Bureau of Statistics ((1982-84)=100). In the event the method of determining the Index is substantially altered, the basis for determining the annual change thereafter shall be the Index which is most comparable to the Index described above.
- (2) For the purpose of computing the percentage change each calendar year, the Index for the month of August for the prior calendar year shall be subtracted from the Index for the immediately-preceding August. The result so obtained (if positive) shall be divided by the Index for the month of August for the prior calendar year to obtain the percentage increase which shall be applied to the then current Integrated Water Connection Base Fee Schedule to determine the new calendar year schedule.

The foregoing Integrated Connection fee is due and payable at the time a User receives a permit to connect to the Water System. A permit issued by the City to connect to the Water System shall expire one hundred eighty (180) days from the date the permit was issued.

The user receiving services who applies for a larger water meter than the one presently in service shall pay an Integrated Connection Fee which is the difference in cost between the meter size in service and the one applied for in accordance with the Integrated Connection Fee in effect at the time of application. No credit or rebate shall be made in the case of application for a smaller meter size.

Existing commercial and industrial customers may request the installation of an additional meter to measure water used solely for irrigation purposes. There shall be no Integrated Connection Fee for the additional meter provided combined maximum capacity as defined by the American Water Works Association Standards C700-90 and C702-92, as amended, does not exceed the maximum capacity of the original meter. If the original maximum capacity is exceeded, the customer shall pay as an Integrated Connection Fee the difference between the fee for the original meter and what the fee would be if the maximum capacities of all meters were totaled. The additional Integrated Connection Fee shall be based upon the fees in effect at the time of installation of the additional meter.

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER RATE STUDY
 WATER SUPPLY SYSTEM FUND
 TASK NO. 16**

INCLUDE PROJECT COST FOR SYSTEM IMPROVEMENTS (NON-INTEGRATED)

THE ESTIMATED TOTAL PROJECT COST FOR RECOMMENDED WATER SYSTEM IMPROVEMENTS ARE SUMMARIZED IN THE FOLLOWING TABLE.

| ITEM NO. | DESCRIPTION | ESTIMATED COST |
|----------|---|----------------------|
| 1 | SCADA UPGRADES - COLDBROOK | 2,000,000 |
| 2 | WILSON PUMP STATION IMPROVEMENTS | 682,000 |
| 3 | FOUR MILE ROAD WATER MAIN AND ELEVATED TANK | 8,245,000 |
| 4 | FRANKLIN PS - VFD'S AND NEW MOTOR STARTERS | 1,000,000 |
| 5 | PATTERSON TANK | 3,241,000 |
| 6 | EAST PARIS PUMP STATION EXPANSION | 3,880,000 |
| 7 | CASCADE NORTH RIVER CROSSING | 3,600,000 |
| 8 | LIVINGSTON DISCHARGE LINE | 10,970,000 |
| | | <u>\$ 33,618,000</u> |

NOTE: NONE OF THE PROJECTS ABOVE ARE INCLUDED IN RECOMMENDED REVENUE REQUIREMENTS FOR CALENDAR YEAR 2013. COSTS SHOWN ARE IN 2012 DOLLARS.

SOURCE: WAYNE JERNBERG, ASSISTANT WATER SYSTEM MANAGER
 OCTOBER 2012

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER RATE STUDY
 WATER SUPPLY SYSTEM FUND
 TASK NO. 17**

**BONDS - PRINCIPAL & INTEREST PAYMENTS
 1993, 2005 & 2010 BONDS**

| FISCAL YEAR ENDING JUNE 30, | CASH BASIS | | |
|--------------------------------------|---------------|---------------|----------------|
| | PRINCIPAL | INTEREST | PRIN & INT |
| 2013 | \$ 8,935,000 | \$ 4,164,688 | \$ 13,099,688 |
| 2014 | 9,280,000 | 3,823,538 | 13,103,538 |
| 2015 | 9,735,000 | 3,463,088 | 13,198,088 |
| 2016 | 10,110,000 | 3,079,750 | 13,189,750 |
| 2017 | 10,635,000 | 2,616,450 | 13,251,450 |
| 2018 | 11,185,000 | 2,123,350 | 13,308,350 |
| 2019 | 4,505,000 | 1,590,500 | 6,095,500 |
| 2020 | 4,755,000 | 1,384,500 | 6,139,500 |
| 2021 | 1,105,000 | 1,169,350 | 2,274,350 |
| 2022 | 1,160,000 | 1,114,100 | 2,274,100 |
| 2023 | 1,215,000 | 1,056,100 | 2,271,100 |
| 2024 | 1,280,000 | 995,350 | 2,275,350 |
| 2025 | 1,340,000 | 931,350 | 2,271,350 |
| 2026 | 1,410,000 | 864,350 | 2,274,350 |
| 2027 | 1,480,000 | 793,850 | 2,273,850 |
| 2028 | 1,555,000 | 719,850 | 2,274,850 |
| 2029 | 1,625,000 | 649,875 | 2,274,875 |
| 2030 | 1,695,000 | 576,750 | 2,271,750 |
| 2031 | 1,780,000 | 492,000 | 2,272,000 |
| 2032 | 1,870,000 | 403,000 | 2,273,000 |
| 2033 | 1,965,000 | 309,500 | 2,274,500 |
| 2034 | 2,060,000 | 211,250 | 2,271,250 |
| 2035 | 2,165,000 | 108,250 | 2,273,250 |
| | \$ 92,845,000 | \$ 32,640,789 | \$ 125,485,789 |

**CITY OF GRAND RAPIDS, MICHIGAN
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
TASK NO. 18**

DETERMINE WATER SYSTEM EQUITY IN THE CONSTRUCTION COST RATE BASE BY
SUBTRACTING DEBT OUTSTANDING FROM THE TOTAL RATE BASE.

| | |
|--|-----------------------|
| CONSTRUCTION COST RATE BASE - TASK NO. 15 | \$ 236,644,484 |
| LESS: BONDED INDEBTEDNESS - TASK NO. 17/20 | (119,076,083) |
| NET WATER SYSTEM EQUITY | <u>\$ 117,568,401</u> |

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER RATE STUDY
 WATER SUPPLY SYSTEM FUND
 RATE OF RETURN ON EQUITY - TASK NO. 19**

AT THE APRIL 5, 1977, COMMITTEE OF THE WHOLE MEETING, THE CITY COMMISSION DECIDED THE LEVEL OF RETURN ON WATER SYSTEM EQUITY. THE LEVEL DECIDED UPON WAS ONE PERCENT MORE THAN THE AVERAGE BOND BUYER'S INDEX OF MUNICIPAL BONDS FOR THE PREVIOUS TWELVE MONTH PERIOD.

BOND BUYER'S INDEX OF 20 MUNICIPAL BONDS

| <u>DATE</u> | <u>RATE</u> | <u>DATE</u> | <u>RATE</u> |
|-------------|-------------|-----------------|---------------|
| 06-Oct-11 | 4.140% | 05-Apr-12 | 4.080% |
| 13-Oct-11 | 4.170% | 12-Apr-12 | 3.970% |
| 20-Oct-11 | 4.080% | 19-Apr-12 | 3.900% |
| 27-Oct-11 | 4.120% | 26-Apr-12 | 3.860% |
| 03-Nov-11 | 4.020% | 03-May-12 | 3.810% |
| 10-Nov-11 | 4.020% | 10-May-12 | 3.710% |
| 17-Nov-11 | 4.090% | 17-May-12 | 3.750% |
| 24-Nov-11 | 4.070% | 24-May-12 | 3.810% |
| 01-Dec-11 | 4.120% | 31-May-12 | 3.770% |
| 08-Dec-11 | 3.930% | 07-Jun-12 | 3.920% |
| 15-Dec-11 | 3.920% | 14-Jun-12 | 3.950% |
| 22-Dec-11 | 3.920% | 21-Jun-12 | 3.950% |
| 29-Dec-11 | 3.880% | 28-Jun-12 | 3.950% |
| 05-Jan-12 | 3.830% | 05-Jul-12 | 3.940% |
| 12-Jan-12 | 3.620% | 12-Jul-12 | 3.830% |
| 19-Jan-12 | 3.600% | 19-Jul-12 | 3.750% |
| 26-Jan-12 | 3.680% | 26-Jul-12 | 3.610% |
| 02-Feb-12 | 3.600% | 02-Aug-12 | 3.660% |
| 09-Feb-12 | 3.700% | 09-Aug-12 | 3.750% |
| 16-Feb-12 | 3.650% | 16-Aug-12 | 3.800% |
| 23-Feb-12 | 3.690% | 23-Aug-12 | 3.760% |
| 01-Mar-12 | 3.720% | 30-Aug-12 | 3.720% |
| 08-Mar-12 | 3.840% | 06-Sep-12 | 3.730% |
| 15-Mar-12 | 3.950% | 13-Sep-12 | 3.790% |
| 22-Mar-12 | 4.010% | 20-Sep-12 | 3.720% |
| 29-Mar-12 | 4.020% | 27-Sep-12 | 3.670% |
| | | <u>52 WEEKS</u> | <u>3.857%</u> |

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER RATE STUDY
 WATER SUPPLY SYSTEM FUND
 TASK NO. 20**

DETERMINE COMPOSITE RATE OF RETURN AND DOLLARS OF RETURN ON A CONSTRUCTION COST RATE BASE.

| | RATE BASE | RATE OF RETURN | RETURN ON INVESTMENT |
|--|----------------|------------------------------------|-------------------------|
| WATER SYSTEM EQUITY IN THE CONSTRUCTION COST RATE (CCR) BASE | \$ 117,568,401 | @ 4.857% | = \$ 5,710,297 |
| WATER SYSTEM INDEBTEDNESS IN THE CCR BASE -1993 Bonds (<i>Fixed Rate Conversion</i>) | 24,400,000 | @ 5.330% | = 1,300,520 |
| -2000 Bonds | - | @ 5.750% | = - |
| -2005 Bonds | 30,965,000 | @ 4.850% | = 1,501,803 |
| -2009 Bonds (Amt in CCRB) | 24,409,177 | @ 4.980% | = 1,215,577 |
| -2010 Bonds (Refunded 2000 bonds) | 37,480,000 | @ 4.590% | = 1,720,332 |
| -2011 DWRF Bonds | 1,821,906 | @ 2.500% | = 45,548 |
| LESS: INTEREST EARNED DURING THE TEST PERIOD ON BOND RESERVE & REPLACEMENT ACCOUNTS | | | (2,789) |
| | \$ 236,644,484 | | \$ 11,491,288 |
| COMPOSITE RATE OF RETURN ON INVESTMENT | | $\frac{\$11,491,288}{236,644,484}$ | = 4.856% |

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
CONSTRUCTION COST RATE BASE & RETURN ON INVESTMENT- TASK NO. 21- PART 1
FISCAL YEAR ENDED JUNE 30, 2012**

PHYSICAL LOCATION

| DESCRIPTION | RETAIL | | | | | | | | | | WHOLESALE | | | TOTAL |
|--------------------------------|-------------------|-----------------|-----------------|------------------|------------------|----------------|--------------------|-----------------|------------------|--------------|-----------------|--|--|-------|
| | INTEGRATED SYSTEM | CITY OF GR | CITY OF WALKER | CITY OF KENTWOOD | CASCADE TOWNSHIP | GR TOWNSHIP | TALLMADGE TOWNSHIP | CITY OF EAST GR | COUNTY OF OTTAWA | ADA TOWNSHIP | | | | |
| COST | \$ 198,115,695 | \$ 147,109,823 | \$ 22,492,537 | \$ 23,186,985 | \$ 20,145,398 | \$ 15,414,409 | \$ 2,014,737 | \$ - | \$ - | \$ - | \$ 428,479,584 | | | |
| LESS: ACCUMULATED DEPRECIATION | 96,576,547 | 37,599,160 | 6,196,470 | 7,268,041 | 4,850,327 | 3,237,278 | 279,827 | - | - | - | 156,007,650 | | | |
| NET BOOK VALUE | \$ 101,539,148 | \$ 109,510,663 | \$ 16,296,067 | \$ 15,918,944 | \$ 15,295,071 | \$ 12,177,131 | \$ 1,734,910 | \$ - | \$ - | \$ - | \$ 272,471,934 | | | |
| WORKING CAPITAL REQUIREMENT | 3,501,935 | 2,649,748 | 371,830 | 440,485 | 322,845 | 234,217 | 16,784 | 22,632 | - | 34,100 | 7,594,576 | | | |
| CONTRIBUTIONS | \$ 105,041,083 | \$ 112,160,411 | \$ 16,667,897 | \$ 16,359,429 | \$ 15,617,916 | \$ 12,411,348 | \$ 1,751,694 | \$ - | \$ - | \$ 34,100 | \$ 280,065,510 | | | |
| LESS AMORTIZATION | - | 20,300,056 | 17,194,574 | 16,520,894 | 16,256,535 | 11,772,846 | 2,014,737 | - | - | - | 84,059,642 | | | |
| CONSTRUCTION COST RATE BASE | \$ - | \$ (10,095,837) | \$ (4,778,197) | \$ (4,248,385) | \$ (4,183,931) | \$ (2,755,085) | \$ (284,360) | \$ - | \$ - | \$ - | \$ (26,285,815) | | | |
| RETURN ON INVESTMENT- TASK 4/5 | \$ - | \$ (10,264,219) | \$ (12,416,377) | \$ (12,272,509) | \$ (12,072,604) | \$ (9,017,751) | \$ (1,730,357) | \$ - | \$ - | \$ - | \$ (57,773,827) | | | |
| RETURN ON INVESTMENT- TASK 20 | \$ 105,041,083 | \$ 101,896,192 | \$ 4,251,520 | \$ 4,086,920 | \$ 3,545,312 | \$ 3,393,587 | \$ 21,337 | \$ 22,632 | \$ - | \$ 34,100 | \$ 222,292,683 | | | |
| RETURN ON INVESTMENT- TASK 4/5 | \$ 5,100,795 | \$ 4,837,814 | \$ 206,454 | \$ 198,461 | \$ 172,160 | \$ 164,793 | \$ 1,036 | \$ 1,099 | \$ - | \$ 1,656 | \$ 110,265 | | | |
| RETURN ON INVESTMENT- TASK 20 | 4.856% | | | | | | | | | | \$ 10,884,268 | | | |

ZONEGATED

| | | | | | | | | | | | |
|----------------------------------|--------------|----------------|------------|--------------|--------------|--------------|------------|--------------|--------|--------------|---------------|
| COST | \$ - | \$ (5,157,296) | \$ 600,931 | \$ 6,848,713 | \$ 7,037,261 | \$ 3,643,414 | \$ 175,703 | \$ 1,448,650 | \$ - | \$ 4,013,690 | \$ 18,611,066 |
| LESS: ACCUMULATED DEPRECIATION | - | (2,522,875) | 436,595 | 1,474,716 | 2,253,065 | 1,090,825 | 79,914 | 360,487 | - | 1,084,182 | 4,256,909 |
| NET BOOK VALUE | \$ - | \$ (2,634,421) | \$ 164,336 | \$ 5,373,997 | \$ 4,784,196 | \$ 2,552,589 | \$ 95,789 | \$ 1,088,163 | \$ - | \$ 2,929,508 | \$ 14,354,157 |
| WORKING CAPITAL REQUIREMENT | - | - | - | - | - | - | - | - | - | - | - |
| CONTRIBUTIONS | \$ - | \$ (2,634,421) | \$ 164,336 | \$ 5,373,997 | \$ 4,784,196 | \$ 2,552,589 | \$ 95,789 | \$ 1,088,163 | \$ - | \$ 2,929,508 | \$ 14,354,157 |
| LESS AMORTIZATION | - | - | - | 14,680 | 3,428 | 22,580 | - | - | - | 11,335 | 52,023 |
| CONSTRUCTION COST RATE BASE | \$ - | \$ - | \$ - | \$ (14,015) | \$ (3,273) | \$ (21,557) | \$ - | \$ - | \$ - | \$ (10,822) | \$ (49,667) |
| RETURN ON INVESTMENT- TASK 19/20 | \$ - | \$ (220,159) | \$ 13,734 | \$ 449,049 | \$ 389,802 | \$ 213,234 | \$ 8,005 | \$ 90,938 | \$ - | \$ 244,776 | \$ 1,199,379 |
| RETURN ON INVESTMENT- TASK 19/20 | 8.357% | 8.357% | 8.357% | 8.357% | 8.357% | 8.357% | 8.357% | 8.357% | 4.856% | 8.357% | 8.357% |
| TOTAL RETURN ON INVESTMENT | \$ 5,100,795 | \$ 4,617,655 | \$ 220,188 | \$ 647,510 | \$ 571,962 | \$ 378,027 | \$ 9,041 | \$ 92,037 | \$ - | \$ 246,432 | \$ 11,883,647 |

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
CONSTRUCTION COST & ACCUMULATED DEPRECIATION- TASK NO. 21- PART 2
FISCAL YEAR ENDED JUNE 30, 2012**

CONSTRUCTION COST

| | AMOUNT | RETAIL | | | | | | WHOLESALE | | | | TOTAL | | | | | | | | | |
|-----------------------------|--------------|-------------------------------|---------------------|----------------|---------------|------------------|---------------|-------------------|-------------------|--------------|-------------|-------|--------------------|---------|-----------------|--------|------------------|--------------|--------------|--------------|----------------|
| | | INTEGRATED SYSTEM | | CITY OF WALKER | | CITY OF KENTWOOD | | CASCADIA TOWNSHIP | | GR TOWNSHIP | | | TALLMADGE TOWNSHIP | | CITY OF EAST GR | | COUNTY OF OTTAWA | | ADA TOWNSHIP | | |
| | | BY PHYSICAL LOCATION- TASK 11 | IN SERVICE- TASK 10 | GR | WALKER | KENTWOOD | WALKER | KENTWOOD | CASCADIA TOWNSHIP | GR TOWNSHIP | GR TOWNSHIP | | TALLMADGE TOWNSHIP | EAST GR | EAST GR | OTTAWA | OTTAWA | ADA TOWNSHIP | ADA TOWNSHIP | | |
| | | \$ 197,583,059 | \$ 552,636 | \$ 155,248,341 | \$ 22,509,961 | \$ 26,141,244 | \$ 20,150,425 | \$ 17,048,859 | \$ 2,014,737 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | |
| | | | | 5,127,351 | 218,326 | 515,711 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| PUMPING STATIONS: | | | | | | | | | | | | | | | | | | | | | |
| KNAPP SERVICE CENTER | \$ 3,346,654 | | | (1,509,977) | - | 428,096 | 99,496 | 655,375 | - | - | - | - | - | - | - | - | - | - | - | 329,010 | |
| LIVINGSTON | 1,952,860 | | | (343,935) | - | 97,183 | 22,555 | 149,276 | - | - | - | - | - | - | - | - | - | - | - | 74,911 | |
| FRANKLIN | 6,949,487 | | | (3,927,015) | - | 1,599,633 | 799,747 | 350,810 | - | - | 647,206 | - | - | - | - | - | - | - | - | 529,620 | |
| LEFFINGWELL | 141,009 | | | (63,622) | - | 17,953 | 4,192 | 27,614 | - | - | - | - | - | - | - | - | - | - | - | 13,863 | |
| BRISTOL | 612,700 | | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| EAST PARIS | 1,710,802 | | | - | - | (796,464) | 796,464 | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| STORAGE TANKS: | | | | | | | | | | | | | | | | | | | | | |
| ELKS | 236,335 | | | (179,088) | 173,496 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| KNAPP | 118,570 | | | (20,881) | - | 5,901 | 1,369 | 9,063 | - | 5,592 | - | - | - | - | - | - | - | - | - | 4,548 | |
| CAMBRIDGE | 116,070 | | | (89,831) | - | 73,876 | 5,752 | - | - | - | 10,203 | - | - | - | - | - | - | - | - | - | |
| WATERMANS | | | | (12,288,815) | 191,685 | 1,954,555 | 5,302,659 | 816,826 | 170,111 | 791,241 | - | - | - | - | - | - | - | - | - | 3,061,738 | |
| ADJUSTED BY ZONEGATING | | \$ 198,115,695 | | \$ 141,952,527 | \$ 23,093,468 | \$ 30,035,698 | \$ 27,182,659 | \$ 19,057,823 | \$ 2,190,440 | \$ 1,448,650 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 4,013,690 | |
| LESS: ZONEGATING ADJUSTMENT | | \$ - | | \$ (5,157,295) | \$ 600,931 | \$ 6,848,713 | \$ 7,037,261 | \$ 3,843,414 | \$ 175,703 | \$ 1,448,650 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 18,611,066 |
| PHYSICAL LOCATION | | \$ 198,115,695 | | \$ 147,109,623 | \$ 22,492,537 | \$ 23,185,985 | \$ 20,145,398 | \$ 15,414,409 | \$ 2,014,737 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 428,479,584 |

ACCUMULATED DEPRECIATION

| | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---------------|---------------|--------------|----------------|--------------|--------------|--------------|--------------|------------|------------|---------|------|------|------|------|------|------|------|------|------|--------------|----------------|
| BY PHYSICAL LOCATION- TASK 11 | \$ 96,576,547 | \$ 40,506,384 | \$ 6,307,843 | \$ 8,182,651 | \$ 4,851,601 | \$ 3,559,706 | \$ 279,827 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | |
| IN SERVICE- TASK 10 | | | | | | | | | | | | | | | | | | | | | | |
| PUMPING STATIONS: | | | | | | | | | | | | | | | | | | | | | | |
| KNAPP SERVICE CENTER | \$ 1,804,303 | | | (814,084) | - | 229,724 | 53,642 | 353,337 | - | - | - | - | - | - | - | - | - | - | - | - | 177,381 | |
| LIVINGSTON | 743,991 | | | (131,031) | - | 37,028 | 8,593 | 56,871 | - | - | - | - | - | - | - | - | - | - | - | - | 28,539 | |
| FRANKLIN | 2,447,329 | | | (1,382,937) | - | 563,326 | 281,639 | 123,541 | - | - | 227,920 | - | - | - | - | - | - | - | - | - | 186,511 | |
| LEFFINGWELL | 134,652 | | | (60,754) | - | 17,144 | 4,003 | 26,369 | - | - | - | - | - | - | - | - | - | - | - | - | 13,238 | |
| BRISTOL | 238,042 | | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| EAST PARIS | 1,505,144 | | | - | - | (700,720) | 700,720 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| STORAGE TANKS: | | | | | | | | | | | | | | | | | | | | | | |
| ELKS | 236,335 | | | (179,088) | 173,496 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| KNAPP | 116,070 | | | (20,442) | - | 5,777 | 1,341 | 8,872 | - | 5,592 | - | - | - | - | - | - | - | - | - | - | 4,452 | |
| CAMBRIDGE | 116,070 | | | (89,831) | - | 73,876 | 5,752 | - | - | - | 10,203 | - | - | - | - | - | - | - | - | - | - | |
| WATERMANS | | | | (2,751,932) | 151,726 | 333,951 | 1,196,101 | 199,407 | 74,322 | 122,364 | - | - | - | - | - | - | - | - | - | - | 674,061 | |
| ADJUSTED BY ZONEGATING | | \$ 96,576,547 | | \$ 35,076,285 | \$ 6,633,065 | \$ 8,742,757 | \$ 7,103,592 | \$ 4,328,103 | \$ 359,741 | \$ 360,487 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,084,182 | |
| LESS: ZONEGATING ADJUSTMENT | | \$ - | | \$ (2,522,875) | \$ 436,595 | \$ 1,474,716 | \$ 2,253,065 | \$ 1,090,825 | \$ 79,914 | \$ 360,487 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,084,182 |
| PHYSICAL LOCATION | | \$ 96,576,547 | | \$ 37,599,160 | \$ 6,196,470 | \$ 7,268,041 | \$ 4,850,327 | \$ 3,237,278 | \$ 279,827 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 156,007,650 |

CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
CONTRIBUTIONS & AMORTIZED CONTRIBUTIONS- TASK NO. 21- PART 3
FISCAL YEAR ENDED JUNE 30, 2012

CONTRIBUTIONS BY OTHERS

| COST CENTER | AMOUNT | RETAIL | | | | | | WHOLESALE | | | | TOTAL |
|----------------------------------|------------|---------------|----------------|------------------|------------------|---------------|--------------------|-----------------|------------------|--------------|---------------|-------|
| | | CITY OF GR | CITY OF WALKER | CITY OF KENTWOOD | CASCADE TOWNSHIP | GR TOWNSHIP | TALLMADGE TOWNSHIP | CITY OF EAST GR | COUNTY OF OTTAWA | ADA TOWNSHIP | TOTAL | |
| 2011 RATE STUDY- LOCATION | | \$ 23,001,276 | \$ 17,160,761 | \$ 16,516,989 | \$ 16,244,651 | \$ 11,590,142 | \$ 2,014,737 | \$ - | \$ - | \$ - | \$ 86,528,556 | |
| ADDITIONS: | | | | | | | | | | | | |
| FRONT FOOT FEES | | 7,501 | 24,417 | 3,905 | 11,884 | 9,455 | - | - | - | - | 57,162 | |
| FIXED ASSET CONTRIBUTIONS | | 106,706 | 9,396 | - | - | 173,249 | - | - | - | - | 289,351 | |
| SMART ZONE ADJUSTMENT | | (2,815,427) | - | - | - | - | - | - | - | - | (2,815,427) | |
| | | 20,300,056 | 17,194,574 | 16,520,894 | 16,256,535 | 11,772,846 | 2,014,737 | - | - | - | 84,059,642 | |
| PUMPING STATIONS: LEFFINGWELL | \$ 115,303 | | | 14,680 | 3,428 | 22,580 | - | - | - | 11,335 | 52,023 | |
| ADJUSTED BY ZONEGATING | | 20,300,056 | 17,194,574 | 16,535,574 | 16,259,963 | 11,795,426 | 2,014,737 | - | - | 11,335 | 84,111,665 | |
| LESS: ZONEGATING ADJUSTMENT | | - | - | 14,680 | 3,428 | 22,580 | - | - | - | 11,335 | 52,023 | |
| PHYSICAL LOCATION | | 20,300,056 | 17,194,574 | 16,520,894 | 16,256,535 | 11,772,846 | 2,014,737 | - | - | - | 84,059,642 | |

AMORTIZED CONTRIBUTIONS

| | | | | | | | | | | |
|----------------------------------|---------------|--------------|--------------|--------------|--------------|------------|------|------|--------|---------------|
| 2011 RATE STUDY- LOCATION | \$ 10,307,424 | \$ 4,545,133 | \$ 4,025,624 | \$ 3,965,833 | \$ 2,597,251 | \$ 257,517 | \$ - | \$ - | \$ - | \$ 25,698,842 |
| CURRENT YEAR ADJUSTMENTS | 275,823 | 233,064 | 222,761 | 218,088 | 157,834 | 26,863 | - | - | - | 1,134,383 |
| PRIOR PERIOD ADJUSTMENT | (547,410) | - | - | - | - | - | - | - | - | (547,410) |
| | 10,035,837 | 4,778,197 | 4,248,385 | 4,183,931 | 2,755,085 | 284,380 | - | - | - | 26,285,815 |
| PUMPING STATIONS: LEFFINGWELL | | | 14,015 | 3,273 | 21,557 | - | - | - | 10,822 | 49,667 |
| ADJUSTED BY ZONEGATING | 10,035,837 | 4,778,197 | 4,262,400 | 4,187,204 | 2,776,642 | 284,380 | - | - | 10,822 | 26,335,482 |
| LESS: ZONEGATING ADJUSTMENT | - | - | 14,015 | 3,273 | 21,557 | - | - | - | 10,822 | 49,667 |
| PHYSICAL LOCATION | 10,035,837 | 4,778,197 | 4,248,385 | 4,183,931 | 2,755,085 | 284,380 | - | - | - | 26,285,815 |

CITY OF GRAND RAPIDS, MICHIGAN
 WATER SUPPLY SYSTEM FUND
 RECONCILIATION OF CONSTRUCTION COST & ACCUMULATED DEPRECIATION- PHYSICAL LOCATION & ZONEGATING
 FISCAL YEAR ENDED JUNE 30, 2012

| COST CENTER | AMOUNT | CONSTRUCTION COST-BY PHYSICAL LOCATION | | | | | | | | | | TOTAL |
|---|--------------|--|----------------|----------------|------------------|------------------|---------------|--------------------|-----------------|------------------|------------------------|----------------|
| | | INTEGRATED SYSTEM | CITY OF GR | CITY OF WALKER | CITY OF KENTWOOD | CASCADE TOWNSHIP | GR TOWNSHIP | TALLMADGE TOWNSHIP | CITY OF EAST GR | COUNTY OF OTTAWA | WHOLESALE ADA TOWNSHIP | |
| COST BY PHYSICAL LOCATION- TASK 11 | | \$ 197,563,059 | \$ 157,571,843 | \$ 21,897,261 | \$ 24,430,442 | \$ 20,150,425 | \$ 17,048,859 | \$ 2,014,737 | \$ - | \$ - | \$ - | \$ 440,676,626 |
| IN SERVICE- TASK 10 | | 552,636 | 5,127,351 | 218,326 | 515,711 | - | - | - | - | - | - | 6,414,024 |
| BRISTOL | | | (612,700) | 612,700 | | | | | | | | - |
| EAST PARIS | | | (1,710,802) | | 1,710,802 | | | | | | | - |
| WATERMANS | | | (20,287,069) | (725,425) | (6,967,535) | (6,200) | (2,208,247) | | | | | (30,194,476) |
| LESS: WATERMANS-TOTAL SUBS-HOME COMM | | | 7,021,199 | 468,875 | 3,497,565 | 1,173 | 573,797 | | | | | 11,593,409 |
| ADD: WATERMANS-TOTAL ADDS-HOME COMM | | | \$ 147,109,822 | \$ 22,492,537 | \$ 23,186,965 | \$ 20,145,398 | \$ 15,414,409 | \$ 2,014,737 | \$ - | \$ - | \$ - | \$ 428,479,583 |
| TOTAL-PHYSICAL LOCATION COST | | \$ 198,115,695 | | | | | | | | | | |
| CONSTRUCTION COST- ZONEGATING | | | | | | | | | | | | |
| PUMPING STATIONS: | | | | | | | | | | | | |
| KNAPP SERVICE CENTER | \$ 3,346,654 | \$ (1,509,977) | \$ - | \$ 426,086 | \$ 98,496 | \$ - | \$ 655,375 | \$ - | \$ - | \$ - | \$ 329,010 | \$ - |
| LIVINGSTON | 1,952,850 | (343,935) | - | 97,193 | 22,555 | - | 149,276 | - | - | - | 74,911 | - |
| FRANKLIN | 6,949,487 | (3,927,016) | - | 1,599,633 | 799,747 | - | 350,810 | 647,206 | - | - | 529,620 | - |
| LEFFINGWELL | 141,009 | (63,622) | - | 17,953 | 4,192 | - | 27,614 | - | - | - | 13,863 | - |
| BRISTOL | 612,700 | - | - | (796,464) | 796,464 | - | - | - | - | - | - | - |
| EAST PARIS | 1,710,802 | - | - | - | - | - | - | - | - | - | - | - |
| STORAGE TANKS: | | | | | | | | | | | | |
| ELKS | 236,335 | (179,088) | 173,496 | - | - | - | - | 5,592 | - | - | - | - |
| KNAPP | 118,570 | (20,881) | - | 5,901 | 1,369 | - | 9,063 | - | - | - | 4,548 | - |
| CAMBRIDGE | 116,070 | (89,831) | - | 73,876 | 5,752 | - | - | 10,203 | - | - | - | - |
| WATERMANS- ZONEGATED COST | | | | | | | | | | | | |
| TOTAL- ZONEGATED COST | | \$ (5,157,266) | \$ 600,931 | \$ 6,848,713 | \$ 7,037,261 | \$ 175,703 | \$ 3,643,414 | \$ 1,448,650 | \$ - | \$ - | \$ 4,013,690 | \$ 18,611,068 |
| GRAND TOTAL- COST | | \$ 198,115,695 | \$ 141,952,526 | \$ 23,063,468 | \$ 27,182,659 | \$ 2,190,440 | \$ 19,057,823 | \$ 2,190,440 | \$ 1,448,650 | \$ - | \$ 4,013,690 | \$ 447,080,649 |
| ACCUMULATED DEPRECIATION-BY PHYSICAL LOCATION | | | | | | | | | | | | |
| ACC DEPREC BY PHYSICAL LOCATION- TASK 11 | | \$ 96,576,547 | \$ 42,249,570 | \$ 6,069,801 | \$ 6,677,507 | \$ 4,851,601 | \$ 3,559,706 | \$ 279,827 | \$ - | \$ - | \$ - | \$ 160,264,559 |
| BRISTOL | | | (236,042) | 238,042 | | | | | | | | - |
| EAST PARIS | | | (1,505,144) | | 1,505,144 | | | | | | | - |
| WATERMANS | | | (4,485,915) | (367,131) | (1,865,424) | (1,571) | (486,822) | | | | | (7,206,863) |
| LESS: WATERMANS-TOTAL SUBS-HOME COMM | | | 1,578,680 | 255,758 | 950,814 | 297 | 164,393 | | | | | 2,949,952 |
| ADD: WATERMANS-TOTAL ADDS-HOME COMM | | | \$ 37,598,159 | \$ 6,196,470 | \$ 7,288,041 | \$ 4,850,327 | \$ 3,237,277 | \$ 279,827 | \$ - | \$ - | \$ - | \$ 156,007,648 |
| TOTAL-PHYSICAL LOCATION ACC DEP | | \$ 96,576,547 | | | | | | | | | | |
| ACCUMULATED DEPRECIATION-ZONEGATING | | | | | | | | | | | | |
| PUMPING STATIONS: | | | | | | | | | | | | |
| KNAPP SERVICE CENTER | \$ 1,804,303 | \$ (814,084) | \$ - | \$ 229,724 | \$ 53,642 | \$ - | \$ 353,337 | \$ - | \$ - | \$ - | \$ 177,381 | \$ - |
| LIVINGSTON | 743,991 | (131,031) | - | 37,028 | 8,593 | - | 56,871 | - | - | - | 28,539 | - |
| FRANKLIN | 2,447,329 | (1,382,937) | - | 563,326 | 281,639 | - | 123,541 | 227,920 | - | - | 186,511 | - |
| LEFFINGWELL | 134,652 | (60,754) | - | 17,144 | 4,003 | - | 26,369 | - | - | - | 13,238 | - |
| BRISTOL | 238,042 | - | - | (700,720) | 700,720 | - | - | - | - | - | - | - |
| EAST PARIS | 1,505,144 | - | - | - | - | - | - | - | - | - | - | - |
| STORAGE TANKS: | | | | | | | | | | | | |
| ELKS | 236,335 | (179,088) | 173,496 | - | - | - | - | 5,592 | - | - | - | - |
| KNAPP | 116,070 | (20,442) | - | 5,777 | 1,341 | - | 8,872 | - | - | - | 4,452 | - |
| CAMBRIDGE | 116,070 | (88,831) | - | 73,876 | 5,752 | - | - | 10,203 | - | - | - | - |
| WATERMANS- ZONEGATED ACC DEP | | | | | | | | | | | | |
| TOTAL- ZONEGATED ACC DEP | | \$ (2,522,875) | \$ 436,595 | \$ 1,474,716 | \$ 2,253,065 | \$ 1,090,825 | \$ 1,090,825 | \$ 79,914 | \$ 360,467 | \$ - | \$ 1,084,182 | \$ 4,256,909 |
| GRAND TOTAL- ACC DEP | | \$ 96,576,547 | \$ 35,076,284 | \$ 6,633,065 | \$ 8,742,757 | \$ 7,103,392 | \$ 4,328,102 | \$ 359,741 | \$ 360,467 | \$ - | \$ 1,084,182 | \$ 160,264,557 |

CITY OF GRAND RAPIDS, MICHIGAN
 WATER SUPPLY SYSTEM FUND
 ADJUSTED OPERATING EXPENSE ZONEGATED BY GOVERNMENTAL UNIT - TASK #22
 FISCAL YEAR ENDED JUNE 30, 2012

| COST CENTER | ADJUSTED EXPENSE BY COST CENTER | INTEGRATED SYSTEM | RETAIL | | | | | | WHOLESALE | | | | | |
|----------------------------|---------------------------------|-------------------|--------------|----------------|------------------|------------------|-------------|--------------------|-----------------|------------------|--------------|--|--|------------|
| | | | CITY OF GR | CITY OF WALKER | CITY OF KENTWOOD | CASCADE TOWNSHIP | GR TOWNSHIP | TALLMADGE TOWNSHIP | CITY OF EAST GR | COUNTY OF OTTAWA | ADA TOWNSHIP | | | |
| FILTRATION PLANT | \$ 6,814,800 | \$ 6,814,800 | | | | | | | | | | | | |
| PUMPING STATIONS: | | | | | | | | | | | | | | |
| A. PRIMARY TRANSPORT | 2,014,673 | 2,014,673 | | | | | | | | | | | | |
| B. INTERMEDIATE TRANSPORT | 1,503,915 | | 719,540 | 43,641 | 331,900 | 225,083 | 70,905 | | | | 49,964 | | | 62,882 |
| WATERMAINS: | | | | | | | | | | | | | | |
| A. PRIMARY TRANSPORT | 289,662 | | 149,753 | 28,230 | 52,585 | 29,473 | 11,531 | | | | 6,958 | | | 10,486 |
| B. INTERMEDIATE TRANSPORT | 1,482,546 | | 554,116 | 308,088 | 256,584 | 215,177 | 112,036 | | | | 104 | | | 12,631 |
| C. LOCAL DISTRIBUTION | 4,010,630 | | 2,961,529 | 311,666 | 272,001 | 214,248 | 239,274 | | | | | | | |
| RETAIL CUSTOMER METERING * | 3,031,904 | | 2,295,879 | 245,887 | 197,559 | 129,917 | 156,689 | | | | | | | |
| SUBTOTAL OPERATING EXPENSE | 19,148,130 | 8,829,473 | 6,860,817 | 937,512 | 1,110,629 | 813,898 | 590,435 | | | | 57,026 | | | 85,999 |
| ENGINEERING SERVICES | 1,028,012 | 474,027 | 358,673 | 50,331 | 59,625 | 43,701 | 31,704 | | | | 3,063 | | | 4,616 |
| ADMINISTRATIVE EXPENSE | 2,459,915 | 1,134,292 | 858,264 | 120,437 | 142,675 | 104,571 | 75,864 | | | | 7,331 | | | 11,045 |
| TOTAL | \$ 22,636,057 | \$ 10,437,792 | \$ 7,897,754 | \$ 1,108,280 | \$ 1,312,929 | \$ 962,170 | \$ 698,003 | | | | \$ 67,420 | | | \$ 101,660 |

* Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

METHOD OF DISTRIBUTION

| | | | | | | | | | | | | | | | |
|------------------------------|-----------|----------|-----------|----------|----------|----------|----------|--|--|--|--------|--|--|--|--------|
| FILTRATION PLANTS | | | | | | | | | | | | | | | |
| PUMPING STATIONS | | | | | | | | | | | | | | | |
| A. PRIMARY TRANSPORT | 100.00% | 100.00% | | | | | | | | | | | | | |
| B. INTERMEDIATE TRANSPORT | 100.00% | 100.00% | 47.845% | 2.902% | 22.069% | 14.966% | 4.715% | | | | 3.322% | | | | 4.181% |
| MEMO | | | | | | | | | | | | | | | |
| WATERMAINS | | | | | | | | | | | | | | | |
| TOTAL MILES: | 1,163.40 | | | | | | | | | | | | | | |
| A. PRIMARY TRANSPORT | 100.000% | 100.000% | 51.699% | 9.746% | 18.154% | 10.175% | 3.981% | | | | 2.402% | | | | 3.620% |
| MILES | 58.28 | | 30.13 | 5.68 | 10.58 | 5.93 | 2.32 | | | | 1.40 | | | | 2.11 |
| B. INTERMEDIATE TRANSPORT | 100.000% | 100.000% | 37.376% | 20.781% | 17.307% | 14.514% | 7.557% | | | | 0.007% | | | | 0.852% |
| MILES | 298.26 | | 111.48 | 61.98 | 51.62 | 43.29 | 22.54 | | | | 0.02 | | | | 2.54 |
| C. LOCAL DISTRIBUTION | 100.000% | 100.000% | 73.842% | 7.771% | 6.782% | 5.342% | 5.966% | | | | | | | | |
| MILES | 806.86 | | 595.80 | 62.70 | 54.72 | 43.10 | 48.14 | | | | | | | | |
| RETAIL CUSTOMER METERING (1) | 100.000% | 100.000% | 75.724% | 8.110% | 6.516% | 4.285% | 5.168% | | | | | | | | |
| NUMBER OF METERS | 78,616.00 | | 59,530.00 | 6,376.00 | 5,123.00 | 3,369.00 | 4,063.00 | | | | | | | | |
| ENGINEERING SERVICES (2) | 100.000% | 100.000% | 34.890% | 4.896% | 5.800% | 4.251% | 3.084% | | | | 0.298% | | | | 0.449% |
| ADMINISTRATIVE EXPENSE (3) | 100.000% | 100.000% | 34.890% | 4.896% | 5.800% | 4.251% | 3.084% | | | | 0.298% | | | | 0.449% |

NOTES:
 (1) ALLOCATION BASED ON NUMBER OF METERS.
 (2) ALLOCATION BASED ON DIRECT OPERATING EXPENSE.
 (3) ALLOCATION BASED ON DIRECT OPERATING EXPENSE, ADJUSTED FOR ANY COST ASSIGNABLE EXCLUSIVELY TO GR OR RETAIL COMMUNITIES, IF APPLICABLE.

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER RATE STUDY
 WATER SUPPLY SYSTEM FUND
 TASK NO. 23**

ASSIGN OTHER OPERATING REVENUES TO EACH GOVERNMENTAL ENTITY. *

BASIS OF ALLOCATION: RETAIL BILLINGS BY GOVERNMENTAL ENTITY - TASK NO. 6 & 7

| | <u>RETAIL BILLINGS</u> | <u>PERCENTAGE OF TOTAL</u> | <u>ALLOCATION *</u> |
|-----------------------|----------------------------|--------------------------------|---------------------|
| CITY OF GRAND RAPIDS | \$ 24,281,784 | 65.3518% | \$ 600,057 |
| CITY OF WALKER | 3,161,981 | 8.5101% | 78,139 |
| CITY OF KENTWOOD | 4,411,524 | 11.8731% | 109,018 |
| CASCADE TOWNSHIP | 2,961,020 | 7.9693% | 73,174 |
| GRAND RAPIDS TOWNSHIP | 2,213,123 | 5.9564% | 54,691 |
| TALLMADGE TOWNSHIP | 126,058 | 0.3393% | 3,115 |
| | <u>\$ 37,155,490</u> | <u>100.0000%</u> | <u>\$ 918,194</u> |

** Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.*

CITY OF GRAND RAPIDS, MICHIGAN
 WATER SUPPLY SYSTEM FUND
 ASSIGN DEPRECIATION EXPENSE TO CUSTOMER COMMUNITIES- TASK NO. 24
 FISCAL YEAR ENDED JUNE 30, 2012

| COST CENTER | DEPRECIATION EXPENSE | INTEGRATED SYSTEM | RETAIL | | | | | | | WHOLESALE | | | TOTAL | |
|-------------------------------|----------------------|-------------------|--------------|----------------|------------------|------------------|-------------|--------------------|-----------------|------------------|--------------|------|-----------|--------------|
| | | | CITY OF GR | CITY OF WALKER | CITY OF KENTWOOD | CASCADE TOWNSHIP | GR TOWNSHIP | TALLMADGE TOWNSHIP | CITY OF EAST GR | COUNTY OF OTTAWA | ADA TOWNSHIP | | | |
| BY PHYSICAL LOCATION- TASK 11 | | \$ 4,014,064 | \$ 2,343,510 | \$ 304,334 | \$ 350,413 | \$ 269,889 | \$ 225,315 | \$ 26,863 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 7,634,388 |
| IN SERVICE- TASK 10 | | 18,421 | 87,059 | 12,977 | 6,876 | - | - | - | - | - | - | - | - | 125,333 |
| PUMPING STATIONS: | | | | | | | | | | | | | | |
| KNAPP SERVICE CENTER | \$ 91,211 | | (41,154) | - | 11,613 | 2,712 | 17,862 | - | - | - | - | - | 8,967 | - |
| LIVINGSTON | 42,634 | | (7,508) | - | 2,122 | 492 | 3,289 | - | - | - | - | - | 1,635 | - |
| FRANKLIN | 208,505 | | (117,822) | - | 47,994 | 23,996 | 10,525 | - | 19,418 | - | - | - | 15,890 | - |
| LEFFINGWELL | 908 | | (410) | - | 116 | 27 | 178 | - | - | - | - | - | 89 | - |
| BRISTOL | 15,870 | | - | - | - | - | - | - | - | - | - | - | - | - |
| EAST PARIS | 24,662 | | - | - | (11,481) | 11,481 | - | - | - | - | - | - | - | - |
| STORAGE TANKS: | | | | | | | | | | | | | | |
| ELKS | - | | - | - | - | - | - | - | - | - | - | - | - | - |
| KNAPP | - | | - | - | - | - | - | - | - | - | - | - | - | - |
| CAMBRIDGE | - | | - | - | - | - | - | - | - | - | - | - | - | - |
| WATERMAINS | | | (163,418) | 2,556 | 25,867 | 70,687 | 10,891 | 2,268 | 10,326 | - | - | - | 40,823 | - |
| ADJUSTED BY ZONEGATING | | 4,032,485 | 2,100,257 | 319,867 | 433,520 | 379,283 | 268,030 | 29,131 | 29,744 | - | - | - | 67,404 | 7,659,721 |
| LESS DEPR ON CIS (TASK 45) | | | (78,284) | | | | | | | | | | | (78,284) |
| LESS CONTRIBUTIONS AMORTIZED | | | (275,823) | (233,064) | (222,761) | (218,038) | (157,834) | (26,863) | - | - | - | - | - | (1,134,383) |
| TASK NO. 21 | | \$ 4,032,485 | \$ 1,746,150 | \$ 86,803 | \$ 210,759 | \$ 161,245 | \$ 110,196 | \$ 2,268 | \$ 29,744 | \$ - | \$ - | \$ - | \$ 67,404 | \$ 6,447,054 |
| TOTAL | | | | | | | | | | | | | | |

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ACCUMULATE REVENUE REQUIREMENTS BY CUSTOMER COMMUNITIES- TASK NO. 25
FISCAL YEAR ENDED JUNE 30, 2012**

| COST CENTER | INTEGRATED SYSTEM | RETAIL | | | | | | | | | | WHOLESALE | | | TOTAL |
|--|-------------------|---------------|----------------|------------------|------------------|--------------|--------------------|-----------------|------------------|--------------|------|-----------|------|--------------|---------------|
| | | CITY OF GR | CITY OF WALKER | CITY OF KENTWOOD | CASCADE TOWNSHIP | GR TOWNSHIP | TALLMADGE TOWNSHIP | CITY OF EAST GR | COUNTY OF OTTAWA | ADA TOWNSHIP | | | | | |
| OPERATION & MAINTENANCE EXPENSE- TASK NO. 22 | \$ 10,437,792 | \$ 7,897,754 | \$ 1,108,280 | \$ 1,312,929 | \$ 962,170 | \$ 698,003 | \$ 50,049 | \$ 67,420 | \$ - | \$ 101,660 | \$ - | \$ - | \$ - | \$ 101,660 | \$ 22,636,057 |
| DEPRECIATION EXPENSE TASK NO. 24 | 4,032,485 | 1,746,150 | 86,803 | 210,759 | 161,245 | 110,196 | 2,268 | 29,744 | - | 67,404 | - | - | - | 67,404 | 6,447,064 |
| RETURN ON SYSTEM INVESTMENT TASK NO. 21 | 5,100,795 | 4,617,655 | 220,188 | 647,510 | 571,962 | 378,027 | 9,041 | 92,037 | - | 246,432 | - | - | - | 246,432 | 11,883,647 |
| REVENUE CREDITS- TASK NO. 23 | - | (600,057) | (78,139) | (109,018) | (73,174) | (54,691) | (3,115) | - | - | - | - | - | - | - | (918,194) |
| ALLOCATE: | | | | | | | | | | | | | | | |
| INTEG CONN. FEE CREDIT (A) | - | (382,027) | (69,099) | (78,107) | (49,710) | (35,318) | (3,117) | (26,710) | - | (32,451) | - | - | - | (32,451) | (676,539) |
| INTEGRATED SYSTEM (A) | (19,571,072) | 10,324,308 | 1,867,396 | 2,110,828 | 1,343,426 | 954,463 | 84,239 | 721,825 | 1,287,594 | 876,993 | - | - | - | 876,993 | - |
| LESS: CIRCUIT BREAKER (B) | - | (89,966) | (19,989) | - | - | - | (14,628) | - | - | - | - | - | - | - | (124,583) |
| | \$ - | \$ 23,513,817 | \$ 3,115,440 | \$ 4,094,901 | \$ 2,915,919 | \$ 2,050,680 | \$ 124,737 | \$ 884,316 | \$ 1,287,594 | \$ 1,260,038 | \$ - | \$ - | \$ - | \$ 1,260,038 | \$ 39,247,442 |

(A) ALLOCATED ON THE BASIS OF RELATIVE BILLED VOLUME & LAND AREA TO UAB PARTNERS. OTTAWA'S ALLOCATION IS BASED ON OLD CONTRACT AND EXCLUDES ANY COST OF COLDBROOK PUMPING.
 (B) PURSUANT TO CITY AND CUSTOMER COMMUNITY CIRCUIT BREAKER, AS PROVIDED FOR BY THE THIRD AMENDMENT TO THE UNIFORM SERVICE AGREEMENTS.

**CITY OF GRAND RAPIDS, MICHIGAN
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
TASK NO. 25a**

REVIEW THE REVENUE REQUIREMENTS TO ASSURE COMPLIANCE WITH THE APPLICABLE BOND ORDINANCE PROVISIONS.

| | <u>YEAR ENDED 6/30/12</u> | <u>PRO FORMA *</u> |
|-------------------------------------|-------------------------------|----------------------|
| REVENUES: | | |
| RETAIL/WHOLESALE WATER SALES | \$ 40,796,724 | \$ 40,916,595 |
| CONNECTION FEES/FRONT FOOT FEES | 733,700 | 720,000 |
| BILLABLE TO SDS FUND | 2,179,715 | 1,987,718 |
| OTHER OPERATING REVENUES | 1,861,814 | 1,889,394 |
| INTEREST ON INVESTMENTS | 164,768 | 200,000 |
| MISCELLANEOUS | 747,701 | 573,730 |
| TOTAL REVENUES | <u>\$ 46,484,422</u> | <u>\$ 46,287,437</u> |
| OPERATING EXPENSES: | | |
| OPERATIONS & MAINTENANCE | \$ 25,291,267 | \$ 25,473,254 |
| DEPRECIATION | 7,534,387 | 7,534,387 |
| TOTAL EXPENSES | <u>\$ 32,825,654</u> | <u>\$ 33,007,641</u> |
| ADDITIONS: DEPRECIATION | <u>7,534,387</u> | <u>7,534,387</u> |
| NET EARNINGS OF THE SYSTEM | <u>\$ 21,193,155</u> | <u>\$ 20,814,183</u> |
| DEBT SERVICE (CASH BASIS) | | |
| SERIES 1993 BONDS | \$ 3,349,450 | \$ 3,475,850 |
| SERIES 2005 BONDS | 2,217,188 | 2,270,938 |
| SERIES 2009 BONDS | 1,972,090 | 1,970,140 |
| SERIES 2010 BONDS | 7,353,800 | 7,352,900 |
| SENIOR LIEN | 14,892,528 | 15,069,828 |
| JUNIOR LIEN ** | - | 300,954 |
| TOTAL | <u>14,892,528</u> | <u>15,370,782</u> |
| COVERAGE RATIO - SENIOR DEBT | 1.42 | 1.38 |
| COVERAGE RATIO - ALL DEBT | <u>1.42</u> | <u>1.35</u> |

* METERED SALES ADJUSTED FOR RATE REVISIONS OF 5.15% AND -4.41% EFFECTIVE 1/1/12 AND 1/1/13, RESPECTIVELY; OTHER REVENUES AND OPERATIONS & MAINTENANCE EXPENSE PER 2013 FISCAL PLAN, ADJUSTED FOR CARRYFORWARDS AND ELIMINATION OF MONTHLY SERVICE STATEMENT FEES.

** AMOUNTS ARE GROSS AND DO NOT INCLUDE PRINCIPAL FORGIVENESS.

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SUMMARY

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26**

| | | |
|---|---------------|-----------------------|
| INITIAL SYSTEM REVENUE REQUIREMENTS | | \$ 39,372,025 |
| REVENUES FROM CURRENT RATES | | |
| MONTHLY METER CHARGE | \$ 10,543,573 | |
| MONTHLY BILLING CHARGE | 3,290,242 | |
| COMMODITY CHARGE | 26,541,817 | |
| MONTHLY FIRE PROTECTION | 628,862 | |
| ANNUAL HYDRANT CHARGE | <u>55,704</u> | <u>(41,060,198)</u> |
| INITIAL REQUIRED REVENUE INCREASE (DECREASE) | | <u>\$ (1,688,173)</u> |
| INITIAL PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES | | <u>-4.11%</u> |
| INITIAL SYSTEM REVENUE REQUIREMENTS FROM ABOVE | | \$ 39,372,025 |
| LESS: AMOUNT OF CIRCUIT BREAKER RELIEF TO REDUCE RR's TO RETAIL | | <u>(124,583)</u> |
| SYSTEM REVENUE REQUIREMENTS | | <u>\$ 39,247,442</u> |
| ACTUAL REQUIRED AMOUNT OF REVENUE INCREASE (DECREASE) | | <u>\$ (1,812,756)</u> |
| ACTUAL PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES | | <u>-4.41%</u> |

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
TASK NO. 26**

| METER SIZE | EQUIV. FACTOR | CITY OF GR | | CITY OF WALKER | | CITY OF KENTWOOD | | CASCADE TWP | | GR TWP | | TALLMADGE TWP | |
|----------------|---------------|------------|--------|----------------|--------|------------------|--------|-------------|--------|--------|--------|---------------|--------|
| | | METERS | EQUIV. | METERS | EQUIV. | METERS | EQUIV. | METERS | EQUIV. | METERS | EQUIV. | METERS | EQUIV. |
| A 3/4" or less | 1.0000 | 53,732 | 53,732 | 5,281 | 5,281 | 3,374 | 3,374 | 2,444 | 2,444 | 3,478 | 3,478 | 110 | 110 |
| B 1" | 1.7778 | 2,473 | 4,396 | 456 | 811 | 620 | 1,102 | 323 | 574 | 305 | 542 | 19 | 34 |
| C 1 1/4" | 2.7778 | - | - | - | - | - | - | - | - | - | - | - | - |
| D 1 1/2" | 4.0000 | 1,080 | 4,320 | 206 | 824 | 383 | 1,532 | 234 | 936 | 114 | 456 | 4 | 16 |
| E 2" | 7.1111 | 828 | 5,888 | 100 | 711 | 195 | 1,387 | 95 | 676 | 44 | 313 | 2 | 14 |
| F 3" | 16.0000 | 88 | 1,408 | 10 | 160 | 17 | 272 | 7 | 112 | 7 | 112 | 2 | 32 |
| G 4" | 28.4444 | 82 | 2,332 | 8 | 228 | 13 | 370 | 2 | 57 | 3 | 85 | 1 | 28 |
| H 6" and over | 64.0000 | 18 | 1,152 | 3 | 192 | 2 | 128 | - | - | - | - | - | - |
| | | 58,301 | 73,228 | 6,064 | 8,207 | 4,604 | 8,165 | 3,105 | 4,799 | 3,951 | 4,986 | 138 | 234 |

FIRE PROTECTION SERVICE

| | | | | | | |
|-------|--------|-------|-------|-------|-------|--------|
| H 6" | 927 | 217 | 289 | 135 | 90 | 14 |
| I 8" | 266 | 73 | 198 | 108 | 21 | 1 |
| J 10" | 14 | 5 | 9 | 2 | - | - |
| K 12" | 22 | 17 | 23 | 19 | 1 | 2 |
| | 1,229 | 312 | 519 | 264 | 112 | 17 |
| TOTAL | 59,530 | 6,376 | 5,123 | 3,369 | 4,063 | 155 |
| TOTAL | | | | | | 78,616 |

Source: Water/Sewage Customer Accounts Report, dated October 31, 2012.

CITY OF GRAND RAPIDS, MICHIGAN

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26**

| | | | | | | |
|--|-----------|-------------------|---|---------|---|-----------------------|
| SYSTEM REVENUE REQUIREMENTS * | | | | | | \$ 23,513,817 |
| REVENUES FROM CURRENT RATES | | | | | | |
| MONTHLY METER CHARGE | | | | | | |
| | 73,228 | meter equivalents | x | \$ 6.72 | x | 12 = \$ 5,905,106 |
| MONTHLY BILLING CHARGE | | | | | | |
| | 58,301 | meters | x | \$ 3.60 | x | 12 = 2,518,603 |
| COMMODITY CHARGE | | | | | | |
| | 8,497,281 | units (100 CF) | x | \$ 1.86 | = | 15,804,943 |
| MONTHLY FIRE PROTECTION | | | | | | 293,005 |
| ANNUAL HYDRANT CHARGE | | | | | | - |
| | | | | | | <u>(24,521,657)</u> |
| REQUIRED REVENUE INCREASE (DECREASE) | | | | | | <u>\$ (1,007,840)</u> |
| PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES | | | | | | <u>-4.11%</u> |

* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 89,966

CITY OF GRAND RAPIDS, MICHIGAN

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

COMMODITY CHARGE:

$$\frac{\text{COMMODITY CHARGE @ 64\%}}{\text{BILLED UNITS}} = \frac{\$15,048,843}{8,497,281} = \underline{\underline{\$ 1.77 /100 CF *}}$$

MONTHLY SERVICE CHARGE:

| | | |
|--------------------------------|--|---------------------|
| SYSTEM REVENUE REQUIREMENTS ** | | \$ 23,513,817 |
| NEW COMMODITY CHARGE | | |
| 8,497,281 x \$ 1.77 | | \$ 15,040,187 |
| NEW MONTHLY BILLING CHARGE | | |
| 58,301 x \$ 3.32 x 12 | | 2,322,712 |
| MONTHLY FIRE PROTECTION CHARGE | | 293,005 |
| ANNUAL HYDRANT CHARGE | | - |
| | | <u>(17,655,904)</u> |
| | | <u>\$ 5,857,913</u> |

$$\text{MONTHLY METER CHARGE} = \frac{\$5,857,913}{73,228 \times 12} = \underline{\underline{\$ 6.67 \text{ MONTHLY}}}$$

| METER SIZE | EQUIVALENT | MONTHLY SERVICE CHARGE | | | PRESENT |
|--------------|------------|------------------------|---------|---------|----------|
| | | METER | BILLING | TOTAL | |
| 3/4" or less | 1.0000 | \$ 6.67 | \$ 3.32 | \$ 9.99 | \$ 10.32 |
| 1" | 1.7778 | 11.86 | 3.32 | 15.18 | 15.55 |
| 1 1/4" | 2.7778 | 18.53 | 3.32 | 21.85 | 22.27 |
| 1 1/2" | 4.0000 | 26.68 | 3.32 | 30.00 | 30.48 |
| 2" | 7.1111 | 47.43 | 3.32 | 50.75 | 51.39 |
| 3" | 16.0000 | 106.72 | 3.32 | 110.04 | 111.12 |
| 4" | 28.4444 | 189.72 | 3.32 | 193.04 | 194.75 |
| 6" and over | 64.0000 | 426.88 | 3.32 | 430.20 | 433.68 |

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2013
 ** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 89,966

CITY OF WALKER, MICHIGAN

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26**

| | | | | | | |
|--|---|---------|---|------|----|---------------------|
| SYSTEM REVENUE REQUIREMENTS * | | | | | | \$ 3,115,440 |
| REVENUES FROM CURRENT RATES | | | | | | |
| MONTHLY METER CHARGE | | | | | | |
| 8,207 meter equivalents | x | \$ 9.55 | x | 12 = | \$ | 940,522 |
| MONTHLY BILLING CHARGE | | | | | | |
| 6,064 meters | x | \$ 3.60 | x | 12 = | | 261,965 |
| COMMODITY CHARGE | | | | | | |
| 1,155,423 units (100 CF) | x | \$ 1.70 | = | | | 1,964,219 |
| MONTHLY FIRE PROTECTION | | | | | | 82,267 |
| ANNUAL HYDRANT CHARGE | | | | | | - |
| | | | | | | <u>(3,248,973)</u> |
| REQUIRED REVENUE INCREASE (DECREASE) | | | | | | <u>\$ (133,533)</u> |
| PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES | | | | | | <u>-4.11%</u> |

* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 19,989

CITY OF KENTWOOD, MICHIGAN

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26**

SYSTEM REVENUE REQUIREMENTS \$ 4,094,901

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

8,165 meter equivalents x \$ 12.50 x 12 = \$ 1,224,750

MONTHLY BILLING CHARGE

4,604 meters x \$ 3.60 x 12 = 198,893

COMMODITY CHARGE

1,632,656 units (100 CF) x \$ 1.69 = 2,759,189

MONTHLY FIRE PROTECTION

145,434

ANNUAL HYDRANT CHARGE

- (4,328,266)

REQUIRED REVENUE INCREASE (DECREASE)

\$ (233,365)

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES

-5.39%

CASCADE TOWNSHIP
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

| | |
|--|----------------------|
| SYSTEM REVENUE REQUIREMENTS | \$ 2,915,919 |
| | |
| REVENUES FROM CURRENT RATES | |
| MONTHLY METER CHARGE | |
| 4,799 meter equivalents x \$ 17.94 x 12 = \$ | 1,033,129 |
| MONTHLY BILLING CHARGE | |
| 3,105 meters x \$ 3.60 x 12 = | 134,136 |
| COMMODITY CHARGE | |
| 783,436 units (100 CF) x \$ 2.26 = | 1,770,565 |
| MONTHLY FIRE PROTECTION | 78,386 |
| ANNUAL HYDRANT CHARGE | <u>39,000</u> |
| | <u>(3,055,216)</u> |
| REQUIRED REVENUE INCREASE (DECREASE) | <u>\$ (139,297)</u> |
| | |
| PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES | <u><u>-4.56%</u></u> |

CASCADE TOWNSHIP
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 2.16 /100 CF *
 \$ 2.26 x 95.44%

MONTHLY SERVICE CHARGE:

| | | |
|--------------------------------|--|--------------------|
| SYSTEM REVENUE REQUIREMENTS | | \$ 2,915,919 |
| NEW COMMODITY CHARGE | | |
| 783,436 x \$ 2.16 | | \$ 1,692,222 |
| NEW MONTHLY BILLING CHARGE | | |
| 3,105 x \$ 3.32 x 12 | | 123,703 |
| MONTHLY FIRE PROTECTION CHARGE | | 78,386 |
| ANNUAL HYDRANT CHARGE | | <u>39,000</u> |
| | | <u>(1,933,311)</u> |
| | | <u>\$ 982,608</u> |

MONTHLY METER CHARGE = $\frac{\$982,608}{4,799 \times 12} = \underline{\underline{\$ 17.06 \text{ MONTHLY}}}$

| METER SIZE | EQUIVALENT | MONTHLY SERVICE CHARGE | | | PRESENT |
|--------------|------------|------------------------|---------|----------|----------|
| | | METER | BILLING | TOTAL | |
| 3/4" or less | 1.0000 | \$ 17.06 | \$ 3.32 | \$ 20.38 | \$ 21.54 |
| 1" | 1.7778 | 30.33 | 3.32 | 33.65 | 35.49 |
| 1 1/4" | 2.7778 | 47.39 | 3.32 | 50.71 | 53.43 |
| 1 1/2" | 4.0000 | 68.24 | 3.32 | 71.56 | 75.36 |
| 2" | 7.1111 | 121.32 | 3.32 | 124.64 | 131.17 |
| 3" | 16.0000 | 272.96 | 3.32 | 276.28 | 290.64 |
| 4" | 28.4444 | 485.26 | 3.32 | 488.58 | 513.89 |
| 6" and over | 64.0000 | 1,091.84 | 3.32 | 1,095.16 | 1,151.76 |

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2013

GRAND RAPIDS TOWNSHIP
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

SYSTEM REVENUE REQUIREMENTS \$ 2,050,680

REVENUES FROM CURRENT RATES

| | | | |
|--|-------------------|------------|---------------------|
| MONTHLY METER CHARGE | | | |
| 4,986 | meter equivalents | x \$ 12.78 | x 12 = \$ 764,653 |
| MONTHLY BILLING CHARGE | | | |
| 3,951 | meters | x \$ 3.60 | x 12 = 170,683 |
| COMMODITY CHARGE | | | |
| 636,368 | units (100 CF) | x \$ 1.89 | = 1,202,736 |
| MONTHLY FIRE PROTECTION | | | 25,205 |
| ANNUAL HYDRANT CHARGE | | | - |
| | | | <u>(2,163,277)</u> |
| REQUIRED REVENUE INCREASE (DECREASE) | | | <u>\$ (112,597)</u> |
| PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES | | | <u>-5.20%</u> |

TALLMADGE TOWNSHIP
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

| | |
|-------------------------------|------------|
| SYSTEM REVENUE REQUIREMENTS * | \$ 124,737 |
| LESS: CASH CONTRIBUTION | - |
| SYSTEM REVENUE REQUIREMENTS | \$ 124,737 |

REVENUES FROM CURRENT RATES

| | | | |
|--------------------------------------|-----------|--------|--------------|
| MONTHLY METER CHARGE | | | |
| 234 meter equivalents | x \$ 4.57 | x 12 = | \$ 12,833 |
| MONTHLY BILLING CHARGE | | | |
| 138 meters | x \$ 3.60 | x 12 = | 5,962 |
| COMMODITY CHARGE | | | |
| 23,504 units (100 CF) | x \$ 3.83 | = | 90,020 |
| MONTHLY FIRE PROTECTION | | | 4,565 |
| ANNUAL HYDRANT CHARGE | | | 16,704 |
| REQUIRED REVENUE INCREASE (DECREASE) | | | \$ (130,084) |

| | |
|--|--------|
| PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES | -4.11% |
|--|--------|

* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 14,628

TALLMADGE TOWNSHIP
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 3.67 /100 CF *
 \$ 3.83 x 95.89%

MONTHLY SERVICE CHARGE:

| | |
|--|------------------|
| SYSTEM REVENUE REQUIREMENTS ** | \$ 124,737 |
| NEW COMMODITY CHARGE 23,504 x \$ 3.67 | \$ 86,260 |
| NEW MONTHLY BILLING CHARGE 138 x \$ 3.32 x 12 | 5,498 |
| MONTHLY FIRE PROTECTION CHARGE | 4,565 |
| ANNUAL HYDRANT CHARGE | <u>16,704</u> |
| | <u>(113,027)</u> |
| | <u>\$ 11,710</u> |

MONTHLY METER CHARGE = $\frac{\$11,710}{234 \times 12} = \underline{\underline{\$ 4.17 \text{ MONTHLY}}}$

| METER SIZE | EQUIVALENT | MONTHLY SERVICE CHARGE | | | PRESENT |
|--------------|------------|------------------------|---------|---------|---------|
| | | METER | BILLING | TOTAL | |
| 3/4" or less | 1.0000 | \$ 4.17 | \$ 3.32 | \$ 7.49 | \$ 8.17 |
| 1" | 1.7778 | 7.41 | 3.32 | 10.73 | 11.72 |
| 1 1/4" | 2.7778 | 11.58 | 3.32 | 14.90 | 16.29 |
| 1 1/2" | 4.0000 | 16.68 | 3.32 | 20.00 | 21.88 |
| 2" | 7.1111 | 29.65 | 3.32 | 32.97 | 36.10 |
| 3" | 16.0000 | 66.72 | 3.32 | 70.04 | 76.72 |
| 4" | 28.4444 | 118.61 | 3.32 | 121.93 | 133.59 |
| 6" and over | 64.0000 | 266.88 | 3.32 | 270.20 | 296.08 |

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2013

** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 14,628

CITY OF EAST GRAND RAPIDS, MICHIGAN

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26**

| | | |
|--|----|-----------------|
| INTEGRATED SYSTEM REVENUE REQUIREMENTS * | \$ | 695,115 |
| COMMODITY CHARGE | | |
| (100CF) 589,736 units x \$ 1.24 | | 731,273 |
| | | <hr/> |
| REQUIRED COMMODITY REVENUE INCREASE (DECREASE) | \$ | <u>(36,158)</u> |
| | | |
| NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS | \$ | 189,201 |
| MONTHLY SERVICE CHARGE | | |
| \$17,894 x 12 MONTHS | | 214,728 |
| | | <hr/> |
| REQUIRED SERVICE REVENUE INCREASE (DECREASE) | \$ | <u>(25,527)</u> |
| | | |
| PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES | | <u>-6.52%</u> |

* NET OF INTEGRATED CONNECTION FEE CREDIT.

CITY OF EAST GRAND RAPIDS, MICHIGAN

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

| | |
|-----------------------------|-------------------|
| SYSTEM REVENUE REQUIREMENTS | \$ 884,316 |
| NEW COMMODITY CHARGE * | |
| 589,736 x \$1.18 = | (695,888) |
| | <hr/> |
| | <u>\$ 188,428</u> |

MONTHLY SERVICE CHARGE * = \$188,428 / 12 = \$15,702

* NEW RATES EFFECTIVE ON JANUARY 1, 2013

ADA TOWNSHIP

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26**

| | | | |
|--|---|-----------|-----------------|
| INTEGRATED SYSTEM REVENUE REQUIREMENTS * | | \$ | 844,542 |
| COMMODITY CHARGE | | | |
| (100CF) 648,751 units | x | \$ 1.36 | 882,301 |
| | | | <hr/> |
| REQUIRED COMMODITY REVENUE INCREASE (DECREASE) | | \$ | <u>(37,759)</u> |
| | | | |
| NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS | | \$ | 415,496 |
| MONTHLY SERVICE CHARGE | | | |
| \$37,090 | x | 12 MONTHS | 445,080 |
| | | | <hr/> |
| REQUIRED SERVICE REVENUE INCREASE (DECREASE) | | \$ | <u>(29,584)</u> |
| | | | |
| PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES | | | <u>-5.07%</u> |

* NET OF INTEGRATED CONNECTION FEE CREDIT.

ADA TOWNSHIP

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

| | |
|-----------------------------|-------------------|
| SYSTEM REVENUE REQUIREMENTS | \$ 1,260,038 |
| NEW COMMODITY CHARGE * | |
| 648,751 x \$1.30 = | (843,376) |
| | <hr/> |
| | <u>\$ 416,662</u> |

MONTHLY SERVICE CHARGE * = \$416,662 / 12 = \$34,722

* NEW RATES EFFECTIVE ON JANUARY 1, 2013

OTTAWA COUNTY
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

| | |
|--|--------------------|
| INTEGRATED SYSTEM REVENUE REQUIREMENTS | \$ 1,287,594 |
| COMMODITY CHARGE | |
| (100CF) 1,020,283 units x \$ 1.31 | 1,336,571 |
| | <hr/> |
| REQUIRED COMMODITY REVENUE INCREASE (DECREASE) | <u>\$ (48,977)</u> |
| | |
| NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS | \$ - |
| MONTHLY SERVICE CHARGE | |
| \$231 x 12 MONTHS | 2,772 |
| | <hr/> |
| REQUIRED SERVICE REVENUE INCREASE (DECREASE) | <u>\$ (2,772)</u> |
| | |
| PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES | <u>-3.86%</u> |

OTTAWA COUNTY
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

| | |
|-----------------------------|-----------------|
| SYSTEM REVENUE REQUIREMENTS | \$ 1,287,594 |
| NEW COMMODITY CHARGE * | |
| 1,020,283 x \$1.26 = | (1,285,557) |
| | <hr/> |
| | <u>\$ 2,037</u> |

MONTHLY SERVICE CHARGE * = \$ 2,037 / 12 = \$170

* NEW RATES EFFECTIVE ON JANUARY 1, 2013

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 21, 2012

TO: Linda Wagenmaker
Utility Financial Officer

FROM:  Rick DeVries, P.E.
Assistant City Engineer

SUBJECT: WATER RATE STUDY - TASK NO. 28 AND 29

Enclosed are the Front Foot Rates for Watermain (Task 28) and the costs for the Water Service Pipes (Task 29), for the Fiscal Year 2012.

RDV

Enclosures

cc: Jack Stegehuis
Mark Garvey

WATER RATE STUDY
 WATER SUPPLY SYSTEM FUND
 RE-EVALUATE FRONT FOOT CHARGES
 TASK NO. 28

The City Engineer's Office has reviewed current construction costs for water facilities and recommends the following front foot assessment rates:

| | <u>2012</u> | <u>2013</u> | <u>% Increase</u> |
|---|-------------|-------------|-----------------------|
| Domestic Water User | \$ 61.00 | \$ 75.00 | 22.95% |
| Commercial - Industrial User (Watermain over 8 in. diameter) | \$ 94.00 | \$ 110.00 | 17.02% |

The rates are based on an average of prices quoted in bid proposals which have been received by the City Engineer's Office during the period July, 2011 through June, 2012. Calculations of the rates are on file in the City Engineer's Office.

WATER RATE STUDY
 WATER SUPPLY SYSTEM FUND
 EVALUATE WATER SERVICE CHARGES
 TASK NO. 29

The City Engineer's Office has evaluated the cost for water services and recommends the following water service charges:

| | | <u>50 Ft. R.O.W.</u> | <u>60 Ft. R.O.W.</u> | <u>66 Ft. R.O.W.</u> | <u>80 Ft. R.O.W.</u> | <u>100 Ft. R.O.W.</u> |
|-------------------------------|------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|
| Cost for 1" Water Service | 2012 | \$ 1,700 | \$ 1,950 | \$ 2,100 | \$ 2,450 | \$ 2,950 |
| | 2013 | \$ 2,050 | \$ 2,400 | \$ 2,550 | \$ 3,000 | \$ 3,600 |
| Cost for 1-1/2" Water Service | 2012 | \$ 2,400 | \$ 2,650 | \$ 2,850 | \$ 3,250 | \$ 3,800 |
| | 2013 | \$ 3,000 | \$ 3,400 | \$ 3,700 | \$ 4,200 | \$ 5,000 |
| Cost for 2" Water Service | 2012 | \$ 2,950 | \$ 3,300 | \$ 3,500 | \$ 4,000 | \$ 4,700 |
| | 2013 | \$ 3,500 | \$ 3,900 | \$ 4,200 | \$ 4,750 | \$ 5,600 |

The percent increases of the water service pipe charges are as shown below:

| | <u>50 Ft. R.O.W.</u> | <u>60 Ft. R.O.W.</u> | <u>66 Ft. R.O.W.</u> | <u>80 Ft. R.O.W.</u> | <u>100 Ft. R.O.W.</u> |
|-----------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|
| Increase for 1" Water Service | 20.59% | 23.08% | 21.43% | 22.45% | 22.03% |
| Increase for 1-1/2" Water Service | 25.00% | 28.30% | 29.82% | 29.23% | 31.58% |
| Increase for 2" Water Service | 18.64% | 18.18% | 20.00% | 18.75% | 19.15% |

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 24, 2012

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Eileen L. Pierce *E.L. Pierce*
Water Customer Service Administrator

SUBJECT: 2012 Water Rate Study – Task #30

Miscellaneous rates and charges contained within the Water System Rules and Regulations have been reviewed with staff.

All fees and charges are recommended to remain the same.

ELP/ep

cc: Joellen Thompson
Wayne Jernberg
Pamela Ritsema
Scott Saindon

FEES AND CHARGES

FIRE PROTECTION CHARGES

| <u>Pipe Size</u> | <u>Monthly</u> | <u>Quarterly</u> |
|------------------|----------------|------------------|
| 6" | \$16.00 | \$48.00 |
| 8" | 28.40 | 85.20 |
| 10" | 44.48 | 133.44 |
| 12" | 64.00 | 192.00 |

HYDRANT USE PERMITS

| | <u>Fee</u> |
|--|---|
| Weekly Pool Filling Permit | \$75/wk + \$300 refundable deposit |
| Contractor Seasonal (Winter or Summer) Hydrant Connection Permit | \$75/wk + \$300 non-refundable fee |
| Tanker Hydrant Connection Permit..... | \$25/week + metered volume (based on average retail commodity rate) + \$300 non-refundable fee |
| Hydrant Flow Test Fee..... | \$200 |

TAPPING PERMITS

| <u>Connection Size</u> | <u>Fee</u> |
|------------------------|------------|
| 2" and smaller | \$225.00 |
| 3" and larger | Cost |

METER INSTALLATION & SEASONAL TURN OFF/ON FEES

| <u>Meter Size</u> | <u>Fee</u> |
|-------------------|------------|
| 3/4" or smaller | \$40.00 |
| 1" | 45.00 |
| 1-1/2" | 55.00 |
| 2" | 60.00 |
| 3" | 100.00 |
| 4" | 200.00 |
| 6" and larger | 250.00 |

FROZEN/DAMAGED/MISSING METER CHARGES

| <u>Meter Size</u> | <u>Fee</u> |
|-------------------|------------|
| 3/4" or smaller | \$150.00 |
| 1" | 200.00 |
| 1-1/2" ECR | 350.00 |
| 1-1/2" Turbo | 500.00 |
| 2" ECR | 450.00 |
| 2" Turbo | 575.00 |
| 3" Turbo | 750.00 |
| 4" | 1400.00 |
| 6" and larger | 2350.00 |

METER SERVICES

| | <u>Fee</u> |
|---|------------|
| Final reading | \$35.00 |
| Meter Testing Fee (paid by customer if meter is accurate, no charge to customer if meter is faulty) | |
| 5/8 – 1” Meter | 50.00 |
| 1-1/2 – 2” Meter | 75.00 |
| 3-6” Meter | Cost |

WATER AND SEWER RATES

Chapter 26 and 27, Grand Rapids City Code

SECURITY DEPOSIT

| | <u>Minimum Charge</u> |
|---|-----------------------|
| Three (3) times average quarterly bill (\$187.20) | \$577.86 |

MISCELLANEOUS PERMITS

| | <u>Fee</u> |
|--|------------|
| Street opening permit..... | \$30.00 |
| Water inspection permit (each inspection within the City)..... | 40.00 |
| Water inspection permit (each inspection outside the City) | 55.00 |
| Sanitary Service line inspection permit (each inspection within city)..... | 40.00 |
| Sanitary Service line inspection permit (each outside city)..... | 55.00 |
| Storm service line inspection permit (each inspection within city) | 40.00 |
| Storm Service line inspection permit (each outside City)..... | 55.00 |
| Plumbing service re-inspection fee..... | 40.00 |
| Cross Connection re-inspection fee..... | 75.00 |
| Sewer Lateral service Demolition/Cap off inspection fee (each within city)..... | 40.00 |
| Sewer Lateral Service Demolition/Cap off inspection fee (each outside city)..... | 55.00 |
| Footing Drain Lateral Inspection Permit (each within City)..... | 40.00 |
| Footing Drain Lateral Inspection Permit (each outside City)..... | 55.00 |

SERVICE FEE

| | |
|---|---------|
| Customer-requested on-site service (non-scheduled appointment-customer issue only)..... | \$55.00 |
| Turn-on/turn-off water for real-estate inspections..... | 110.00 |

PENALTIES

| | <u>Fee</u> |
|---|------------|
| Late-payment penalty | 10% of net |
| Processing for shut-off (non-payment, cross connection) | 55.00 |
| Penalty for failure to keep appointment | 35.00 |
| Penalty for each missed appointment thereafter (related to same service)..... | 50.00 |
| Unauthorized operation of valves | 100.00* |
| (plus double the commodity rate for estimated volume) | |
| Unauthorized use of connection pipes for fire protection..... | 100.00* |
| (plus double the commodity rate for estimated volume) | |
| Unauthorized opening of by-pass valve/tampering | 100.00* |
| (plus double the commodity rate for estimated volume) | |

| | |
|--|---------|
| Unauthorized use of a hydrant/water | 500.00 |
| Use of illegal connection on hydrant | 500.00 |
| (including loss of connection) | |
| Failure to return hydrant connection equipment | 500.00 |
| (plus number of weeks equipment used/missing) | |
| Return of damaged hydrant connection equipment | 500.00 |
| Lost/non-returned hydrant wrench..... | 50.00 |
| Permit infractions/violations..... | 100.00* |
| (plus double with each subsequent infraction) | |
| Returned check charge (verified with City Treasurer 8/23/10) | 30.00 |
| Unauthorized service tap of watermain | 500.00 |
| (fine per tap plus tapping permit fee for each tap) | |

*Penalty will double with each subsequent infraction and/or litigation.

**CITY OF GRAND RAPIDS, MICHIGAN
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
TASK NO. 31**

THERE IS NO TASK 31 FOR THE WATER PORTION OF THE RATE STUDY

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 18, 2012

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Wayne Jernberg *WJ*
Assistant Water System Manager

SUBJECT: **2012 WATER RATE STUDY - TASK #32, WATERMAIN OVERSIZING RATES**

Watermain oversizing rates are established for this year as noted below:

| | |
|--------------------------|-------------------------|
| 8 inch to 12 inch | \$14.84 per lineal foot |
| 12 inch to 16 inch | \$20.51 per lineal foot |
| 8 inch to 16 inch | \$35.35 per lineal foot |

These rates have been determined in accordance with the Water System Rules and Regulations, and are approved for use from January 1, 2013 through December 31, 2013. Background information and calculations to establish these rates are on file in the Water Engineering, Distribution and Collection office.

These costs will be reviewed and may be adjusted again next year. If you have any questions regarding this matter, please call me at 456-4055.

WJ/SS

Cc: Scott Saindon
Joellen Thompson
Mark DeClercq
Rick DeVries

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER RATE STUDY
 WATER SUPPLY SYSTEM FUND
 TASK NO. 33**

SERVICE AREA MAPS AND SERVICE AREA LAND MASS SUMMARIES

The following summarizes Utility Services Districts (USD) land mass square miles for UAB partner communities, per information on file as of October 8, 2012:

| UAB Partners | Sq. Miles of USD by CC | Percent |
|-----------------------|---------------------------|----------|
| Grand Rapids | 45.36 | 35.127% |
| Walker | 25.43 | 19.693% |
| Kentwood | 14.00 | 10.842% |
| Cascade | 20.45 | 15.837% |
| Grand Rapids Township | 10.93 | 8.464% |
| Tallmadge Township | 2.44 | 1.890% |
| East Grand Rapids | 3.37 | 2.610% |
| Ada | 7.15 | 5.537% |
| Total | 129.13 | 100.000% |

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER RATE STUDY
 WATER SUPPLY SYSTEM FUND
 TASK NO. 34**

INDIVIDUAL CIRCUIT BREAKER AND CITY & CUSTOMER COMMUNITY CIRCUIT BREAKER

The Third Amendment to the Water and Sanitary Sewer Agreements stipulates penalty fees shall be used to fund the circuit breaker provisions noted above. The following summarizes those values:

| <u>Description</u> | <u>AMOUNT</u> | <u>PERCENT</u> |
|---|-------------------|----------------|
| Individual Circuit Breaker | \$ 63,797 | 12.50% |
| City & Customer Community Circuit Breaker | 446,582 | 87.50% |
| Total | <u>\$ 510,379</u> | <u>100.00%</u> |

The following summarizes the amount, if any, of the City & Customer Community Circuit Breaker to be applied as a revenue credit in next year's Rate Study:

| <u>Description</u> | <u>AMOUNT</u> | <u>PERCENT</u> |
|---|-------------------|----------------|
| City & Customer Community Circuit Breaker Amount- Above | \$ 446,582 | 100.00% |
| Less: Amount Applied in Current Rate Study | (124,583) | -27.90% |
| Total Revenue Credit- Next Year's Rate Study | <u>\$ 321,999</u> | <u>72.10%</u> |

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
SYSTEM ADDITIONS AND IMPROVEMENTS
FOR THE YEAR ENDED JUNE 30, 2012
TASKS NO. 1, 2, & 3**

| COMMUNITY | LOCAL | | TRUNK | | INTERCEPTOR | | TOTALS | |
|-----------------------|--------------|---------------|--------------|---------------|----------------|---------------|--------------|---------------|
| | FEET | MILES | FEET | MILES | FEET | MILES | FEET | MILES |
| Grand Rapids | | | | | | | | |
| Construction | 380 | 0.07 | 235 | 0.04 | (26) | 0.00 | 589 | 0.11 |
| Abandonment | 0 | 0.00 | (30) | (0.01) | 0 | 0.00 | (30) | (0.01) |
| CSO Construction | 9,454 | 1.79 | 2,163 | 0.41 | 485 | 0.09 | 12,102 | 2.29 |
| CSO Abandonment | (7,163) | (1.36) | (2,739) | (0.52) | (2,019) | (0.38) | (11,921) | (2.26) |
| | <u>2,671</u> | <u>0.50</u> | <u>(371)</u> | <u>(0.08)</u> | <u>(1,560)</u> | <u>(0.29)</u> | <u>740</u> | <u>0.13</u> |
| Kentwood | | | | | | | | |
| Construction | 3,342 | 0.63 | 235 | 0.04 | (336) | (0.06) | 3,241 | 0.61 |
| Abandonment | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| | <u>3,342</u> | <u>0.63</u> | <u>235</u> | <u>0.04</u> | <u>(336)</u> | <u>(0.06)</u> | <u>3,241</u> | <u>0.61</u> |
| Cascade Twp. | | | | | | | | |
| Construction | 65 | 0.01 | 93 | 0.02 | 306 | 0.06 | 464 | 0.09 |
| Abandonment | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| | <u>65</u> | <u>0.01</u> | <u>93</u> | <u>0.02</u> | <u>306</u> | <u>0.06</u> | <u>464</u> | <u>0.09</u> |
| G.R. Twp. | | | | | | | | |
| Construction | 1,899 | 0.36 | 0 | 0.00 | 0 | 0.00 | 1,899 | 0.36 |
| Abandonment | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| | <u>1,899</u> | <u>0.36</u> | <u>0</u> | <u>0.00</u> | <u>0</u> | <u>0.00</u> | <u>1,899</u> | <u>0.36</u> |
| Tallmadge Twp. | | | | | | | | |
| Construction | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Abandonment | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| | <u>0</u> | <u>0.00</u> | <u>0</u> | <u>0.00</u> | <u>0</u> | <u>0.00</u> | <u>0</u> | <u>0.00</u> |
| Walker | | | | | | | | |
| Construction | 670 | 0.13 | 106 | 0.02 | 0 | 0.00 | 776 | 0.15 |
| Abandonment | (770) | (0.15) | (80) | (0.02) | 0 | 0.00 | (850) | (0.17) |
| | <u>(100)</u> | <u>(0.02)</u> | <u>26</u> | <u>0.00</u> | <u>0</u> | <u>0.00</u> | <u>(74)</u> | <u>(0.02)</u> |
| Wright Twp | | | | | | | | |
| Construction | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Abandonment | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| | <u>0</u> | <u>0.00</u> | <u>0</u> | <u>0.00</u> | <u>0</u> | <u>0.00</u> | <u>0</u> | <u>0.00</u> |
| *TOTAL* | <u>7,877</u> | <u>1.48</u> | <u>(17)</u> | <u>(0.02)</u> | <u>(1,590)</u> | <u>(0.29)</u> | <u>6,270</u> | <u>1.17</u> |

SEWER COSTS

| COMMUNITY | COMMUNITY COST |
|-------------------|-------------------|
| Grand Rapids | \$ 106,706 |
| Kentwood | 421,477 |
| Cascade Twp. | |
| Grand Rapids Twp. | 84,424 |
| Tallmadge Twp. | |
| Walker | - |
| Wright Twp. | - |
| *TOTAL* | <u>\$ 612,607</u> |

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
OPERATING EXPENSE ALLOCATION BY COST CENTER - TASK #4, PART 1
FISCAL YEAR ENDED JUNE 30, 2012**

| ACTIVITY CODE | ACTIVITY | EXPENSE BY ACTIVITY | WASTEWATER TREATMENT PLANT | | | WASTEWATER LIFT STATIONS | | | SEWER LINES | | | BULK METERING STATIONS | CUSTOMER ACCOUNTING | INDUSTRIAL PRETREAT. | ADMIN. EXPENSE |
|---------------|------------------------------------|---------------------|----------------------------|------------|-----------------|--------------------------|------------|-----------------|--------------|-------|-----------------|------------------------|---------------------|----------------------|----------------|
| | | | INTERCEPTOR | TRUNK | LOCAL COLLECTOR | INTERCEPTOR | TRUNK | LOCAL COLLECTOR | INTERCEPTOR | TRUNK | LOCAL COLLECTOR | | | | |
| 4423 | WASTEWATER TREATMENT (LESS 442305) | \$ 14,658,195 | \$ 13,668,423 | \$ 288,616 | \$ 170,864 | \$ 520,053 | | | | | \$ 12,439 | | | | |
| 4425 | SEWER MAINTENANCE | 4,875,701 | | | | | 280,557 | 554,172 | 4,060,972 | | | | 2,818,579 | | |
| 4413 | CUSTOMER SERVICE * | 2,818,579 | | | | | | | | | | | | | |
| 442305 | INDUSTRIAL PRETREATMENT | 627,924 | | | | | | | | | | | | 627,924 | |
| | SUBTOTAL OPERATING EXPENSE | 22,980,389 | 13,668,423 | 288,616 | 170,864 | 520,053 | 280,557 | 554,172 | 4,060,972 | | 12,439 | | 2,818,579 | 627,924 | - |
| 4410 | ADMINISTRATION | 1,643,768 | | | | | | | | | | | | | 1,643,768 |
| | TOTAL | \$ 24,624,167 | \$ 13,668,423 | \$ 288,616 | \$ 170,864 | \$ 520,053 | \$ 280,557 | \$ 554,172 | \$ 4,060,972 | | \$ 12,439 | | \$ 2,818,579 | \$ 627,924 | \$ 1,643,768 |

* Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

METHOD OF DISTRIBUTION

| | | | | | | | | | | | | | | | | |
|--------|--------------------------|----------|---------|-----|-----|------|---------|--|---------|--|-----|--|----------|----------|--|----------|
| 4423 | WASTEWATER TREATMENT | 100.000% | | | | | | | | | | | | | | |
| | A. TREATMENT PLANT | | 93.248% | | | | | | | | | | | | | |
| | B. LIFT & METER STATIONS | | 6.752% | (1) | (8) | (45) | | | | | (4) | | | | | |
| | NO. OF STATIONS | (58) | | | | | | | | | | | | | | |
| 4425 | SEWER MAINTENANCE | 100.000% | | | | | | | | | | | | | | |
| | TOTAL MILES | 905.14 | | | | | | | | | | | | | | |
| | A. INTERCEPTOR MILES | 48.37 | 5.344% | | | | 5.344% | | | | | | | | | |
| | B. TRUNK LINES MILES | 102.88 | 11.366% | | | | 11.366% | | | | | | | | | |
| | C. LOCAL COLLECTOR MILES | 753.89 | 83.290% | | | | | | 83.290% | | | | | | | |
| 4413 | CUSTOMER SERVICE | 100.000% | | | | | | | | | | | 100.000% | | | |
| 442305 | INDUSTRIAL PRETREATMENT | 100.000% | | | | | | | | | | | | 100.000% | | |
| 4410 | ADMINISTRATION | 100.000% | | | | | | | | | | | | | | 100.000% |

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED OPERATING EXPENSE ALLOCATION BY COST CENTER - TASK #5, PART 1
FISCAL YEAR ENDED JUNE 30, 2012**

| ACTIVITY CODE | ACTIVITY | WASTEWATER TREATMENT PLANT | | | WASTEWATER LIFT STATIONS | | | SEWER LINES | | | BULK METERING STATIONS | CUSTOMER ACCOUNTING | INDUSTRIAL PRETREAT. | ADMIN. EXPENSE |
|---------------|---|------------------------------|---------------|------------|--------------------------|-------------|------------|-----------------|--------------|-----------|------------------------|---------------------|----------------------|----------------|
| | | ADJUSTED EXPENSE BY ACTIVITY | INTERCEPTOR | TRUNK | LOCAL COLLECTOR | INTERCEPTOR | TRUNK | LOCAL COLLECTOR | INTERCEPTOR | TRUNK | | | | |
| 4423 | WASTEWATER TREATMENT (LESS 442305) | \$ 14,043,110 | \$ 13,054,248 | \$ 286,353 | \$ 170,507 | \$ 519,575 | | | | | \$ 12,427 | | | |
| 4425 | SEWER MAINTENANCE | 5,305,518 | | | | | | | | | | | | |
| 4413 | CUSTOMER SERVICE * | 2,793,080 | | 283,527 | 603,025 | 4,418,966 | | | | | | 2,793,080 | | |
| 442305 | INDUSTRIAL PRETREATMENT | 627,745 | | | | | | | | | | | 627,745 | |
| 4410 | SUBTOTAL OPERATING EXPENSE ADMINISTRATION | 22,768,453 | 13,054,248 | 286,353 | 170,507 | 519,575 | 283,527 | 603,025 | 4,418,966 | 12,427 | 2,793,080 | 627,745 | - | 1,004,635 |
| | TOTAL | \$ 23,774,088 | \$ 13,054,248 | \$ 286,353 | \$ 170,507 | \$ 519,575 | \$ 283,527 | \$ 603,025 | \$ 4,418,966 | \$ 12,427 | \$ 2,793,080 | \$ 627,745 | \$ 1,004,635 | |

* Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

METHOD OF DISTRIBUTION

| | | | | | | | | | | | | | | |
|--------|---|----------|-----|-----|------|--|---------|--|---------|-----|----------|----------|--|----------|
| 4423 | WASTEWATER TREATMENT | 100.000% | | | | | | | | | | | | |
| | A. TREATMENT PLANT | 92.958% | | | | | | | | | | | | |
| | B. LIFT & METER STATIONS NO. OF STATIONS (58) | 7.042% | (1) | (8) | (45) | | | | | (4) | | | | |
| 4425 | SEWER MAINTENANCE TOTAL MILES | 100.000% | | | | | | | | | | | | |
| | A. INTERCEPTOR MILES | 5.344% | | | | | 5.344% | | | | | | | |
| | B. TRUNK LINES MILES | 11.366% | | | | | 11.366% | | | | | | | |
| | C. LOCAL COLLECTOR MILES | 83.290% | | | | | | | 83.290% | | | | | |
| 4413 | CUSTOMER SERVICE | 100.000% | | | | | | | | | 100.000% | | | |
| 442305 | INDUSTRIAL PRETREATMENT | 100.000% | | | | | | | | | | 100.000% | | |
| 4410 | ADMINISTRATION | 100.000% | | | | | | | | | | | | 100.000% |

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED OPERATING EXPENSE ALLOCATION BY GOVERNMENTAL UNIT - TASK #5, PART 2
FISCAL YEAR ENDED JUNE 30, 2012**

| COST CENTER | ADJUSTED EXPENSE BY COST CENTER | INTEGRATED SYSTEM | RETAIL | | | | | | | | | | WHOLESALE | | | | | | | |
|-----------------------------|---------------------------------|----------------------|---------------------|---------------------|-------------------|-------------------|-------------------|--------------------|------------------|-----------------|--------------|--------------|-----------------|---------------|------------------|--|--|--|--|-----------------|
| | | | CITY OF GR | CITY OF WALKER | CITY OF KENTWOOD | CASCADE TOWNSHIP | GR TOWNSHIP | TALLMADGE TOWNSHIP | WRIGHT TOWNSHIP | CITY OF EAST GR | N. KENT AREA | ADA TOWNSHIP | GAINES TOWNSHIP | MEIJER-ALGOMA | | | | | | |
| WASTEWATER TREATMENT | \$ 13,054,248 | \$ 13,054,248 | | | | | | | | | | | | | | | | | | |
| LIFT STATIONS: | | | | | | | | | | | | | | | | | | | | |
| A. INTERCEPTOR | 286,353 | | | | | | | | | | | | | | | | | | | |
| B. TRUNK | 170,507 | | 286,353 | 94,809 | | 26,951 | | | | | | | | | | | | | | |
| C. LOCAL COLLECTOR | 519,575 | | 77,854 | 117,052 | | 100,496 | 152,870 | 36,537 | 6,820 | | | | | | 27,946 | | | | | |
| SEWER LINES: | | | | | | | | | | | | | | | | | | | | |
| A. INTERCEPTOR | 283,527 | | 169,458 | 40,505 | 66,294 | 7,270 | | | | | | | | | | | | | | |
| B. TRUNK | 603,025 | | 202,653 | 156,443 | 142,489 | 51,402 | 32,533 | 16,589 | 706 | | | | | | | | | | | |
| C. LOCAL COLLECTOR | 4,418,966 | | 2,773,918 | 545,696 | 431,468 | 262,177 | 330,185 | 49,139 | 26,381 | | | | | | | | | | | |
| BULK METERING STATIONS | 12,427 | | | | 3,420 | | | | | | | | | | | | | | | |
| CUSTOMER ACCOUNTING | 2,793,080 | | 2,203,182 | 208,839 | 166,970 | 65,637 | 134,934 | 4,832 | 8,666 | | | | | | | | | | | |
| INDUSTRIAL PRETREATMENT | 627,745 | | | | | | | | | | | | | | | | | | | |
| SUBTOTAL OPERATING EXPENSE | 22,769,453 | 13,681,993 | 5,762,375 | 1,163,346 | 810,641 | 513,933 | 660,522 | 107,097 | 42,593 | | | | | | 30,970 | | | | | 3,115 |
| ADMINISTRATIVE EXPENSE | 1,004,635 | | 254,248 | 51,329 | 35,767 | 22,576 | 28,702 | 4,725 | 1,879 | | | | | | 1,367 | | | | | 137 |
| TOTAL | \$ 23,774,088 | \$ 14,285,671 | \$ 6,016,623 | \$ 1,214,675 | \$ 846,408 | \$ 536,609 | \$ 679,224 | \$ 111,822 | \$ 44,472 | | | | | | \$ 32,337 | | | | | \$ 3,252 |

| METHOD OF DISTRIBUTION | | TOTAL MILES: | | NO. OF STATIONS (58) | | NO. OF METERS | | ADMINISTRATIVE EXPENSE (3) | |
|------------------------------|----------|--------------|----------|----------------------|----------|---------------|--------|----------------------------|--------|
| WASTEWATER TREATMENT | 100.000% | 905.14 | 905.14 | | | | | | |
| A. TREATMENT PLANT | 100.000% | | | | | | | | |
| B. LIFT & METER STATIONS (1) | 100.000% | | | | | | | | |
| SEWER LINES: | | | | | | | | | |
| A. INTERCEPTOR | 100.000% | 59,768% | 14,286% | 23,382% | 2,564% | 0.000% | 0.000% | 0.000% | 0.000% |
| B. TRUNK LINES | 100.000% | 33,641% | 25,949% | 23,629% | 8,524% | 5.395% | 2,751% | 0.117% | 0.000% |
| C. LOCAL COLLECTOR | 100.000% | 62,773% | 12,349% | 9,764% | 5,933% | 7.472% | 1.112% | 0.597% | 0.000% |
| CUSTOMER ACCTG (2) | 100.000% | 78,880% | 7,477% | 5,978% | 2,350% | 4.831% | 0.173% | 0.311% | 0.000% |
| INDUSTRIAL PRETREATMENT | 100.000% | 58,340.00 | 5,530.00 | 4,421.00 | 1,738.00 | 3,573.00 | 128.00 | 230.00 | 0.000% |
| ADMINISTRATIVE EXPENSE (3) | 100.000% | 25,307% | 5,109% | 3,560% | 2,257% | 2,857% | 0.470% | 0.187% | 0.014% |

NOTES:
 (1) ADJUSTED DIRECT COSTS PER SCHEDULE.
 (2) ALLOCATION BASED ON NUMBER OF METERS, INCLUSIVE OF USERS FOR WRIGHT TWP.
 (3) ALLOCATED ON DIRECT OPERATING EXPENSE, ADJUSTED FOR ANY COST ASSIGNABLE EXCLUSIVELY TO GR OR RETAIL COMMUNITIES, IF APPLICABLE.

CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2012
RATE STUDY- TASKS NO. 4 & 5

ORGANIZATIONAL UNIT: 4401, 4410 & 4480 - ADMINISTRATION

| NO. | EXPENDITURE SUB-OBJECT DESCRIPTION | OPERATING EXPENSES | ADJUSTED COST FACTORS | ADJUSTED CURRENT ANNUAL EXPENSES |
|------|---------------------------------------|------------------------|-----------------------------|---|
| 7020 | PERMANENT EMPLOYEES | \$ 193,431.47 | \$ - | \$ 193,431.47 |
| 7055 | TIME & ONE-HALF | 297.62 | - | 297.62 |
| 7105 | EMPLOYERS SOCIAL SECURITY | 14,077.03 | - | 14,077.03 |
| 7110 | HOSPITALIZATION INSURANCE | 29,946.95 | (2,979.72) | 26,967.23 |
| 7115 | RETIREE HEALTH CARE | 27,341.88 | 4,071.21 | 31,413.09 |
| 7120 | RETIREMENT FUND CONTRIBUTION | 19,057.00 | (941.42) | 18,115.58 |
| 7125 | SPECIAL PENSION BENEFITS | 8,842.46 | - | 8,842.46 |
| 7135 | UNEMPLOYMENT COMPENSATION | 277.40 | - | 277.40 |
| 7150 | LONGEVITY PAY | 745.50 | - | 745.50 |
| 7175 | FOOD/CLEAN/CAR ALLOW | 806.00 | - | 806.00 |
| | TOTAL PERSONAL SERVICES | <u>294,823.31</u> | <u>150.07</u> | <u>294,973.38</u> |
| 7260 | SUPPLIES | 4,122.34 | - | 4,122.34 |
| 7300 | POSTAGE | - | - | - |
| | TOTAL SUPPLIES | <u>4,122.34</u> | <u>-</u> | <u>4,122.34</u> |
| 8140 | COMPUTER SERVICES | 165,183.96 | (8,024.96) | 157,159.00 |
| 8180 | CONTRACTUAL SERVICES | 29,608.36 | - | 29,608.36 |
| 8355 | CLAIMS | 253,844.00 | (126,817.00) | 127,027.00 |
| 8450 | INSURANCE PREMIUMS | 182,827.00 | - | 182,827.00 |
| 8500 | TELEPHONE | 4,354.46 | - | 4,354.46 |
| 9000 | PRINTING & PUBLISHING | 343.84 | - | 343.84 |
| 9410 | BUILDINGS RENTALS OR LEASE | 20,319.40 | - | 20,319.40 |
| 9420 | EQUIPMENT RENTALS OR LEASE | 835.18 | - | 835.18 |
| 9440 | VEHICLE RENTAL/CAR MILEAGE | 5,759.58 | - | 5,759.58 |
| 9550 | PROFESSIONAL DEVELOPMENT | 3,043.94 | - | 3,043.94 |
| 9552 | OTHER TRAVEL AND TRAINING | 3,852.98 | - | 3,852.98 |
| 9554 | LOCAL BUSINESS EXPENSE | 1,591.44 | - | 1,591.44 |
| 9556 | MEMBERSHIPS | 3,185.87 | - | 3,185.87 |
| | TOTAL OTHER SERVICES & CHARGES | <u>674,750.01</u> | <u>(134,841.96)</u> | <u>539,908.05</u> |
| 9760 | EQUIPMENT | 671.75 | - | 671.75 |
| | TOTAL CAPITAL | <u>671.75</u> | <u>-</u> | <u>671.75</u> |
| 9995 | OPERATING TRANS-MISC | 1,867.00 | - | 1,867.00 |
| 9990 | OPERATING TRANSFERS OUT | 667,534.00 | (504,442.00) | 163,092.00 |
| | TOTAL TRANSFERS/FEES | <u>669,401.00</u> | <u>(504,442.00)</u> | <u>164,959.00</u> |
| | ORGANIZATIONAL UNIT TOTAL | <u>\$ 1,643,768.41</u> | <u>\$ (639,133.89)</u> | <u>\$ 1,004,634.52</u> |

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2012
RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 4413- SDSF- CUST.SERV/S

| <u>EXPENDITURE SUB-OBJECT</u> | | <u>OPERATING</u> | <u>ADJUSTED</u> | <u>ADJUSTED</u> |
|-------------------------------|---------------------------|------------------|-----------------|-----------------|
| <u>NO.</u> | <u>DESCRIPTION</u> | <u>EXPENSES</u> | <u>COST</u> | <u>CURRENT</u> |
| | | | <u>FACTORS</u> | <u>ANNUAL</u> |
| | | | | <u>EXPENSES</u> |
| 9990 | OPERATING TRANSFERS OUT | \$ 2,818,578.61 | \$ (25,499.08) | \$ 2,793,079.53 |
| | TOTAL TRANSFERS/FEES | 2,818,578.61 | (25,499.08) | 2,793,079.53 |
| | ORGANIZATIONAL UNIT TOTAL | \$ 2,818,578.61 | \$ (25,499.08) | \$ 2,793,079.53 |

* Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2012
RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 4423- WASTEWATER

| NO. | EXPENDITURE SUB-OBJECT DESCRIPTION | OPERATING EXPENSES | ADJUSTED COST FACTORS | ADJUSTED CURRENT ANNUAL EXPENSES |
|------|---------------------------------------|-------------------------|-----------------------------|---|
| 7020 | PERMANENT EMPLOYEES | \$ 3,534,441.33 | \$ - | \$ 3,534,441.33 |
| 7025 | ACT.ASSIGNMENT | 6,409.12 | - | 6,409.12 |
| 7040 | TEMPORARY EMPLOYEES | 23,434.40 | - | 23,434.40 |
| 7050 | REGULAR HOURLY RATE | 1,903.50 | - | 1,903.50 |
| 7055 | TIME & ONE-HALF | 59,266.20 | - | 59,266.20 |
| 7105 | EMPLOYERS SOCIAL SECURITY | 259,689.20 | - | 259,689.20 |
| 7110 | HOSPITALIZATION INSURANCE | 846,787.16 | (84,255.32) | 762,531.84 |
| 7115 | RETIREE HEALTH CARE | 396,129.84 | 58,983.73 | 455,113.57 |
| 7120 | RETIREMENT FUND CONTRIBUTION | 670,913.31 | (33,143.12) | 637,770.19 |
| 7125 | SPECIAL PENSION BENEFITS | 610.50 | - | 610.50 |
| 7135 | UNEMPLOYMENT COMPENSATION | 5,796.13 | - | 5,796.13 |
| 7150 | LONGEVITY PAY | 35,119.89 | - | 35,119.89 |
| 7165 | SHIFT DIFFERENTIAL | 11,652.81 | - | 11,652.81 |
| | TOTAL PERSONAL SERVICES | <u>5,852,153.39</u> | <u>(58,414.71)</u> | <u>5,793,738.68</u> |
| 7260 | SUPPLIES | 925,839.49 | - | 925,839.49 |
| 7300 | POSTAGE | 207.68 | - | 207.68 |
| 7680 | CLOTHING/CLEANING ALLOWANCE | 8,978.77 | - | 8,978.77 |
| 7800 | INVENTORY - COST OF GOODS SOLD | 39,479.62 | - | 39,479.62 |
| | TOTAL SUPPLIES | <u>974,505.56</u> | <u>-</u> | <u>974,505.56</u> |
| 8140 | COMPUTER SERVICES | 128,611.18 | 49,199.82 | 177,811.00 |
| 8180 | CONTRACTUAL SERVICES | 4,628,166.56 | (605,869.75) | 4,022,296.81 |
| 8500 | TELEPHONE | 117,490.77 | - | 117,490.77 |
| 9000 | PRINTING & PUBLISHING | 7,274.15 | - | 7,274.15 |
| 9210 | ELECTRICITY | 2,333,516.64 | - | 2,333,516.64 |
| 9220 | WATER | 31,166.70 | - | 31,166.70 |
| 9230 | NATURAL GAS | 188,030.59 | - | 188,030.59 |
| 9300 | MAINTENANCE SERVICE | 131,846.05 | - | 131,846.05 |
| 9420 | EQUIPMENT RENTALS OR LEASE | 201,696.66 | - | 201,696.66 |
| 9440 | VEHICLE RENTAL/CAR MILEAGE | 6,895.80 | - | 6,895.80 |
| 9550 | PROFESSIONAL DEVELOPMENT | 6,495.96 | - | 6,495.96 |
| 9552 | OTHER TRAVEL AND TRAINING | 22,933.22 | - | 22,933.22 |
| 9554 | LOCAL BUSINESS EXPENSE | 15.40 | - | 15.40 |
| 9556 | MEMBERSHIPS | 7,301.80 | - | 7,301.80 |
| 9558 | PUBLICATIONS AND SUBSCRIPTIONS | 191.49 | - | 191.49 |
| 9610 | FEES | 20,683.00 | - | 20,683.00 |
| 9622 | REFUSE COLLECTION CHARGES | 1,979.65 | - | 1,979.65 |
| | TOTAL OTHER SERVICES & CHARGES | <u>7,834,295.62</u> | <u>(556,669.93)</u> | <u>7,277,625.69</u> |
| 9760 | EQUIPMENT | 913.83 | - | 913.83 |
| 9800 | CONSTRUCTION IN PROGRESS | (3,673.41) | - | (3,673.41) |
| | TOTAL CAPITAL | <u>(2,759.58)</u> | <u>-</u> | <u>(2,759.58)</u> |
| | ORGANIZATIONAL UNIT TOTAL | <u>\$ 14,658,194.99</u> | <u>\$ (615,084.64)</u> | <u>\$ 14,043,110.35</u> |

CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2012
RATE STUDY- TASKS NO. 4 & 5

ORGANIZATIONAL UNIT: 442305- IND. PRETREATMENT

| NO. | EXPENDITURE SUB-OBJECT DESCRIPTION | OPERATING EXPENSES | ADJUSTED COST FACTORS | ADJUSTED CURRENT ANNUAL EXPENSES |
|------|---------------------------------------|-----------------------|-----------------------------|---|
| 7020 | PERMANENT EMPLOYEES | \$ 325,372.67 | \$ - | \$ 325,372.67 |
| 7055 | TIME & ONE-HALF | 1,392.85 | - | 1,392.85 |
| 7105 | EMPLOYERS SOCIAL SECURITY | 23,435.64 | - | 23,435.64 |
| 7110 | HOSPITALIZATION INSURANCE | 72,157.65 | (7,179.69) | 64,977.96 |
| 7115 | RETIREE HEALTH CARE | 69,107.69 | 10,290.14 | 79,397.83 |
| 7120 | RETIREMENT FUND CONTRIBUTION | 66,603.84 | (3,290.23) | 63,313.61 |
| 7135 | UNEMPLOYMENT COMPENSATION | 455.52 | - | 455.52 |
| | TOTAL PERSONAL SERVICES | <u>558,525.86</u> | <u>(179.78)</u> | <u>558,346.08</u> |
| 7260 | SUPPLIES | 22,717.98 | - | 22,717.98 |
| 7300 | POSTAGE | 1,771.93 | - | 1,771.93 |
| 7680 | CLOTHING/CLEANING ALLOWANCE | 1,805.20 | - | 1,805.20 |
| | TOTAL SUPPLIES | <u>26,295.11</u> | <u>-</u> | <u>26,295.11</u> |
| 8180 | CONTRACTUAL SERVICES | 10,833.69 | - | 10,833.69 |
| 9000 | PRINTING & PUBLISHING | 630.00 | - | 630.00 |
| 9420 | EQUIPMENT RENTALS OR LEASE | 22,728.00 | - | 22,728.00 |
| 9552 | OTHER TRAVEL AND TRAINING | 2,186.86 | - | 2,186.86 |
| 9556 | MEMBERSHIPS | 268.00 | - | 268.00 |
| | TOTAL OTHER SERVICES & CHARGES | <u>36,646.55</u> | <u>-</u> | <u>36,646.55</u> |
| 9750 | FURNITURE | 6,456.82 | - | 6,456.82 |
| | TOTAL CAPITAL | <u>6,456.82</u> | <u>-</u> | <u>6,456.82</u> |
| | ORGANIZATIONAL UNIT TOTAL | <u>\$ 627,924.34</u> | <u>\$ (179.78)</u> | <u>\$ 627,744.56</u> |

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2012
RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 4425- REPAIR & MAINTENANCE

| NO. | EXPENDITURE SUB-OBJECT DESCRIPTION | OPERATING EXPENSES | ADJUSTED COST FACTORS | ADJUSTED CURRENT ANNUAL EXPENSES |
|------|---------------------------------------|------------------------|-----------------------------|---|
| 7020 | PERMANENT EMPLOYEES | \$ 1,237,024.42 | \$ - | \$ 1,237,024.42 |
| 7025 | ACT.ASSIGNMENT | 2,312.72 | - | 2,312.72 |
| 7050 | REGULAR HOURLY RATE | 371.11 | - | 371.11 |
| 7055 | TIME & ONE-HALF | 51,467.59 | - | 51,467.59 |
| 7105 | EMPLOYERS SOCIAL SECURITY | 93,356.90 | - | 93,356.90 |
| 7110 | HOSPITALIZATION INSURANCE | 334,205.56 | (33,253.45) | 300,952.11 |
| 7115 | RETIREE HEALTH CARE | 157,931.90 | 23,516.06 | 181,447.96 |
| 7120 | RETIREMENT FUND CONTRIBUTION | 227,016.86 | (11,214.63) | 215,802.23 |
| 7125 | SPECIAL PENSION BENEFITS | 4,877.74 | - | 4,877.74 |
| 7135 | UNEMPLOYMENT COMPENSATION | 1,737.28 | - | 1,737.28 |
| 7150 | LONGEVITY PAY | 10,807.60 | - | 10,807.60 |
| 7165 | SHIFT DIFFERENTIAL | 128.09 | - | 128.09 |
| | TOTAL PERSONAL SERVICES | <u>2,121,237.77</u> | <u>(20,952.02)</u> | <u>2,100,285.75</u> |
| 7260 | SUPPLIES | 150,407.88 | - | 150,407.88 |
| 7300 | POSTAGE | 196.03 | - | 196.03 |
| 7680 | CLOTHING/CLEANING ALLOWANCE | 6,479.27 | - | 6,479.27 |
| | TOTAL SUPPLIES | <u>157,083.18</u> | <u>-</u> | <u>157,083.18</u> |
| 8140 | COMPUTER SERVICES | 18,822.00 | 759.00 | 19,581.00 |
| 8180 | CONTRACTUAL SERVICES | 785,853.36 | 600,010.00 | 1,385,863.36 |
| 8355 | CLAIMS | 300,000.00 | (150,000.00) | 150,000.00 |
| 8500 | TELEPHONE | 4,619.21 | - | 4,619.21 |
| 9000 | PRINTING & PUBLISHING | 2,536.05 | - | 2,536.05 |
| 9210 | ELECTRICITY | 11,747.43 | - | 11,747.43 |
| 9220 | WATER | 6,802.98 | - | 6,802.98 |
| 9230 | NATURAL GAS | 9,943.02 | - | 9,943.02 |
| 9300 | MAINTENANCE SERVICE | 39,762.81 | - | 39,762.81 |
| 9310 | HOME REPAIR | 151,285.65 | - | 151,285.65 |
| 9330 | PAVEMENT REPAIR | 129,937.16 | - | 129,937.16 |
| 9420 | EQUIPMENT RENTALS OR LEASE | 1,090,548.01 | - | 1,090,548.01 |
| 9430 | LAND RENTAL OR LEASE | 5,500.62 | - | 5,500.62 |
| 9440 | VEHICLE RENTAL/CAR MILEAGE | 3,600.58 | - | 3,600.58 |
| 9552 | OTHER TRAVEL AND TRAINING | 5,334.09 | - | 5,334.09 |
| 9554 | LOCAL BUSINESS EXPENSE | 77.37 | - | 77.37 |
| 9610 | FEES | 130.00 | - | 130.00 |
| 9622 | REFUSE COLLECTION CHARGES | 939.30 | - | 939.30 |
| | TOTAL OTHER SERVICES & CHARGES | <u>2,567,439.64</u> | <u>450,769.00</u> | <u>3,018,208.64</u> |
| 9760 | EQUIPMENT | 16,073.54 | - | 16,073.54 |
| | TOTAL CAPITAL | <u>16,073.54</u> | <u>-</u> | <u>16,073.54</u> |
| 9990 | OPERATING TRANSFERS OUT | 13,867.00 | - | 13,867.00 |
| | TOTAL TRANSFERS/FEES | <u>13,867.00</u> | <u>-</u> | <u>13,867.00</u> |
| | ORGANIZATIONAL UNIT TOTAL | <u>\$ 4,875,701.13</u> | <u>\$ 429,816.98</u> | <u>\$ 5,305,518.11</u> |

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MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 2, 2012

TO: Eric R. DeLong
Deputy City Manager

FROM: Linda Wagenmaker *LW*
Utility Financial Officer

SUBJECT: FY 2012 OPERATING EXPENSES- SEWAGE PUMPING STATIONS

The attached schedule allocates the direct cost for operating and maintaining system pumping and metering stations. The operating expense consists of direct labor, utilities, operating and maintenance supplies, repairs and maintenance and vehicle rental.

The overflow regulators are components of the integrated system and subsequently not included herein.

LW

Attachment

srs\stask4 2012

**CITY OF GRAND RAPIDS, MICHIGAN
INVENTORY OF SEWAGE PUMPING/METER STATIONS
FOR THE YEAR ENDED JUNE 30, 2012**

| <u>Station</u> | <u>Physical Location</u> | <u>Type</u> | <u>FY'12 Expenses</u> |
|--------------------------|--------------------------|-------------|---------------------------|
| Market Avenue | Grand Rapids | Interceptor | \$ 286,616 |
| Millbank | Grand Rapids | Local | 3,913 |
| Eastlake | Grand Rapids | Local | 5,719 |
| Eastern | Grand Rapids | Trunk | 5,671 |
| Middleboro | Grand Rapids | Trunk | 305 |
| Oak Hollow | Grand Rapids Twnsp | Local | 14,847 |
| Kingsbury | Walker | Trunk | 19,684 |
| Bona Vista | Grand Rapids | Trunk | 11,674 |
| Aberdeen | Grand Rapids | Local | 13,502 |
| O'Brien | Walker | Trunk | 33,710 |
| Leonard Heights | Walker | Trunk | 41,502 |
| Guild | Grand Rapids | Local | 4,117 |
| Orchard Vista | Cascade Twnsp | Local | 4,488 |
| Brookview | Grand Rapids | Trunk | 31,142 |
| Remembrance Road | Walker | Local | 98,730 |
| Kraft Avenue | Cascade Twnsp | Local | 18,917 |
| Thornapple | Cascade Twnsp | Trunk | 26,976 |
| Thornhills | Cascade Twnsp | Local | 11,058 |
| Greenbrier | Grand Rapids Twnsp | Local | 13,890 |
| Shore Haven | Grand Rapids Twnsp | Local | 7,639 |
| Ada | Ada | Local | 27,972 |
| Robinhood | Grand Rapids Twnsp | Local | 13,341 |
| Lincoln School | Grand Rapids Twnsp | Local | 10,743 |
| Reeds Lake Blvd. | Grand Rapids Twnsp | Local | 9,988 |
| 6000 28th Street | Cascade Twnsp | Local | 7,781 |
| Ada | Ada | Meter | 3,027 |
| East Grand Rapids | East Grand Rapids | Meter | 2,871 |
| Gaines Township | Gaines Township | Meter | 3,118 |
| Kentwood | Kentwood | Meter | 3,423 |
| Rickman Avenue | Grand Rapids | Local | 18,023 |
| Michigan Street | Grand Rapids | Local | 18,583 |
| Eagle Crest | Grand Rapids Twnsp | Local | 9,971 |
| East Paris | Grand Rapids Twnsp | Local | 7,473 |
| Alpine Estates | Walker | Local | 13,707 |
| Elmdale | Grand Rapids | Local | 3,916 |
| Collindale | Walker | Local | 4,723 |
| Saddleback | Grand Rapids Twnsp | Local | 4,434 |
| Arbor Hills Lift Station | Grand Rapids Twnsp | Local | 5,618 |
| Cypress Trails | Grand Rapids Twnsp | Local | 3,745 |
| Bird Avenue | Grand Rapids Twnsp | Local | 22,179 |
| Valentine | Grand Rapids Twnsp | Local | 2,454 |
| Cascade Springs | Cascade Twnsp | Local | 7,376 |
| Churchill Downs | Grand Rapids | Local | 5,790 |
| Woodsboro Court | Grand Rapids Twnsp | Local | 4,931 |
| Meadowood Trails | Cascade Twnsp | Local | 18,078 |
| Stonebridge | Grand Rapids Twnsp | Local | 11,164 |
| Burton/Cacade | Cascade Twnsp | Local | 18,926 |
| Crahen | Grand Rapids Twnsp | Local | 5,621 |
| Jonathan Woods | Cascade Twnsp | Local | 6,405 |
| Watermark | Cascade Twnsp | Local | 7,559 |
| Mountain Ash | Tallmadge Twnsp | Local | 11,750 |
| Reeds Hollow | Grand Rapids Twnsp | Local | 4,972 |
| 16th Avenue Lift Station | Marne | Local | 6,826 |
| Hayes West Lift Station | Tallmadge | Local | 8,732 |
| Hayes East Lift Station | Tallmadge | Local | 4,193 |
| 8th & Leonard LS | Tallmadge | Local | 6,477 |
| Summit Ridge LS | Grand Rapids | Local | 4,363 |
| Lake Michigan Estates | Tallmadge | Local | 5,419 |
| | | | \$ 989,772 |

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 4, 2012

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Scott Buhrer 
Chief Financial Officer

SUBJECT: 2012 SEWER RATE STUDY ANNUAL EXPENSE ADJUSTMENTS-TASK #5

Attached are adjustments to test period actual operating expenses to be included in Task #5 of the Sewer Rate Study.

Attachment

**CITY OF GRAND RAPIDS
SEWER DISPOSAL SYSTEM FUND
RATE STUDY TASK NO. 5
NOTES TO ADJUSTED CURRENT ANNUAL EXPENSES
FOR THE YEAR ENDED JUNE 30, 2012**

Object Level 3 - 7115

The factor to establish calendar year 2013's retiree health care cost is 14.89%. Increase the total of fiscal year 2012's retiree health care by this percent to establish the cost for calendar year 2013.

Object Level 3 – 7060, 7020, 7040, 7055, 7025, 7045, 7050, 7030, 7035, 7190

The wage increase factor to translate FY2012 actual costs to estimated calendar 2032 will be 0.0%. No wage increases are anticipated.

Object Level 3 - 7105

Increase FY2012 actual FICA expense by 0.0% to account for the effect of the wage increases.

Object Level 3 - 7110

Decrease FY2012 health insurance actual by 9.95% to reflect rate changes effective in calendar year 2013.

Object Level 3 - 7120

Decrease FY2012 actual pension expense by 4.94% to reflect the effect of a General Pension rate change decrease from FY2012 20.63% to calendar year rate of 19.61% and an estimated wage increase of 0.0%.

Object Level 3 – 8140/8355/9990

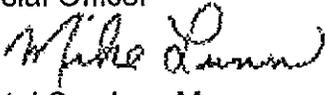
Administration - Adjust FY2012 actual cost to reflect adjustments in charges for central services rendered by the Information Technology Fund, the Insurance Payment Fund and the General Operating Fund.

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 25, 2012

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Mike Lunn 
Environmental Services Manager

SUBJECT: 2012 SEWER RATE STUDY - TASK #5-KNOWN COST
INCREASES/DECREASES

Known cost increases by which to adjust FY12 operating costs include a fund carry-forward for large diameter sewer cleaning that was not fully performed prior to June 30, 2012, as detailed below. In addition to the below carry-forward, the contractual services account (WWTP-4423-8180) within Wastewater has been decreased by \$605,870 for GVRBA expense reimbursements.

| <u>ACCOUNT</u> | <u>DESCRIPTION</u> | <u>AMOUNT</u> |
|-----------------|---|---------------|
| R&M - 4425-8180 | Terra Contracting (large diameter sewer cleaning) | \$600,010 |

ML/SS

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MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 2, 2012

TO: Eric R. DeLong
Deputy City Manager

FROM: Linda Wagenmaker 
Utility Financial Officer

SUBJECT: 2012 SEWER RATE STUDY- TASK #6

The Sewage Disposal System Fund's revenues and volumes by governmental unit for the year ended June 30, 2012 are disclosed on the following page. In addition, actual volume comparisons for the past five (5) years by governmental unit are included herein.

LW/SS

Attachment

srs\stask6 2012

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 6**

DETERMINE SEWAGE VOLUME AND REVENUE BY GOVERNMENTAL ENTITY FOR THE YEAR ENDED JUNE 30, 2012:

| RETAIL: | SALES REVENUE | 3 YR AVE BILLED VOL (GALLONS) |
|---|------------------|----------------------------------|
| CITY OF GRAND RAPIDS (1) | \$ 32,925,110.19 | 5,196,580,400 |
| CITY OF WALKER | 4,867,622.64 | 626,013,916 |
| CITY OF KENTWOOD | 3,724,074.86 | 996,191,636 |
| CASCADE TOWNSHIP | 2,130,671.46 | 292,261,552 |
| GRAND RAPIDS TOWNSHIP | 2,546,683.36 | 298,505,856 |
| TALLMADGE TOWNSHIP | 263,463.13 | 12,641,200 |
| WRIGHT TOWNSHIP (2) | 271,367.17 | 13,401,907 |
| SUB-TOTAL RETAIL (3) | \$ 46,728,992.81 | 7,435,596,467 |
| WHOLESALE: | | |
| CITY OF E. GRAND RAPIDS | \$ 678,535.83 | 440,214,567 |
| ADA TOWNSHIP | 1,192,870.86 | 311,384,352 |
| GAINES TOWNSHIP (4) | 171,465.90 | 112,092,500 |
| SUB-TOTAL WHOLESALE | \$ 2,042,872.59 | 863,691,419 |
| TOTAL | \$ 48,771,865.40 | 8,299,287,886 |
| REVENUE CLASSIFICATION: | | |
| 4410 - 607055 RETAIL SEWAGE SERVICE CHARGE | | \$ 46,642,515.67 |
| 4410 - 607056 WYOMING SEWAGE SERVICE CHARGE | | 86,477.14 |
| 4410 - 607060 WHOLESALE SEWAGE SERVICE CHARGE | | 2,042,872.59 |
| | | \$ 48,771,865.40 |

- (1) THE VOLUME & DOLLAR AMOUNT FOR THE CITY OF WYOMING ARE INCLUDED IN THE GRAND RAPIDS TOTALS.
- (2) CHARGES TO USERS IN WRIGHT TOWNSHIP ARE BASED ON A REU (RESIDENTIAL EQUIVALENT UNIT) CHARGE, IN LIEU OF COMMODITY & MONTHLY SERVICE CHARGES, AND AS SUCH DOES NOT RECORD ANY BILLED VOLUME IN RETAIL SERVICE CHARGES TO WRIGHT TOWNSHIP. THE AMOUNT INCLUDED ABOVE REFLECTS THE ESTIMATED BILLED VOLUME BASED ON THE WWTP'S LIFT STATION PUMPING REPORT FOR FY 2012.
- (3) A POSITIVE REVENUE ACCRUAL OF \$524,217 HAS BEEN PRORATED TO ALL RETAIL CUSTOMER COMMUNITIES TO ACCRUE BILLINGS FROM THE LAST READING DATE THROUGH JUNE 30, 2012, AND ADJUST FOR PREVIOUS FISCAL YEAR ACCRUAL.
- (4) GAINES TWP RATES ARE CALCULATED BASED ON MOST RECENT FISCAL YEAR BILLED VOLUME PER CONTRACT.

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
2012 RATE STUDY TASK NO. 6**

VOLUME COMPARISONS FOR FIVE (5) YEARS BY GOVERNMENTAL UNIT (INCLUDING NORTH KENT & MEIJER-ALGOMA) *
VOLUME = 1,000 GALLONS

| MUNICIPALITY | FY08 | | FY09 | | FY10 | | FY11 | | FY12 | | FY08-FY12 | |
|-------------------|------------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|----------|
| | VOL BILLED | % CHANGE |
| GRAND RAPIDS | 5,682,778 | | 5,422,022 | -4.59% | 5,327,763 | -1.74% | 5,130,744 | -3.70% | 5,131,245 | 0.01% | 5,131,245 | -9.71% |
| WALKER | 709,490 | | 671,946 | -5.29% | 630,592 | -6.15% | 628,009 | -0.41% | 619,441 | -1.36% | 619,441 | -12.69% |
| KENTWOOD | 1,048,020 | | 935,212 | -10.76% | 938,707 | 0.37% | 1,010,318 | 7.63% | 1,039,550 | 2.89% | 1,039,550 | -0.81% |
| CASCADE | 342,924 | | 324,838 | -5.27% | 287,725 | -11.43% | 286,529 | -0.42% | 302,532 | 5.59% | 302,532 | -11.78% |
| GRAND RAPIDS TWP | 311,922 | | 307,379 | -1.46% | 300,605 | -2.20% | 297,595 | -1.00% | 297,317 | -0.09% | 297,317 | -4.68% |
| TALLMADGE | 12,939 | | 14,558 | 12.51% | 13,005 | -10.67% | 12,739 | -2.05% | 12,180 | -4.39% | 12,180 | -5.87% |
| WRIGHT TWP | 17,254 | | 19,523 | 13.15% | 14,379 | -26.35% | 13,370 | -7.02% | 12,457 | -6.83% | 12,457 | -27.80% |
| EAST GRAND RAPIDS | 429,912 | | 518,933 | 20.71% | 456,699 | -11.99% | 444,128 | -2.75% | 419,817 | -5.47% | 419,817 | -2.35% |
| NORTH KENT AREA * | * | N/A |
| ADA TWP | 320,565 | | 337,356 | 5.24% | 309,321 | -8.31% | 315,329 | 1.94% | 309,502 | -1.85% | 309,502 | -3.45% |
| GAINES TWP | 103,612 | | 112,141 | 8.23% | 94,689 | -15.56% | 101,030 | 6.70% | 112,093 | 10.95% | 112,093 | 8.19% |
| MEIJER - ALGOMA * | * | N/A |
| TOTAL | 8,979,416 | | 8,663,908 | -3.51% | 8,373,475 | -3.35% | 8,239,791 | -1.60% | 8,256,134 | 0.20% | 8,256,134 | -8.05% |

* Service ended 11/08.

GRAND RAPIDS VOLUME COMPARED TO
CUSTOMER COMMUNITIES

| VOLUME = 1,000 GALLONS. | FY08 | | FY09 | | FY10 | | FY11 | | FY12 | |
|-------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | % OF TOTAL | VOL BILLED |
| GRAND RAPIDS | 63.29% | 5,422,022 | 62.58% | 5,327,753 | 63.63% | 5,130,744 | 62.27% | 5,131,245 | 62.15% | 5,131,245 |
| CUSTOMER COMMUNITIES | 36.71% | 3,241,886 | 37.42% | 3,045,722 | 36.37% | 3,109,047 | 37.73% | 3,124,889 | 37.85% | 3,124,889 |
| TOTAL | 100.00% | 8,663,908 | 100.00% | 8,373,475 | 100.00% | 8,239,791 | 100.00% | 8,256,134 | 100.00% | 8,256,134 |

* Volumes were restated from previous Rate Studies to reflect actual billings without adjustment for accrued revenues.

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 7**

OPERATING REVENUES OTHER THAN WASTEWATER RECEIPTS:

| | | |
|-------------|------------------------------------|----------------------|
| 4423-476009 | INDUSTRIAL PRETREATMENT PERMITS | \$ 48,813.81 |
| 4410-607001 | MISC SERVICE FEES | 10,479.21 |
| 4423-607001 | MISC SERVICE FEES | 399.97 |
| 4425-607001 | MISC SERVICE FEES | 1,141.94 |
| 4410-607009 | PHOTOCOPY FEES | 36.00 |
| 4410-607050 | INSPECTION FEES - UTILITIES | 20,010.00 |
| 4410-607031 | PRELIM/DESIGN/CONSTR ENG | 989.90 |
| 4410-607057 | INDUSTRIAL DISCHARGE AUTHORIZATION | 35,677.50 |
| | | <u>\$ 117,548.33</u> |

CREDIT: UNDERUTILIZATION OF PENALTY CREDIT FROM PREVIOUS YEAR \$ 288,354.00

OTHER OPERATING REVENUES NOT INCLUDED:

CAPITAL CONTRIBUTION

| | | |
|-------------|----------------------|---------------------|
| 4410-607051 | SEWAGE FRONT FOOTAGE | \$ 22,672.00 |
| | AUDITOR'S ADJUSTMENT | - |
| | | <u>\$ 22,672.00</u> |

INTEGRATED SYSTEM CREDITS

| | | |
|-------------|-----------------------------|------------------------|
| 4410-607053 | INTEGRATED SEWER CONNECTION | \$ 607,261.50 |
| 4423-607074 | SEWAGE SURCHARGE | 2,048,421.16 |
| | | <u>\$ 2,655,682.66</u> |

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 18, 2012

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Mike Lunn 
Environmental Services Manager

SUBJECT: 2012 SEWER RATE STUDY- TASK #8

No significant changes in operating levels are anticipated to take effect by January 1, 2013, which would require adjustments to operating costs for the test period.

MLSS

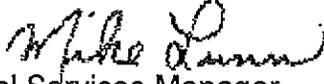
srs\stask8 2012

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 18, 2012

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Mike Lunn 
Environmental Services Manager

SUBJECT: 2012 SEWER RATE STUDY- TASK #9

No significant changes in sewer revenues are anticipated to take effect by January 1, 2013, which would require an adjustment to operating revenue estimates as a whole.

MLSS

srs\stask9 2012

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 5, 2012

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Charles R. Schroeder, PE *CS*
Assistant Environmental Services Manager

SUBJECT: 2012 SEWER RATE STUDY- TASK #10

The following are major sewage system projects that for rate study purposes should be considered operative as of January 1, 2013.

| <u>Description</u> | <u>Location</u> | <u>Amount</u> |
|--|-----------------|---------------|
| Plainfield-3 Mile Road/I-96 (EB Off Ramp) | Grand Rapids | \$ 90,000 |
| Eastside CSO-Contract No. 20 | Grand Rapids | 730,000 |
| Burton-Eastern/Plymouth | Grand Rapids | 252,540 |
| Eastside CSO-Contract No. 23A | Grand Rapids | 1,353,600 |
| Eastside CSO-Contract No. 23B | Grand Rapids | 1,263,627 |
| Remembrance Road South of 3 Mile | Walker | 90,000 |
| Logan-Division to Jefferson | Grand Rapids | 1,274,400 |
| Eastside CSO-Contract No. 18 | Grand Rapids | 2,117,700 |
| Eastside CSO-Contract No. 26A | Grand Rapids | 2,500,000 |
| Eastside CSO-Contract No. 26B | Grand Rapids | 1,250,000 |
| Ionia Avenue-Buckley St. to Wealthy St. (Urban Market) | Grand Rapids | 1,194,300 |
| Plainfield-Leonard to Ann | Grand Rapids | 749,700 |
| Maryland Estates District SSES | Grand Rapids | 456,692 |
| East Leonard Heights District SSES | Grand Rapids | 314,250 |
| East Leonard Heights | Grand Rapids | 513,830 |
| MAPS Flood Gates Repair/Removal | Integrated | 337,500 |
| Replace Blowers (Grit) | Integrated | 333,828 |
| Emergency Power Supply-Plant Gates | Integrated | 67,500 |

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CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 11

"COMPUTE ACCUMULATED COST, DEPRECIATION AND DEPRECIATION EXPENSE AS OF JUNE 30, 2012"

INTEGRATED SYSTEM

| | ORIGINAL COST | ACCUMULATED DEPRECIATION | DEPRECIATION EXPENSE |
|------------------------------|-----------------------|-----------------------------|-------------------------|
| LAND | \$ 1,633,122 | \$ - | \$ - |
| LAND IMPROVEMENTS | 16,172,844 | 12,397,208 | 291,576 |
| BUILDINGS & STRUCTURES | 47,778,004 | 27,700,458 | 878,206 |
| PROCESS EQUIPMENT | 61,849,799 | 30,475,281 | 1,571,985 |
| AUXILIARY EQUIPMENT | 26,447,812 | 23,296,096 | 355,060 |
| MACHINERY & EQUIPMENT | 4,867,536 | 4,608,488 | 106,150 |
| OFFICE EQUIPMENT & FURNITURE | 628,067 | 618,808 | 234 |
| | <u>\$ 159,377,184</u> | <u>\$ 99,096,339</u> | <u>\$ 3,203,211</u> |

NON-INTEGRATED SYSTEM

| | ORIGINAL COST | ACCUMULATED DEPRECIATION | DEPRECIATION EXPENSE |
|---------------------------------|-----------------------|-----------------------------|-------------------------|
| LAND | \$ 2,704,296 | \$ - | \$ - |
| LAND IMPROVEMENTS | 3,486,637 | 832,907 | 164,678 |
| BUILDINGS & STRUCTURES | 10,959,603 | 2,300,417 | 230,710 |
| PROCESS EQUIPMENT | 16,500,271 | 5,003,474 | 509,520 |
| AUXILIARY EQUIPMENT | 3,898,952 | 2,161,642 | 209,168 |
| MACHINERY & EQUIPMENT | 1,646,924 | 953,009 | 158,277 |
| OFFICE EQUIPMENT & FURNITURE | 68,632 | 68,632 | - |
| SERVICEMAINS - GRAND RAPIDS | 318,417,025 | 82,894,960 | 5,995,070 |
| SERVICEMAINS - WALKER | 38,547,018 | 12,945,062 | 764,663 |
| SERVICEMAINS - KENTWOOD | 40,369,642 | 12,437,249 | 803,031 |
| SERVICEMAINS - CASCADE TWP | 19,856,940 | 6,798,360 | 397,139 |
| SERVICEMAINS - GRAND RAPIDS TWP | 17,226,108 | 5,906,036 | 340,235 |
| SERVICEMAINS - TALLMADGE TWP | 5,661,019 | 1,019,172 | 114,705 |
| SERVICEMAINS - WRIGHT TWP | 501,505 | 16,288 | 2,506 |
| | <u>\$ 479,844,572</u> | <u>\$ 133,337,208</u> | <u>\$ 9,689,702</u> |
| TOTAL | <u>\$ 639,221,756</u> | <u>\$ 232,433,547</u> | <u>\$ 12,892,913</u> |

SOURCE: GENERAL LEDGER, AS ADJUSTED, FOR JUNE 30, 2012.

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 12**

TASK 12A DETERMINE WORKING CAPITAL NEEDS FOR MATERIALS AND SUPPLIES ON HAND.

MATERIALS AND SUPPLIES INVENTORY AS OF JUNE 30, 2012: \$ 1,152,066

TASK 12B DETERMINE WORKING CAPITAL NEEDS FOR PREPAYMENT OF OPERATING COSTS.

NO REQUIREMENT FOR PREPAYMENT OF OPERATING COSTS IS CALLED FOR IN THE ORDINARY CYCLE OF BUSINESS.

TASK 12C DETERMINE CASH WORKING CAPITAL NEEDS & DETERMINE TOTAL WORKING CAPITAL NEEDS.

MINIMUM CASH WORKING CAPITAL IS DEFINED AS THE SUM OF 90 DAYS ADJUSTED OPERATING EXPENSES.

ADJUSTED CURRENT ANNUAL EXPENSES = \$ 23,774,088 @ 90/365 = \$ 5,862,104

TOTAL WORKING CAPITAL NEEDS CONSIST OF THE FOLLOWING:

| | | |
|--------------------------------------|----|-----------|
| 12A INVESTMENT IN INVENTORY | \$ | 1,152,066 |
| 12B PREPAYMENT OF OPERATING EXPENSES | | - |
| 12C 90 DAY OPERATING EXPENSES | | 5,862,104 |
| | | 5,862,104 |
| | \$ | 7,014,170 |

**SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
ZONEGATED FACILITIES
TASK #13
November 2, 2012**

Lengths and cost of all interceptor and trunk sewer mains that are jointly used were allocated according to the percentage of flow from contributing communities per the "Report on Sewage Flow Allocation and Zoning of the Sewage System for Fiscal Year 2002" (B&V zoning report), as adjusted for FY12 characteristics. Jointly used pumping stations were also prorated based on B&V zoning report. All zoning work papers are on file at the Oak Industrial Drive Administration building. Maps are on file in the City Engineer's Office.

LW

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CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
METHODOLOGY FOR I/I & OTHER FLOW APPORTIONMENT - TASK NO. 13

| | |
|--|-------------------|
| | <u>MILLION</u> |
| | <u>GALLONS</u> |
| | 14,921.10 |
| | (841.41) |
| | <u>(7,414.72)</u> |
| | 6,664.97 |

1.) ANNUAL WASTEWATER TREATMENT PLANT FLOW
LESS: WHOLESALE BILLED FLOW
LESS: RETAIL BILLED FLOW
TOTAL RETAIL I/I & OTHER FLOW

2.) RETAIL INFLOW FROM SEPARATED AREAS (A)
RETAIL INFLOW FROM COMBINED AREAS - AMOUNT ESTIMATED (A)
LESS: ANNUAL BYPASS FROM (3) PUMPING STATIONS
LESS: IN-SYSTEM BYPASS & RETENTION BASIN OVERFLOW
TOTAL RETAIL INFLOW

3.) RETAIL INFILTRATION:
TOTAL RETAIL I/I & OTHER FLOW
LESS: TOTAL RETAIL INFLOW (#2)
LESS: MARKET AVE RETENTION BASIN (MARB) CAPTURE
TOTAL RETAIL INFILTRATION & OTHER FLOW

4.) ALLOCATION OF RETAIL INFILTRATION & OTHER FLOW
- APPORTIONED ON THE BASIS OF B&V SUMMARY OF
1997 MONITORED FLOW DATA (B)

| | |
|--|-------------------|
| | <u>MILLION</u> |
| | <u>GALLONS</u> |
| | 5,236.04 |
| | <u>(56.79)</u> |
| | 5,292.83 |
| | <u>(1,372.14)</u> |
| | 6,664.97 |
| | <u>5,236.04</u> |

| | |
|--|------------------|
| | <u>MILLION</u> |
| | <u>GALLONS</u> |
| | 5,236.04 |
| | <u>100.0000%</u> |
| | <u>100.0000%</u> |
| | 5,236.04 |

GOVERNMENTAL UNIT(S)
UTILITY PARTNERS
TOTAL

PRORATA SHARE OF
RETAIL INFILTRATION & OTHER

100.0000%
100.0000%

(A) BASED ON RECORDED RAINFALL @ WWTP & APPORTIONED PER BLACK & VEATCH'S SUMMARY OF 1997 MONITORED FLOW DATA.
(B) BASED ON INFILTRATION & OTHER FLOW APPORTIONED IN PREVIOUS YEAR & ADJUSTED FOR SYSTEM ADDITIONS & IMPROVEMENTS IN EACH CUSTOMER COMMUNITY.

CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
METHODOLOGY FOR I/I & OTHER FLOW APPORTIONMENT - TASK NO. 13 (CONTINUED)

5.) SUMMARY: (IN MILLION GALLONS)

| GOVERNMENTAL UNIT(S) | BILLED FLOW (TASK #6) | INFLOW (#2 ABOVE) | INFILTRATION & OTHER FLOW (#4 ABOVE) | MARB (A) (#3 ABOVE) | TOTAL PLANT FLOW | PERCENT OF TOTAL | TOTAL PLANT FLOW (MGD) |
|----------------------|--------------------------|----------------------|--|------------------------|---------------------|---------------------|---------------------------|
| UTILITY PARTNERS | 8,144.04 | 1,372.14 | 5,236.04 | 56.02 | 14,808.24 | 99.2436% | 40.5706 |
| GAINES TWP | 112.09 | - | - | 0.77 | 112.86 | 0.7564% | 0.3092 |
| TOTAL | 8,256.13 | 1,372.14 | 5,236.04 | 56.79 | 14,921.10 | 100.0000% | 40.8798 |

(A) BASED ON BILLED FLOW (TASK #6).

MEMORANDUM

CITY OF GRAND RAPIDS

Date: July 9, 2012

To: Linda Wagenmaker, Utility Financial Officer

From: Mike Lunn *Mike Lunn*
Environmental Services Manager

Subject: 2012 Sewer Rate Study - Wastewater Plant Flow Data

Listed below is the flow data measured in million gallons (MG) for the last three completed fiscal years. Plant flow decreased by 2.6% from 15,321.57 MG treated in FY11 to 14,921.10 MG treated in FY12.

| Month | FY 2010 | FY 2011 | FY 2012 | % incr (decr) |
|--------------|------------------|------------------|------------------|---------------|
| July | 1,178.67 | 1,343.33 | 1,338.31 | -0.4% |
| August | 1,294.03 | 1,169.94 | 1,329.91 | 13.7% |
| September | 1,072.35 | 1,078.00 | 1,095.80 | 1.7% |
| October | 1,356.18 | 1,041.49 | 1,132.82 | 8.8% |
| November | 1,327.26 | 997.41 | 1,149.36 | 15.2% |
| December | 1,336.85 | 1,049.53 | 1,276.78 | 21.7% |
| January | 1,235.45 | 1,034.32 | 1,291.29 | 24.8% |
| February | 1,051.07 | 1,032.11 | 1,199.29 | 16.2% |
| March | 1,397.47 | 1,636.36 | 1,486.58 | -9.2% |
| April | 1,406.38 | 1,671.09 | 1,279.82 | -23.4% |
| May | 1,383.83 | 1,851.22 | 1,253.16 | -32.3% |
| June | 1,602.04 | 1,416.77 | 1,087.98 | -23.2% |
| Total | 15,641.58 | 15,321.57 | 14,921.10 | -2.6% |

| Data measured | FY 2010 | FY 2011 | FY 2012 | % incr (decr) |
|---|---------|---------|---------|---------------|
| Wastewater Treatment Plan (WWTP) avg. daily flow (MG) | 42.854 | 41.977 | 40.880 | -2.6% |
| Rainfall recorded at WWTP (inches) | 37.000 | 38.200 | 35.800 | -6.3% |
| In-system overflows (MG) (report attached) | 2.599 | 1.579 | 0.343 | -78.3% |
| Market Avenue Retention Basin (MARB) inflow (MG) | 237.780 | 147.880 | 56.790 | -61.6% |
| Market Avenue Retention Basin (MARB) over flow (MG) | 35.848 | 48.474 | - | -100.0% |

cc: Mark DeClercq, City Engineer

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 18, 2012

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Charles R. Schroeder, PE
Assistant Environmental Services Manager

SUBJECT: 2012 SEWER RATE STUDY – TASK14

Zonegating maps for the sewage system are included in the "Report on Sewage Flow Allocation and Zonegating of the Sewage System" from Black & Veatch, Ltd dated September 2003. The report also contains comprehensive information with respect to the basis for zonegating service mains and other system components, such as lift stations, that service more than one community.

CRS:SS

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**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 15**

COMPUTE CONSTRUCTION COST RATE BASE (DEPRECIATED PLANT, PLUS WORKING CAPITAL, LESS CSO REVENUE REQUIREMENTS FOR CSO FIXED ASSETS INCLUDED IN TASK #11/21, LESS CONTRIBUTIONS BY OTHERS).

| | | | |
|--------------------------------|---------------|----------------------|------------------------------|
| ORIGINAL CONSTRUCTION COST | - TASK #10 | \$ 14,889,467 | |
| | - TASK #11 | 638,416,756 | |
| | - TASK #16/21 | <u>(187,363,456)</u> | \$ 465,942,767 |
| LESS: ACCUMULATED DEPRECIATION | - TASK #10 | \$ - | |
| | TASK #11 | 232,328,429 | |
| | TASK #16/21 | <u>(43,285,108)</u> | <u>(189,043,321)</u> |
| | | | 276,899,446 |
| WORKING CAPITAL REQUIREMENT | - TASK #12 | \$ 7,014,170 | |
| | | <u>7,014,170</u> | <u>7,014,170</u> |
| | | | 283,913,616 |
| CONTRIBUTIONS BY OTHERS | - TASK #21 | \$ 183,956,192 | |
| LESS: AMORTIZATION | | (117,226,929) | |
| | | <u>(66,729,263)</u> | <u>(66,729,263)</u> |
| CONSTRUCTION COST RATE BASE | | | <u><u>\$ 217,184,353</u></u> |

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 9, 2012

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Scott Saindon *SS*
Financial Analyst

**SUBJECT: 2012 SEWER RATE STUDY TASK #15A
INTEGRATED SEWER CONNECTION FEES**

Attached is the Integrated Sewer Connection Fee Schedule as currently provided for in Chapter 27 of the City Code, with the addition of rates to be effective on January 1, 2013. The City Commission on June 27, 2000 established fees through calendar year 2004. Beginning January 1, 2005, the integrated sewer connection fees are to be calculated on a yearly basis as part of the annual Water/Sewer Rate Study. The Consumer Price Index used to determine rates effective January 1, 2013 is as follows:

| | |
|--------------------------------|---------|
| August, 2012 Index | 230.379 |
| August, 2011 Index | 226.545 |
| Increase (decrease) | 3.834 |
| Percentage increase (decrease) | 1.69% |

SS

Attachment

srs\stask15a 2012

Section 2.96 Integrated Sewer Connection Fee Schedule

When a property owner or user is requested or required to connect to the System and has not previously paid or been assessed a connection fee, the following connection fee schedule shall apply:

Integrated Connection Base Fee Schedule

| Water Meter Size (inches) | <u>1/01/12</u> | <u>1/01/13</u> |
|------------------------------|----------------|----------------|
| 3/4 or less | \$ 2,780 | \$ 2,830 |
| 1 | 4,640 | 4,730 |
| 1 ½ | 9,260 | 9,420 |
| 2 | 14,820 | 15,080 |
| 3 | 32,440 | 33,030 |
| 4 | 58,380 | 59,430 |
| 6 and over | 129,740 | 132,080 |

Except as otherwise provided in the immediately succeeding paragraph, the foregoing integrated sewer connection base fee schedule for single-family and multi-family residential dwelling units shall be adjusted upward and downward as follows: A single-family residential dwelling unit located on a parcel containing twenty thousand (20,000) square feet shall pay the applicable integrated connection fee in accordance with the foregoing schedule. When determining the square footage of a residential parcel for the purposes of determining the appropriate integrated connection fee, parcel size may be adjusted downward to take into consideration such things as wetlands, lakes, streams and other unusual characteristics of the parcel in accordance with policies approved from time to time by the Utility Advisory Board. To the extent the size of a parcel, as adjusted, is greater than or less than twenty thousand (20,000) square feet, one-half the applicable integrated connection fee will increase or decrease by the same percentage increase or decrease in the parcel above or below twenty thousand (20,000) square feet. In the case of multi-family residential dwellings, in order to determine the size of the parcel assigned to each dwelling unit for purposes of calculating the integrated connection fee to be paid by each multi-family residential dwelling unit, the total square footage of the parcel, as adjusted, on which the multi-family residential dwelling is located shall be divided by the total number of residential units. Notwithstanding any other provision in this subsection, the integrated connection fee for a single-family residential dwelling unit or multi-family residential dwelling unit shall not exceed four and one-half times the applicable base integrated connection fee set forth in foregoing schedule.

There shall be no upward adjustment in the integrated sewer service connection fee payable for a single-family residential dwelling unit connecting to the Sewer System if (a) each of the following conditions are met (1) a building permit shall have been obtained, (2) the dwelling unit shall have been constructed, and (3) a certificate of occupancy shall have been issued prior to January 1, 2000 or (b) local building permit fees have been paid to the local governmental unit prior to January 1, 2000 for a single-family residential dwelling unit to be

constructed on or after January 1, 2000. When connecting to the Sewer System, Users living in or owning such single-family residential dwelling units shall pay the applicable base integrated connection fee set forth in the Integrated Connection Base Fee Schedule adjusted downward, if applicable, in accordance with the immediate preceding paragraph.

Effective January 1, 2005 and January 1st of every year thereafter, the Integrated Sewer Connection Base Fees shall be adjusted by a percentage, which is determined by the annual change in the Consumer Price Index (the "index") calculated as follows:

- (1) The Consumer Price Index shall be that Index referred to as the Consumer Price Index, US City Average, All Urban Consumers, published by the U.S. Department of Labor-Bureau of Statistics ((1982-84)=100). In the event the method of determining the Index is substantially altered, the basis for determining the annual change thereafter shall be the Index which is most comparable to the Index described above.
- (2) For the purpose of computing the percentage change each calendar year, the Index for the month of August for the prior calendar year shall be subtracted from the Index for the immediately-preceding August. The result so obtained (if positive) shall be divided by the Index for the month of August for the prior calendar year to obtain the percentage increase which shall be applied to the then current Integrated Sewer Connection Base Fee Schedule to determine the new calendar year schedule.

The foregoing Integrated Connection fee is due and payable at the time a User receives a permit to connect to the Sewer System. A permit issued by the City to connect to the Sewer System shall expire one hundred eighty (180) days from the date the permit was issued.

The user receiving services who applies for a larger water meter than the one presently in service shall pay an Integrated Connection Fee which is the difference in cost between the meter size in service and the one applied for in accordance with the Integrated Connection Fee in effect at the time of application. No credit or rebate shall be made in the case of application for a smaller meter size.

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CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
CSO REVENUE REQUIREMENTS - TASK 16
PRINCIPAL & INTEREST ON REVENUE BONDS & SRF
DEBT FOR CALENDAR YEAR 2013 - ACCRUAL BASIS

| DATE | SRF/REVENUE REFERENCE | REVENUE BONDS | | | STATE REVOLVING FUNDS | | | TOTAL | | TOTAL PRINCIPAL & INTEREST |
|----------|-----------------------|---------------|-----------|-----------------|-----------------------|-----------|-----------|----------------|----------------|----------------------------|
| | | 5073- SERIES | PRINCIPAL | INTEREST | EST. FEES | PRINCIPAL | INTEREST | PRINCIPAL | INTEREST | |
| 07/01/13 | N/A | 1998 | (1) | \$ 515,529.20 | \$ 1,250.00 | | | | | \$ 516,779.20 |
| 01/01/14 | N/A | 1998 | (1) | \$ 1,687,768.50 | 1,250.00 | | | | | \$ 1,687,768.50 |
| 07/01/13 | N/A | 2004 | (2) | 704,850.00 | 600.00 | | | | | 704,850.00 |
| 01/01/14 | N/A | 2004 | (2) | 704,250.00 | 600.00 | | | | | 704,850.00 |
| 07/01/13 | N/A | 2005 | (3) | 524,400.00 | 800.00 | | | | | 525,200.00 |
| 01/01/14 | N/A | 2005 | (3) | 524,400.00 | 800.00 | | | | | 525,200.00 |
| 07/01/13 | N/A | 2008 | (4) | 555,762.50 | 900.00 | | | | | 556,662.50 |
| 01/01/14 | N/A | 2008 | (4) | 555,762.50 | 900.00 | | | 505,000.00 | | 1,061,662.50 |
| 07/01/13 | N/A | 2010A | (5) | 306,852.00 | 0.00 | | | | | 306,852.00 |
| 01/01/14 | N/A | 2010A | (5) | 306,852.00 | 0.00 | | | | | 306,852.00 |
| 04/01/13 | 01 | 1991 | | | | | \$ 350.00 | | | 350.00 |
| 10/01/13 | | SRF | | | | | 700.00 | | | 700.00 |
| 04/01/14 | | | | | | | 0.00 | | | 0.00 |
| 04/01/13 | 02/03 | 1992A | | | | | 4,275.00 | | | 4,275.00 |
| 10/01/13 | | SRF | | | | | 8,550.00 | | | 8,550.00 |
| 04/01/14 | | | | | | | 0.00 | | | 0.00 |
| 04/01/13 | 04 | 1992B | | | | | 525.00 | | | 525.00 |
| 10/01/13 | | SRF | | | | | 1,050.00 | | | 1,050.00 |
| 04/01/14 | | | | | | | 0.00 | | | 0.00 |
| 04/01/13 | 06 | 1993A | | | | | 3,125.00 | | | 3,125.00 |
| 10/01/13 | | SRF | | | | | 6,250.00 | | | 6,250.00 |
| 04/01/14 | | | | | | | 0.00 | | | 0.00 |
| 04/01/13 | 07 | 1993B | | | | | 4,525.00 | | | 4,525.00 |
| 10/01/13 | | SRF | | | | | 9,050.00 | | | 9,050.00 |
| 04/01/14 | | | | | | | 2,250.00 | | | 2,250.00 |
| 04/01/13 | 09 | 1994A | | | | | 6,100.00 | | | 6,100.00 |
| 10/01/13 | | SRF | | | | | 12,200.00 | | | 12,200.00 |
| 04/01/14 | | | | | | | 3,050.00 | | | 3,050.00 |
| 04/01/13 | 10 | 1994B | | | | | 4,500.00 | | | 4,500.00 |
| 10/01/13 | | SRF | | | | | 6,000.00 | | | 6,000.00 |
| 04/01/14 | | | | | | | 3,000.00 | | | 3,000.00 |
| 04/01/13 | 11 | 1995A | | | | | 4,338.05 | | | 4,338.05 |
| 10/01/13 | | SRF | | | | | 5,850.90 | | | 5,850.90 |
| 04/01/14 | | | | | | | 2,925.45 | | | 2,925.45 |
| 04/01/13 | 12 | 1995B | | | | | 4,612.50 | | | 4,612.50 |
| 10/01/13 | | SRF | | | | | 9,225.00 | | | 9,225.00 |
| 04/01/14 | | | | | | | 3,487.50 | | | 3,487.50 |
| | | | | | | | | \$5,631,721.06 | \$5,326,626.80 | \$10,958,347.86 |

(1) PRORATED AMOUNT OF 1998 ISSUE RELATED TO CSO DEBT
(2) DS ON ES CSO PORTION OF 2004 ISSUE. (\$28.17M)
(3) DS ON ES CSO PORTION OF 2005 ISSUE. (\$21.355M)
(4) DS ON ES CSO PORTION OF 2008 ISSUE. (\$24.805M)
(5) DS ON ES CSO PORTION OF 2010A&B ISSUE. (\$14.05M)
(6) PRORATED FOR APPLICABLE THREE (3) MONTH PERIOD IN CALENDAR YEAR 2013

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 16A**

INCLUDE PROJECT COST ESTIMATES FOR UPCOMING SYSTEM IMPROVEMENTS (NON-INTEGRATED)

THE ESTIMATED TOTAL PROJECT COST FOR RECOMMENDED SEWAGE SYSTEM IMPROVEMENTS ARE SUMMARIZED IN THE FOLLOWING TABLE.

| <u>ITEM NO.</u> | <u>DESCRIPTION</u> | <u>ESTIMATED COST</u> |
|-----------------|------------------------------------|-----------------------|
| 1 | KINGSBURY LIFT STATION REPLACEMENT | 1,200,000 |
| 2 | SOUTH WALKER SANITARY LIFT STATION | 400,000 |
| | | <u>\$ 1,600,000</u> |

NOTE: NONE OF THE PROJECTS ABOVE ARE INCLUDED IN RECOMMENDED REVENUE REQUIREMENTS FOR CALENDAR YEAR 2013.

*SOURCE: CHUCK SCHROEDER, ASSISTANT ENVIRONMENTAL SERVICES MANAGER
OCTOBER 2012.*

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 17**

BONDS - PRINCIPAL & INTEREST PAYMENTS (SENIOR)

| FISCAL YEAR ENDING JUNE 30, | CASH BASIS | | |
|--------------------------------------|----------------|----------------|----------------|
| | PRINCIPAL | INTEREST | PRIN & INT |
| 2013 | \$ 4,955,000 | \$ 11,819,503 | \$ 16,774,503 |
| 2014 | 6,030,000 | 12,618,027 | 18,648,027 |
| 2015 | 6,295,000 | 12,352,095 | 18,647,095 |
| 2016 | 6,575,000 | 12,066,408 | 18,641,408 |
| 2017 | 6,880,000 | 11,772,827 | 18,652,827 |
| 2018 | 7,210,000 | 11,444,552 | 18,654,552 |
| 2019 | 7,585,000 | 11,080,927 | 18,665,927 |
| 2020 | 7,960,000 | 10,697,552 | 18,657,552 |
| 2021 | 8,310,000 | 10,292,102 | 18,602,102 |
| 2022 | 10,125,000 | 9,864,302 | 19,989,302 |
| 2023 | 10,660,000 | 9,342,952 | 20,002,952 |
| 2024 | 11,200,000 | 8,812,870 | 20,012,870 |
| 2025 | 11,755,000 | 8,254,252 | 20,009,252 |
| 2026 | 12,345,000 | 7,667,470 | 20,012,470 |
| 2027 | 12,970,000 | 7,053,436 | 20,023,436 |
| 2028 | 13,610,000 | 6,408,605 | 20,018,605 |
| 2029 | 9,590,000 | 5,730,830 | 15,320,830 |
| 2030 | 10,075,000 | 5,253,909 | 15,328,909 |
| 2031 | 10,575,000 | 4,752,842 | 15,327,842 |
| 2032 | 11,110,000 | 4,226,880 | 15,336,880 |
| 2033 | 11,670,000 | 3,674,308 | 15,344,308 |
| 2034 | 12,260,000 | 3,093,840 | 15,353,840 |
| 2035 | 12,265,000 | 2,484,011 | 14,749,011 |
| 2036 | 7,240,000 | 1,907,272 | 9,147,272 |
| 2037 | 7,590,000 | 1,556,837 | 9,146,837 |
| 2038 | 7,960,000 | 1,189,408 | 9,149,408 |
| 2039 | 5,555,000 | 821,798 | 6,376,798 |
| 2040 | 5,795,000 | 585,946 | 6,380,946 |
| 2041 | 6,045,000 | 339,886 | 6,384,886 |
| 2042 | 2,080,000 | 83,200 | 2,163,200 |
| | \$ 264,275,000 | \$ 197,248,847 | \$ 461,523,847 |

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 18**

DETERMINE SEWER SYSTEM EQUITY IN THE CONSTRUCTION COST RATE BASE BY
SUBTRACTING NON-CSO DEBT OUTSTANDING FROM THE TOTAL RATE BASE.

| | |
|--|----------------------|
| CONSTRUCTION COST RATE BASE - TASK NO. 15 | \$ 217,184,353 |
| LESS: BONDED INDEBTEDNESS (ACCRUAL) - TASK NO. 17 / 20 | (134,766,055) |
| NET SEWER SYSTEM EQUITY | <u>\$ 82,418,298</u> |

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE OF RETURN ON EQUITY - TASK NO. 19**

AT THE APRIL 5, 1977, COMMITTEE OF THE WHOLE MEETING, THE CITY COMMISSION DECIDED THE LEVEL OF RETURN ON SEWER SYSTEM EQUITY. THE LEVEL DECIDED UPON WAS ONE PERCENT MORE THAN THE AVERAGE BOND BUYER'S INDEX OF MUNICIPAL BONDS FOR THE PREVIOUS TWELVE MONTH PERIOD.

BOND BUYER'S INDEX OF 20 MUNICIPAL BONDS

| <u>DATE</u> | <u>RATE</u> | <u>DATE</u> | <u>RATE</u> |
|-------------|-------------|-----------------|---------------|
| 06-Oct-11 | 4.140% | 05-Apr-12 | 4.080% |
| 13-Oct-11 | 4.170% | 12-Apr-12 | 3.970% |
| 20-Oct-11 | 4.080% | 19-Apr-12 | 3.900% |
| 27-Oct-11 | 4.120% | 26-Apr-12 | 3.860% |
| 03-Nov-11 | 4.020% | 03-May-12 | 3.810% |
| 10-Nov-11 | 4.020% | 10-May-12 | 3.710% |
| 17-Nov-11 | 4.090% | 17-May-12 | 3.750% |
| 24-Nov-11 | 4.070% | 24-May-12 | 3.810% |
| 01-Dec-11 | 4.120% | 31-May-12 | 3.770% |
| 08-Dec-11 | 3.930% | 07-Jun-12 | 3.920% |
| 15-Dec-11 | 3.920% | 14-Jun-12 | 3.950% |
| 22-Dec-11 | 3.920% | 21-Jun-12 | 3.950% |
| 29-Dec-11 | 3.880% | 28-Jun-12 | 3.950% |
| 05-Jan-12 | 3.830% | 05-Jul-12 | 3.940% |
| 12-Jan-12 | 3.620% | 12-Jul-12 | 3.830% |
| 19-Jan-12 | 3.600% | 19-Jul-12 | 3.750% |
| 26-Jan-12 | 3.680% | 26-Jul-12 | 3.610% |
| 02-Feb-12 | 3.600% | 02-Aug-12 | 3.660% |
| 09-Feb-12 | 3.700% | 09-Aug-12 | 3.750% |
| 16-Feb-12 | 3.650% | 16-Aug-12 | 3.800% |
| 23-Feb-12 | 3.690% | 23-Aug-12 | 3.760% |
| 01-Mar-12 | 3.720% | 30-Aug-12 | 3.720% |
| 08-Mar-12 | 3.840% | 06-Sep-12 | 3.730% |
| 15-Mar-12 | 3.950% | 13-Sep-12 | 3.790% |
| 22-Mar-12 | 4.010% | 20-Sep-12 | 3.720% |
| 29-Mar-12 | 4.020% | 27-Sep-12 | 3.670% |
| | | <u>52 WEEKS</u> | <u>3.857%</u> |

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 20**

DETERMINE COMPOSITE RATE OF RETURN ON CONSTRUCTION COST RATE BASE

| | RATE BASE | RATE OF RETURN | RETURN ON INVESTMENT |
|---|----------------|-----------------------------------|-------------------------|
| SEWER SYSTEM EQUITY IN THE CONSTRUCTION COST RATE (CCR) BASE | \$ 82,418,298 | @ 4.857% | = \$ 4,003,057 |
| SEWER SYSTEM INDEBTEDNESS (NON-CSO) IN THE CONSTRUCTION COST RATE BASE | | | |
| 1998 ISSUE (REFIN. AMT. OF 1990 ISSUE) | 12,698,879 | @ 5.06% | = 642,563 |
| 2004 ISSUE | 7,795,000 | @ 4.97% | = 387,412 |
| 2005 ISSUE | 25,970,000 | @ 4.90% | = 1,272,530 |
| 2008 ISSUE | 40,130,000 | @ 4.92% | = 1,974,396 |
| 2010 ISSUE | 29,625,000 | @ 5.00% | = 1,481,250 |
| 2010A&B ISSUE (amount in CCRB) | 14,944,564 | @ 4.37% | = 653,077 |
| 2011 SRF (amount in CCRB) | 1,757,493 | @ 2.50% | = 43,937 |
| 2012 ISSUE (amount in CCRB) | 1,845,119 | @ 4.48% | = 82,661 |
| LESS INTEREST ON BOND RESERVE ACCOUNTS | | | (3,622) |
| | \$ 217,184,353 | | \$ 10,537,261 |
| COMPOSITE RATE OF RETURN ON INVESTMENT | | \$10,537,261 217,184,353 = | 4.852% |

CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
CONSTRUCTION COST RATE BASE & RETURN ON SYSTEM INVESTMENT- TASK NO. 21- PART1
FISCAL YEAR ENDED JUNE 30, 2012

PHYSICAL LOCATION

| DESCRIPTION | RETAIL | | | | | | | | | | WHOLESALE | | | | TOTAL |
|----------------------------------|-------------------|-----------------|-----------------|------------------|------------------|------------------|----------------|--------------------|-----------------|-----------------|--------------|-----------------|----------------|--|-------|
| | INTEGRATED SYSTEM | CITY OF GR | CITY OF WALKER | CITY OF KENTWOOD | CITY OF TOWNSHIP | CASCADE TOWNSHIP | GR TOWNSHIP | TALLMADGE TOWNSHIP | WRIGHT TOWNSHIP | CITY OF EAST GR | ADA TOWNSHIP | GAINES TOWNSHIP | | | |
| COST | \$ 160,116,012 | \$ 163,745,128 | \$ 40,413,900 | \$ 30,250,314 | \$ 18,490,978 | \$ 19,842,361 | \$ 4,911,989 | \$ 4,944,447 | \$ - | \$ - | \$ - | \$ - | \$ 438,265,129 | | |
| LESS: ACCUMULATED DEPRECIATION | 99,096,339 | 45,195,062 | 13,336,239 | 10,914,117 | 6,843,734 | 6,146,289 | 1,008,102 | 49,588 | \$ - | \$ - | \$ - | \$ - | 182,590,480 | | |
| NET BOOK VALUE | \$ 61,019,673 | \$ 118,550,066 | \$ 27,077,661 | \$ 19,336,197 | \$ 11,647,244 | \$ 13,696,072 | \$ 3,903,887 | \$ 444,859 | \$ - | \$ - | \$ - | \$ - | \$ 255,675,649 | | |
| WORKING CAPITAL REQUIREMENT | 4,214,744 | 1,718,542 | 373,855 | 241,989 | 169,322 | 218,772 | 28,407 | 23,638 | \$ - | \$ - | \$ - | \$ - | 7,014,170 | | |
| CONTRIBUTIONS | \$ 65,234,417 | \$ 120,288,608 | \$ 27,457,516 | \$ 19,578,166 | \$ 11,816,586 | \$ 13,914,834 | \$ 3,932,294 | \$ 469,517 | \$ 4,419 | \$ 16,273 | \$ 4,209 | \$ - | \$ 262,689,839 | | |
| LESS AMORTIZATION | (41,127,065) | (52,744,450) | (22,891,822) | (22,912,579) | (16,592,805) | (13,696,634) | (4,560,073) | - | \$ - | \$ - | \$ - | \$ - | 181,094,888 | | |
| CONSTRUCTION COST RATE BASE | \$ (6,469,370) | \$ (10,844,063) | \$ (13,406,473) | \$ (12,556,529) | \$ (10,003,761) | \$ (3,388,586) | \$ (3,672,219) | \$ - | \$ - | \$ - | \$ - | \$ - | (115,753,907) | | |
| RETURN ON INVESTMENT- TASK 20 | \$ 58,765,047 | \$ 109,424,545 | \$ 14,045,043 | \$ 7,021,657 | \$ 1,812,805 | \$ 5,526,298 | \$ 260,075 | \$ 468,517 | \$ 4,419 | \$ 16,273 | \$ 4,209 | \$ - | \$ 197,348,898 | | |
| RETURN ON INVESTMENT- TASK 20 | \$ 2,851,280 | \$ 5,309,279 | \$ 681,465 | \$ 340,891 | \$ 87,957 | \$ 268,136 | \$ 12,619 | \$ 22,732 | \$ 214 | \$ 790 | \$ 204 | \$ - | \$ 9,575,367 | | |
| RETURN ON INVESTMENT- TASK 19/21 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | | |
| RETURN ON INVESTMENT- TASK 19/21 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | | |
| TOTAL RETURN ON INVESTMENT | \$ 2,851,280 | \$ 5,309,279 | \$ 681,465 | \$ 340,891 | \$ 87,957 | \$ 268,136 | \$ 12,619 | \$ 22,732 | \$ 214 | \$ 790 | \$ 204 | \$ - | \$ 9,575,367 | | |
| NET BOOK VALUE | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | | |
| LESS AMORTIZATION | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | | |
| CONSTRUCTION COST RATE BASE | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | | |
| RETURN ON INVESTMENT- TASK 19/21 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | | |
| RETURN ON INVESTMENT- TASK 19/21 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | | |
| TOTAL RETURN ON INVESTMENT | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | | |

ZONEGATED

| | | | | | | | | | | | | |
|----------------------------------|------|----------------|--------------|--------------|--------------|--------------|------------|--------------|------------|--------------|------------|---------------|
| COST | \$ - | \$ (1,793,274) | \$ 8,378,506 | \$ 2,771,477 | \$ 4,682,815 | \$ 5,114,980 | \$ 713,977 | \$ 1,210,563 | \$ 261,809 | \$ 5,379,513 | \$ 957,272 | \$ 27,677,638 |
| LESS: ACCUMULATED DEPRECIATION | - | (848,367) | 2,009,378 | 1,395,205 | 1,040,666 | 1,181,473 | 69,937 | 251,275 | 244,489 | 643,856 | 465,949 | 6,463,881 |
| NET BOOK VALUE | \$ - | \$ (944,907) | \$ 6,369,128 | \$ 1,376,272 | \$ 3,642,149 | \$ 3,933,507 | \$ 644,040 | \$ 959,288 | \$ 17,320 | \$ 4,735,657 | \$ 491,323 | \$ 21,223,777 |
| WORKING CAPITAL REQUIREMENT | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| CONTRIBUTIONS | \$ - | \$ (944,907) | \$ 6,369,128 | \$ 1,376,272 | \$ 3,642,149 | \$ 3,933,507 | \$ 644,040 | \$ 959,288 | \$ 17,320 | \$ 4,735,657 | \$ 491,323 | \$ 21,223,777 |
| LESS AMORTIZATION | \$ - | \$ - | (10,344) | 1,371,755 | 314,067 | 110,548 | 145 | 149 | - | 201,747 | 852,579 | 2,861,334 |
| CONSTRUCTION COST RATE BASE | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| RETURN ON INVESTMENT- TASK 19/21 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| RETURN ON INVESTMENT- TASK 19/21 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| TOTAL RETURN ON INVESTMENT | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
RECONCILIATION OF CONSTRUCTION COST & ACCUMULATED DEPRECIATION- PHYSICAL LOCATION & ZONEGATING
FISCAL YEAR ENDED JUNE 30, 2012**

| COST CENTER | AMOUNT | INTEGRATED SYSTEM | | | | | RETAIL | | | | | WHOLESALE | | | TOTAL |
|--|--------|-------------------|----------------|------------------|--------------------------|---------------|--------------------|-----------------|-----------------|--------------|-----------------|-----------|------|------|----------------|
| | | CITY OF GR | CITY OF WALKER | CITY OF KENTWOOD | CITY OF CASCADE TOWNSHIP | GR TOWNSHIP | TALLMADGE TOWNSHIP | WRIGHT TOWNSHIP | CITY OF EAST GR | ADA TOWNSHIP | GAINES TOWNSHIP | | | | |
| CONSTRUCTION COST-BY PHYSICAL LOCATION: | | | | | | | | | | | | | | | |
| BY PHYSICAL LOCATION- TASK 11 | | \$ 159,377,184 | \$ 357,682,340 | \$ 38,547,018 | \$ 40,369,642 | \$ 19,855,940 | \$ 17,226,108 | \$ 5,661,019 | \$ 501,505 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 639,221,756 |
| IN SERVICE- TASK 1C | | 738,828 | 14,060,639 | 90,000 | - | - | - | - | - | - | - | - | - | - | 14,899,467 |
| MARINE CONNECTOR AGREEMENT | | - | (211,573) | - | - | - | - | - | - | - | - | - | - | - | (805,000) |
| SADDLEBACK SEWER | | - | (1,187,160) | - | 1,115,707 | 71,453 | - | (515,311) | (78,116) | - | - | - | - | - | - |
| TASK 11/16/21- CSO COST | | - | (187,363,456) | - | - | - | - | - | 71,058 | - | - | - | - | - | (187,363,456) |
| O'BRIEN | | - | (141,105) | - | - | - | 141,105 | - | - | - | - | - | - | - | - |
| HAYES- WEST | | - | (215,841) | - | - | - | 215,841 | - | - | - | - | - | - | - | - |
| HAYES- EAST | | - | (323,154) | - | - | - | - | - | - | - | - | - | - | - | - |
| KINGSBURY | \$ | 323,154 | (66,841) | 323,154 | 66,841 | - | - | - | - | - | - | - | - | - | - |
| MEADOWOOD TRAILS | | 66,841 | (66,841) | - | - | - | 66,840 | - | - | - | - | - | - | - | - |
| OAK HOLLOW | | 66,840 | (66,840) | - | - | - | - | - | - | - | - | - | - | - | - |
| COLLINDALE | | 66,840 | (66,840) | - | - | - | - | - | - | - | - | - | - | - | - |
| THORNAPPLE | | 224,216 | (224,216) | - | - | - | 224,216 | - | - | - | - | - | - | - | - |
| 6000 28TH ST | | 111,401 | (111,401) | - | - | - | 111,401 | - | - | - | - | - | - | - | - |
| THORNHILLS | | 118,407 | (118,407) | - | - | - | 118,407 | - | - | - | - | - | - | - | - |
| ROBINHOOD | | 178,399 | (178,399) | - | - | - | 178,399 | - | - | - | - | - | - | - | - |
| CASCADE SPRINGS | | 65,478 | (65,478) | - | - | - | 65,478 | - | - | - | - | - | - | - | - |
| SHOREHAVEN | | 72,602 | (72,602) | - | - | - | 72,602 | - | - | - | - | - | - | - | - |
| EAGLECREST | | 152,332 | (152,332) | - | - | - | 152,332 | - | - | - | - | - | - | - | - |
| GREENBRIER | | 48,486 | (48,486) | - | - | - | 48,486 | - | - | - | - | - | - | - | - |
| LINCOLN SCHOOL | | 153,651 | (153,651) | - | - | - | 153,651 | - | - | - | - | - | - | - | - |
| REEDS LAKE | | 962,898 | (962,898) | - | - | - | 962,898 | - | - | - | - | - | - | - | - |
| KRAFT | | 72,602 | (72,602) | - | - | - | 72,602 | - | - | - | - | - | - | - | - |
| ORCHARD VISTA | | 39,712 | (39,712) | - | - | - | 39,712 | - | - | - | - | - | - | - | - |
| BIRD AVE-ALPINE ESTATES | | 797,860 | (797,860) | - | - | - | 797,860 | - | - | - | - | - | - | - | - |
| EAST PARIS | | 323,478 | (323,478) | - | - | - | 323,478 | - | - | - | - | - | - | - | - |
| SERVICE MAINS | | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| LESS- SERVICE MAINS- TOTAL SUBS- PHY. LOC. | | (22,308,498) | (13,840,328) | (13,840,328) | (19,694,446) | (2,312,401) | (140,457) | (590,665) | - | - | - | - | - | - | (58,886,795) |
| ADD- SERVICE MAINS- TOTAL ADDS- PHY. LOC. | | 10,342,109 | 12,231,144 | 12,231,144 | 8,459,411 | 176,329 | 164 | - | - | - | - | - | - | - | 31,209,157 |
| TOTAL- PHYSICAL LOCATION COST | | \$ 160,116,012 | \$ 163,745,128 | \$ 40,413,900 | \$ 30,250,314 | \$ 18,490,978 | \$ 19,842,361 | \$ 4,911,989 | \$ 494,447 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 438,265,129 |

| CONSTRUCTION COST- ZONEGATING: | | | | | | | | | | | | | | | |
|---------------------------------------|----|----------------|----------------|---------------|---------------|---------------|---------------|--------------|--------------|------|------|------|------|------|----------------|
| LIFT STATIONS / CHAMBERS: | | | | | | | | | | | | | | | |
| FULLER-BROOKVIEW | \$ | 1,252,893 | (469,804) | - | - | - | - | - | - | - | - | - | - | - | - |
| FULTON- MIDDLEBORROW | | 37,983 | (37,407) | - | - | - | 499,804 | - | - | - | - | - | - | - | - |
| WEALTHY ST EXT. CHAMBER | | 498,953 | (87,710) | 83,093 | - | - | 37,407 | - | - | - | - | - | - | - | - |
| WEALTHY | | 20,444 | (12,454) | 12,185 | - | - | - | 4,617 | - | - | - | - | - | - | - |
| MARKET | | 12,605,367 | (2,267,201) | 1,842,905 | - | - | 371,984 | 53 | 216 | - | - | - | - | - | - |
| VANPORTLIET / LEONARD HTS | | 1,236,296 | (187,138) | (187,138) | - | - | - | 25,841 | 26,471 | - | - | - | - | - | - |
| REMEMBRANCE / 3 MILE | | 1,213,244 | - | (127,682) | - | - | - | 25,163 | 102,519 | - | - | - | - | - | - |
| 16th AVENUE | | 71,058 | - | - | - | - | - | (141,105) | 141,105 | - | - | - | - | - | - |
| HAYES- WEST | | 141,105 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| HAYES- EAST | | 215,841 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| O'BRIEN | | 546,532 | 25,064 | (52,795) | - | - | - | 27,731 | - | - | - | - | - | - | - |
| SERVICE MAINS- ZONEGATED COST | | 899,100 | 899,100 | 6,807,936 | 2,771,477 | 4,682,815 | 4,205,785 | 771,677 | 940,252 | - | - | - | - | - | 27,677,638 |
| TOTAL- ZONEGATED COST | | \$ - | \$ (1,793,274) | \$ 8,378,906 | \$ 2,771,477 | \$ 4,682,815 | \$ 5,114,980 | \$ 713,977 | \$ 1,210,563 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 27,677,638 |
| GRAND TOTAL- COST | | \$ 160,116,012 | \$ 161,951,854 | \$ 48,792,406 | \$ 33,021,791 | \$ 23,173,793 | \$ 24,957,341 | \$ 5,625,966 | \$ 1,705,010 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 465,942,767 |

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
RECONCILIATION OF CONSTRUCTION COST & ACCUMULATED DEPRECIATION- PHYSICAL LOCATION & ZONEGATING
FISCAL YEAR ENDED JUNE 30, 2012**

| COST CENTER | AMOUNT | RETAIL | | | | | | | | | | WHOLESALE | | TOTAL |
|--|---------------|-------------------|---------------|----------------|------------------|--------------------------|--------------|--------------------|-----------------|-----------------|--------------|-----------------|----------------|-------|
| | | INTEGRATED SYSTEM | CITY OF GR | CITY OF WALKER | CITY OF KENTWOOD | CITY OF CASCADE TOWNSHIP | GR TOWNSHIP | TALLMADGE TOWNSHIP | WRIGHT TOWNSHIP | CITY OF EAST GR | ADA TOWNSHIP | GAINES TOWNSHIP | | |
| ACCUMULATED DEPRECIATION- BY PHYSICAL LOCATION: | | | | | | | | | | | | | | |
| BY PHYSICAL LOCATION- TASK 11 | \$ 99,096,339 | \$ 94,215,041 | \$ 12,945,062 | \$ 12,457,249 | \$ 6,798,360 | \$ 5,906,036 | \$ 1,019,172 | \$ 16,288 | \$ - | \$ - | \$ - | \$ - | \$ 232,433,547 | |
| IN SERVICE- TASK 10 | - | - | - | - | - | - | - | - | - | - | - | - | (162,833) | |
| MARINE CONNECTOR AGREEMENT | - | (117,566) | - | - | - | - | - | (37,463) | - | - | - | - | 57,715 | |
| SADDLEBACK SEWER | - | - | - | 54,857 | 2,858 | - | - | - | - | - | - | - | (43,285,108) | |
| TASK 11/16/21- CSO ACC. DEPRECIATION | - | (43,285,108) | - | - | - | - | - | - | - | - | - | - | - | |
| O'BRIEN | - | (219,341) | 219,341 | - | - | - | - | - | - | - | - | - | - | |
| VANPORTLUET | - | 65,310 | 313,208 | - | - | - | - | - | - | - | - | - | - | |
| REMEMBRANCE / 3 MILE | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 16th AVENUE | - | (41,082) | - | - | - | - | - | - | - | - | - | - | - | |
| HAYES- WEST | - | (63,457) | - | - | - | - | - | - | - | - | - | - | - | |
| HAYES- EAST | - | (68,246) | - | - | - | - | - | - | - | - | - | - | - | |
| KINGSBURY | \$ 53,348 | (53,348) | 53,348 | - | - | - | - | - | - | - | - | - | - | |
| MEADOWOOD TRAILS | 4,456 | (4,456) | - | - | - | 4,456 | - | - | - | - | - | - | - | |
| OAK HOLLOW | 4,456 | (4,456) | - | - | - | - | - | - | - | - | - | - | - | |
| COLLINDALE | 4,456 | (4,456) | - | - | - | - | - | - | - | - | - | - | - | |
| THORNAPPLE | 68,841 | (68,841) | 4,456 | - | - | - | - | - | - | - | - | - | - | |
| 6000 28TH ST | 11,140 | (11,140) | - | - | - | - | - | - | - | - | - | - | - | |
| THORNHILLS | 19,735 | (19,735) | - | - | - | - | - | - | - | - | - | - | - | |
| ROBINHOOD | 35,680 | (35,680) | - | - | - | - | - | - | - | - | - | - | - | |
| CASCADE SPRINGS | 28,374 | (28,374) | - | - | - | - | - | - | - | - | - | - | - | |
| SHOREHAVEN | 14,520 | (14,520) | - | - | - | - | - | - | - | - | - | - | - | |
| EAGLECREST | 25,389 | (25,389) | - | - | - | - | - | - | - | - | - | - | - | |
| GREENBRIER | 6,465 | (6,465) | - | - | - | - | - | - | - | - | - | - | - | |
| LINCOLN SCHOOL | 16,773 | (16,773) | - | - | - | - | - | - | - | - | - | - | - | |
| REEDS LAKE | 99,915 | (99,915) | - | - | - | - | - | - | - | - | - | - | - | |
| KRAFT | 14,520 | (14,520) | - | - | - | - | - | - | - | - | - | - | - | |
| ORCHARD VISTA | 5,295 | (5,295) | - | - | - | - | - | - | - | - | - | - | - | |
| BIRD AVE-ALPINE ESTATES | 65,844 | (65,844) | - | - | - | - | - | - | - | - | - | - | - | |
| EAST PARIS | 86,261 | (86,261) | - | - | - | - | - | - | - | - | - | - | - | |
| SERVICE MAINS | - | (9,061,465) | (2,169,664) | (2,786,191) | (188,027) | (115,175) | (106,320) | - | - | - | - | - | (14,426,842) | |
| LESS- SERVICE MAINS- TOTAL SUBS- PHY. LOC. | - | 4,781,284 | 1,905,178 | 1,208,203 | 78,182 | 135 | - | - | - | - | - | - | 7,972,982 | |
| ADD- SERVICE MAINS- TOTAL ADDS- PHY. LOC. | \$ 99,096,339 | \$ 45,195,062 | \$ 13,336,239 | \$ 10,914,118 | \$ 6,843,734 | \$ 6,146,299 | \$ 1,008,102 | \$ 49,568 | \$ - | \$ - | \$ - | \$ - | \$ 182,589,461 | |

| ACCUMULATED DEPRECIATION- ZONEGATED | | | | | | | | | | | | | |
|--|---------------|---------------|---------------|---------------|--------------|--------------|--------------|------------|------------|------------|------------|----------------|---|
| LIFT STATIONS / CHAMBERS: | | | | | | | | | | | | | |
| FULLER-BROOKVIEW | \$ 559,785 | (223,309) | - | - | - | - | - | - | - | - | - | - | - |
| FULTON- MIDDLEBORROW | 37,070 | (36,508) | - | - | - | - | - | - | - | - | - | - | - |
| WEALTHY ST EXT. CHAMBER | 113,208 | (21,635) | 20,496 | - | - | 1,139 | - | - | - | - | - | - | - |
| WEALTHY | 20,444 | (12,454) | 12,185 | - | - | 53 | - | 216 | - | - | - | - | - |
| MARKET | 4,223,362 | (759,614) | 617,456 | - | - | 8,658 | - | 8,869 | - | - | - | - | - |
| VANPORTLUET | 65,310 | 9,886 | (9,886) | - | - | - | - | - | - | - | - | - | - |
| REMEMBRANCE / 3 MILE | 313,208 | - | (32,962) | - | - | - | - | 6,496 | - | - | - | - | - |
| 16th AVENUE | 41,082 | - | - | - | - | - | - | - | - | - | - | - | - |
| HAYES- WEST | 63,467 | - | - | - | - | - | - | (63,467) | - | - | - | - | - |
| HAYES- EAST | 68,246 | - | - | - | - | - | - | - | - | - | - | - | - |
| O'BRIEN | 219,341 | 10,059 | (21,188) | - | - | - | - | 11,129 | - | - | - | - | - |
| SERVICEMAINS-ZONEGATED ACC. DEPRECIATION | - | 185,208 | 1,423,277 | 1,395,205 | 1,040,666 | 797,025 | 105,929 | 152,257 | 244,489 | 643,856 | 465,949 | 6,453,861 | |
| TOTAL- ZONEGATED ACC. DEPRECIATION | \$ - | \$ (648,367) | \$ 2,009,378 | \$ 1,395,205 | \$ 1,040,666 | \$ 1,181,473 | \$ 69,937 | \$ 251,275 | \$ 244,489 | \$ 643,856 | \$ 465,949 | \$ 6,453,861 | |
| GRAND TOTAL- ACC. DEPRECIATION | \$ 99,096,339 | \$ 44,346,695 | \$ 15,345,617 | \$ 12,309,323 | \$ 7,884,400 | \$ 7,327,772 | \$ 1,078,039 | \$ 300,843 | \$ 244,489 | \$ 643,856 | \$ 465,949 | \$ 183,043,322 | |

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**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED OPERATING EXPENSE ZONEGATING ALLOCATION BY GOVERNMENTAL UNIT - TASK #22
FISCAL YEAR ENDED JUNE 30, 2012**

| COST CENTER | ADJUSTED EXPENSE BY COST CENTER | INTEGRATED SYSTEM | CITY OF GRAND RAPIDS | | | | | RETAIL | | | | | WHOLESALE | | | | |
|----------------------------|---------------------------------|-------------------|----------------------|--------------|------------|------------|------------|-----------|-----------|-----------------|-----------|-----------|-----------|---|--------|---|---|
| | | | GR | WALKER | KENTWOOD | CASCADE | GR | TALLMADGE | WRIGHT | CITY OF EAST GR | ADA | GAINES | TOWNSHIP | | | | |
| WASTEWATER TREATMENT | \$ 13,054,248 | \$ 13,054,248 | | | | | | | | | | | | | | | |
| LIFT STATIONS: | | | | | | | | | | | | | | | | | |
| A. INTERCEPTOR | 286,353 | | 234,850 | 41,865 | - | - | - | - | 587 | 601 | - | - | - | - | - | - | - |
| B. TRUNK | 170,507 | | 43,856 | 85,279 | - | - | 26,951 | 1,709 | 1,709 | - | - | - | - | - | - | - | - |
| C. LOCAL COLLECTOR | 519,575 | | 77,854 | 106,571 | - | - | 100,496 | 29,869 | 29,869 | 23,879 | - | - | 27,946 | - | - | - | - |
| SEWER LINES: | | | | | | | | | | | | | | | | | |
| A. INTERCEPTOR | 283,527 | | 169,458 | 40,505 | 66,294 | - | 7,270 | - | - | - | - | - | - | - | - | - | - |
| B. TRUNK | 603,025 | | 202,663 | 156,443 | 142,489 | - | 51,402 | 16,589 | 706 | 706 | - | - | - | - | - | - | - |
| C. LOCAL COLLECTOR | 4,418,966 | | 2,773,918 | 545,698 | 431,468 | - | 262,177 | 330,185 | 49,139 | 26,381 | - | - | - | - | - | - | - |
| D. ZONEGATING | | | (127,252) | 28,311 | (25,029) | - | 35,638 | 38,589 | (10,551) | 16,412 | - | - | 21,922 | - | 10,609 | - | - |
| BULK METERING STATIONS | 12,427 | | - | - | 3,420 | - | - | - | - | - | - | - | 3,024 | - | 3,115 | - | - |
| CUSTOMER ACCOUNTING * | 2,793,080 | | 2,203,182 | 208,839 | 166,970 | - | 65,637 | 134,934 | 4,832 | 8,686 | - | - | - | - | - | - | - |
| INDUSTRIAL PRETREATMENT | 627,745 | | | | | | | | | | | | | | | | |
| SUBTOTAL OPERATING EXPENSE | 22,769,453 | 13,681,993 | 5,578,729 | 1,213,611 | 786,612 | 549,571 | 710,253 | 92,164 | 76,665 | 14,239 | 52,892 | 13,724 | | | | | |
| ADMINISTRATIVE EXPENSE | 1,004,635 | 603,678 | 246,145 | 53,547 | 34,663 | 24,248 | 31,338 | 4,066 | 3,383 | 628 | 2,334 | 605 | | | | | |
| TOTAL | \$ 23,774,088 | \$ 14,285,671 | \$ 5,824,874 | \$ 1,267,158 | \$ 820,275 | \$ 573,819 | \$ 741,591 | \$ 96,230 | \$ 80,048 | \$ 14,867 | \$ 55,226 | \$ 14,329 | | | | | |

* Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

METHOD OF DISTRIBUTION

| WASTEWATER TREATMENT | 100.000% | 100.000% |
|----------------------------|-----------|----------|
| LIFT STATIONS: | (54) | |
| A. INTERCEPTORS | (1) | |
| B. TRUNK | (8) | |
| C. LOCAL | (45) | |
| SEWER LINES: | | |
| TOTAL MILES: | 905.14 | |
| A. INTERCEPTOR | 100.000% | 100.000% |
| MILES | 48.37 | |
| B. TRUNK LINES | 100.000% | 100.000% |
| MILES | 102.88 | |
| C. LOCAL COLLECTOR | 100.000% | 100.000% |
| MILES | 753.89 | |
| D. ZONEGATING | | |
| MILES | (4) | |
| BULK METERING STATIONS | | |
| CUSTOMER ACCTG (1) | | |
| NO. OF METERS | 73,960.00 | |
| INDUSTRIAL PRETREATMENT | | |
| ADMINISTRATIVE EXPENSE (2) | | |

NOTES:

- (1) MAINTENANCE & COLLECTION COSTS ARE ALLOCATED ON THE NUMBER OF METERS, INCLUSIVE OF USERS FOR WRIGHT TWP.
- (2) ALLOCATED ON DIRECT OPERATING EXPENSE, ADJUSTED FOR ANY COST ASSIGNABLE EXCLUSIVELY TO GR OR RETAIL COMMUNITIES, IF APPLICABLE.

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 23**

ASSIGN OTHER OPERATING REVENUES TO EACH GOVERNMENTAL ENTITY.

BASIS OF ALLOCATION: RETAIL BILLINGS BY GOVERNMENTAL ENTITY - TASK NO. 6 & 7

| | <u>RETAIL BILLINGS</u> | <u>PERCENTAGE OF TOTAL</u> | <u>ALLOCATION *</u> |
|-----------------------|----------------------------|--------------------------------|---------------------|
| CITY OF GRAND RAPIDS | \$ 32,925,110 | 70.4598% | \$ 285,998 |
| CITY OF WALKER | 4,867,623 | 10.4167% | 42,282 |
| CITY OF KENTWOOD | 3,724,075 | 7.9695% | 32,348 |
| CASCADE TOWNSHIP | 2,130,671 | 4.5596% | 18,508 |
| GRAND RAPIDS TOWNSHIP | 2,546,683 | 5.4499% | 22,121 |
| TALLMADGE TOWNSHIP | 263,463 | 0.5638% | 2,288 |
| WRIGHT TOWNSHIP | 271,367 | 0.5807% | 2,357 |
| | <u>\$ 46,728,992</u> | <u>100.0000%</u> | <u>\$ 405,902</u> |

** Reflects adjustment for circuit breaker provisions per 3rd amendment of W/S agreements*

CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ASSIGN DEPRECIATION EXPENSE TO CUSTOMER COMMUNITIES- TASK NO. 24
FISCAL YEAR ENDED JUNE 30, 2012

| COST CENTER | DEPRECIATION EXPENSE | INTEGRATED SYSTEM | | | | | RETAIL | | | | | WHOLESALE | | | | | TOTAL |
|------------------------------------|----------------------|-------------------|----------------|------------------|------------------|-------------|--------------------|-----------------|-----------------|------------|--------------|-----------------|--------------|---------------|--|--|-------|
| | | CITY OF GR | CITY OF WALKER | CITY OF KENTWOOD | CASCADE TOWNSHIP | GR TOWNSHIP | TALLMADGE TOWNSHIP | WRIGHT TOWNSHIP | CITY OF EAST GR | TOWNSHIP | ADA TOWNSHIP | GAINES TOWNSHIP | | | | | |
| BY PHYSICAL LOCATION- TASK 11 | | \$ 7,070,046 | \$ 897,362 | \$ 803,031 | \$ 420,428 | \$ 387,624 | \$ 114,705 | \$ 2,506 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 12,892,913 | | | |
| ADD: IN SERVICE- TASK 10 | | 281,213 | 1,800 | - | - | - | - | - | - | - | - | - | 309,891 | | | | |
| MARNE CONNECTOR AGREEMENT | | (12,959) | | | | | | | | | | | (24,829) | | | | |
| SADDLEBACK SEWER | | | | 22,313 | 1,429 | | (10,307) | | | | | | 23,742 | | | | |
| LESS: TASK 11/16/21- CSO DEP. EXP. | | (3,781,238) | | | | | | (1,563) | | | | | (3,781,238) | | | | |
| LIFT STATIONS / CHAMBERS: | | | | | | | | | | | | | | | | | |
| FULLER-BROOKVIEW (GR) | \$ 48,649 | (18,609) | - | - | - | 18,609 | - | - | - | - | - | - | - | | | | |
| FULTON- MIDDLEBORO (GR) | 183 | (180) | - | - | 180 | - | - | - | - | - | - | - | - | | | | |
| WEALTHY ST EXT. CHAMBER | 11,321 | (2,164) | 2,050 | - | - | 114 | - | - | - | - | - | - | - | | | | |
| MARKET | 488,326 | (87,890) | 71,393 | - | - | 14,411 | 1,001 | 1,025 | - | - | - | - | - | | | | |
| VANPORTFLIET | 35,390 | 5,357 | (5,357) | - | - | - | - | - | - | - | - | - | - | | | | |
| REMEMBRANCE / 3 MILE | 62,642 | - | (6,592) | - | - | - | 1,289 | 5,283 | - | - | - | - | - | | | | |
| OBRIEN | 13,667 | 718 | (1,513) | - | - | - | 795 | - | - | - | - | - | - | | | | |
| KINGSBURY | 10,772 | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| MEADOWOOD TRAILS | 2,228 | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| OAK HOLLOW | 2,228 | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| COLLINDALE | 2,228 | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| THORNAPPLE | 7,474 | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| 6000 28TH ST | 3,713 | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| THORNHILLS | 3,947 | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| ROBINHOOD | 5,947 | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| CASCADE SPRINGS | 2,183 | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| SHOREHAVEN | 2,420 | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| EAGLECREST | 5,078 | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| GREENRIER | 1,618 | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| LINCOLN SCHOOL | 5,121 | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| REEDS LAKE | 24,979 | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| KRAFT | 2,420 | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| ORCHARD VISTA | 1,324 | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| 16TH AVE | 4,565 | (4,565) | - | - | - | - | - | 4,565 | - | - | - | - | - | | | | |
| HAYES- WEST | 7,062 | (7,062) | - | - | - | - | - | 7,062 | - | - | - | - | - | | | | |
| HAYES- EAST | 9,893 | (9,893) | - | - | - | - | 9,893 | - | - | - | - | - | - | | | | |
| BIRD AVE-ALPINE ESTATES | 23,258 | (23,258) | - | - | - | 23,258 | - | - | - | - | - | - | - | | | | |
| EAST PARIS | 10,783 | (10,783) | - | - | - | 10,783 | - | - | - | - | - | - | - | | | | |
| SERVICEMAINS | | (201,618) | 94,614 | (173,087) | 50,064 | 78,977 | 3,576 | 18,673 | 107,031 | 18,943 | | | - | | | | |
| ADJUSTED BY ZONEGATING | | 3,197,185 | 1,047,757 | 682,277 | 471,921 | 533,842 | 121,076 | 37,551 | 2,807 | 107,031 | 18,943 | | 9,420,479 | | | | |
| LESS CONTRIBUTIONS AMORTIZED | | (1,052,755) | (426,805) | (436,351) | (331,856) | (269,625) | (91,247) | - | - | - | (15,590) | | (3,580,917) | | | | |
| TASK NO. 21 | | \$ 2,144,430 | \$ 620,952 | \$ 215,926 | \$ 140,065 | \$ 264,217 | \$ 29,829 | \$ 37,551 | \$ 2,807 | \$ 107,031 | \$ 3,353 | | \$ 5,839,562 | | | | |
| TOTAL | | \$ 2,273,401 | \$ 620,952 | \$ 215,926 | \$ 140,065 | \$ 264,217 | \$ 29,829 | \$ 37,551 | \$ 2,807 | \$ 107,031 | \$ 3,353 | | \$ 5,839,562 | | | | |

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ACCUMULATE REVENUE REQUIREMENTS BY CUSTOMER COMMUNITIES- TASK NO. 25
FISCAL YEAR ENDED JUNE 30, 2012**

| COST CENTER | INTEGRATED SYSTEM | RETAIL | | | | | | WHOLESALE | | | TOTAL | |
|---|-------------------|---------------|----------------|------------------|------------------|--------------|--------------------|-----------------|-----------------|--------------|------------|-----------------|
| | | CITY OF GR | CITY OF WALKER | CITY OF KENTWOOD | CASCADE TOWNSHIP | GR TOWNSHIP | TALLMADGE TOWNSHIP | WRIGHT TOWNSHIP | CITY OF EAST GR | ADA TOWNSHIP | | GAINES TOWNSHIP |
| OPERATION & MAINTENANCE EXPENSE-TASK NO. 22 | \$ 14,285,671 | \$ 5,824,874 | \$ 1,287,158 | \$ 820,275 | \$ 573,819 | \$ 741,591 | \$ 96,230 | \$ 80,048 | \$ 14,867 | \$ 55,226 | \$ 14,329 | \$ 23,774,088 |
| DEPRECIATION EXPENSE | 2,273,401 | 2,144,430 | 620,952 | 215,926 | 140,065 | 264,217 | 29,829 | 37,551 | 2,807 | 107,031 | 3,353 | 5,839,552 |
| TASK NO. 24 | 2,851,280 | 5,230,313 | 1,213,733 | 402,973 | 380,258 | 592,690 | 66,441 | 102,900 | 1,661 | 388,793 | 1,232 | 11,232,274 |
| RETURN ON SYSTEM INVESTMENT | | (285,998) | (42,282) | (32,348) | (18,508) | (22,121) | (2,288) | (2,357) | | | | (405,902) |
| REVENUE CREDITS- TASK NO. 23 | | 10,958,348 | | | | | | | | | | 10,958,348 |
| CSO DEBT SERVICE REQUIREMENTS | | | | | | | | | | | | |
| ALLOCATE: | | | | | | | | | | | | |
| INTEGRATED SYSTEM CREDITS | | (1,612,462) | (250,596) | (330,507) | (143,023) | (113,106) | (12,850) | (7,119) | (96,255) | (87,766) | - | (2,655,683) |
| INTEGRATED SYSTEM (A) | | 11,696,323 | 1,817,743 | 2,397,400 | 1,037,445 | 820,434 | 93,211 | 51,634 | 712,711 | 636,631 | 146,820 | - |
| LESS: CIRCUIT BREAKER (B) | | (527,178) | - | - | - | - | (16,572) | (15,256) | | | | (559,006) |
| | \$ - | \$ 33,428,650 | \$ 4,626,709 | \$ 3,473,719 | \$ 1,970,055 | \$ 2,283,705 | \$ 254,001 | \$ 247,401 | \$ 633,791 | \$ 1,099,915 | \$ 165,734 | \$ 48,183,681 |

(A) ALLOCATED TO CUSTOMER COMMUNITIES UNDER OLD CONTRACT BASIS OF PLANT FLOW. REMAINING ALLOCATION TO UAB PARTNERS UNDER UNIFORM SERVICE AGREEMENTS BASED ON PLANT FLOW & LAND, AS NOTED BELOW.
 (B) PURSUANT TO CITY AND CUSTOMER COMMUNITY CIRCUIT BREAKER, AS PROVIDED FOR BY THE THIRD AMENDMENT TO THE UNIFORM SERVICE AGREEMENTS.

| COST CENTER | INTEGRATED SYSTEM | RETAIL | | | | | | WHOLESALE | | | TOTAL | |
|-------------------------------|-------------------|---------------|----------------|------------------|------------------|-------------|--------------------|-----------------|-----------------|--------------|------------|-----------------|
| | | CITY OF GR | CITY OF WALKER | CITY OF KENTWOOD | CASCADE TOWNSHIP | GR TOWNSHIP | TALLMADGE TOWNSHIP | WRIGHT TOWNSHIP | CITY OF EAST GR | ADA TOWNSHIP | | GAINES TOWNSHIP |
| OLD METHOD- PLANT FLOW | | \$ 11,696,323 | \$ 1,817,743 | \$ 2,397,400 | \$ 1,037,445 | \$ 820,434 | \$ 93,211 | \$ 51,634 | \$ 712,711 | \$ 636,631 | \$ 146,820 | \$ 19,263,532 |
| NEW METHOD- PLANT FLOW / LAND | | \$ 11,696,323 | \$ 1,817,743 | \$ 2,397,400 | \$ 1,037,445 | \$ 820,434 | \$ 93,211 | \$ 51,634 | \$ 712,711 | \$ 636,631 | \$ 146,820 | \$ 19,410,352 |

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWER SUPPLY SYSTEM FUND
TASK NO. 25a**

REVIEW THE REVENUE REQUIREMENTS TO ASSURE COMPLIANCE WITH THE APPLICABLE BOND ORDINANCE PROVISIONS.

| | <u>YEAR ENDED 6/30/12</u> | <u>PRO FORMA *</u> |
|---|---------------------------------|---------------------------------|
| REVENUES: | | |
| RETAIL/WHOLESALE SEWAGE SERVICE | \$ 48,771,865 | \$ 48,679,681 |
| CONNECTION FEES/FRONT FOOT FEES | 629,934 | 658,000 |
| SEWAGE SURCHARGES | 2,048,421 | 2,483,700 |
| OTHER OPERATING REVENUES | 117,548 | 97,000 |
| INTEREST ON INVESTMENTS | 169,940 | 175,000 |
| MISCELLANEOUS | 682,466 | 688,660 |
| TOTAL REVENUES | <u>\$ 52,420,174</u> | <u>\$ 52,782,041</u> |
| OPERATING EXPENSES: | | |
| OPERATIONS & MAINTENANCE | \$ 23,985,302 | \$ 25,179,352 |
| DEPRECIATION | 12,892,913 | 12,892,913 |
| TOTAL EXPENSES | <u>\$ 36,878,215</u> | <u>\$ 38,072,265</u> |
| ADDITIONS: DEPRECIATION | <u>12,892,913</u> | <u>12,892,913</u> |
| NET EARNINGS OF THE SYSTEM | <u><u>\$ 28,434,872</u></u> | <u><u>\$ 27,602,689</u></u> |
| DEBT SERVICE (CASH BASIS) | | |
| SERIES 2012 BONDS | \$ - | \$ 297,326 |
| SERIES 2010A&B BONDS (after BABA subsidy) | 1,280,226 | 1,254,920 |
| SERIES 2010 BONDS | 1,481,250 | 1,481,250 |
| SERIES 2008 BONDS | 4,395,038 | 4,395,238 |
| SERIES 2005 BONDS | 2,952,006 | 2,953,006 |
| SERIES 2004 BONDS | 1,994,737 | 1,992,738 |
| SERIES 1998 BONDS | 4,391,713 | 4,400,025 |
| TOTAL SENIOR DEBT SERVICE | <u>16,494,970</u> | <u>16,774,503</u> |
| SRF DEBT (JUNIOR LIEN) | 3,737,713 | 4,104,069 |
| | <u>\$ 20,232,683</u> | <u>\$ 20,878,572</u> |
| COVERAGE RATIO - SENIOR DEBT | <u>1.72</u> | <u>1.65</u> |
| COVERAGE RATIO - ALL DEBT | <u>1.41</u> | <u>1.32</u> |

* SEWAGE SERVICES ADJUSTED FOR RATE REVISIONS OF 2.89% AND -2.46% EFFECTIVE 1/1/12 AND 1/1/13, RESPECTIVELY; OTHER REVENUES AND OPERATIONS & MAINTENANCE EXPENSE PER 2013 FISCAL PLAN, ADJUSTED FOR CARRYFORWARDS.

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SUMMARY

**SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26**

| | | |
|---|-------------------|-----------------------|
| INITIAL SYSTEM REVENUE REQUIREMENTS | | \$ 48,742,687 |
| REVENUES FROM CURRENT RATES | | |
| REU CHARGE | \$ 249,251 | |
| MONTHLY METER CHARGE | 13,081,909 | |
| MONTHLY BILLING CHARGE | 3,696,505 | |
| COMMODITY CHARGE | <u>32,372,451</u> | <u>(49,400,116)</u> |
| INITIAL REQUIRED REVENUE INCREASE (DECREASE) | | <u>\$ (657,429)</u> |
| INITIAL PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES | | <u>-1.33%</u> |
| INITIAL SYSTEM REVENUE REQUIREMENTS FROM ABOVE | | \$ 48,742,687 |
| LESS: AMOUNT OF CIRCUIT BREAKER RELIEF TO REDUCE RR's TO RETAIL | | <u>(559,006)</u> |
| SYSTEM REVENUE REQUIREMENTS | | <u>\$ 48,183,681</u> |
| ACTUAL REQUIRED AMOUNT OF REVENUE INCREASE (DECREASE) | | <u>\$ (1,216,435)</u> |
| ACTUAL PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES | | <u>-2.46%</u> |

**SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 26**

| METER SIZE | EQUIV. FACTOR | CITY OF GR | | CITY OF WALKER | | CITY OF KENTWOOD | | CASCADE TWP | | GR TWP | | TALLMADGE TWP | | WRIGHT TWP | | | |
|-------------------|---------------|------------|--------|----------------|--------|------------------|--------|-------------|--------|----------|--------|---------------|--------|------------|---------|---------|-----|
| | | METERS * | EQUIV. | METERS * | EQUIV. | METERS * | EQUIV. | METERS * | EQUIV. | METERS * | EQUIV. | METERS * | EQUIV. | METERS * | EQUIV. | USERS* | REU |
| A 3/4" or less | 1.0000 | 54,430 | 54,430 | 4,950 | 4,950 | 3,428 | 3,428 | 1,315 | 1,315 | 3,226 | 3,226 | 107 | 107 | - | - | - | - |
| B 1" | 1.7778 | 2,208 | 3,925 | 344 | 612 | 466 | 828 | 214 | 380 | 232 | 412 | 13 | 23 | - | - | - | - |
| C 1 1/4" | 2.7778 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| D 1 1/2" | 4.0000 | 852 | 3,408 | 140 | 560 | 306 | 1,224 | 140 | 560 | 72 | 288 | 3 | 12 | - | - | - | - |
| E 2" | 7.1111 | 668 | 4,750 | 79 | 562 | 189 | 1,344 | 61 | 434 | 33 | 235 | 2 | 14 | - | - | - | - |
| F 3" | 16.0000 | 86 | 1,376 | 8 | 128 | 17 | 272 | 6 | 96 | 6 | 96 | 2 | 32 | - | - | - | - |
| G 4" | 28.4444 | 80 | 2,276 | 7 | 199 | 11 | 313 | 2 | 57 | 4 | 114 | 1 | 28 | - | - | - | - |
| H 6" and over | 64.0000 | 16 | 1,024 | 2 | 128 | 4 | 256 | - | - | - | - | - | - | - | - | - | - |
| Other- Wright Twp | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 230 | 333.187 | |
| TOTAL | | 58,340 | 71,189 | 5,530 | 7,139 | 4,421 | 7,665 | 1,738 | 2,842 | 3,573 | 4,371 | 128 | 216 | 230 | 333.187 | | |

* Source: Grand Rapids Water/Sewage Customer Accounts Report, October 31, 2012.

CITY OF GRAND RAPIDS, MICHIGAN

**SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26**

SYSTEM REVENUE REQUIREMENTS * \$ 33,428,650

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

71,189 meter equivalents x \$ 9.43 x 12 = \$ 8,055,747

MONTHLY BILLING CHARGE

58,340 meters x \$ 3.47 x 12 = 2,429,278

COMMODITY CHARGE

6,947,300 units (100 CF) x \$ 3.36 = 23,342,928 (33,827,953)

REQUIRED REVENUE INCREASE (DECREASE) \$ (399,303)

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES -1.18%

* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 527,178

CITY OF GRAND RAPIDS, MICHIGAN

**SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

COMMODITY CHARGE:

$$\frac{\text{INTEGRATED SYSTEM COST}}{\text{BILLED UNITS}} = \frac{\$22,654,671}{6,947,300} = \underline{\underline{\$ 3.26 /100 CF *}}$$

MONTHLY SERVICE CHARGE:

| | | |
|--------------------------------|--|----------------------------|
| SYSTEM REVENUE REQUIREMENTS ** | | \$ 33,428,650 |
| NEW COMMODITY CHARGE | | |
| 6,947,300 x \$ 3.26 | | \$ 22,648,198 |
| NEW MONTHLY BILLING CHARGE | | |
| 58,340 x \$ 3.15 x 12 | | <u>2,205,252</u> |
| | | <u>(24,853,450)</u> |
| | | <u><u>\$ 8,575,200</u></u> |

$$\text{MONTHLY METER CHARGE} = \frac{\$8,575,200}{71,189 \times 12} = \underline{\underline{\$ 10.04 \text{ MONTHLY}}}$$

| METER SIZE | EQUIVALENT | MONTHLY SERVICE CHARGE | | | PRESENT |
|--------------|------------|------------------------|---------|----------|----------|
| | | METER | BILLING | TOTAL | |
| 3/4" or less | 1.0000 | \$ 10.04 | \$ 3.15 | \$ 13.19 | \$ 12.90 |
| 1" | 1.7778 | 17.85 | 3.15 | 21.00 | 20.23 |
| 1 1/4" | 2.7778 | 27.89 | 3.15 | 31.04 | 29.66 |
| 1 1/2" | 4.0000 | 40.16 | 3.15 | 43.31 | 41.19 |
| 2" | 7.1111 | 71.40 | 3.15 | 74.55 | 70.53 |
| 3" | 16.0000 | 160.64 | 3.15 | 163.79 | 154.35 |
| 4" | 28.4444 | 285.58 | 3.15 | 288.73 | 271.70 |
| 6" and over | 64.0000 | 642.56 | 3.15 | 645.71 | 606.99 |

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2013

** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 527,178

CITY OF WALKER, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

| | | | |
|--|---|----------|---------------------|
| SYSTEM REVENUE REQUIREMENTS | | \$ | 4,626,709 |
| | | | |
| REVENUES FROM CURRENT RATES | | | |
| MONTHLY METER CHARGE | | | |
| 7,139 meter equivalents | x | \$ 26.87 | x 12 = \$ 2,301,899 |
| MONTHLY BILLING CHARGE | | | |
| 5,530 meters | x | \$ 3.47 | x 12 = 230,269 |
| COMMODITY CHARGE | | | |
| 836,917 units (100 CF) | x | \$ 2.72 | = <u>2,276,414</u> |
| | | | <u>(4,808,582)</u> |
| REQUIRED REVENUE INCREASE (DECREASE) | | | <u>\$ (181,873)</u> |
| | | | |
| PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES | | | <u>-3.78%</u> |

CITY OF KENTWOOD, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

| | | | |
|--|------|------|--------------------|
| SYSTEM REVENUE REQUIREMENTS | | \$ | 3,473,719 |
| | | | |
| REVENUES FROM CURRENT RATES | | | |
| | | | |
| MONTHLY METER CHARGE | | | |
| 7,665 meter equivalents | x \$ | 3.55 | x 12 = \$ 326,529 |
| MONTHLY BILLING CHARGE | | | |
| 4,421 meters | x \$ | 3.47 | x 12 = 184,090 |
| COMMODITY CHARGE | | | |
| 1,331,807 units (100 CF) | x \$ | 2.35 | = <u>3,129,746</u> |
| | | | <u>(3,640,365)</u> |
| REQUIRED REVENUE INCREASE (DECREASE) | | \$ | <u>(166,646)</u> |
| | | | |
| PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES | | | <u>-4.58%</u> |

CASCADE TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

| | |
|-----------------------------|--------------|
| SYSTEM REVENUE REQUIREMENTS | \$ 1,970,056 |
| LESS: CASH CONTRIBUTION | - |
| SYSTEM REVENUE REQUIREMENTS | \$ 1,970,056 |

REVENUES FROM CURRENT RATES

| | | | |
|--|------------|--------|--------------|
| MONTHLY METER CHARGE | | | |
| 2,842 meter equivalents | x \$ 28.58 | x 12 = | \$ 974,692 |
| MONTHLY BILLING CHARGE | | | |
| 1,738 meters | x \$ 3.47 | x 12 = | 72,370 |
| COMMODITY CHARGE | | | |
| 390,724 units (100 CF) | x \$ 2.63 | = | 1,027,604 |
| | | | (2,074,666) |
| REQUIRED REVENUE INCREASE (DECREASE) | | | \$ (104,610) |
| PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES | | | -5.04% |

GRAND RAPIDS TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

| | | |
|-----------------------------|----|------------------|
| SYSTEM REVENUE REQUIREMENTS | \$ | 2,283,705 |
| LESS: CASH CONTRIBUTION | | (5,600) |
| SYSTEM REVENUE REQUIREMENTS | \$ | <u>2,278,105</u> |

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

4,371 meter equivalents x \$ 25.68 x 12 = \$ 1,346,967

MONTHLY BILLING CHARGE

3,573 meters x \$ 3.47 x 12 = 148,780

COMMODITY CHARGE

399,072 units (100 CF) x \$ 2.49 = 993,689 (2,489,436)

REQUIRED REVENUE INCREASE (DECREASE) \$ (211,331)

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES -8.49%

TALLMADGE TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

| | | |
|-------------------------------|----|---------|
| SYSTEM REVENUE REQUIREMENTS * | \$ | 254,001 |
| LESS: CASH CONTRIBUTION | | - |
| SYSTEM REVENUE REQUIREMENTS | \$ | 254,001 |

REVENUES FROM CURRENT RATES

| | | |
|--|------------|------------------|
| MONTHLY METER CHARGE | | |
| 216 meter equivalents | x \$ 29.35 | x 12 = \$ 76,075 |
| MONTHLY BILLING CHARGE | | |
| 128 meters | x \$ 3.47 | x 12 = 5,330 |
| COMMODITY CHARGE | | |
| 16,900 units (100 CF) | x \$ 10.32 | = <u>174,408</u> |
| | | (255,813) |
| REQUIRED REVENUE INCREASE (DECREASE) | | \$ (1,812) |
| PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES | | -0.71% |

* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 16,572

TALLMADGE TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 10.25 /100 CF *
 \$ 10.32 x 99.29%

MONTHLY SERVICE CHARGE:

| | | |
|--------------------------------|-------|------------|
| SYSTEM REVENUE REQUIREMENTS ** | | \$ 254,001 |
| NEW COMMODITY CHARGE | | |
| 16,900 x \$ 10.25 | | \$ 173,225 |
| NEW MONTHLY BILLING CHARGE | | |
| 128 x \$ 3.15 x 12 | 4,838 | (178,063) |
| | | \$ 75,938 |

MONTHLY METER CHARGE = $\frac{\$75,938}{216 \times 12} = \underline{\underline{\$ 29.30 \text{ MONTHLY}}}$

| METER SIZE | EQUIVALENT | MONTHLY SERVICE CHARGE | | | PRESENT |
|--------------|------------|------------------------|---------|----------|----------|
| | | METER | BILLING | TOTAL | |
| 3/4" or less | 1.0000 | \$ 29.30 | \$ 3.15 | \$ 32.45 | \$ 32.82 |
| 1" | 1.7778 | 52.09 | 3.15 | 55.24 | 55.65 |
| 1 1/4" | 2.7778 | 81.39 | 3.15 | 84.54 | 85.00 |
| 1 1/2" | 4.0000 | 117.20 | 3.15 | 120.35 | 120.87 |
| 2" | 7.1111 | 208.36 | 3.15 | 211.51 | 212.18 |
| 3" | 16.0000 | 468.80 | 3.15 | 471.95 | 473.07 |
| 4" | 28.4444 | 833.42 | 3.15 | 836.57 | 838.31 |
| 6" and over | 64.0000 | 1,875.20 | 3.15 | 1,878.35 | 1,881.87 |

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2013

** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 16,572

WRIGHT TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

| | | |
|-------------------------------|----|----------------|
| SYSTEM REVENUE REQUIREMENTS * | \$ | 247,401 |
| LESS: CASH CONTRIBUTION | | - |
| SYSTEM REVENUE REQUIREMENTS | \$ | <u>247,401</u> |

REVENUES FROM CURRENT RATES

REU CHARGE

333.187 meter equivalents x \$ 62.34 x 12 = \$ 249,251

MONTHLY METER CHARGE

333.187 meter equivalents x \$ - x 12 = -

MONTHLY BILLING CHARGE

230 meters x \$ - x 12 = -

COMMODITY CHARGE

17,917 units (100 CF) x \$ - = - (249,251)

REQUIRED REVENUE INCREASE (DECREASE) \$ (1,850)

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES -0.74%

* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 15,256

WRIGHT TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

MONTHLY REU CHARGE:

$$\frac{\text{SYSTEM REVENUE REQUIREMENTS **}}{\text{TOTAL REU'S * 12 MONTHS}} = \frac{\$247,401}{333.187 \times 12} = \$ \underline{\underline{61.88}} \quad \text{MONTHLY REU CHARGE *}$$

EXAMPLES OF APPROXIMATE MONTHLY CHARGE BY NUMBER OF REU:

| <u>NUMBER OF REU</u> | <u>AMOUNT</u> | <u>NUMBER OF REU</u> | <u>AMOUNT</u> | <u>NUMBER OF REU</u> | <u>AMOUNT</u> |
|----------------------|---------------|----------------------|---------------|----------------------|---------------|
| 1.0000 | \$ 61.88 | 7.5000 | \$ 464.10 | 19.0000 | \$ 1,175.72 |
| 1.5000 | 92.82 | 8.0000 | 495.04 | 20.0000 | 1,237.60 |
| 2.0000 | 123.76 | 8.5000 | 525.98 | 25.0000 | 1,547.00 |
| 2.5000 | 154.70 | 9.0000 | 556.92 | 30.0000 | 1,856.40 |
| 3.0000 | 185.64 | 9.5000 | 587.86 | 35.0000 | 2,165.80 |
| 3.5000 | 216.58 | 10.0000 | 618.80 | 40.0000 | 2,475.20 |
| 4.0000 | 247.52 | 11.0000 | 680.68 | 50.0000 | 3,094.00 |
| 4.4000 | 272.27 | 12.0000 | 742.56 | 60.0000 | 3,712.80 |
| 4.5000 | 278.46 | 13.0000 | 804.44 | 70.0000 | 4,331.60 |
| 5.0000 | 309.40 | 14.0000 | 866.32 | 80.0000 | 4,950.40 |
| 5.5000 | 340.34 | 15.0000 | 928.20 | 90.0000 | 5,569.20 |
| 6.0000 | 371.28 | 16.0000 | 990.08 | 100.0000 | 6,188.00 |
| 6.5000 | 402.22 | 17.0000 | 1,051.96 | 150.0000 | 9,282.00 |
| 7.0000 | 433.16 | 18.0000 | 1,113.84 | 200.0000 | 12,376.00 |

* NEW RATES EFFECTIVE ON JANUARY 1, 2013

** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 15,256

CITY OF EAST GRAND RAPIDS, MICHIGAN

**SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26**

| | | | |
|--|---|----|-----------------|
| INTEGRATED SYSTEM REVENUE REQUIREMENTS | | \$ | 614,456 |
| COMMODITY CHARGE | | | |
| 440.215 units | x | \$ | 1,534.00 |
| | | | 675,290 |
| | | | <hr/> |
| REQUIRED COMMODITY REVENUE INCREASE (DECREASE) | | \$ | <u>(60,834)</u> |
| | | | |
| NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS | | \$ | 19,335 |
| MONTHLY SERVICE CHARGE | | | |
| \$1,679 | x | | 12 MONTHS |
| | | | 20,148 |
| | | | <hr/> |
| REQUIRED SERVICE REVENUE INCREASE (DECREASE) | | \$ | <u>(813)</u> |
| | | | |
| PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES | | | <u>-8.86%</u> |

CITY OF EAST GRAND RAPIDS, MICHIGAN

**SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

| | |
|-----------------------------|------------------|
| SYSTEM REVENUE REQUIREMENTS | \$ 633,791 |
| NEW COMMODITY CHARGE * | |
| 440.215 x \$ 1,396.00 = | (614,540) |
| | <hr/> |
| | <u>\$ 19,251</u> |

MONTHLY SERVICE CHARGE * = \$ 19,251 / 12 = \$1,604

* NEW RATES EFFECTIVE ON JANUARY 1, 2013

ADA TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

| | | |
|--|--|---------------------------|
| INTEGRATED SYSTEM REVENUE REQUIREMENTS | | \$ 548,865 |
| COMMODITY CHARGE | | |
| 311.384 units x \$ 1,918.00 | | 597,235 |
| | | _____ |
| REQUIRED COMMODITY REVENUE INCREASE (DECREASE) | | <u><u>\$ (48,370)</u></u> |
| | | |
| NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS | | \$ 551,050 |
| MONTHLY SERVICE CHARGE | | |
| \$49,052 x 12 MONTHS | | 588,624 |
| | | _____ |
| REQUIRED SERVICE REVENUE INCREASE (DECREASE) | | <u><u>\$ (37,574)</u></u> |
| | | |
| PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES | | <u><u>-7.25%</u></u> |

ADA TOWNSHIP

**SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

SYSTEM REVENUE REQUIREMENTS \$ 1,099,915

NEW COMMODITY CHARGE *

311.384 x \$ 1,763.00 =

(548,970)

\$ 550,945

MONTHLY SERVICE CHARGE * = \$550,945 / 12 = \$45,912

* NEW RATES EFFECTIVE ON JANUARY 1, 2013

GAINES TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

| | | |
|---|----|-----------------------|
| INTEGRATED SYSTEM REVENUE REQUIREMENTS | \$ | 146,820 |
| COMMODITY CHARGE | | |
| 112.093 units x \$ 1,384.00 | | 155,137 |
| | | 155,137 |
| REQUIRED COMMODITY REVENUE INCREASE (DECREASE) | \$ | <u><u>(8,317)</u></u> |
| | | |
| NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS | \$ | 18,914 |
| MONTHLY SERVICE CHARGE | | |
| \$1,468 x 12 MONTHS | | 17,616 |
| | | 17,616 |
| REQUIRED SERVICE REVENUE INCREASE (DECREASE) | \$ | <u><u>1,298</u></u> |
| | | |
| PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES | | <u><u>-4.06%</u></u> |

GAINES TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

| | |
|-----------------------------|------------------|
| SYSTEM REVENUE REQUIREMENTS | \$ 165,734 |
| NEW COMMODITY CHARGE * | |
| 112.093 x \$ 1,310.00 = | (146,842) |
| | <hr/> |
| | <u>\$ 18,892</u> |

MONTHLY SERVICE CHARGE * = \$ 18,892 / 12 = \$1,574

* NEW RATES EFFECTIVE ON JANUARY 1, 2013

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 21, 2012

TO: Linda Wagenmaker
Utility Financial Officer

FROM:  Rick DeVries, P.E.
Assistant City Engineer

SUBJECT: SEWER RATE STUDY - TASK NO. 28 AND 29

Enclosed are the Front Foot Rates for Sanitary Sewer (Task 28) and the costs for Sanitary Sewer Laterals (Task 29), for the Fiscal Year 2012.

RDV

Enclosures

cc: Jack Stegehuis
Mark Garvey

SEWER RATE STUDY
 SEWAGE DISPOSAL SYSTEM FUND
 RE-EVALUATE FRONT FOOT CHARGES
 TASK NO. 28

The City Engineer's Office has reviewed current construction costs for sewer facilities and recommends the following front foot assessment rates:

| | <u>2012</u> | <u>2013</u> | <u>% Increase</u> |
|---|-------------|-------------|-----------------------|
| Domestic Sewer User | \$ 62.00 | \$ 70.00 | 12.90% |
| Commercial - Industrial User (Sewer over 8 in. diameter) | \$ 88.00 | \$ 104.00 | 18.18% |

The rates are based on an average of prices quoted in bid proposals which have been received by the City Engineer's Office during the period July, 2011 through June, 2012. Calculations of the rates are on file in the City Engineer's Office.

SEWER RATE STUDY
 SEWAGE DISPOSAL SYSTEM FUND
 EVALUATE SEWER LATERAL CHARGES
 TASK NO. 29

The City Engineer's Office has evaluated the cost for a six inch (6") sanitary sewer lateral and recommends that sewer lateral costs should be as follows:

| <u>R.O.W. WIDTH</u> | <u>COST FOR 8-INCH LATERAL</u> | | |
|---------------------|--------------------------------|-------------|-------------------|
| | <u>2012</u> | <u>2013</u> | <u>% Increase</u> |
| 50 ft. | \$1,800 | \$2,150 | 19.44% |
| 60 ft. | \$2,150 | \$2,550 | 18.60% |
| 66 ft. | \$2,300 | \$2,800 | 21.74% |
| 80 ft. | \$2,750 | \$3,350 | 21.82% |
| 100 ft. | \$3,400 | \$4,100 | 20.59% |

MEMORANDUM

CITY OF GRAND RAPIDS

Date: October 9, 2012

To: Linda Wagenmaker
Utility Financial Officer

From: Michael Lunn *Mike Lunn*
Acting Environmental Services Manager

Subject: Sewer Rate Study – Task #30 - Surcharges

The Wastewater Treatment plant has a limited amount of capacity which is typically allocated to industries having discharges exceeding ordinance limits. These industries are charged for utilizing this remaining plant capacity in four categories of conventional pollutants. These pollutants are: 1) Biochemical Oxygen Demand (BOD); 2) Total Suspended Solids (TSS); 3) Total Phosphorus (Phos); 4) and Ammonia Nitrogen (NH₃). This benefits the industries in that it reduces their pretreatment requirements and benefits the system by utilizing available system capacity.

As shown on the attached sheets, the surcharge methodology includes evaluating various cost centers at the Wastewater Treatment plant and allocating costs based on unit process operating cost. Cumulative costs can then be allocated to the four conventional pollutant categories identified above to determine appropriate surcharge rates.

ML/LW

City of Grand Rapids Michigan
Sewage Disposal System Fund
Evaluation of Wastewater Surcharges for Industrial Customers- BOD, TSS, Phos & NH3
TASK NO. 30- Part 1

| Description | Wastewater Surcharges | | | | | | | |
|--|-------------------------|---------------------|---------------------|---------------------|---------------------|-------------------|-------------------|----------------------|
| | Rate Study Year 2012 | Volume | BOD | TSS | Phos | NH3 | Industrial | Other |
| Operation & Maintenance (See Part 2) | \$ 23,774,088 | \$ 4,036,414 | \$ 3,504,797 | \$ 4,150,521 | \$ 935,169 | \$ 427,347 | \$ 627,745 | \$ 10,092,095 |
| Depreciation (See Part 3) | 5,839,562 | 702,936 | 610,363 | 722,805 | 162,866 | 74,431 | - | 3,566,161 |
| Return on System Investment (See Part 3) | 11,232,274 | 881,615 | 765,512 | 906,536 | 204,266 | 93,351 | - | 8,380,994 |
| Total | \$ 40,845,924 | \$ 5,620,965 | \$ 4,880,672 | \$ 5,779,862 | \$ 1,302,301 | \$ 595,129 | \$ 627,745 | \$ 22,039,250 |

Recommended Surcharge Rate - 2013 **\$ 0.193** **\$ 0.277** **\$ 2.158** **\$ 0.294**

| | | | | |
|---|-------------------|-----------------|-----------------|-------------------|
| Actual Surcharge Rate - 2012 | \$ 0.200 | \$ 0.254 | \$ 1.042 | \$ 0.330 |
| Change in Surcharge Rate - Amount- 2012 to 2013 | \$ (0.007) | \$ 0.023 | \$ 1.116 | \$ (0.036) |
| Change in Surcharge Rate - Percent- 2012 to 2013 | -3.50% | 9.06% | 107.10% | -10.91% |

| | | | | |
|--|---------------|---------------|--------------|--------------|
| Loadings - lb/day (Per Lunn email of 09/07/2012) * | 69,395 | 57,190 | 1,653 | 5,545 |
| Loadings - lb/year | 25,329,175 | 20,874,350 | 603,345 | 2,023,925 |

* Loadings are the average of the last three years.

Task No. 30 - Part 2

City of Grand Rapids Michigan
 Sewage Disposal System Fund
 Evaluation of High Strength Surcharges- BOD, TSS, Phos & NH3
 Allocation of Operation & Maintenance Expense & Determination of WWTP Allocation Factors

| Wastewater Treatment Plant | Primary Allocation | | Component Allocation (3) | | | | | | | | | | | |
|--------------------------------|----------------------|------------------------|--------------------------|----------------|-----------------------|---------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|---------------------|----------------------|
| | Base Year- 2012 | Calendar Year- 2013 | See Task 30 - Part 4 | | Wastewater Surcharges | | | | | | | | | |
| | | | Allocation (1) | Allocation (2) | Volume | BOD | TSS | Phos | NH3 | Industrial | Other | | | |
| Pre-Treatment | \$ 1,165,322 | \$ 1,161,825 | WWTP | (1) | \$ 1,161,825 | - | - | - | - | - | - | - | - | - |
| Primary Treatment | 1,800,807 | 1,795,402 | WWTP | (2) | - | 1,077,241 | - | 179,540 | - | - | - | - | - | - |
| Secondary Treatment | 2,893,846 | 2,885,161 | WWTP | (3) | 721,291 | 432,774 | 432,774 | 144,258 | - | - | - | - | - | - |
| Disinfection/Dechlorination | 1,240,428 | 1,236,705 | WWTP | (4) | 1,236,705 | - | - | - | - | - | - | - | - | - |
| Phosphorus Removal | 800,093 | 797,692 | WWTP | (5) | 398,846 | - | 398,846 | - | - | - | - | - | - | - |
| Residue Handling/Disposal | 5,193,048 | 5,177,463 | WWTP | (6) | 517,747 | 2,640,506 | 103,549 | 103,549 | - | - | - | - | - | - |
| | <u>\$ 13,093,544</u> | <u>\$ 13,054,248</u> | | | <u>\$ 4,036,414</u> | <u>\$ 4,150,521</u> | <u>\$ 935,169</u> | <u>\$ 427,347</u> | <u>\$ -</u> | <u>\$ -</u> | <u>\$ -</u> | <u>\$ -</u> | <u>\$ -</u> | <u>\$ -</u> |
| Lift Stations | | | | | | | | | | | | | | |
| Interceptor | | 286,353 | Collection | (11) | - | - | - | - | - | - | - | - | - | 286,353 |
| Trunk | | 170,507 | Collection | (11) | - | - | - | - | - | - | - | - | - | 170,507 |
| Local Collector | | 519,575 | Collection | (11) | - | - | - | - | - | - | - | - | - | 519,575 |
| Sewer Lines | | | | | | | | | | | | | | |
| Interceptor | | 283,527 | Collection | (11) | - | - | - | - | - | - | - | - | - | 283,527 |
| Trunk | | 603,025 | Collection | (11) | - | - | - | - | - | - | - | - | - | 603,025 |
| Local Collector | | 4,418,966 | Collection | (11) | - | - | - | - | - | - | - | - | - | 4,418,966 |
| Bulk Meter Stations | | 12,427 | Collection | (7) | - | - | - | - | - | - | - | - | - | 12,427 |
| Customer Accounting | | 2,793,080 | Admin | (8) | - | - | - | - | - | - | - | - | - | 2,793,080 |
| Industrial Pretreatment | | 627,745 | Industry | (9) | - | - | - | - | - | - | - | 627,745 | - | - |
| Subtotal | | <u>\$ 22,769,453</u> | | | <u>\$ 4,036,414</u> | <u>\$ 4,150,521</u> | <u>\$ 935,169</u> | <u>\$ 427,347</u> | <u>\$ 627,745</u> | <u>\$ 627,745</u> | <u>\$ 627,745</u> | <u>\$ 9,087,460</u> | <u>\$ 1,004,635</u> | <u>\$ 10,092,095</u> |
| Admin | | 1,004,635 | Admin | (10) | - | - | - | - | - | - | - | - | - | - |
| Total | | <u>\$ 23,774,088</u> | | | <u>\$ 4,036,414</u> | <u>\$ 4,150,521</u> | <u>\$ 935,169</u> | <u>\$ 427,347</u> | <u>\$ 627,745</u> | <u>\$ 627,745</u> | <u>\$ 627,745</u> | <u>\$ 9,087,460</u> | <u>\$ 1,004,635</u> | <u>\$ 10,092,095</u> |
| WWTP Allocation Factors | | 100.000% | | | 30.920% | 31.794% | 7.164% | 3.274% | 0.000% | 0.000% | 0.000% | 0.000% | 0.000% | 0.000% |

(1) Based on September 7, 2012 update from M Lunn regarding 2012 WWTP Surcharge Rate Evaluation.
 (2) Primary Allocation of Current Year for Calendar 2013, based on 2012 Base Year.
 (3) Refer to Task 30- Part 4 as noted.

Task No. 30 - Part 3

City of Grand Rapids Michigan
 Sewage Disposal System Fund
 Evaluation of High Strength Surcharges- BOD, TSS, Phos & NH3
 Allocation of Depreciation Expense & Return on System Investment

Depreciation Expense- Task 24

| Description | Amount | Volume | Wastewater Surcharges | | | | | Industrial | Other |
|-----------------------|---------------------|-------------------|-----------------------|-------------------|-------------------|------------------|-------------|---------------------|-------|
| | | | BOD | TSS | Phos | NH3 | | | |
| Integrated System (1) | \$ 2,273,401 | \$ 702,936 | \$ 610,363 | \$ 722,805 | \$ 162,866 | \$ 74,431 | \$ - | \$ - | |
| Other | 3,566,161 | - | - | - | - | - | - | 3,566,161 | |
| Total | \$ 5,839,562 | \$ 702,936 | \$ 610,363 | \$ 722,805 | \$ 162,866 | \$ 74,431 | \$ - | \$ 3,566,161 | |

Return on System Investment- Task 21

| Description | Amount | Volume | Wastewater Surcharges | | | | | Industrial | Other |
|-----------------------|----------------------|-------------------|-----------------------|-------------------|-------------------|------------------|-------------|---------------------|-------|
| | | | BOD | TSS | Phos | NH3 | | | |
| Integrated System (1) | \$ 2,851,280 | \$ 881,615 | \$ 765,512 | \$ 906,536 | \$ 204,266 | \$ 93,351 | \$ - | \$ - | |
| Other | 8,380,994 | - | - | - | - | - | - | 8,380,994 | |
| Total | \$ 11,232,274 | \$ 881,615 | \$ 765,512 | \$ 906,536 | \$ 204,266 | \$ 93,351 | \$ - | \$ 8,380,994 | |

(1) Allocated on WWTP Allocation Factors *

* Refer to Task No. 30 - Part 2

30.9200% 26.8480% 31.7940% 7.1640% 3.2740%

Task No. 30 - Part 4

City of Grand Rapids Michigan
 Sewage Disposal System Fund
 Evaluation of High Strength Surcharges- BOD, TSS, Phos & NH3
 Functional Cost Allocation Factors

| Line No. Ref. | Cost Function | Total % | Allocation Basis | Volume % | Wastewater Surcharges | | | | | Other % |
|---------------|-----------------------------|----------|------------------|----------|-----------------------|---------|---------|---------|--------------|----------|
| | | | | | BOD % | TSS % | Phos % | NH3 % | Industrial % | |
| (1) | Pre-Treatment | 100.000% | WWTP | 100.000% | 0.000% | 0.000% | 0.000% | 0.000% | 0.000% | 0.000% |
| (2) | Primary Treatment | 100.000% | WWTP | 0.000% | 30.000% | 60.000% | 0.000% | 10.000% | 0.000% | 0.000% |
| (3) | Secondary Treatment | 100.000% | WWTP | 25.000% | 40.000% | 15.000% | 15.000% | 5.000% | 0.000% | 0.000% |
| (4) | Disinfection/Dechlorination | 100.000% | WWTP | 100.000% | 0.000% | 0.000% | 0.000% | 0.000% | 0.000% | 0.000% |
| (5) | Phosphorus Removal | 100.000% | WWTP | 50.000% | 0.000% | 0.000% | 50.000% | 0.000% | 0.000% | 0.000% |
| (6) | Residue Handling/Disposal | 100.000% | WWTP | 10.000% | 35.000% | 51.000% | 2.000% | 2.000% | 0.000% | 0.000% |
| (7) | Bulk Metering Stations | 100.000% | Collection | 0.000% | 0.000% | 0.000% | 0.000% | 0.000% | 0.000% | 100.000% |
| (8) | Customer Accounting | 100.000% | Admin | 0.000% | 0.000% | 0.000% | 0.000% | 0.000% | 0.000% | 100.000% |
| (9) | Industrial Pretreatment | 100.000% | Industry | 0.000% | 0.000% | 0.000% | 0.000% | 0.000% | 100.000% | 0.000% |
| (10) | Admin | 100.000% | Admin | 0.000% | 0.000% | 0.000% | 0.000% | 0.000% | 0.000% | 100.000% |
| (11) | Collection System | 100.000% | Collection | 0.000% | 0.000% | 0.000% | 0.000% | 0.000% | 0.000% | 100.000% |

(a) With the exception of phosphorus removal, foregoing based on "Final Allocation Table" in August 1, 2003 memo from Randall Fisher & Mike Lunn to Eric DeLong regarding 2001 Surcharge Rate Evaluation. Evaluation by WWTP staff for 2012 RS Review concluded percentages for phosphorus removal shall remain allocated 50/50 to the categories above, as initially recommended in the 2006 RS Review, to recommend 2013 rate adjustments.

CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
IPP PERMIT FEE STRUCTURE – TASK NO. 31

The City of Grand Rapids Industrial Pretreatment Program (IPP) Permit fee structure is based on the actual cost of administration and implementation. Administration includes all the costs associated with document generation and handling as well as one annual site visit. The implementation costs include all sampling and associated laboratory analyses required by the permit. These two fees are identified on permit documents as a Permit Fee and an Analytical Fee.

Permit Fee: This fee is based on the actual costs associated with administering the permit program, including time spent on permit required inspections, clerical requirements, data handling requirements and all trunkline monitoring. This fee will be specific to the costs associated with the permit category.

Analytical Fee: This fee is based on actual costs associated with each permit. The costs, and an explanation of how they are determined, are outlined in an accompanying attachment. Labor time, including sampling and sample delivery to our laboratory, was derived from experience:

| | |
|--------------------|----------------|
| Composite samples: | 1.5 hours each |
| Grab samples: | 1.0 hours each |

Four examples of analytical fees are attached herewith.

City of Grand Rapids
Cost of Services Provided by IPP

Last Update: 10/10/2012

Permit Fee: \$ 400.00

IPP Costs:

Labor: \$ 57.57 per hour
Vehicle: \$ 3.78 per hour
Sampler: \$ 35.00 per day

IPP Accounting:

Composite Labor: 1.5 hours per sample
Grab Sample Labor: 1.0 hours per sample

Laboratory Costs:

| | | | |
|---------------------------------|----|--------|-----|
| metals | \$ | 7.00 | ea. |
| TSS | \$ | 7.00 | ea. |
| BOD | \$ | 14.00 | ea. |
| total phosphate | \$ | 13.50 | ea. |
| pH | \$ | 5.00 | ea. |
| EPA 624 | \$ | 60.00 | ea. |
| EPA 625 | \$ | 115.00 | ea. |
| BTEX/MTBE | \$ | 35.00 | ea. |
| sulfide | \$ | 12.00 | ea. |
| oil & grease | \$ | 25.00 | ea. |
| total cyanide | \$ | 15.00 | ea. |
| hex chrome | \$ | 10.00 | ea. |
| fecal coliform | \$ | 25.00 | ea. |
| Mercury (EPA 245.1 or 245.2) | \$ | 15.00 | ea. |
| Ammonia as (NH ₃ -N) | \$ | 9.00 | ea. |

Explanation of Costs:

Labor: Labor is the hourly pay rate of a Water Pollution Control Inspector (classification 21A @ "F" step = to \$28,7842 x 2) per the latest agreement between the City of Grand Rapids and the Grand Rapids Employees Independent Union plus 100% as specified in section 2.81(1) of the City of Grand Rapids Sewage Disposal System Ordinance. If personnel in a different classification are required, time will be billed based on that classification's pay scale plus 100%.

Vehicle: Hourly rate is the actual cost charged to City departments for vehicle use plus 25% for overhead.

Sampler: Sampler costs are derived from an average of the lowest quoted prices obtained from private suppliers in the greater Grand Rapids Area.

Analysis: Laboratory costs are based on the most recently approved competitive bid obtained for contract work provided to the Grand Rapids Wastewater Treatment Plant's Laboratory.

Permit No: Example 1

Company: Typical Metal Finisher
Facility Address:
City, State, Zip

Permit Fee: \$ 400.00
Analytical Fee: \$ 784.10
Amount Due: \$ 1,184.10

Composite Samples: 4

IPP Requirements: man hours = 6.0 x \$ 57.57 = \$ 345.42
sampler days = 4.0 x \$ 35.00 = \$ 140.00
vehicle hours = 6.0 x \$ 3.78 = \$ 22.68

Total IPP Composite Costs: \$ 508.10

Laboratory Analysis: (each composite)
metals 7 x \$ 7.00 = \$ 49.00
TSS x \$ 7.00 = \$ -
BOD x \$ 14.00 = \$ -
total phosphorus x \$ 13.50 = \$ -
pH x \$ 5.00 = \$ -
EPA 625 x \$ 115.00 = \$ -
sulfide x \$ 12.00 = \$ -
oil & grease x \$ 25.00 = \$ -
hex chrome x \$ 10.00 = \$ -
fecal coliform x \$ 25.00 = \$ -
other x = \$ -

total per composite: \$ 49.00

Total Laboratory Composite Costs: \$ 196.00

Total Composite Sample Costs: \$ 704.10

Grab Samples: 4

IPP Requirements: man hours = 0.0 x \$ 57.57 = \$ -
vehicle hours = 0.0 x \$ 3.78 = \$ -

Total IPP Grab Costs: \$ -

Laboratory Analysis: (each grab)
metals x \$ 7.00 = \$ -
TSS x \$ 7.00 = \$ -
BOD x \$ 14.00 = \$ -
total phosphorus x \$ 13.50 = \$ -
pH 1 x \$ 5.00 = \$ 5.00
EPA 624 x \$ 60.00 = \$ -
EPA 625 x \$ 115.00 = \$ -
BTEX/MTBE x \$ 35.00 = \$ -
sulfide x \$ 12.00 = \$ -
oil & grease x \$ 25.00 = \$ -
total cyanide 1 x \$ 15.00 = \$ 15.00
hex chrome x \$ 10.00 = \$ -
fecal coliform x \$ 25.00 = \$ -
other x = \$ -

total per grab: \$ 20.00

Total Laboratory Grab Costs: \$ 80.00

Total Grab Sample Costs: \$ 80.00

Total Analytical Permit Costs: \$ 784.10

Permit No: Example 2

Company: Litho Process
Facility Address:
City, State, Zip

Permit Fee: \$ 400.00
Analytical Fee: \$ 66.35
Amount Due: \$ 466.35

Composite Samples:

IPP Requirements: man hours = 0.0 x \$ 57.57 = \$ -
sampler days = 0.0 x \$ 35.00 = \$ -
vehicle hours = 0.0 x \$ 3.78 = \$ -

Total IPP Composite Costs: \$ -

Laboratory Analysis: metals x \$ 7.00 = \$ -
(each composite) TSS x \$ 7.00 = \$ -
BOD x \$ 14.00 = \$ -
total phosphorus x \$ 13.50 = \$ -
pH x \$ 5.00 = \$ -
EPA 625 x \$ 115.00 = \$ -
sulfide x \$ 12.00 = \$ -
oil & grease x \$ 25.00 = \$ -
hex chrome x \$ 10.00 = \$ -
fecal coliform x \$ 25.00 = \$ -
other x = \$ -

total per composite: \$ -

Total Laboratory Composite Costs: \$ -

Total Composite Sample Costs: \$ -

Grab Samples: 1

IPP Requirements: man hours = 1.0 x \$ 57.57 = \$ 57.57
vehicle hours = 1.0 x \$ 3.78 = \$ 3.78

Total IPP Grab Costs: \$ 61.35

Laboratory Analysis: metals x \$ 7.00 = \$ -
(each grab) TSS x \$ 7.00 = \$ -
BOD x \$ 14.00 = \$ -
total phosphorus x \$ 13.50 = \$ -
pH 1 x \$ 5.00 = \$ 5.00
EPA 624 x \$ 60.00 = \$ -
EPA 625 x \$ 115.00 = \$ -
BTEX/MTBE x \$ 35.00 = \$ -
sulfide x \$ 12.00 = \$ -
oil & grease x \$ 25.00 = \$ -
total cyanide x \$ 15.00 = \$ -
hex chrome x \$ 10.00 = \$ -
fecal coliform x \$ 25.00 = \$ -
other x = \$ -

total per grab: \$ 5.00

Total Laboratory Grab Costs: \$ 5.00

Total Grab Sample Costs: \$ 66.35

Total Analytical Permit Costs: \$ 66.35

Permit No: Example 3

Company: Stripping Process
Facility Address:
City, State, Zip

Permit Fee: \$ 400.00
Analytical Fee: \$ 101.35
Amount Due: \$ 501.35

Composite Samples:

IPP Requirements: man hours = 0.0 x \$ 57.57 = \$ -
sampler days = 0.0 x \$ 35.00 = \$ -
vehicle hours = 0.0 x \$ 3.78 = \$ -

Total IPP Composite Costs: \$ -

Laboratory Analysis: (each composite)
metals x \$ 7.00 = \$ -
TSS x \$ 7.00 = \$ -
BOD x \$ 14.00 = \$ -
total phosphorus x \$ 13.50 = \$ -
pH x \$ 5.00 = \$ -
EPA 625 x \$ 115.00 = \$ -
sulfide x \$ 12.00 = \$ -
oil & grease x \$ 25.00 = \$ -
hex chrome x \$ 10.00 = \$ -
fecal coliform x \$ 25.00 = \$ -
other x = \$ -

total per composite: \$ -

Total Laboratory Composite Costs: \$ -

Total Composite Sample Costs: \$ -

Grab Samples: 1

IPP Requirements: man hours = 1.0 x \$ 57.57 = \$ 57.57
vehicle hours = 1.0 x \$ 3.78 = \$ 3.78

Total IPP Grab Costs: \$ 61.35

Laboratory Analysis: (each grab)
metals 5 x \$ 7.00 = \$ 35.00
TSS x \$ 7.00 = \$ -
BOD x \$ 14.00 = \$ -
total phosphorus x \$ 13.50 = \$ -
pH 1 x \$ 5.00 = \$ 5.00
EPA 624 x \$ 60.00 = \$ -
EPA 625 x \$ 115.00 = \$ -
BTEX/MTBE x \$ 35.00 = \$ -
sulfide x \$ 12.00 = \$ -
oil & grease x \$ 25.00 = \$ -
total cyanide x \$ 15.00 = \$ -
hex chrome x \$ 10.00 = \$ -
fecal coliform x \$ 25.00 = \$ -
other x = \$ -

total per grab: \$ 40.00

Total Laboratory Grab Costs: \$ 40.00

Total Grab Sample Costs: \$ 101.35

Total Analytical Permit Costs: \$ 101.35

Permit No: Example 4

Company: Silver User - photoprocessor
Facility Address:
City, State, Zip

Permit Fee: \$ 400.00
Analytical Fee: \$ 205.05
Amount Due: \$ 605.05

Composite Samples:

IPP Requirements: man hours = 0.0 x \$ 57.57 = \$ -
sampler days = 0.0 x \$ 35.00 = \$ -
vehicle hours = 0.0 x \$ 3.78 = \$ -

Total IPP Composite Costs: \$ -

Laboratory Analysis: (each composite)
metals x \$ 7.00 = \$ -
TSS x \$ 7.00 = \$ -
BOD x \$ 14.00 = \$ -
total phosphorus x \$ 13.50 = \$ -
pH x \$ 5.00 = \$ -
EPA 625 x \$ 115.00 = \$ -
sulfide x \$ 12.00 = \$ -
oil & grease x \$ 25.00 = \$ -
hex chrome x \$ 10.00 = \$ -
fecal coliform x \$ 25.00 = \$ -
other x = \$ -

total per composite: \$ -

Total Laboratory Composite Costs: \$ -

Total Composite Sample Costs: \$ -

Grab Samples: 3

IPP Requirements: man hours = 3.0 x \$ 57.57 = \$ 172.71
vehicle hours = 3.0 x \$ 3.78 = \$ 11.34

Total IPP Grab Costs: \$ 184.05

Laboratory Analysis: (each grab)
metals 1 x \$ 7.00 = \$ 7.00
TSS x \$ 7.00 = \$ -
BOD x \$ 14.00 = \$ -
total phosphorus x \$ 13.50 = \$ -
pH x \$ 5.00 = \$ -
EPA 624 x \$ 60.00 = \$ -
EPA 625 x \$ 115.00 = \$ -
BTEX/MTBE x \$ 35.00 = \$ -
sulfide x \$ 12.00 = \$ -
oil & grease x \$ 25.00 = \$ -
total cyanide x \$ 15.00 = \$ -
hex chrome x \$ 10.00 = \$ -
fecal coliform x \$ 25.00 = \$ -
other x = \$ -

total per grab: \$ 7.00

Total Laboratory Grab Costs: \$ 21.00

Total Grab Sample Costs: \$ 205.05

Total Analytical Permit Costs: \$ 205.05

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 18, 2012

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Charles R. Schroeder, PE
Assistant Environmental Services Manager

SUBJECT: **2012 SEWER RATE STUDY - TASK #32 – SANITARY SEWER
OVERSIZING RATES**

Sanitary Sewer Oversizing rates are established as follows:

| <u>Description</u> | <u>Amount</u> <u>(Per lineal foot)</u> |
|--------------------|---|
| 8" to 10" | \$ 6.47 |
| 8" to 12" | \$ 11.56 |
| 8" to 15" | \$ 21.18 |
| 10" to 12" | \$ 5.09 |
| 10" to 15" | \$ 14.71 |
| 12" to 15" | \$ 9.62 |

These rates have been determined in accordance with the Sewage Disposal System Rules and Regulations and are approved for use from January 1, 2013 through December 31, 2013. Background information and calculations to establish these rates are on file in the Utility Engineering Distribution and Collection Division Office located at 1900 Oak Industrial Drive, NE. If you have any questions regarding this matter, please call me at extension 3690 (456-3690)

CRS/SS

srs\stask32 2012

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 33**

SERVICE AREA MAPS AND SERVICE AREA LAND MASS SUMMARIES

The following summarizes Utility Service Districts (USD) land mass square miles for UAB partner communities, per information on file as of October 08, 2012:

| UAB Partners | Sq. Miles of USD by CC | Percent |
|-----------------------|---------------------------|----------|
| Grand Rapids | 45.36 | 38.500% |
| Walker | 20.17 | 17.119% |
| Kentwood | 14.28 | 12.120% |
| Cascade | 16.21 | 13.758% |
| Grand Rapids Township | 7.95 | 6.748% |
| Tallmadge Township | 2.44 | 2.071% |
| Wright Township | 0.89 | 0.755% |
| East Grand Rapids | 3.37 | 2.860% |
| Ada | 7.15 | 6.069% |
| Total | 117.82 | 100.000% |

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 34**

INDIVIDUAL CIRCUIT BREAKER AND CITY & CUSTOMER COMMUNITY CIRCUIT BREAKER

The Third Amendment to the Water and Sanitary Sewer Agreements stipulates penalty fees shall be used to fund the circuit breaker provisions noted above. The following summarizes those values:

| <u>Description</u> | <u>AMOUNT</u> | <u>PERCENT</u> |
|---|-------------------|----------------|
| Individual Circuit Breaker | \$ 79,858 | 12.50% |
| City & Customer Community Circuit Breaker | 559,006 | 87.50% |
| Total | <u>\$ 638,864</u> | <u>100.00%</u> |

The following summarizes the amount, if any, of the City & Customer Community Circuit Breaker to be applied as a revenue credit in next year's Rate Study:

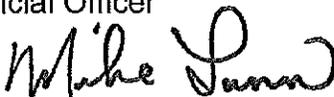
| <u>Description</u> | <u>AMOUNT</u> | <u>PERCENT</u> |
|---|---------------|----------------|
| City & Customer Community Circuit Breaker Amount- Above | \$ 559,006 | 100.00% |
| Less: Amount Applied in Current Rate Study | (559,006) | -100.00% |
| Total Revenue Credit- Next Year's Rate Study | <u>\$ -</u> | <u>0.00%</u> |

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 2, 2012

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Mike Lunn 
Environmental Services Manager

SUBJECT: 2012 SEWER RATE STUDY - TASK #35- FDD Opt Out Charge

The Footing Drain Disconnection Ordinance (FDD) Authorizes the City Manager or his designee to identify FDD Project Areas within the City of Grand Rapids based on the severity of System groundwater and stormwater inflow surcharge problems. Once designated, the ordinance requires homeowners within the FDD Project Areas to disconnect their footing drains from the City's sanitary sewer system at City expense.

The additional charge for non-compliance with the footing drain disconnection ordinance has been calculated based on current information and recommended to be \$73.20 which is the actual cost to the system for the additional flow.

ML/SS

srs\stask35 2012

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWER SUPPLY SYSTEM FUND
TASK NO. 35**

DETERMINE FOOTING DRAIN OPT OUT SEWER RATE.

1. Avoided Claims for Sewage Backups

Annual claim costs

| | | |
|-------------------------------|------------------------------|---|
| Annual Backup Claims | \$150,000 /year ¹ | Estimated annual claims cost |
| System Retail Customers | 73,960 | Total retail customers ² |
| Grand Rapids Retail Customers | <u>58,340</u> | Total retail customers in Grand Rapids ² |
| Annual Cost | <u>\$2.03 /yr/cust.</u> | Annual cost for claims in Grand Rapids |

2. Avoided Costs to treat the additional flow generated by footing drains

Flow Estimate

| | | |
|-------|------------------------|-------------------------|
| DWF | 43,800 gal/year | Average generation rate |
| WWF | <u>21,796</u> gal/year | Average generation rate |
| Total | 65,596 gal/year | Average per house |

Unit Conveyance & Treatment Costs

| | | |
|-------------------------|--------------------------|-----------------------------------|
| Annual average FD flows | 0.065596 MG/yr | Average per house |
| Conveyance | \$421 /MG | Unit conveyance cost ³ |
| Treatment | <u>\$875</u> /MG | Unit treatment cost ³ |
| Conveyance & Treatment | \$1,296 /MG | |
| Annual Cost | <u>\$85.01 /yr/cust.</u> | Annual cost for a connected FD |

3. Actual MDNRE penalties for SSO's

Penalties for SSQ

| | | |
|------------------------|-------------------------|---------------------------|
| Grand Rapids Customers | 58,340 | |
| Penalties | \$25,000 | Per occurrence |
| Potential SSOs | 0 /year | Occurrences |
| Annual cost | <u>0</u> \$/year | |
| | <u>\$0.00 /yr/cust.</u> | Annual cost for penalties |

4. Avoided Transport & Future Projects

Cost Per FDD

| | | |
|-----------------------------|-------------------------------------|--|
| Pilot Project Costs | 1,788 \$/yr/FDD cust. | Annual cost of FDD work ⁶ |
| FDD Equivalents | <u>25,598</u> FDD | FDDs needed to correct backup problems |
| Total Cost | \$45,769,224 | Annualized Conveyance and Storage Costs |
| Grand Rapids Customers | <u>58,340</u> | Customers in Grand Rapids |
| Cost Per single Family Home | <u>\$784.53</u> \$/home/not removed | Annualized cost for Grand Rapids Customers |

5. Avoided Administrative (Engineering & Legal) Costs

Associated with Administration of claims, construction

| | | |
|-------------|---------------------------|---|
| Legal | 0.5 | Citywide claims administration |
| Engineering | <u>1.5</u> | Citywide engineering investigation |
| Staffing | 2.0 | Total staffing |
| Rate | <u>\$200,000</u> /year | Average loaded staffing rate ⁴ |
| Total | \$400,000 /year | |
| Customers | <u>58,340</u> | In Grand Rapids |
| | <u>\$6.86</u> \$/yr/cust. | |

Annual Cost Summary

| | | |
|------------------------------------|-----------------------------|-----------------------------------|
| 1. Avoided Claims | \$2.03 | |
| 2. Avoided Treatment | \$85.01 | |
| 3. Actual MDNRE Penalties for SSOs | \$0.00 | |
| 4. Avoided Future Projects | \$784.53 | |
| 5. Administration | <u>\$6.86</u> | |
| TOTAL | \$878.43 \$/yr/cust. | |
| | \$73.20 /month/cust. | Monthly fee for not disconnecting |

Notes:

- ¹ Sinking fund annual budget
- ² Customer numbers per 2012 Rate Study
- ³ Value for sewer maintenance and WWTP costs from 2012 rate study.
- ⁴ Estimated staff rate with benefits
- ⁶ Total cost per FDD amortized over 20 years with 2.5% interest rate

PRELIMINARY RATE RECOMMENDATION

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 15, 2012

TO: Eric DeLong
Deputy City Manager

FROM: Linda Wagenmaker *LW*
Utility Financial Officer

SUBJECT: 2012 WATER/SEWER RATE REVIEW - PRELIMINARY REPORT

The REVISED preliminary report, recommending water and sewer rates as of January 1, 2013 for Grand Rapids and all customer communities, is submitted for consideration. The report continues to be two-tiered in nature, calculating recommended rates for customer communities based upon: (a) adherence to the rate-making methodology established in 1976-1977 for customer communities not party to the uniform water and sewer service agreements; (b) rate methodology changes, based upon the uniform service agreements with our UAB partners.

Recommended rate adjustments incorporate provisions of the third amendment to the uniform service agreements with our Utility Partners; specifically, the elimination of penalty fee credits from retail revenue requirements to fund the Individual Circuit Breaker (ICB) and the City and Customer Community Circuit Breaker. Revenue from penalty fees was down 14% in the fiscal year ended June 30, 2012, a result of the conversion to a new customer information system. The amount generated to support the ICB, the program aimed at addressing retail users requiring assistance in payment of their water/sewer bills, was \$143,655. The third amendment also provides a funding mechanism, if sufficient funding is available, to limit each retail service area revenue requirement change to a level in line with the overall systems' initial average change, i.e., the City and Customer Community Circuit Breaker. Adequate funds were available to achieve that goal in the water system and full relief was provided to Grand Rapids, Walker and Tallmadge Township. The sewage system provided partial relief to Grand Rapids, Tallmadge and Wright Townships.

Proposed 2013 water and sewer rates reflect decreases resulting from lower operating costs and declining interest rates. Also contributing to the decrease were increased surcharges, integrated connection fees and other revenue credits. Both systems saw increases as a result of declining average billed volume and fewer customers.

Summaries of proposed overall revisions for the systems are as follows:

1. Water Supply System revenue requirements will decrease \$1,812,756 or 4.41% less than revenues generated by existing rates and charges.
2. Sewage Disposal System revenue requirements will decrease \$1,216,435 or 2.46% less than revenues generated by existing rates and charges.

Attached is a schedule of comparative 2012/2013 water/sewer quarterly billings based on system consumption averages for a typical domestic user in Grand Rapids and retail customer communities. That schedule also includes a comparison of the approximate 2012/2013 monthly charges for Wright Township's REU (Residential Equivalent Unit) rate structure. Comparative rate adjustments are also noted for our wholesale customer communities.

Announcement of proposed 2013 water and sewer rates to our UAB partners and other customer communities was made Thursday, November 8, 2012. Revised water rates were distributed to our UAB partners on Thursday, November 15, 2012. All customer communities have a thirty-day comment period following notification of the rates as provided in our water/sewer service agreements. Approval of customer community rates by resolution of the City Commission is scheduled for Tuesday, December 18, 2012.

Resolutions are being prepared providing for publication of proposed ordinances amending the Grand Rapids Water and Sewer Rates and Charges and establishing December 4, 2012 as the date for public hearing and December 18, 2012 to consider adoption of the proposed ordinances.

LW

Attachment

T:\Water\Accountant\Rate Study\WSRS\12Prelim-Cover Memo REVISED 111512.doc

**CITY OF GRAND RAPIDS, MICHIGAN
2012 PRELIMINARY WATER/SEWER RATE STUDY
IMPACT OF RATE ADJUSTMENTS ON DOMESTIC USERS
BY CUSTOMER COMMUNITY *
November 14, 2012**

| | APPROXIMATE QUARTERLY BILL | | CHANGE | |
|--|----------------------------|------------------|-------------------|---------------|
| | 2012 | 2013 | DOLLARS | PERCENT |
| GRAND RAPIDS | | | | |
| WATER | \$ 73.74 | \$ 70.68 | \$ (3.06) | -4.15% |
| SEWER | 99.18 | 98.25 | (0.93) | -0.94% |
| | <u>\$ 172.92</u> | <u>\$ 168.93</u> | <u>\$ (3.99)</u> | <u>-2.31%</u> |
| BASE RATIO | 1.00 | 1.00 | | |
| WALKER | | | | |
| WATER | \$ 78.55 | \$ 75.11 | \$ (3.44) | -4.38% |
| SEWER | 139.98 | 134.52 | (5.46) | -3.90% |
| | <u>\$ 218.53</u> | <u>\$ 209.63</u> | <u>\$ (8.90)</u> | <u>-4.07%</u> |
| RATIO TO GR | 1.26 | 1.24 | | |
| KENTWOOD | | | | |
| WATER | \$ 87.17 | \$ 82.10 | \$ (5.07) | -5.82% |
| SEWER | 63.36 | 60.33 | (3.03) | -4.78% |
| | <u>\$ 150.53</u> | <u>\$ 142.43</u> | <u>\$ (8.10)</u> | <u>-5.38%</u> |
| RATIO TO GR | 0.87 | 0.84 | | |
| CASCADE TWP | | | | |
| WATER | \$ 116.60 | \$ 110.82 | \$ (5.78) | -4.96% |
| SEWER | 143.49 | 136.05 | (7.44) | -5.19% |
| | <u>\$ 260.09</u> | <u>\$ 246.87</u> | <u>\$ (13.22)</u> | <u>-5.08%</u> |
| RATIO TO GR | 1.50 | 1.46 | | |
| GRAND RAPIDS TWP- Contribution of \$7,200 for 2012, \$0 for 2013. | | | | |
| WATER | \$ 92.61 | \$ 87.67 | \$ (4.94) | -5.33% |
| SEWER | 132.27 | 121.35 | (10.92) | -8.26% |
| | <u>\$ 224.88</u> | <u>\$ 209.02</u> | <u>\$ (15.86)</u> | <u>-7.05%</u> |
| RATIO TO GR | 1.30 | 1.24 | | |
| TALLMADGE TWP- Contribution of \$17,758 for 2012, \$0 for 2013. | | | | |
| WATER | \$ 112.60 | \$ 106.88 | \$ (5.72) | -5.08% |
| SEWER | 284.22 | 281.85 | (2.37) | -0.83% |
| | <u>\$ 396.82</u> | <u>\$ 388.73</u> | <u>\$ (8.09)</u> | <u>-2.04%</u> |
| RATIO TO GR | 2.29 | 2.30 | | |

* THE COMPARISONS ABOVE ARE BASED ON SYSTEM AVERAGE DOMESTIC CUSTOMER QUARTERLY CONSUMPTION OF : WATER- 23.00 UNITS OR 17,204 GALLONS
SEWER - 18.00 UNITS OR 13,464 GALLONS
NO. OF MONTHS: 3

Note: The average water consumption depicted above is the same as in last year's rate study.

REU (RESIDENTIAL EQUIVALENT UNIT) CUSTOMER COMMUNITY- APPROXIMATE QUARTERLY BILL

WRIGHT TWP- Contribution of \$5,000 for 2012, \$0 for 2013.

| | | | | |
|-------------------------|------------------|------------------|------------------|--------|
| SEWER (No. of REU 1.00) | <u>\$ 187.02</u> | <u>\$ 185.64</u> | <u>\$ (1.38)</u> | -0.74% |
|-------------------------|------------------|------------------|------------------|--------|

CITY OF GRAND RAPIDS, MICHIGAN
2012 PRELIMINARY WATER/SEWER RATE STUDY
IMPACT OF RATE ADJUSTMENTS ON WHOLESALE USERS
November 14, 2012

| | <u>2012</u> | <u>2013</u> | <u>PERCENTAGE CHANGE</u> |
|---------------------------|--------------|--------------|------------------------------|
| EAST GRAND RAPIDS | | | |
| WATER - SERVICE (MONTHLY) | \$ 17,894.00 | \$ 15,702.00 | -12.25% |
| - COMMODITY (100 CF) | 1.24 | 1.18 | -4.84% |
| SEWER - SERVICE (MONTHLY) | 1,679.00 | 1,604.00 | -4.47% |
| - COMMODITY (MG) | 1,534.00 | 1,396.00 | -9.00% |
| | | | |
| ADA TWP | | | |
| WATER - SERVICE | \$ 37,090.00 | \$ 34,722.00 | -6.38% |
| - COMMODITY | 1.36 | 1.30 | -4.41% |
| SEWER - SERVICE | 49,052.00 | 45,912.00 | -6.40% |
| - COMMODITY | 1,918.00 | 1,763.00 | -8.08% |
| | | | |
| OTTAWA COUNTY | | | |
| WATER - SERVICE | \$ 231.00 | \$ 170.00 | -26.41% |
| - COMMODITY | 1.31 | 1.26 | -3.82% |
| | | | |
| GAINES TWP | | | |
| SEWER - SERVICE | \$ 1,468.00 | \$ 1,574.00 | 7.22% |
| - COMMODITY | 1,384.00 | 1,310.00 | -5.35% |

PROPOSED GRAND RAPIDS ORDINANCES

*81961 Com. Lumpkins, supported by Com. Bliss, moved adoption of the following resolution under the Consent Agenda:

RESOLVED:

1. The attached Ordinance amending Sections 2.34(2), 2.35, 2.40, 2.45 and adding new Sections 2.41.1 and 2.41.2 to Chapter 26, Title II of the Grand Rapids City Code be published as part of the Proceedings.
2. As authorized by Article V, Sec. 10(b) of the City Charter, the attached summary of the proposed Ordinance be published in a newspaper of general circulation in lieu of publishing the full text thereof.
3. A public hearing be held on the proposed Ordinance on December 4, 2012, at 7:00 p.m. in the Commission Chambers on the ninth floor of City Hall.
4. The proposed Ordinance be considered for adoption on December 18, 2012.
5. The City Clerk provide all notices of the public hearing as required by law.

SUMMARY OF ORDINANCE 2012-_____

This Ordinance amends Sections 2.34(2), 2.35, 2.40, 2.45 and adds new Sections 2.41.1 and 2.41.2 to Chapter 26, Title II of the Grand Rapids City Code entitled "City Water System".

The proposed amendment to the Water Rates and Charges will do the following:

- Amend the front foot rate for a Domestic user from \$61.00 to \$75.00;
- Amend the front foot rate for a Commercial or Industrial user for a line larger than eight inches in diameter from \$94.00 to \$110.00;
- Amend the Integrated Water Connection Base Fee Schedule as detailed:

| Water Meter Size (inches) | 1/01/12 | 1/01/13 |
|---------------------------|---------|---------|
| ¾ or less | \$2,780 | \$2,830 |
| 1 | 4,640 | 4,730 |
| 1 1/2 | 9,260 | 9,420 |
| 2 | 14,820 | 15,080 |
| 3 | 32,440 | 33,030 |
| 4 | 58,380 | 59,430 |
| 6 and over | 129,740 | 132,080 |

- Amend the commodity rate for retail domestic, commercial and industrial users within the City of Grand Rapids from \$1.86 to \$1.77 per 100 cubic feet;
- Amend the monthly service charge for all users as detailed:

| Water Meter Size (inches) | 1/01/12 | 1/01/13 |
|---------------------------|---------|---------|
| ¾ or less | \$10.32 | \$9.99 |
| 1 | 15.55 | 15.18 |
| 1 1/4 | 22.27 | 21.85 |
| 1 1/2 | 30.48 | 30.00 |
| 2 | 51.39 | 50.75 |
| 3 | 111.12 | 110.04 |
| 4 | 194.75 | 193.04 |
| 6 or larger | 433.68 | 430.20 |

- Amend the charges for water service lines as detailed:

| | | 50 Ft. R.O.W. | 60 Ft. R.O.W. | 66 Ft. R.O.W. | 80 Ft. R.O.W. | 100 Ft. R.O.W. |
|---------------|------|------------------|------------------|------------------|------------------|-------------------|
| Cost for 1" | 2012 | \$ 1,700 | \$ 1,950 | \$ 2,100 | \$ 2,450 | \$ 2,950 |
| Water Service | 2013 | 2,050 | 2,400 | 2,550 | 3,000 | 3,600 |
| Cost for 1 ½" | 2012 | 2,400 | 2,650 | 2,850 | 3,250 | 3,800 |
| Water Service | 2013 | 3,000 | 3,400 | 3,700 | 4,200 | 5,000 |
| Cost for 2" | 2012 | 2,950 | 3,300 | 3,500 | 4,000 | 4,700 |
| Water Service | 2013 | 3,500 | 3,900 | 4,200 | 4,750 | 5,600 |

- Establish the Individual Circuit Breaker (ICB) program for calendar 2013 at \$143,655;
- These proposed amendments shall be effective on January 1, 2013.

NOTICE

Copies of this Ordinance are available for review and distribution from the Office of the City Clerk, 300 Monroe Ave., NW, Grand Rapids, MI 49503.

The City Commission will hold a public hearing on the proposed Ordinance changes on December 4, 2012, at 7:00 p.m. in the Commission Chamber on the ninth floor of City Hall.

**AN ORDINANCE TO AMEND SECTIONS 2.34(2), 2.35, 2.40, 2.45 AND
ADD SECTIONS 2.41.1 AND 2.41.2 TO CHAPTER 26 OF TITLE II
OF THE CODE OF THE CITY OF GRAND RAPIDS
AMENDING THE WATER RATES AND CHARGES**

ORDINANCE NO. 2012-_____

THE PEOPLE OF THE CITY OF GRAND RAPIDS DO ORDAIN:

Section 1. That Section 2.34(2) of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"(2) The charge shall be known as the front foot rate and be determined by multiplying the rate per foot by the number of feet the property owner has fronting on the watermain used for local distribution. The front foot rate shall be as follows:

(a) Domestic User: \$75.00;

(b) Commercial or Industrial User:

1. The same as a domestic user if the connection is made to a line eight (8) inches or less in diameter.
2. For a line larger than eight (8) inches in diameter: \$110.00.

This charge will be annually reviewed and may change to reflect the current average cost of installation of local distribution lines."

Section 2. That Section 2.35 of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.35 Integrated Water Connection Fee Schedule.

- (1) When a property owner or user is requested or required to connect to the System and has not previously paid or been assessed a connection fee, the following connection fee schedule shall apply:

Integrated Water Connection Base Fee Schedule

| <u>Water Meter (or equivalent) Size (inches)</u> | <u>Base Fee</u> |
|--|-----------------|
| 3/4 or less | \$2,830 |
| 1 | 4,730 |
| 1 ½ | 9,420 |
| 2 | 15,080 |
| 3 | 33,030 |
| 4 | 59,430 |
| 6 and over | 132,080 |

- (2) Except as otherwise provided in the immediately succeeding paragraph, the foregoing integrated water connection base fee schedule for single-family and multi-family residential dwelling units shall be adjusted upward and downward as follows: A single-family residential dwelling unit located on a parcel containing twenty thousand (20,000) square feet shall pay the applicable integrated connection fee in accordance with the foregoing schedule. When determining the square footage of a residential parcel for the purposes of determining the appropriate integrated connection fee, parcel size may be adjusted downward to take into consideration such things as wetlands, lakes, streams and other unusual characteristics of the parcel in accordance with policies approved from time to time by the Utility Advisory Board. To the extent the size of a parcel, as adjusted, is greater than or less than twenty thousand (20,000) square feet, one-half the applicable integrated connection fee will increase or decrease by the same percentage increase or decrease in the parcel above or below twenty thousand (20,000) square feet. In the case of multi-family residential dwellings, in order to determine the size of the parcel assigned to each dwelling unit for purposes of calculating the integrated connection fee to be paid by each multi-family residential dwelling unit, the total square footage of the parcel, as adjusted, on which the multi-family residential dwelling is located shall be divided by the total number of residential units. Notwithstanding any other provision in this subsection, the integrated connection fee for a single-family residential dwelling unit or multi-family residential dwelling unit shall not exceed four and one-half times the applicable base integrated connection fee set forth in the foregoing schedule.

There shall be no upward adjustment in the integrated water service connection fee payable for a single-family residential dwelling unit connecting to the Water System if (a) each of the following conditions are met (1) a building permit shall have been obtained, (2) the dwelling unit shall have been constructed, and (3) a certificate of occupancy shall have been issued prior to January 1, 2000 or (b) local building permit fees have been paid to the local governmental unit prior to January 1, 2000 for a single-family residential dwelling unit to be constructed on or after January 1, 2000. When connecting to the Water System, Users living in or owning such single-family residential dwelling units shall pay the applicable base integrated connection fee set forth in the Integrated Water Connection Base Fee Schedule adjusted downward, if applicable, in accordance with the immediate preceding paragraph.

Effective January 1, 2005 and January 1st of every year thereafter, the Integrated Water Connection Base Fees shall be adjusted by a percentage, which is determined by the annual change in the Consumer Price Index (the "Index") calculated as follows:

- (a) The Consumer Price Index shall be that Index referred to as the Consumer Price Index, US City Average, All Urban Consumers, published by the U.S. Department of Labor-Bureau of Statistics ((1982-84)=100). In the event the method of determining the Index is substantially altered, the basis for determining the annual change thereafter shall be the Index which is most comparable to the Index described above.
- (b) For the purpose of computing the percentage change each calendar year, the Index for the month of August for the prior calendar year shall be subtracted from the Index for the immediately preceding August. The result so obtained (if positive) shall be divided by the Index for the month of August for the prior calendar year to obtain the percentage increase which shall be applied to the then current Integrated Water Connection Base Fee Schedule to determine the new calendar year schedule.

The foregoing Integrated Connection fee is due and payable at the time a User receives a permit to connect to the Water System. A permit issued by the City to connect to the Water System shall expire one hundred eighty (180) days from the date the permit was issued.

The user receiving services who applies for a larger water meter than the one presently in service shall pay an Integrated Connection Fee which is the difference in cost between the meter size in service and the one applied for in accordance with the Integrated Connection Fee in effect at the time of application. No credit or rebate shall be made in the case of application for a smaller meter size.

Existing commercial and industrial customers may request the installation of an additional meter to measure water used solely for irrigation purposes. There shall be no Integrated Connection Fee for the additional meter provided combined maximum capacity as defined by the American Water Works Association Standards C700-90 and C702-92, as amended, does not exceed the maximum capacity of the original meter. If the original maximum capacity is exceeded, the customer shall pay as an Integrated Connection Fee the difference between the fee for the original meter and what the fee would be if the maximum capacities of all meters were totaled. The additional Integrated Connection Fee shall be based upon the fees in effect at the time of installation of the additional meter."

Section 3. That Section 2.40 of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.40 Rates and Charges for Retail Customers Within the City of Grand Rapids.

The following charges for water service provided retail users within the City of Grand Rapids shall be made.

Commodity Rate

| | |
|------------|---------------------------|
| Domestic | \$1.77 per 100 cubic feet |
| Commercial | \$1.77 per 100 cubic feet |
| Industrial | \$1.77 per 100 cubic feet |

Monthly Service Charge

| <u>Size of Meter</u> | <u>Charge</u> |
|----------------------|---------------|
| 3/4 inch or less | \$9.99 |
| 1 inch | 15.18 |
| 1 1/4 inch | 21.85 |
| 1 1/2 inch | 30.00 |
| 2 inches | 50.75 |
| 3 inches | 110.04 |
| 4 inches | 193.04 |
| 6 inches or larger | 430.20" |

Section 4. That Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to add Section 2.41.1 as follows:

"Sec. 2.41.1 Miscellaneous Charges.

(1) Water Service Pipe Costs, as reflected in Task #29 of the 2012 Water Rate Study:

| | | 50 Ft. <u>R.O.W.</u> | 60 Ft. <u>R.O.W.</u> | 66 Ft. <u>R.O.W.</u> | 80 Ft. <u>R.O.W.</u> | 100 Ft. <u>R.O.W.</u> |
|-----------------|------|-------------------------|-------------------------|-------------------------|-------------------------|--------------------------|
| Cost for 1" | 2012 | \$ 1,700 | \$ 1,950 | \$ 2,100 | \$ 2,450 | \$ 2,950 |
| Water Service | 2013 | \$ 2,050 | \$ 2,400 | \$ 2,550 | \$ 3,000 | \$ 3,600 |
| Cost for 1-1/2" | 2012 | \$ 2,400 | \$ 2,650 | \$ 2,850 | \$ 3,250 | \$ 3,800 |
| Water Service | 2013 | \$ 3,000 | \$ 3,400 | \$ 3,700 | \$ 4,200 | \$ 5,000 |
| Cost for 2" | 2012 | \$ 2,950 | \$ 3,300 | \$ 3,500 | \$ 4,000 | \$ 4,700 |
| Water Service | 2013 | \$ 3,500 | \$ 3,900 | \$ 4,200 | \$ 4,750 | \$ 5,600 |

(2) Miscellaneous Charges, as reflected in Task #30 of the 2012 Water Rate Study:

(a) Hydrant Use Permits

| | |
|--|--|
| Weekly Pool Filling Permit..... | \$75/wk + \$300 refundable deposit |
| Contractor Seasonal (Winter or Summer) | |
| Hydrant Connection Permit..... | \$75/wk + \$300 non-refundable fee |
| Tanker Hydrant Connection Permit..... | \$25/week + metered volume (based on average retail commodity rate) + \$300 non-refundable fee |
| Hydrant Flow Test..... | \$200 Fee |

(b) Tapping Permits

| <u>Connection Size</u> | <u>Fee</u> |
|------------------------|------------|
| 2" and smaller | \$225.00 |
| 3" and larger | Cost |

(c) Meter Installation and Seasonal Turn Off/On Fees

| <u>Meter Size</u> | <u>Fee</u> |
|-------------------|------------|
| 3/4" or smaller | \$40.00 |
| 1" | 45.00 |
| 1-1/2" | 55.00 |
| 2" | 60.00 |
| 3" | 100.00 |
| 4" | 200.00 |
| 6" and larger | 250.00 |

(d) Frozen/Damaged/Missing Meter Charges

| <u>Meter Size</u> | <u>Fee</u> |
|-------------------|------------|
| 3/4" or smaller | \$150.00 |
| 1" | 200.00 |
| 1-1/2" ECR | 350.00 |
| 1-1/2" Turbo | 500.00 |
| 2" ECR | 450.00 |
| 2" Turbo | 575.00 |
| 3" Turbo | 750.00 |
| 4" | 1400.00 |
| 6" and larger | 2350.00 |

(e) Meter Services

Final reading \$35.00

Meter Testing Fee
 (paid by customer if meter is accurate, no charge to customer if meter is faulty)

| | |
|------------------|-------|
| 5/8 – 1" Meter | 50.00 |
| 1-1/2 – 2" Meter | 75.00 |
| 3-6" Meter | Cost |

(f) Security Deposit
 Three (3) times average quarterly bill (\$187.20)..... \$577.86

(g) Miscellaneous Permits

| | |
|---|---------|
| Street opening permit | \$30.00 |
| Water inspection permit (each inspection within the City) | \$40.00 |
| Water inspection permit (each inspection outside the City) | \$55.00 |
| Sanitary Service line inspection permit (each inspection within city) | \$40.00 |
| Sanitary Service line inspection permit (each outside city) | \$55.00 |
| Storm service line inspection permit (each inspection within city) | \$40.00 |
| Storm Service line inspection permit (each outside City) | \$55.00 |
| Plumbing service re-inspection fee..... | \$40.00 |
| Cross Connection re-inspection fee | \$75.00 |
| Sewer Lateral service Demolition/Cap off inspection fee (each within city) | \$40.00 |
| Sewer Lateral Service Demolition/Cap off inspection fee (each outside city) | \$55.00 |
| Footing Drain Lateral Inspection Permit (each within City) | \$40.00 |
| Footing Drain Lateral Inspection Permit (each outside City) | \$55.00 |

(h) Service Fee
 Customer-requested on-site service (non-scheduled appointment-customer issue only) . \$55.00
 Turn-on/turn-off water for real-estate inspections..... \$110.00

(i) Penalties

| | |
|--|------------|
| Late-payment penalty | 10% of net |
| Processing for shut-off (non-payment, cross connection) | \$55.00 |
| Penalty for failure to keep appointment | \$35.00 |
| Penalty for each missed appointment thereafter (related to same service) | \$50.00 |
| Unauthorized operation of valves | \$100.00* |
| (plus double the commodity rate for estimated volume) | |
| Unauthorized use of connection pipes for fire protection..... | \$100.00* |
| (plus double the commodity rate for estimated volume) | |
| Unauthorized opening of by-pass valve/tampering..... | \$100.00* |
| (plus double the commodity rate for estimated volume) | |
| Unauthorized use of a hydrant/water..... | \$500.00 |
| Use of illegal connection on hydrant (including loss of connection)..... | \$500.00 |
| Failure to return hydrant connection equipment | |
| (plus number of weeks equipment used/missing) | \$500.00 |
| Return of damaged hydrant connection equipment..... | \$500.00 |
| Lost/non-returned hydrant wrench..... | \$50.00 |
| Permit infractions/violations..... | \$100.00* |
| (plus double with each subsequent infraction) | \$100.00 |
| Returned check charge (verified with City Treasurer 8/23/10) | \$30.00 |
| Unauthorized service tap of watermain | |
| (fine per tap plus tapping permit fee for each tap)..... | \$500.00 |

*Penalty will double with each subsequent infraction and/or litigation.

(3) Watermain Oversizing Rates, as reflected in Task #32 of the 2012 Water Rate Study:

| | |
|-------------------------|--------------------------|
| 8 inch to 12 inch | \$14.84 per lineal foot |
| 12 inch to 16 inch..... | \$20.51 per lineal foot |
| 8 inch to 16 inch..... | \$35.35 per lineal foot" |

Section 5. That Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to add Section 2.41.2 as follows:

"Sec. 2.41.2 Circuit Breaker.

As agreed among the customer communities per the uniform water and sewer service agreement, the Individual Circuit Breaker (ICB) and City and Customer Community Circuit Breaker programs have been established in order to relieve hardship. The former program serves to assist eligible water customers, and the latter program serves to normalize rates among customer communities to the extent that funds are available for such purpose. These programs shall be administered according to the terms of the uniform water and sewer service agreement. The amount allocated for this purpose shall not exceed:

| <u>Year</u> | <u>Circuit Breaker Allocation</u> |
|-------------|-----------------------------------|
| 2013 | \$143,655" |

Section 6. That Section 2.45 of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.45 Effective Date.

The rates, charges and fees set forth in Section 2.34(2), 2.35, 2.40 and 2.41.1 shall be effective on January 1, 2013."

* CONSENT AGENDA APPROVAL

I hereby certify that the foregoing is a true transcript of the action of the City Commission of the City of Grand Rapids, Michigan, in public session held November 27, 2012.



Lauri S. Parks, City Clerk

*81962 Com. Lumpkins, supported by Com. Bliss, moved adoption of the following resolution under the Consent Agenda:

RESOLVED:

1. The attached Ordinance amending Sections 2.95(2), 2.96, 2.101, 2.102, 2.105 and adding a new Section 2.102.1 to Chapter 27, Title II of the Grand Rapids City Code be published as part of the Proceedings.

2. As authorized by Article V, Sec. 10(b) of the City Charter, the attached summary of the proposed Ordinance be published in a newspaper of general circulation in lieu of publishing the full text thereof.

3. A public hearing be held on the proposed Ordinance on December 4, 2012, at 7:00 p.m. in the Commission Chambers on the ninth floor of City Hall.

4. The proposed Ordinance be considered for adoption on December 18, 2012.

5. The City Clerk provide all notices of the public hearing as required by law.

SUMMARY OF ORDINANCE 2012-_____

This Ordinance amends Sections 2.95 (2), 2.96, 2.101, 2.102, 2.105 and adds a new Section 2.102.1 to Chapter 27, Title II of the Grand Rapids City Code entitled "City Sewage Disposal System".

The proposed amendment to the Sewer Rates and Charges will do the following:

- Amend the front foot rate for a Domestic user from \$62.00 to \$70.00;
- Amend the front foot rate for a Commercial or Industrial user for a line larger than eight inches in diameter from \$88.00 to \$104.00;
- Amend the Integrated Sewer Connection Base Fee Schedule as detailed:

| Water Meter Size (inches) | 1/01/12 | 1/01/13 |
|---------------------------|---------|---------|
| ¾ or less | \$2,780 | \$2,830 |
| 1 | 4,640 | 4,730 |
| 1 1/2 | 9,260 | 9,420 |
| 2 | 14,820 | 15,080 |
| 3 | 32,440 | 33,030 |
| 4 | 58,380 | 59,430 |
| 6 and over | 129,740 | 132,080 |

- Amend the commodity rate for retail domestic, commercial and industrial users within the City of Grand Rapids from \$3.36 to \$3.26 per 100 cubic feet;
- Amend the monthly service charge for all users as detailed:

| Water Meter Size (inches) | 1/01/12 | 1/01/13 |
|---------------------------|----------|----------|
| ¾ or less | \$ 12.90 | \$ 13.19 |
| 1 | 20.23 | 21.00 |
| 1 1/4 | 29.66 | 31.04 |
| 1 1/2 | 41.19 | 43.31 |
| 2 | 70.53 | 74.55 |
| 3 | 154.35 | 163.79 |
| 4 | 271.70 | 288.73 |
| 6 or larger | 606.99 | 645.71 |

- Amend surcharges as detailed:

| Surcharge | 2012 Rate | 2013 Rate |
|------------|-----------|-----------|
| BOD | \$0.200 | \$0.193 |
| TSS | 0.254 | 0.277 |
| phosphorus | 1.042 | 2.158 |
| ammonia | 0.330 | 0.294 |

- Amend the vehicle charge on the schedule of charges that apply to any analysis which may be required as a part of a Significant Industrial User Discharge Permit from \$3.57 per hour to \$3.78 per hour and add to the schedule these charges: Mercury at \$15.00 each and Ammonia at \$9.00 each;
- Amend the charges for sewer laterals as detailed:

| | | 50 Ft. R.O.W. | 60 Ft. R.O.W. | 66 Ft. R.O.W. | 80 Ft. R.O.W. | 100 Ft. R.O.W. |
|-------------|------|------------------|------------------|------------------|------------------|-------------------|
| Cost for 6" | 2012 | \$1,800 | \$2,150 | \$2,300 | \$2,750 | \$3,400 |
| Lateral | 2013 | 2,150 | 2,550 | 2,800 | 3,350 | 4,100 |

- Amend the sewer oversizing rates as detailed:

| Description | Amount Per lineal foot |
|-------------|---------------------------|
| 8" to 10" | \$6.47 |
| 8" to 12" | 11.56 |
| 8" to 15" | 21.18 |
| 10" to 12" | 5.09 |
| 10" to 15" | 14.71 |
| 12" to 15" | 9.62 |

- These proposed amendments shall be effective on January 1, 2013.

NOTICE

Copies of this Ordinance are available for review and distribution from the Office of the City Clerk, 300 Monroe Ave., NW, Grand Rapids, MI 49503.

The City Commission will hold a public hearing on the proposed Ordinance changes on December 4, 2012, at 7:00 p.m. in the Commission Chamber on the ninth floor of City Hall.

AN ORDINANCE TO AMEND SECTIONS 2.95(2), 2.96, 2.101, 2.102, 2.105 AND ADD A NEW SECTION 2.102.1 TO CHAPTER 27 OF TITLE II OF THE CODE OF THE CITY OF GRAND RAPIDS, AMENDING THE SEWER RATES AND CHARGES

ORDINANCE NO. 2012-_____

THE PEOPLE OF THE CITY OF GRAND RAPIDS DO ORDAIN:

Section 1. That Section 2.95(2) of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

- "(2) The charge shall be known as the front foot rate and be determined by multiplying the rate per foot by the number of feet the property owner has fronting on the local collector sewer line from which he or she will receive service. The front foot rate shall be as follows:

- (a) Domestic User: \$70.00;
- (b) Commercial or Industrial User:
 1. The same as a domestic user if the connection is made to a local collector sewer line eight (8) inches or less in diameter.
 2. For a line larger than eight (8) inches in diameter: \$104.00.

This charge will be annually reviewed and may change to reflect the current average cost of installation of local collector sewer lines."

Section 2. That Section 2.96 of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.96 Integrated Sewer Connection Fee Schedule.

- (1) When a property owner or user is requested or required to connect to the System and has not previously paid or been assessed a connection fee, the following connection fee schedule shall apply:

Integrated Sewer Connection Base Fee Schedule

| <u>Water Meter (or equivalent) Size (inches)</u> | <u>Base Fee</u> |
|--|-----------------|
| 3/4 or less | \$2,830 |
| 1 | \$4,730 |
| 1 ½ | \$9,420 |
| 2 | \$15,080 |
| 3 | \$33,030 |
| 4 | \$59,430 |
| 6 and over | \$132,080 |

- (2) Except as otherwise provided in the immediately succeeding paragraph, the foregoing integrated sewer connection base fee schedule for single-family and multi-family residential dwelling units shall be adjusted upward and downward as follows: A single-family residential dwelling unit located on a parcel containing twenty thousand (20,000) square feet shall pay the applicable integrated connection fee in accordance with the foregoing schedule. When determining the square footage of a residential parcel for the purposes of determining the appropriate integrated connection fee, parcel size may be adjusted downward to take into consideration such things as wetlands, lakes, streams and other unusual characteristics of the parcel in accordance with policies approved from time to time by the Utility Advisory Board. To the extent the size of a parcel, as adjusted, is greater than or less than twenty thousand (20,000) square feet, one-half the applicable integrated connection fee will increase or decrease by the same percentage increase or decrease in the parcel above or below twenty thousand (20,000) square feet. In the case of multi-family residential dwellings, in order to determine the size of the parcel assigned to each dwelling unit for purposes of calculating the integrated connection fee to be paid by each multi-family residential dwelling unit, the total square footage of the parcel, as adjusted, on which the multi-family residential dwelling is located shall be divided by the total number of residential units. Notwithstanding any other provision in this subsection, the integrated connection fee for a single-family residential dwelling unit or multi-family residential dwelling unit shall not exceed four and one-half times the applicable base integrated connection fee set forth in the foregoing schedule.

There shall be no upward adjustment in the integrated sewer service connection fee payable for a single-family residential dwelling unit connecting to the Sewer System if (a) each of the following conditions are met (1) a building permit shall have been obtained, (2) the dwelling unit shall have been constructed, and (3) a certificate of occupancy shall have been issued prior to January 1, 2000 or (b) local building permit fees have been paid to the local governmental unit prior to January 1, 2000 for a single-family residential dwelling unit to be constructed on or after January 1, 2000. When connecting to the Sewer System, Users living in or owning such single-family residential dwelling units shall pay the applicable base integrated connection fee set forth in the Integrated Sewer Connection Base Fee Schedule adjusted downward, if applicable, in accordance with the immediate preceding paragraph.

Effective January 1, 2005 and January 1st of every year thereafter, the Integrated Sewer Connection Base Fees shall be adjusted by a percentage, which is determined by the annual change in the Consumer Price Index (the "index") calculated as follows:

- (a) The Consumer Price Index shall be that Index referred to as the Consumer Price Index, US City Average, All Urban Consumers, published by the U.S. Department of Labor-Bureau of Statistics ((1982-84)=100). In the event the method of determining the Index is substantially altered, the basis for determining the annual change thereafter shall be the Index which is most comparable to the Index described above.
- (b) For the purpose of computing the percentage change each calendar year, the Index for the month of August for the prior calendar year shall be subtracted from the Index for the immediately preceding August. The result so obtained (if positive) shall be divided by the Index for the month of August for the prior calendar year to obtain the percentage increase which shall be applied to the then current Integrated Sewer Connection Base Fee Schedule to determine the new calendar year schedule.

The foregoing Integrated Connection fee is due and payable at the time a User receives a permit to connect to the Sewer System. A permit issued by the City to connect to the Sewer System shall expire one hundred eighty (180) days from the date the permit was issued.

The user receiving services who applies for a larger water meter than the one presently in service shall pay an Integrated Connection Fee which is the difference in cost between the meter size in service and the one applied for in accordance with the Integrated Connection Fee in effect at the time of application. No credit or rebate shall be made in the case of application for a smaller meter size."

Section 3. That Section 2.101 of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.101 Rates and Charges for Retail Users Within the City of Grand Rapids.

The following rates and charges for sewage disposal service shall apply for users within the City of Grand Rapids:

Commodity Rate

| | |
|------------|---------------------------|
| Domestic | \$3.26 per 100 cubic feet |
| Commercial | \$3.26 per 100 cubic feet |
| Industrial | \$3.26 per 100 cubic feet |

Monthly Service Charge

| <u>Size of Meter</u> | <u>Charge</u> |
|----------------------|---------------|
| 3/4 inch or less | \$13.19 |
| 1 inch | 21.00 |
| 1 1/4 inches | 31.04 |
| 1 1/2 inches | 43.31 |
| 2 inches | 74.55 |
| 3 inches | 163.79 |
| 4 inches | 288.73 |
| 6 inches or larger | 645.71" |

Section 4. That Section 2.102 of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.102 Surcharges and Permit Fees.

- (1) If the City Manager determines that a discharge will not cause pass through or interference as defined in this Chapter, Industrial or Commercial users whether they are located within a retail service area or a bulk service area shall be charged a surcharge if the concentration of their discharge exceeds a five-day BOD of two hundred fifty (250) mg/l, and/or TSS of two hundred fifty (250) mg/l, or any phosphorus of fifteen (15) mg/l. That charge shall be nineteen and three-tenth cents (\$0.193) per pound of BOD and twenty seven and seven-tenth cents (\$0.277) per pound of TSS and two dollars and fifteen and eight-tenth cents (\$2.158) per pound of phosphorus in excess of the above limits. In addition, all industrial or commercial users shall be charged a surcharge for ammonia concentrations exceeding thirty-eight (38) mg/l. The charge shall be twenty nine and four-tenth cents (\$0.294) per pound of ammonia in excess of the above limit. Discharge concentrations of these substances and the resulting surcharge shall be based on at least three composite samples per quarter. This sampling shall be performed by either the City or the Industrial User as determined by the City Manager.
- (2) The fee for a Significant Industrial User Discharge Permit as provided for in Section 2.70 of this Chapter whether they are located within a retail service area or a bulk service area shall be four hundred dollars (\$400.00) per year and an analytical fee based upon Section 2.102(3)
- (3) The following schedule of charges shall apply to any analysis which may be required as a part of a Significant Industrial User Discharge Permit:

| | |
|---------------------|---------------|
| Metals | \$7.00 each |
| TSS | \$7.00 each |
| BOD | \$14.00 each |
| Total Phosphate | \$13.50 each |
| pH | \$5.00 each |
| EPA 624 | \$60.00 each |
| EPA 625 | \$115.00 each |
| BTEX/MTBE | \$35.00 each |
| Sulfide | \$12.00 each |
| Oil and Grease | \$25.00 each |
| Total Cyanide | \$15.00 each |
| Hexavalent Chromium | \$10.00 each |
| Fecal Coliform | \$25.00 each |
| Mercury | \$15.00 each |
| Ammonia | \$9.00 each |
| Labor | \$57.57 hour |
| Sampler | \$35.00 day |
| Vehicle | \$3.78 hour |

- (4) These charges will be reviewed annually and may change to reflect the current cost of providing these services."

Section 5. That Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to add Section 2.102.1 as follows:

"Sec. 2.102.1 Miscellaneous Charges.

- (1) **Sewer Lateral Charges**, as reflected in Task #29 of the 2012 Sewer Rate Study:

| <u>R.O.W. WIDTH</u> | <u>COST FOR 6-INCH LATERAL</u> | | |
|---------------------|--------------------------------|---------|------------|
| | 2012 | 2013 | % Increase |
| 50 ft. | \$1,800 | \$2,150 | 19.44% |
| 60 ft. | \$2,150 | \$2,550 | 18.60% |
| 66 ft. | \$2,300 | \$2,800 | 21.74% |
| 80 ft. | \$2,750 | \$3,350 | 21.82% |
| 100 ft. | \$3,400 | \$4,100 | 20.59% |

- (2) **Sewer Oversizing Rates**, as reflected in Task #32 of the 2012 Sewer Rate Study:

| <u>Description</u> | <u>Amount (per lineal foot)</u> |
|--------------------|---------------------------------|
| 8" to 10" | \$6.47 |
| 8" to 12" | \$11.56 |
| 8" to 15" | \$21.18 |
| 10" to 12" | \$5.09 |
| 10" to 15" | \$14.71 |
| 12" to 15" | \$9.62 |

- (3) **Footing Drain Disconnect Opt Out Charge**, as reflected in Task #35 of the 2012 Sewer Rate Study, and as authorized by Section 2.115 of this Code:

\$73.20/customer/month

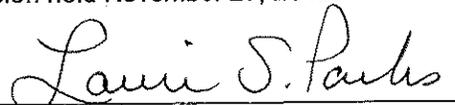
Section 6. That Section 2.105 of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.105 Effective Date.

The rates, charges and fees set forth in Section 2.95(2), 2.96, 2.101, 2.102 and 2.102.1 shall be effective on January 1, 2013."

* CONSENT AGENDA APPROVAL

I hereby certify that the foregoing is a true transcript of the action of the City Commission of the City of Grand Rapids, Michigan, in public session held November 27, 2012.


 Lauri S. Parks, City Clerk

NOTICE OF PUBLIC HEARING

STATE OF MICHIGAN)
County of Kent

ss Karen Jones

Being duly sworn deposes and say he/she is Principal Clerk of



THE GRAND RAPIDS PRESS
DAILY EDITION

a newspaper published and circulated in the County of Kent and otherwise qualified according to Supreme Court Rule; and that the annexed notice, taken from said paper, has been duly published in said paper on the following day(days) _____

December 1 A.D. 20 12

Sworn to and subscribed before me this 17th day of January 20 13

JANICE M. RINGLER
Notary Public, State of Michigan
County of Kent
My Commission Expires: 10/03/2014
Acting in the County of Kent

CITY OF GRAND RAPIDS

A PUBLIC HEARING ON PROPOSED WATER/SEWER RATES AND CHARGES FOR 2013

will be held at 7:00 p.m. on Tuesday, December 4, 2012, in the Grand Rapids City Commission Chambers, 9th floor of City Hall, 300 Monroe Avenue, NW, Grand Rapids, MI.

The City of Grand Rapids has completed the "Preliminary Water/Sewer 2012 Rate Study" report, which is the basis for recommending rates to become effective January 1, 2013 for all residential, commercial and industrial users. That report, which also includes information on the Individual Circuit Breaker Program, the program aimed to help retail users requiring assistance in payment of their water/sewer bills, is available for public inspection in the City Clerk's Office, 2nd floor of City Hall, between 8:00 a.m. and 5:00 p.m. weekdays.

We encourage all water/sewer users to attend this public hearing on December 4, 2012.

1521071-01

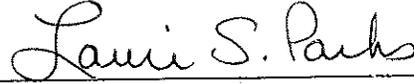
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PUBLIC HEARINGS - GRAND RAPIDS ORDINANCES

82010 Pursuant to Commission File No. 81961, dated November 27, 2012, a public hearing was held on this date to consider an amendment to Chapter 26, Title II of the Code of the City of Grand Rapids (Water Rates and Charges).

At the conclusion of said hearing, the Mayor declared the hearing closed and referred the matter to the Committee of the Whole.

I hereby certify that the foregoing is a true transcript of the action of the City Commission of the City of Grand Rapids, Michigan, in public session held December 4, 2012.



Lauri S. Parks, City Clerk

82011 Pursuant to Commission File No. 81962, dated November 27, 2012, a public hearing was held on this date to consider an amendment to Chapter 27, Title II of the Code of the City of Grand Rapids (Sewer Rates and Charges).

At the conclusion of said hearing, the Mayor declared the hearing closed and referred the matter to the Committee of the Whole.

I hereby certify that the foregoing is a true transcript of the action of the City Commission of the City of Grand Rapids, Michigan, in public session held December 4, 2012.

A handwritten signature in cursive script that reads "Lauri S. Parks". The signature is written in black ink and is positioned above a horizontal line.

Lauri S. Parks, City Clerk

FINAL ADOPTION OF RATE ORDINANCES

82020 An Ordinance to amend Chapter 26 of Title II of the City Code amending Water Rates and Charges was presented to the City Commission on November 27, 2012 under File No. 81961 and a hearing was held on December 4, 2012 under File No. 82010. The aforementioned ordinance shall be considered for adoption this date.

Com. Shaffer, supported by Com. Gutowski, moved adoption of the following ordinance:

AN ORDINANCE TO AMEND SECTIONS 2.34(2), 2.35, 2.40, 2.45 AND ADD SECTIONS 2.41.1 AND 2.41.2 TO CHAPTER 26 OF TITLE II OF THE CODE OF THE CITY OF GRAND RAPIDS AMENDING THE WATER RATES AND CHARGES ORDINANCE NO. 2012-63 THE PEOPLE OF THE CITY OF GRAND RAPIDS DO ORDAIN:

Section 1. That Section 2.34(2) of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"(2) The charge shall be known as the front foot rate and be determined by multiplying the rate per foot by the number of feet the property owner has fronting on the watermain used for local distribution. The front foot rate shall be as follows:

- (a) Domestic User: \$75.00;
(b) Commercial or Industrial User;
1. The same as a domestic user if the connection is made to a line eight (8) inches or less in diameter.
2. For a line larger than eight (8) inches in diameter: \$110.00.

This charge will be annually reviewed and may change to reflect the current average cost of installation of local distribution lines."

Section 2. That Section 2.35 of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.35 Integrated Water Connection Fee Schedule.

(1) When a property owner or user is requested or required to connect to the System and has not previously paid or been assessed a connection fee, the following connection fee schedule shall apply:

Integrated Water Connection Base Fee Schedule

Table with 2 columns: Water Meter (or equivalent) Size (inches) and Base Fee. Rows include sizes 3/4 or less, 1, 1 1/2, 2, 3, 4, and 6 and over with corresponding base fees.

(2) Except as otherwise provided in the immediately succeeding paragraph, the foregoing integrated water connection base fee schedule for single-family and multi-family residential dwelling units shall be adjusted upward and downward as follows: A single-family residential dwelling unit located on a parcel containing twenty thousand (20,000) square feet shall pay the applicable integrated

connection fee in accordance with the foregoing schedule. When determining the square footage of a residential parcel for the purposes of determining the appropriate integrated connection fee, parcel size may be adjusted downward to take into consideration such things as wetlands, lakes, streams and other unusual characteristics of the parcel in accordance with policies approved from time to time by the Utility Advisory Board. To the extent the size of a parcel, as adjusted, is greater than or less than twenty thousand (20,000) square feet, one-half the applicable integrated connection fee will increase or decrease by the same percentage increase or decrease in the parcel above or below twenty thousand (20,000) square feet. In the case of multi-family residential dwellings, in order to determine the size of the parcel assigned to each dwelling unit for purposes of calculating the integrated connection fee to be paid by each multi-family residential dwelling unit, the total square footage of the parcel, as adjusted, on which the multi-family residential dwelling is located shall be divided by the total number of residential units. Notwithstanding any other provision in this subsection, the integrated connection fee for a single-family residential dwelling unit or multi-family residential dwelling unit shall not exceed four and one-half times the applicable base integrated connection fee set forth in the foregoing schedule.

There shall be no upward adjustment in the integrated water service connection fee payable for a single-family residential dwelling unit connecting to the Water System if (a) each of the following conditions are met (1) a building permit shall have been obtained, (2) the dwelling unit shall have been constructed, and (3) a certificate of occupancy shall have been issued prior to January 1, 2000 or (b) local building permit fees have been paid to the local governmental unit prior to January 1, 2000 for a single-family residential dwelling unit to be constructed on or after January 1, 2000. When connecting to the Water System, Users living in or owning such single-family residential dwelling units shall pay the applicable base integrated connection fee set forth in the Integrated Water Connection Base Fee Schedule adjusted downward, if applicable, in accordance with the immediate preceding paragraph.

Effective January 1, 2005 and January 1st of every year thereafter, the Integrated Water Connection Base Fees shall be adjusted by a percentage, which is determined by the annual change in the Consumer Price Index (the "Index") calculated as follows:

- (a) The Consumer Price Index shall be that Index referred to as the Consumer Price Index, US City Average, All Urban Consumers, published by the U.S. Department of Labor-Bureau of Statistics ((1982-84)=100). In the event the method of determining the Index is substantially altered, the basis for determining the annual change thereafter shall be the Index which is most comparable to the Index described above.
- (b) For the purpose of computing the percentage change each calendar year, the Index for the month of August for the prior calendar year shall be subtracted from the Index for the immediately preceding August. The result so obtained (if positive) shall be divided by the Index for the month of August for the prior calendar year to obtain the percentage increase which shall be applied to the then current Integrated Water Connection Base Fee Schedule to determine the new calendar year schedule.

The foregoing Integrated Connection fee is due and payable at the time a User receives a permit to connect to the Water System. A permit issued by the City to connect to the Water System shall expire one hundred eighty (180) days from the date the permit was issued.

The user receiving services who applies for a larger water meter than the one presently in service shall pay an Integrated Connection Fee which is the difference in cost between the meter size in service and the one applied for in accordance with the Integrated Connection Fee in effect at the time of application. No credit or rebate shall be made in the case of application for a smaller meter size.

Existing commercial and industrial customers may request the installation of an additional meter to measure water used solely for irrigation purposes. There shall be no Integrated Connection Fee for the additional meter provided combined maximum capacity as defined by the American Water Works Association Standards C700-90 and C702-92, as amended, does not exceed the maximum capacity of the original meter. If the original maximum capacity is exceeded, the customer shall pay as an Integrated Connection Fee the difference between the fee for the original meter and what the fee would be if the maximum capacities of all meters were totaled. The additional Integrated Connection Fee shall be based upon the fees in effect at the time of installation of the additional meter."

Section 3. That Section 2.40 of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.40 Rates and Charges for Retail Customers Within the City of Grand Rapids.

The following charges for water service provided retail users within the City of Grand Rapids shall be made.

| <u>Commodity Rate</u> | |
|-----------------------|---------------------------|
| Domestic | \$1.77 per 100 cubic feet |
| Commercial | \$1.77 per 100 cubic feet |
| Industrial | \$1.77 per 100 cubic feet |

| <u>Monthly Service Charge</u> | |
|-------------------------------|---------------|
| <u>Size of Meter</u> | <u>Charge</u> |
| 3/4 inch or less | \$9.99 |
| 1 inch | 15.18 |
| 1 1/4 inch | 21.85 |
| 1 1/2 inch | 30.00 |
| 2 inches | 50.75 |
| 3 inches | 110.04 |
| 4 inches | 193.04 |
| 6 inches or larger | 430.20" |

Section 4. That Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to add Section 2.41.1 as follows:

"Sec. 2.41.1 Miscellaneous Charges.

(1) **Water Service Pipe Costs**, as reflected in Task #29 of the 2012 Water Rate Study:

| | | 50 Ft. | 60 Ft. | 66 Ft. | 80 Ft. | 100 Ft. |
|-----------------|------|---------------|---------------|---------------|---------------|---------------|
| | | <u>R.O.W.</u> | <u>R.O.W.</u> | <u>R.O.W.</u> | <u>R.O.W.</u> | <u>R.O.W.</u> |
| Cost for 1" | 2012 | \$ 1,700 | \$ 1,950 | \$ 2,100 | \$ 2,450 | \$ 2,950 |
| Water Service | 2013 | \$ 2,050 | \$ 2,400 | \$ 2,550 | \$ 3,000 | \$ 3,600 |
| Cost for 1-1/2" | 2012 | \$ 2,400 | \$ 2,650 | \$ 2,850 | \$ 3,250 | \$ 3,800 |
| Water Service | 2013 | \$ 3,000 | \$ 3,400 | \$ 3,700 | \$ 4,200 | \$ 5,000 |
| Cost for 2" | 2012 | \$ 2,950 | \$ 3,300 | \$ 3,500 | \$ 4,000 | \$ 4,700 |
| Water Service | 2013 | \$ 3,500 | \$ 3,900 | \$ 4,200 | \$ 4,750 | \$ 5,600 |

(2) **Miscellaneous Charges**, as reflected in Task #30 of the 2012 Water Rate Study:

(a) Hydrant Use Permits

| | |
|--|--|
| Weekly Pool Filling Permit..... | \$75/wk + \$300 refundable deposit |
| Contractor Seasonal (winter or summer) | |
| Hydrant Connection Permit..... | \$75/wk + \$300 non-refundable fee |
| Tanker Hydrant Connection Permit..... | \$25/week + metered volume (based on average retail commodity rate) + \$300 non-refundable fee |
| Hydrant Flow Test..... | \$200 fee |

(b) Tapping Permits

| <u>Connection Size</u> | <u>Fee</u> |
|------------------------|------------|
| 2" and smaller | \$225.00 |
| 3" and larger | Cost |

(c) Meter Installation and Seasonal Turn Off/On Fees

| <u>Meter Size</u> | <u>Fee</u> |
|-------------------|------------|
| 3/4" or smaller | \$40.00 |
| 1" | 45.00 |
| 1-1/2" | 55.00 |
| 2" | 60.00 |
| 3" | 100.00 |
| 4" | 200.00 |
| 6" and larger | 250.00 |

(d) Frozen/Damaged/Missing Meter Charges

| <u>Meter Size</u> | <u>Fee</u> |
|-------------------|------------|
| 3/4" or smaller | \$150.00 |
| 1" | 200.00 |
| 1-1/2" ECR | 350.00 |
| 1-1/2" Turbo | 500.00 |
| 2" ECR | 450.00 |
| 2" Turbo | 575.00 |
| 3" Turbo | 750.00 |
| 4" | 1400.00 |
| 6" and larger | 2350.00 |

(e) Meter Services

| | |
|--|-----------------------------|
| Final reading | \$35.00 |
| Meter Testing Fee (paid by customer if meter is accurate, no charge to customer if meter is faulty) | |
| | 5/8 - 1" Meter \$50.00 |
| | 1-1/2 - 2" Meter \$75.00 |
| | 3-6" Meter Cost |

(f) Security Deposit

| | |
|---|----------|
| Three (3) times average quarterly bill (\$187.20) | \$577.86 |
|---|----------|

(g) Miscellaneous Permits

| | |
|--|---------|
| Street opening permit..... | \$30.00 |
| Water inspection permit (each inspection within the City) | \$40.00 |
| Water inspection permit (each inspection outside the City)..... | \$55.00 |
| Sanitary Service line inspection permit (each inspection within city)..... | \$40.00 |
| Sanitary Service line inspection permit (each outside city) | \$55.00 |
| Storm service line inspection permit (each inspection within city) | \$40.00 |
| Storm Service line inspection permit (each outside City) | \$55.00 |
| Plumbing service re-inspection fee | \$40.00 |

| | |
|--|---------|
| Cross Connection re-inspection fee | \$75.00 |
| Sewer Lateral service Demolition/Cap off inspection fee (each within city)..... | \$40.00 |
| Sewer Lateral Service Demolition/Cap off inspection fee (each outside city)..... | \$55.00 |
| Footing Drain Lateral Inspection Permit (each within City)..... | \$40.00 |
| Footing Drain Lateral Inspection Permit (each outside City) | \$55.00 |

(h) Service Fee

| | |
|--|----------|
| Customer-requested on-site service (non-scheduled appointment-customer issue only)..... | \$55.00 |
| Turn-on/turn-off water for real-estate inspections..... | \$110.00 |

(i) Penalties

| | |
|---|------------|
| Late-payment penalty..... | 10% of net |
| Processing for shut-off (non-payment, cross connection) | \$55.00 |
| Penalty for failure to keep appointment..... | \$35.00 |
| Penalty for each missed appointment thereafter (related to same service)..... | \$50.00 |
| Unauthorized operation of valves..... | \$100.00* |
| (plus double the commodity rate for estimated volume) | |
| Unauthorized use of connection pipes for fire protection | \$100.00* |
| (plus double the commodity rate for estimated volume) | |
| Unauthorized opening of by-pass valve/tampering | \$100.00* |
| (plus double the commodity rate for estimated volume) | |
| Unauthorized use of a hydrant/water | \$500.00 |
| Use of illegal connection on hydrant (including loss of connection) | \$500.00 |
| Failure to return hydrant connection equipment..... | \$500.00 |
| (plus number of weeks equipment used/missing) | |
| Return of damaged hydrant connection equipment..... | \$500.00 |
| Lost/non-returned hydrant wrench | \$50.00 |
| Permit infractions/violations..... | \$100.00* |
| (plus double with each subsequent infraction) | |
| Returned check charge | \$30.00 |
| Unauthorized service tap of watermain..... | \$500.00 |
| (fine per tap plus tapping permit fee for each tap) | |

*Penalty will double with each subsequent infraction and/or litigation.

- (3) Watermain Oversizing Rates**, as reflected in Task #32 of the 2012 Water Rate Study:
- | | |
|-------------------------|--------------------------|
| 8 inch to 12 inch..... | \$14.84 per lineal foot |
| 12 inch to 16 inch..... | \$20.51 per lineal foot |
| 8 inch to 16 inch..... | \$35.35 per lineal foot* |

Section 5. That Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to add Section 2.41.2 as follows:

“Sec. 2.41.2 Circuit Breaker.

As agreed among the customer communities per the uniform water and sewer service agreement, the Individual Circuit Breaker (ICB) and City and Customer Community Circuit Breaker programs have been established in order to relieve hardship. The former program serves to assist eligible water customers, and the latter program serves to normalize rates among customer communities to the extent that funds are available for such purpose. These programs shall be administered according to the terms of the uniform water and sewer service agreement. The amount allocated for this purpose shall not exceed:

| <u>Year</u> | <u>Circuit Breaker Allocation</u> |
|-------------|-----------------------------------|
| 2013 | \$143,655” |

Section 6. That Section 2.45 of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"Sec. 2.45 Effective Date.

The rates, charges and fees set forth in Section 2.34(2), 2.35, 2.40 and 2.41.1 shall be effective on January 1, 2013."

Carried by a roll call vote: Yeas: -7 Nays: -0

Com. Gutowski, supported by Com. Kelly, moved that the ordinance take immediate effect pursuant to Section 9 of Title V of the City Charter.

Adopted: Yeas: -7 Nays: -0

I hereby certify that the foregoing is a true transcript of the action of the City Commission of the City of Grand Rapids, Michigan, in public session held December 18, 2012.



Lauri S. Parks, City Clerk

82021 An Ordinance to amend Chapter 27 of Title II of the City Code amending Sewer Rates and Charges was presented to the City Commission on November 27, 2012 under File No. 81962 and a hearing was held on December 4, 2012 under File No. 82011. The aforementioned ordinance shall be considered for adoption this date.

Com. Shaffer, supported by Com. Bliss, moved adoption of the following ordinance:

**AN ORDINANCE TO AMEND SECTIONS 2.95(2), 2.96, 2.101, 2.102, 2.105
AND ADD A NEW SECTION 2.102.1 TO CHAPTER 27 OF TITLE II
OF THE CODE OF THE CITY OF GRAND RAPIDS,
AMENDING THE SEWER RATES AND CHARGES
ORDINANCE NO. 2012-64
THE PEOPLE OF THE CITY OF GRAND RAPIDS DO ORDAIN:**

Section 1. That Section 2.95(2) of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"(2) The charge shall be known as the front foot rate and be determined by multiplying the rate per foot by the number of feet the property owner has fronting on the local collector sewer line from which he or she will receive service. The front foot rate shall be as follows:

- (a) Domestic User: \$70.00;
- (b) Commercial or Industrial User;

- 1. The same as a domestic user if the connection is made to a local collector sewer line eight (8) inches or less in diameter.
- 2. For a line larger than eight (8) inches in diameter: \$104.00.

This charge will be annually reviewed and may change to reflect the current average cost of installation of local collector sewer lines."

Section 2. That Section 2.96 of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.96 Integrated Sewer Connection Fee Schedule.

- (1) When a property owner or user is requested or required to connect to the System and has not previously paid or been assessed a connection fee, the following connection fee schedule shall apply:

Integrated Sewer Connection Base Fee Schedule

| Water Meter (or equivalent) Size (inches) | Base Fee |
|---|-----------|
| 3/4 or less | \$2,830 |
| 1 | \$4,730 |
| 1 ½ | \$9,420 |
| 2 | \$15,080 |
| 3 | \$33,030 |
| 4 | \$59,430 |
| 6 and over | \$132,080 |

- (2) Except as otherwise provided in the immediately succeeding paragraph, the foregoing integrated sewer connection base fee schedule for single-family and multi-family residential dwelling units shall be adjusted upward and downward as

follows: A single-family residential dwelling unit located on a parcel containing twenty thousand (20,000) square feet shall pay the applicable integrated connection fee in accordance with the foregoing schedule. When determining the square footage of a residential parcel for the purposes of determining the appropriate integrated connection fee, parcel size may be adjusted downward to take into consideration such things as wetlands, lakes, streams and other unusual characteristics of the parcel in accordance with policies approved from time to time by the Utility Advisory Board. To the extent the size of a parcel, as adjusted, is greater than or less than twenty thousand (20,000) square feet, one-half the applicable integrated connection fee will increase or decrease by the same percentage increase or decrease in the parcel above or below twenty thousand (20,000) square feet. In the case of multi-family residential dwellings, in order to determine the size of the parcel assigned to each dwelling unit for purposes of calculating the integrated connection fee to be paid by each multi-family residential dwelling unit, the total square footage of the parcel, as adjusted, on which the multi-family residential dwelling is located shall be divided by the total number of residential units. Notwithstanding any other provision in this subsection, the integrated connection fee for a single-family residential dwelling unit or multi-family residential dwelling unit shall not exceed four and one-half times the applicable base integrated connection fee set forth in foregoing schedule.

There shall be no upward adjustment in the integrated sewer service connection fee payable for a single-family residential dwelling unit connecting to the Sewer System if (a) each of the following conditions are met (1) a building permit shall have been obtained, (2) the dwelling unit shall have been constructed, and (3) a certificate of occupancy shall have been issued prior to January 1, 2000 or (b) local building permit fees have been paid to the local governmental unit prior to January 1, 2000 for a single-family residential dwelling unit to be constructed on or after January 1, 2000. When connecting to the Sewer System, Users living in or owning such single-family residential dwelling units shall pay the applicable base integrated connection fee set forth in the Integrated Sewer Connection Base Fee Schedule adjusted downward, if applicable, in accordance with the immediate preceding paragraph.

Effective January 1, 2005 and January 1st of every year thereafter, the Integrated Sewer Connection Base Fees shall be adjusted by a percentage, which is determined by the annual change in the Consumer Price Index (the "Index") calculated as follows:

- (a) The Consumer Price Index shall be that Index referred to as the Consumer Price Index, US City Average, All Urban Consumers, published by the U.S. Department of Labor-Bureau of Statistics ((1982-84)=100). In the event the method of determining the Index is substantially altered, the basis for determining the annual change thereafter shall be the Index which is most comparable to the Index described above.
- (b) For the purpose of computing the percentage change each calendar year, the Index for the month of August for the prior calendar year shall be subtracted from the Index for the immediately preceding August. The result so obtained (if positive) shall be divided by the Index for the month of August for the prior calendar year to obtain the percentage increase which shall be applied to the then current Integrated Sewer Connection Base Fee Schedule to determine the new calendar year schedule.

The foregoing Integrated Connection fee is due and payable at the time a User receives a permit to connect to the Sewer System. A permit issued by the City to connect to the Sewer System shall expire one hundred eighty (180) days from the date the permit was issued.

The user receiving services who applies for a larger water meter than the one presently in service shall pay an Integrated Connection Fee which is the difference in cost between the meter size in service and the one applied for in accordance with the Integrated Connection Fee in effect at the time of application. No credit or rebate shall be made in the case of application for a smaller meter size."

Section 3. That Section 2.101 of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.101 Rates and Charges for Retail Users Within the City of Grand Rapids.

The following rates and charges for sewage disposal service shall apply for users within the City of Grand Rapids:

| <u>Commodity Rate</u> | |
|-----------------------|---------------------------|
| Domestic | \$3.26 per 100 cubic feet |
| Commercial | \$3.26 per 100 cubic feet |
| Industrial | \$3.26 per 100 cubic feet |

| <u>Monthly Service Charge</u> | |
|-------------------------------|---------------|
| <u>Size of Meter</u> | <u>Charge</u> |
| 3/4 inch or less | \$13.19 |
| 1 inch | 21.00 |
| 1 1/4 inches | 31.04 |
| 1 1/2 inches | 43.31 |
| 2 inches | 74.55 |
| 3 inches | 163.79 |
| 4 inches | 288.73 |
| 6 inches or larger | 645.71" |

Section 4. That Section 2.102 of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.102 Surcharges and Permit Fees.

- (1) If the City Manager determines that a discharge will not cause pass through or interference as defined in this Chapter, Industrial or Commercial users whether they are located within a retail service area or a bulk service area shall be charged a surcharge if the concentration of their discharge exceeds a five-day BOD of two hundred fifty (250) mg/l, and/or TSS of two hundred fifty (250) mg/l, or any phosphorus of fifteen (15) mg/l. That charge shall be nineteen and three-tenth cents (\$0.193) per pound of BOD and twenty seven and seven-tenth cents (\$0.277) per pound of TSS and two dollars and fifteen and eight-tenth cents (\$2.158) per pound of phosphorus in excess of the above limits. In addition, all industrial or commercial users shall be charged a surcharge for ammonia concentrations exceeding thirty-eight (38) mg/l. The charge shall be twenty nine and four-tenth cents (\$0.294) per pound of ammonia in excess of the above limit. Discharge concentrations of these substances and the resulting surcharge shall be based on at least three composite samples per quarter. This sampling shall be performed by either the City or the Industrial User as determined by the City Manager.
- (2) The fee for a Significant Industrial User Discharge Permit as provided for in Section 2.70 of this Chapter whether they are located within a retail service area

or a bulk service area shall be four hundred dollars (\$400.00) per year and an analytical fee based upon Section 2.102(3).

- (3) The following schedule of charges shall apply to any analysis which may be required as a part of a Significant Industrial User Discharge Permit:

| | |
|---------------------|---------------|
| Metals | \$7.00 each |
| TSS | \$7.00 each |
| BOD | \$14.00 each |
| Total Phosphate | \$13.50 each |
| pH | \$5.00 each |
| EPA 624 | \$60.00 each |
| EPA 625 | \$115.00 each |
| BTEX/MTBE | \$35.00 each |
| Sulfide | \$12.00 each |
| Oil and Grease | \$25.00 each |
| Total Cyanide | \$15.00 each |
| Hexavalent Chromium | \$10.00 each |
| Fecal Coliform | \$25.00 each |
| Mercury | \$15.00 each |
| Ammonia | \$9.00 each |
| Labor | \$57.57 hour |
| Sampler | \$35.00 day |
| Vehicle | \$3.78 hour |

- (4) These charges will be reviewed annually and may change to reflect the current cost of providing these services.”

Section 5. That Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to add Section 2.102.1 as follows:

“Sec. 2.102.1 Miscellaneous Charges.

- (1) **Sewer Lateral Charges**, as reflected in Task #29 of the 2012 Sewer Rate Study:

| <u>R.O.W. WIDTH</u> | <u>COST FOR 6-INCH LATERAL</u> | | |
|---------------------|--------------------------------|---------|------------|
| | 2012 | 2013 | % Increase |
| 50 ft. | \$1,800 | \$2,150 | 19.44% |
| 60 ft. | \$2,150 | \$2,550 | 18.60% |
| 66 ft. | \$2,300 | \$2,800 | 21.74% |
| 80 ft. | \$2,750 | \$3,350 | 21.82% |
| 100 ft. | \$3,400 | \$4,100 | 20.59% |

- (2) **Sewer Oversizing Rates**, as reflected in Task #32 of the 2012 Sewer Rate Study:

| <u>Description</u> | <u>Amount (per lineal foot)</u> |
|--------------------|-------------------------------------|
| 8" to 10" | \$6.47 |
| 8" to 12" | \$11.56 |
| 8" to 15" | \$21.18 |
| 10" to 12" | \$5.09 |
| 10" to 15" | \$14.71 |
| 12" to 15" | \$9.62 |

- (3) **Footing Drain Disconnect Opt Out Charge**, as reflected in Task #35 of the 2012 Sewer Rate Study, and as authorized by Section 2.115 of this Code:

\$73.20/customer/month

Section 6. That Section 2.105 of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.105 Effective Date.

The rates, charges and fees set forth in Section 2.95(2), 2.96, 2.101, 2.102 and 2.102.1 shall be effective on January 1, 2013."

Carried by a roll call vote: Yeas: -7 Nays: -0

Com. Gutowski, supported by Com. Kelly, moved that the ordinance take immediate effect pursuant to Section 9 of Title V of the City Charter.

Adopted: Yeas: -7 Nays: -0

I hereby certify that the foregoing is a true transcript of the action of the City Commission of the City of Grand Rapids, Michigan, in public session held December 18, 2012.



Lauri S. Parks, City Clerk



CITY OF GRAND RAPIDS AGENDA ACTION REQUEST

DATE: December 11, 2012

TO: Gregory A. Sundstrom, City Manager

COMMITTEE: Committee of the Whole

LIAISON: Gregory A. Sundstrom, City Manager

FROM: Linda Wagenmaker *LW*
Utility Financial Officer

SUBJECT: 2013 CUSTOMER COMMUNITY WATER-SEWER RATES

The 2012 Preliminary Water-Sewer Rate Study recommended water and sewer rate adjustments as of January 1, 2013 for Grand Rapids and each customer community served by the water and sewage systems. City Commission approval of rate adjustments for customer communities is required.

UAB partners and other customer communities were notified of the recommended rate adjustments on November 8, 2012. The water-sewer service agreements provide our customer communities a thirty-day comment period following notification of rate adjustments. No comments were received except that Grand Rapids Township elected to contribute \$5,600 to reduce sewer rates effective January 1, 2013.

In summary, Water Supply System revenue requirements reflect a decrease of \$1,812,756 or 4.41% less than revenues generated by existing rates and charges, and Sewage Disposal System revenue requirements reflect a decrease of \$1,216,435 or 2.46% less than revenues generated by existing rates and charges.

The attached resolution approves the recommended water and sewer rates for the City's retail and wholesale communities for calendar year 2013. A summary of water and sewer revenue requirement changes and a rate schedule for each customer community is attached to the resolution.

LW

Attachments

YOUR COMMITTEE OF THE WHOLE recommends adoption of the following resolution approving the attached revised Water and Sewer Rates in accordance with the 2012 Water-Sewer Rate Review.

CORRECT IN FORM

DEPARTMENT OF LAW

COMMITTEE OF THE WHOLE

Com. _____, supported by Com. _____, moved adoption of the following resolution:

WHEREAS, The Water-Sewer rate studies have been undertaken and completed for the years 1976 through 2011, and,

WHEREAS, The 2012 Water-Sewer Rate Review has been completed using the same general methodology as the 1976 through 2011 Water-Sewer Rate Studies, as adjusted where appropriate for the uniform water and sewer service agreements.

RESOLVED that the attached water and sewer rates are approved and shall be effective January 1, 2013.

RESOLVED that the City Clerk is directed to notify the contractual water and sewer service customers in writing of the water and sewer rates, and the Mayor and City Clerk are authorized to take any other action as may be required to evidence the new water and sewer rates.

Drafted by: Linda Wagenmaker, Utility Financial Officer

**CITY OF GRAND RAPIDS, MICHIGAN
2012 FINAL WATER/SEWER RATE STUDY
SUMMARY OF REVENUE REQUIREMENT CHANGES
December 10, 2012**

| | WATER (1) | | SEWER (1) | |
|-------------------------|-----------------------|---------------|-----------------------|---------------|
| | AMOUNT | PERCENT | AMOUNT | PERCENT |
| GRAND RAPIDS | \$ (1,007,840) | -4.11% | \$ (399,303) | -1.18% |
| WALKER | (133,533) | -4.11% | (181,873) | -3.78% |
| KENTWOOD | (233,365) | -5.39% | (166,646) | -4.58% |
| CASCADE TWP | (139,297) | -4.56% | (104,610) | -5.04% |
| GRAND RAPIDS TWP (2) | (112,597) | -5.20% | (211,331) | -8.49% |
| NET OF CONTRIBUTION OF: | | | 5,600 | |
| TALLMADGE TWP (2) | (5,347) | -4.11% | (1,812) | -0.71% |
| WRIGHT TWP (2) | NA | NA | (1,850) | -0.74% |
| EAST GRAND RAPIDS | (61,685) | -6.52% | (61,647) | -8.86% |
| ADA TWP | (67,343) | -5.07% | (85,944) | -7.25% |
| OTTAWA COUNTY | (51,749) | -3.86% | NA | NA |
| GAINES TWP | NA | NA | (7,019) | -4.06% |
| SYSTEM | \$ (1,812,756) | -4.41% | \$ (1,216,435) | -2.46% |

(1) Change in revenue requirements based on revenues currently generated from rates, customer base and volumes reported in the preliminary rate study. (Includes consideration for relief from CCCCB)

(2) Grand Rapids Twp contributed \$7,200 in 2011 Rate Study for 2012 sewer revenue requirements & rates.
Tallmadge Twp contributed \$8,038 in 2011 Rate Study for 2012 water revenue requirements & rates.
Tallmadge Twp contributed \$9,720 in 2011 Rate Study for 2012 sewer revenue requirements & rates.
Wright Twp contributed \$5,000 in 2011 Rate Study for 2012 sewer revenue requirements & rates.

DISCLOSE RELIEF PROVIDED BY CITY & CUSTOMER COMMUNITY CIRCUIT BREAKER (CCCB)

| | WATER | | SEWER | |
|-------------------------------|----------------|---------|----------------|---------|
| | AMOUNT | PERCENT | AMOUNT | PERCENT |
| SYSTEM CHANGE- ABOVE | \$ (1,812,756) | -4.41% | \$ (1,216,435) | -2.46% |
| ADD: CCCB RELIEF | 124,583 | 0.30% | 559,006 | 1.13% |
| SYSTEM CHANGE- WITHOUT RELIEF | \$ (1,688,173) | -4.11% | \$ (657,429) | -1.33% |

Page has been removed from the published Rate Study.

APPROVAL OF CUSTOMER COMMUNITIES' RATES

*82038 Com. Lumpkins, supported by Com. Bliss, moved adoption of the following resolution under the Consent Agenda:

WHEREAS, The Water-Sewer rate studies have been undertaken and completed for the years 1976 through 2011; and

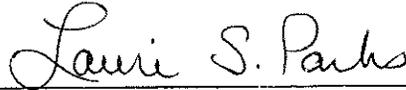
WHEREAS, The 2012 Water-Sewer Rate Review has been completed using the same general methodology as the 1976 through 2011 Water-Sewer Rate Studies, as adjusted where appropriate for the uniform water and sewer service agreements.

RESOLVED that the attached water and sewer rates are approved and shall be effective January 1, 2013.

RESOLVED that the City Clerk is directed to notify the contractual water and sewer service customers in writing of the water and sewer rates, and the Mayor and City Clerk are authorized to take any other action as may be required to evidence the new water and sewer rates.

* CONSENT AGENDA APPROVAL

I hereby certify that the foregoing is a true transcript of the action of the City Commission of the City of Grand Rapids, Michigan, in public session held December 18, 2012.



Lauri S. Parks, City Clerk



December 21, 2012

Ms. Sarah Bydalek, City Clerk
City of Walker
4243 Remembrance Road NW
Grand Rapids, MI 49504

Dear Sarah:

The "2012 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer service.

Customer communities were notified of the recommended rate changes at a meeting on November 8, 2012 followed by a thirty-day comment period.

On December 18, 2012, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2013. A certified copy of the resolution and the approved rate schedules for the City of Walker are attached for your information.

If you need any further information, please call me at 456-3015.

Sincerely,

Lauri S. Parks
City Clerk

LSP/pas

Enclosures

cc: Scott Buhner, Assistant to the City Manager, Fiscal Services
Linda Wagenmaker, Utility Financial Officer

LAURI S. PARKS, CITY CLERK
300 MONROE AVENUE, N.W., GRAND RAPIDS, MICHIGAN 49503
TELEPHONE (616) 456-3010 • FAX (616) 456-4607

CITY OF WALKER, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 2.62 /100 CF *
 \$ 2.72 x 96.22%

MONTHLY SERVICE CHARGE:

| | | |
|-----------------------------|----------------|---------------------|
| SYSTEM REVENUE REQUIREMENTS | | \$ 4,626,709 |
| NEW COMMODITY CHARGE | | |
| 836,917 x \$ 2.62 | | \$ 2,192,723 |
| NEW MONTHLY BILLING CHARGE | | |
| 5,530 x \$ 3.15 x 12 | <u>209,034</u> | <u>(2,401,757)</u> |
| | | <u>\$ 2,224,952</u> |

MONTHLY METER CHARGE = $\frac{\$2,224,952}{7,139 \times 12} = \underline{\underline{\$ 25.97 \text{ MONTHLY}}}$

| METER SIZE | EQUIVALENT | MONTHLY SERVICE CHARGE | | | PRESENT |
|--------------|------------|------------------------|---------|----------|----------|
| | | METER | BILLING | TOTAL | |
| 3/4" or less | 1.0000 | \$ 25.97 | \$ 3.15 | \$ 29.12 | \$ 30.34 |
| 1" | 1.7778 | 46.17 | 3.15 | 49.32 | 51.24 |
| 1 1/4" | 2.7778 | 72.14 | 3.15 | 75.29 | 78.11 |
| 1 1/2" | 4.0000 | 103.88 | 3.15 | 107.03 | 110.95 |
| 2" | 7.1111 | 184.68 | 3.15 | 187.83 | 194.55 |
| 3" | 16.0000 | 415.52 | 3.15 | 418.67 | 433.39 |
| 4" | 28.4444 | 738.70 | 3.15 | 741.85 | 767.77 |
| 6" and over | 64.0000 | 1,662.08 | 3.15 | 1,665.23 | 1,723.15 |

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2013



December 21, 2012

Mr. Dan Kasunic, Clerk
City of Kentwood
4900 Breton Avenue SE
Kentwood, MI 49518-8848

Dear Dan:

The "2012 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer service.

Customer communities were notified of the recommended rate changes at a meeting on November 8, 2012 followed by a thirty-day comment period.

On December 18, 2012, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2013. A certified copy of the resolution and the approved rate schedules for the City of Kentwood are attached for your information.

If you need any further information, please call me at 456-3015.

Sincerely,

Lauri S. Parks
City Clerk

LSP/pas

Enclosures

cc: Scott Buhner, Assistant to the City Manager, Fiscal Services
Linda Wagenmaker, Utility Financial Officer

CITY OF KENTWOOD, MICHIGAN

WATER RATE STUDY
 WATER SUPPLY SYSTEM FUND
 RATE ANALYSIS - TASK NO. 27

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 1.60 /100 CF *
 \$ 1.69 x 94.61%

MONTHLY SERVICE CHARGE:

| | | |
|--------------------------------|--------------|---------------------|
| SYSTEM REVENUE REQUIREMENTS | | \$ 4,094,901 |
| NEW COMMODITY CHARGE | | |
| 1,632,656 x \$ 1.60 | \$ 2,612,250 | |
| NEW MONTHLY BILLING CHARGE | | |
| 4,604 x \$ 3.32 x 12 | 183,423 | |
| MONTHLY FIRE PROTECTION CHARGE | 145,434 | |
| ANNUAL HYDRANT CHARGE | <u>-</u> | <u>(2,941,107)</u> |
| | | <u>\$ 1,153,794</u> |

MONTHLY METER CHARGE = $\frac{\$1,153,794}{8,165 \times 12} = \underline{\underline{\$ 11.78 \text{ MONTHLY}}}$

| METER SIZE | EQUIVALENT | MONTHLY SERVICE CHARGE | | | PRESENT |
|--------------|------------|------------------------|---------|----------|----------|
| | | METER | BILLING | TOTAL | |
| 3/4" or less | 1.0000 | \$ 11.78 | \$ 3.32 | \$ 15.10 | \$ 16.10 |
| 1" | 1.7778 | 20.94 | 3.32 | 24.26 | 25.82 |
| 1 1/4" | 2.7778 | 32.72 | 3.32 | 36.04 | 38.32 |
| 1 1/2" | 4.0000 | 47.12 | 3.32 | 50.44 | 53.60 |
| 2" | 7.1111 | 83.77 | 3.32 | 87.09 | 92.49 |
| 3" | 16.0000 | 188.48 | 3.32 | 191.80 | 203.60 |
| 4" | 28.4444 | 335.08 | 3.32 | 338.40 | 359.16 |
| 6" and over | 64.0000 | 753.92 | 3.32 | 757.24 | 803.60 |

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2013

CITY CLERK



CITY OF GRAND RAPIDS

December 21, 2012

Mr. Ronald Goodyke, Clerk
Cascade Charter Township
2865 Thornhills SE
Grand Rapids, MI 49546-7192

Dear Mr. Goodyke:

The "2012 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer service.

Customer communities were notified of the recommended rate changes at a meeting on November 8, 2012 followed by a thirty-day comment period.

On December 18, 2012, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2013. A certified copy of the resolution and the approved rate schedules for Cascade Township are attached for your information.

If you need any further information, please call me at 456-3015.

Sincerely,

Lauri S. Parks
City Clerk

LSP/pas

Enclosures

cc: Scott Buhner, Assistant to the City Manager, Fiscal Services
Linda Wagenmaker, Utility Financial Officer

LAURI S. PARKS, CITY CLERK
300 MONROE AVENUE, N.W., GRAND RAPIDS, MICHIGAN 49503
TELEPHONE (616) 456-3010 • FAX (616) 456-4607

CASCADE TOWNSHIP

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 2.16 /100 CF *
 \$ 2.26 x 95.44%

MONTHLY SERVICE CHARGE:

| | | |
|--------------------------------|---------------|--------------------|
| SYSTEM REVENUE REQUIREMENTS | | \$ 2,915,919 |
| NEW COMMODITY CHARGE | | |
| 783,436 x \$ 2.16 | \$ 1,692,222 | |
| NEW MONTHLY BILLING CHARGE | | |
| 3,105 x \$ 3.32 x 12 | 123,703 | |
| MONTHLY FIRE PROTECTION CHARGE | 78,386 | |
| ANNUAL HYDRANT CHARGE | <u>39,000</u> | <u>(1,933,311)</u> |
| | | <u>\$ 982,608</u> |

MONTHLY METER CHARGE = $\frac{\$982,608}{4,799 \times 12} = \underline{\underline{\$ 17.06 \text{ MONTHLY}}}$

| METER SIZE | EQUIVALENT | MONTHLY SERVICE CHARGE | | | PRESENT |
|--------------|------------|------------------------|---------|----------|----------|
| | | METER | BILLING | TOTAL | |
| 3/4" or less | 1.0000 | \$ 17.06 | \$ 3.32 | \$ 20.38 | \$ 21.54 |
| 1" | 1.7778 | 30.33 | 3.32 | 33.65 | 35.49 |
| 1 1/4" | 2.7778 | 47.39 | 3.32 | 50.71 | 53.43 |
| 1 1/2" | 4.0000 | 68.24 | 3.32 | 71.56 | 75.36 |
| 2" | 7.1111 | 121.32 | 3.32 | 124.64 | 131.17 |
| 3" | 16.0000 | 272.96 | 3.32 | 276.28 | 290.64 |
| 4" | 28.4444 | 485.26 | 3.32 | 488.58 | 513.89 |
| 6" and over | 64.0000 | 1,091.84 | 3.32 | 1,095.16 | 1,151.76 |

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2013

CASCADE TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 2.50 /100 CF *
 \$ 2.63 x 94.96%

MONTHLY SERVICE CHARGE:

| | | |
|-----------------------------|--------|--------------|
| SYSTEM REVENUE REQUIREMENTS | | \$ 1,970,056 |
| NEW COMMODITY CHARGE | | |
| 390,724 x \$ 2.50 | | \$ 976,810 |
| NEW MONTHLY BILLING CHARGE | | |
| 1,738 x \$ 3.15 x 12 | 65,696 | (1,042,506) |
| | | \$ 927,550 |

MONTHLY METER CHARGE = $\frac{\$927,550}{2,842 \times 12} = \underline{\underline{\$ 27.20 \text{ MONTHLY}}}$

| METER SIZE | EQUIVALENT | MONTHLY SERVICE CHARGE | | | PRESENT |
|--------------|------------|------------------------|---------|----------|----------|
| | | METER | BILLING | TOTAL | |
| 3/4" or less | 1.0000 | \$ 27.20 | \$ 3.15 | \$ 30.35 | \$ 32.05 |
| 1" | 1.7778 | 48.36 | 3.15 | 51.51 | 54.28 |
| 1 1/4" | 2.7778 | 75.56 | 3.15 | 78.71 | 82.86 |
| 1 1/2" | 4.0000 | 108.80 | 3.15 | 111.95 | 117.79 |
| 2" | 7.1111 | 193.42 | 3.15 | 196.57 | 206.71 |
| 3" | 16.0000 | 435.20 | 3.15 | 438.35 | 460.75 |
| 4" | 28.4444 | 773.69 | 3.15 | 776.84 | 816.41 |
| 6" and over | 64.0000 | 1,740.80 | 3.15 | 1,743.95 | 1,832.59 |

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2013



December 21, 2012

Mr. Ed Robinette, Clerk
Grand Rapids Charter Township
1836 East Beltline NE
Grand Rapids, MI 49525

Dear Ed:

The "2012 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer service.

Customer communities were notified of the recommended rate changes at a meeting on November 8, 2012 followed by a thirty-day comment period.

On December 18, 2012, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2013. A certified copy of the resolution and the approved rate schedules for Grand Rapids Township are attached for your information.

If you need any further information, please call me at 456-3015.

Sincerely,

Lauri S. Parks
City Clerk

LSP/pas

Enclosures

cc: Scott Buhner, Assistant to the City Manager, Fiscal Services
Linda Wagenmaker, Utility Financial Officer

GRAND RAPIDS TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 2.28 /100 CF *
 \$ 2.49 x 91.51%

MONTHLY SERVICE CHARGE:

| | |
|---------------------------------|---------------------|
| SYSTEM REVENUE REQUIREMENTS | \$ 2,278,105 |
| NET OF CONTRIBUTION OF \$ 5,600 | |
| NEW COMMODITY CHARGE | |
| 399,072 x \$ 2.28 | \$ 909,884 |
| NEW MONTHLY BILLING CHARGE | |
| 3,573 x \$ 3.15 x 12 | <u>135,059</u> |
| | <u>(1,044,943)</u> |
| | <u>\$ 1,233,162</u> |

MONTHLY METER CHARGE = $\frac{\$1,233,162}{4,371 \times 12} = \underline{\underline{\$ 23.51 \text{ MONTHLY}}}$

| METER SIZE | EQUIVALENT | MONTHLY SERVICE CHARGE | | | PRESENT |
|--------------|------------|------------------------|---------|----------|----------|
| | | METER | BILLING | TOTAL | |
| 3/4" or less | 1.0000 | \$ 23.51 | \$ 3.15 | \$ 26.66 | \$ 29.15 |
| 1" | 1.7778 | 41.80 | 3.15 | 44.95 | 49.12 |
| 1 1/4" | 2.7778 | 65.31 | 3.15 | 68.46 | 74.80 |
| 1 1/2" | 4.0000 | 94.04 | 3.15 | 97.19 | 106.19 |
| 2" | 7.1111 | 167.18 | 3.15 | 170.33 | 186.08 |
| 3" | 16.0000 | 376.16 | 3.15 | 379.31 | 414.35 |
| 4" | 28.4444 | 668.73 | 3.15 | 671.88 | 733.92 |
| 6" and over | 64.0000 | 1,504.64 | 3.15 | 1,507.79 | 1,646.99 |

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2013

CITY CLERK



CITY OF GRAND RAPIDS

December 21, 2012

Ms. Lenore Cook, Clerk
Tallmadge Township Offices
0-1451 Leonard Street NW
Grand Rapids, MI 49504

Dear Ms. Cook:

The "2012 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer service.

Customer communities were notified of the recommended rate changes at a meeting on November 8, 2012 followed by a thirty-day comment period.

On December 18, 2012, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2013. A certified copy of the resolution and the approved rate schedules for Tallmadge Township are attached for your information.

If you need any further information, please call me at 456-3015.

Sincerely,

Lauri S. Parks
City Clerk

LSP/pas

Enclosures

cc: Scott Buhner, Assistant to the City Manager, Fiscal Services
Linda Wagenmaker, Utility Financial Officer

LAURI S. PARKS, CITY CLERK
300 MONROE AVENUE, N.W., GRAND RAPIDS, MICHIGAN 49503
TELEPHONE (616) 456-3010 • FAX (616) 456-4607

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CITY CLERK



CITY OF GRAND RAPIDS

December 21, 2012

Ms. Linda Way, Township Clerk
Wright Township
1565 Jackson
P.O. Box 255
Marne, MI 49435

Dear Ms. Way:

The "2012 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer service.

Customer communities were notified of the recommended rate changes at a meeting on November 8, 2012 followed by a thirty-day comment period.

On December 18, 2012, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2013. A certified copy of the resolution and the approved rate schedule for Wright Township are attached for your information.

If you need any further information, please call me at 456-3015.

Sincerely,

Lauri S. Parks
City Clerk

LSP/pas

Enclosures

cc: Scott Buhner, Assistant to the City Manager, Fiscal Services
Linda Wagenmaker, Utility Financial Officer

LAURI S. PARKS, CITY CLERK
300 MONROE AVENUE, N.W., GRAND RAPIDS, MICHIGAN 49503
TELEPHONE (616) 456-3010 • FAX (616) 456-4607

WRIGHT TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

MONTHLY REU CHARGE:

$$\frac{\text{SYSTEM REVENUE REQUIREMENTS **}}{\text{TOTAL REU'S * 12 MONTHS}} = \frac{\$247,401}{333.187 \times 12} = \$ \underline{\underline{61.88}} \quad \text{MONTHLY REU CHARGE *}$$

EXAMPLES OF APPROXIMATE MONTHLY CHARGE BY NUMBER OF REU:

| <u>NUMBER OF REU</u> | <u>AMOUNT</u> | <u>NUMBER OF REU</u> | <u>AMOUNT</u> | <u>NUMBER OF REU</u> | <u>AMOUNT</u> |
|----------------------|---------------|----------------------|---------------|----------------------|---------------|
| 1.0000 | \$ 61.88 | 7.5000 | \$ 464.10 | 19.0000 | \$ 1,175.72 |
| 1.5000 | 92.82 | 8.0000 | 495.04 | 20.0000 | 1,237.60 |
| 2.0000 | 123.76 | 8.5000 | 525.98 | 25.0000 | 1,547.00 |
| 2.5000 | 154.70 | 9.0000 | 556.92 | 30.0000 | 1,856.40 |
| 3.0000 | 185.64 | 9.5000 | 587.86 | 35.0000 | 2,165.80 |
| 3.5000 | 216.58 | 10.0000 | 618.80 | 40.0000 | 2,475.20 |
| 4.0000 | 247.52 | 11.0000 | 680.68 | 50.0000 | 3,094.00 |
| 4.4000 | 272.27 | 12.0000 | 742.56 | 60.0000 | 3,712.80 |
| 4.5000 | 278.46 | 13.0000 | 804.44 | 70.0000 | 4,331.60 |
| 5.0000 | 309.40 | 14.0000 | 866.32 | 80.0000 | 4,950.40 |
| 5.5000 | 340.34 | 15.0000 | 928.20 | 90.0000 | 5,569.20 |
| 6.0000 | 371.28 | 16.0000 | 990.08 | 100.0000 | 6,188.00 |
| 6.5000 | 402.22 | 17.0000 | 1,051.96 | 150.0000 | 9,282.00 |
| 7.0000 | 433.16 | 18.0000 | 1,113.84 | 200.0000 | 12,376.00 |

* NEW RATES EFFECTIVE ON JANUARY 1, 2013

** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 15,256



December 21, 2012

Ms. Karen Brower, Clerk
City of East Grand Rapids
750 Lakeside Drive SE
East Grand Rapids, MI 49506

Dear Karen:

The "2012 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer service.

Customer communities were notified of the recommended rate changes at a meeting on November 8, 2012 followed by a thirty-day comment period.

On December 18, 2012, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2013. A certified copy of the resolution and the approved rate schedules for the City of East Grand Rapids are attached for your information.

If you need any further information, please call me at 456-3015.

Sincerely,

Lauri S. Parks
City Clerk

LSP/pas

Enclosures

cc: Scott Buhner, Assistant to the City Manager, Fiscal Services
Linda Wagenmaker, Utility Financial Officer

CITY OF EAST GRAND RAPIDS, MICHIGAN

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

| | |
|-----------------------------|-------------------|
| SYSTEM REVENUE REQUIREMENTS | \$ 884,316 |
| NEW COMMODITY CHARGE * | |
| 589,736 x \$1.18 = | (695,888) |
| | <hr/> |
| | <u>\$ 188,428</u> |

MONTHLY SERVICE CHARGE * = \$188,428 / 12 = \$15,702

* NEW RATES EFFECTIVE ON JANUARY 1, 2013

CITY OF EAST GRAND RAPIDS, MICHIGAN

**SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

| | |
|-----------------------------|------------------|
| SYSTEM REVENUE REQUIREMENTS | \$ 633,791 |
| NEW COMMODITY CHARGE * | |
| 440.215 x \$ 1,396.00 = | (614,540) |
| | <hr/> |
| | <u>\$ 19,251</u> |

MONTHLY SERVICE CHARGE * = \$ 19,251 / 12 = \$1,604

* NEW RATES EFFECTIVE ON JANUARY 1, 2013

CITY CLERK



CITY OF GRAND RAPIDS

December 21, 2012

Ms. Susan Burton, Clerk
Ada Township
7330 Thornapple River Drive
P.O. Box 370
Ada, MI 49301

Dear Susan:

The "2012 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer service.

Customer communities were notified of the recommended rate changes at a meeting on November 8, 2012 followed by a thirty-day comment period.

On December 18, 2012, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2013. A certified copy of the resolution and the approved rate schedules for Ada Township are attached for your information.

If you need any further information, please call me at 456-3015.

Sincerely,

Lauri S. Parks
City Clerk

LSP/pas

Enclosures

cc: Scott Buhner, Assistant to the City Manager, Fiscal Services
Linda Wagenmaker, Utility Financial Officer

LAURI S. PARKS, CITY CLERK
300 MONROE AVENUE, N.W., GRAND RAPIDS, MICHIGAN 49503
TELEPHONE (616) 456-3010 • FAX (616) 456-4607

ADA TOWNSHIP

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

| | |
|-----------------------------|-------------------|
| SYSTEM REVENUE REQUIREMENTS | \$ 1,260,038 |
| NEW COMMODITY CHARGE * | |
| 648,751 x \$1.30 = | (843,376) |
| | <hr/> |
| | <u>\$ 416,662</u> |

MONTHLY SERVICE CHARGE * = $\$416,662 / 12 = \$34,722$

* NEW RATES EFFECTIVE ON JANUARY 1, 2013

ADA TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

| | |
|-----------------------------|-------------------|
| SYSTEM REVENUE REQUIREMENTS | \$ 1,099,915 |
| NEW COMMODITY CHARGE * | |
| 311.384 x \$ 1,763.00 = | (548,970) |
| | <hr/> |
| | <u>\$ 550,945</u> |

MONTHLY SERVICE CHARGE * = \$550,945 / 12 = \$45,912

* NEW RATES EFFECTIVE ON JANUARY 1, 2013



December 21, 2012

Mr. Ken Zarzecki
Director of Public Utilities
County of Ottawa
Board of County Road Commissioners
U.S. 31 at Rosy Mound Drive, P.O. Box 739
Grand Haven, MI 49417

Dear Mr. Zarzecki:

The "2012 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer service.

Customer communities were notified of the recommended rate changes at a meeting on November 8, 2012 followed by a thirty-day comment period.

On December 18, 2012, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2013. A certified copy of the resolution and the approved water rate schedule for Ottawa County are attached for your information.

If you need any further information, please call me at 456-3015.

Sincerely,

Lauri S. Parks
City Clerk

LSP/pas

Enclosures

cc: Scott Buhner, Assistant to the City Manager, Fiscal Services
Linda Wagenmaker, Utility Financial Officer

LAURI S. PARKS, CITY CLERK
300 MONROE AVENUE, N.W., GRAND RAPIDS, MICHIGAN 49503
TELEPHONE (616) 456-3010 • FAX (616) 456-4607

OTTAWA COUNTY
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

| | |
|-----------------------------|-----------------|
| SYSTEM REVENUE REQUIREMENTS | \$ 1,287,594 |
| NEW COMMODITY CHARGE * | |
| 1,020,283 x \$1.26 = | (1,285,557) |
| | <hr/> |
| | <u>\$ 2,037</u> |

MONTHLY SERVICE CHARGE * = \$ 2,037 / 12 = \$170

* NEW RATES EFFECTIVE ON JANUARY 1, 2013



December 21, 2012

Ms. Crystal Osterink, Clerk
Gaines Charter Township
8555 Kalamazoo Ave., S.E.
Caledonia, MI 49316-8270

Dear Crystal:

The "2012 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer service.

Customer communities were notified of the recommended rate changes at a meeting on November 8, 2012 followed by a thirty-day comment period.

On December 18, 2012, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2013. A certified copy of the resolution and the approved sewer rate schedule for Gaines Township are attached for your information.

If you need any further information, please call me at 456-3015.

Sincerely,

Lauri S. Parks
City Clerk

LSP/pas

Enclosures

cc: Scott Buhner, Assistant to the City Manager, Fiscal Services
Linda Wagenmaker, Utility Financial Officer

GAINES TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

| | |
|-----------------------------|------------------|
| SYSTEM REVENUE REQUIREMENTS | \$ 165,734 |
| NEW COMMODITY CHARGE * | |
| 112.093 x \$ 1,310.00 = | (146,842) |
| | <hr/> |
| | <u>\$ 18,892</u> |

MONTHLY SERVICE CHARGE * = \$ 18,892 / 12 = \$1,574

* NEW RATES EFFECTIVE ON JANUARY 1, 2013

**CITY OF GRAND RAPIDS, MICHIGAN
WATER & SEWER RATES FOR GRAND RAPIDS & RETAIL CUSTOMER COMMUNITIES
EFFECTIVE JANUARY 1, 2013**

WATER RATES

| COMMODITY | METER CODE | GRAND RAPIDS | WALKER | KENTWOOD | CASCADE | GR. RAPIDS TOWNSHIP | TALLMADGE TOWNSHIP | WRIGHT TOWNSHIP |
|---|------------|--------------|-----------|-----------|-------------|---------------------|--------------------|-----------------|
| CHARGE (HCF) | | \$ 1.77 | \$ 1.63 | \$ 1.60 | \$ 2.16 | \$ 1.79 | \$ 3.67 | NA |
| MONTHLY SERVICE CHARGE BY METER SIZE | | | | | | | | |
| 3/4" & Less | A | \$ 9.99 | \$ 12.54 | \$ 15.10 | \$ 20.38 | \$ 15.50 | \$ 7.49 | NA |
| 1" | B | \$ 15.18 | \$ 19.71 | \$ 24.26 | \$ 33.65 | \$ 24.97 | \$ 10.73 | NA |
| 1-1/4" | C | \$ 21.85 | \$ 28.93 | \$ 36.04 | \$ 50.71 | \$ 37.15 | \$ 14.90 | NA |
| 1-1/2" | D | \$ 30.00 | \$ 40.20 | \$ 50.44 | \$ 71.56 | \$ 52.04 | \$ 20.00 | NA |
| 2" | E | \$ 50.75 | \$ 68.88 | \$ 87.09 | \$ 124.64 | \$ 89.93 | \$ 32.97 | NA |
| 3" | F | \$ 110.04 | \$ 150.84 | \$ 191.80 | \$ 276.28 | \$ 198.20 | \$ 70.04 | NA |
| 4" | G | \$ 193.04 | \$ 265.58 | \$ 338.40 | \$ 488.58 | \$ 349.77 | \$ 121.93 | NA |
| 6" & Over | H | \$ 430.20 | \$ 593.40 | \$ 757.24 | \$ 1,095.16 | \$ 782.84 | \$ 270.20 | NA |

SEWER RATES

| COMMODITY | METER CODE | GRAND RAPIDS | WALKER | KENTWOOD | CASCADE | GR. RAPIDS TOWNSHIP | TALLMADGE TOWNSHIP | WRIGHT TOWNSHIP |
|---|------------|--------------|-------------|-----------|-------------|---------------------|--------------------|-----------------|
| CHARGE (HCF) | | \$ 3.26 | \$ 2.62 | \$ 2.24 | \$ 2.50 | \$ 2.28 | \$ 10.25 | NA |
| REU Charge (Monthly) * | | NA | NA | NA | NA | NA | NA | \$ 61.88 |
| MONTHLY SERVICE CHARGE BY METER SIZE | | | | | | | | |
| 3/4" & Less | A | \$ 13.19 | \$ 29.12 | \$ 6.67 | \$ 30.35 | \$ 26.66 | \$ 32.45 | NA |
| 1" | B | \$ 21.00 | \$ 49.32 | \$ 9.41 | \$ 51.51 | \$ 44.95 | \$ 55.24 | NA |
| 1-1/4" | C | \$ 31.04 | \$ 75.29 | \$ 12.93 | \$ 78.71 | \$ 68.46 | \$ 84.54 | NA |
| 1-1/2" | D | \$ 43.31 | \$ 107.03 | \$ 17.23 | \$ 111.95 | \$ 97.19 | \$ 120.35 | NA |
| 2" | E | \$ 74.55 | \$ 187.83 | \$ 28.18 | \$ 196.57 | \$ 170.33 | \$ 211.51 | NA |
| 3" | F | \$ 163.79 | \$ 418.67 | \$ 59.47 | \$ 438.35 | \$ 379.31 | \$ 471.95 | NA |
| 4" | G | \$ 288.73 | \$ 741.85 | \$ 103.27 | \$ 776.84 | \$ 671.88 | \$ 836.57 | NA |
| 6" & Over | H | \$ 645.71 | \$ 1,665.23 | \$ 228.43 | \$ 1,743.95 | \$ 1,507.79 | \$ 1,878.35 | NA |

* REU - Residential Equivalent Unit (Wright Township Only)

FIRE PROTECTION RATES- ALL GOVERNMENTAL UNITS

| | | | | | |
|----|---|----------|-----|---|----------|
| 6" | H | \$ 16.00 | 10" | J | \$ 44.48 |
| 8" | I | \$ 28.40 | 12" | K | \$ 64.00 |

**CITY OF GRAND RAPIDS, MICHIGAN
WATER & SEWER RATES FOR WHOLESALE CUSTOMERS
Effective January 1, 2013**

| | 2013 |
|---------------------------|--------------|
| EAST GRAND RAPIDS | |
| WATER - SERVICE (MONTHLY) | \$ 15,702.00 |
| - COMMODITY (100 CF) | 1.18 |
| SEWER - SERVICE (MONTHLY) | 1,604.00 |
| - COMMODITY (MG) | 1,396.00 |
| | |
| ADA TWP | |
| WATER - SERVICE | \$ 34,722.00 |
| - COMMODITY | 1.30 |
| SEWER - SERVICE | 45,912.00 |
| - COMMODITY | 1,763.00 |
| | |
| OTTAWA COUNTY | |
| WATER - SERVICE | \$ 170.00 |
| - COMMODITY | 1.26 |
| | |
| GAINES TWP | |
| SEWER - SERVICE | \$ 1,574.00 |
| - COMMODITY | 1,310.00 |

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