

March 13, 2019

Victor Carosi, PE
Commissioner of Public Works
Town of Greenburgh
177 Hillside Avenue
Greenburgh, NY 10607

RE: Results of FY 2019 Financial Plan Update and Rate Projection

Dear Mr. Carosi:

This technical memorandum summarizes the results of the fiscal year (“FY”) 2019 financial plan update and rate projection completed by Raftelis Financial Consultants, Inc. (“Raftelis”) for the Town of Greenburgh’s (“Town”) Consolidated Water District (“water system”). This work involved developing a multi-year financial planning model that incorporated the water system’s latest adopted operating budget (FY 2019) and capital plan, and projecting annual rate revenues over the forecast period to evaluate the need for potential rate adjustments in future years. The rate adjustments were then applied to the Town’s existing water rates to project rates in future years. Further information pertaining to the results of the financial plan update is included in the following sections of this memorandum.

Financial Plan Results

In general, the Town’s existing financial plan was prepared based on inputs from the Town’s adopted FY 2019 operating budget for the water system, its latest capital plan, and a listing of all future principal and interest payments associated with the current and proposed future outstanding debt of the system. The forecast period for the financial plan begins in FY 2019 and extends through FY 2023. The base year (FY 2019) utilizes budgeted revenues and operating expenses, while the projected results in FY 2020 and beyond utilize projected figures. In addition, the financial plan was designed to meet the following objectives, which were identified by the Town at the outset of the project.

-)] Allow the system to continue to operate self-sufficiently and without revenue support from the Town’s General Fund, and with the ability to fully fund the required operating and capital needs of the system.
-)] Maintain a secure financial position for the system by ensuring compliance with key financial metrics related to liquidity and debt service coverage.
-)] Continue to maintain affordable water service for customers.

These objectives were identified in response to several challenges currently facing the Town’s water system, which include limited future customer growth, declines in consumption per account,

continued annual increases in purchased water costs and other operating and maintenance (“O&M”) expenses, and a capital project funding need of almost \$54.1 million (escalated dollars) over the next five fiscal years, from FY 2019 through FY 2023. The individual projects included in the capital plan, which comprise the \$54.1 million capital spend, are shown in Table 1.

Table 1. Capital Project Expenditures

| Project | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 |
|-------------------------------------|-------------|-------------|-------------|-------------------|-------------|
| Water Tank Rehabilitation | \$3,500,000 | \$2,818,750 | 0 | \$0 | \$0 |
| Water Main Clean and Line | 3,000,000 | 3,587,500 | 0 | 4,038,340 | 0 |
| Water Main Replacement | 0 | 1,025,000 | 1,575,938 | 0 | 2,207,626 |
| Knollwood Pump Station Improvements | <u>0</u> | <u>0</u> | <u>0</u> | <u>32,306,719</u> | <u>0</u> |
| Total | \$6,500,000 | \$7,431,250 | \$1,575,938 | \$36,345,059 | \$2,207,626 |

Note: Projected capital project costs provided by the Town were escalated in future years at a rate of 2.5 percent per year for financial planning purposes.

In addition to the major inputs related to revenues, expenses, capital project costs, and existing debt service, several key assumptions were made in developing the financial plan. These assumptions are highlighted below.

1. The unrestricted and available fund balance as of the beginning of FY 2019 was estimated to be \$13.9 million, based on forecasted fund balance information for the water system, as contained in the Town’s adopted FY 2019 budget document.
2. Not considering the impact of proposed rate adjustments, an overall decrease in rate revenue from volumetric rates was projected due to forecasted declines in billed consumption of a fraction of a percent per year. This projection was prepared by Raftelis based on a review of historical annual billed consumption data.
3. The water system generates various non-rate revenues which include hydrant rentals, penalties for late payment, equipment sales, real property rentals, and other miscellaneous revenues. These revenues were projected in future years at their budgeted FY 2019 levels based on a review of actual revenues received in prior years, discussions with the Town, and the expectation that associated rate, fee, or rental amounts would remain unchanged in future years.
4. In total, annual O&M costs were projected to increase by approximately 4.6 to 4.7 percent per year, which included the cost of purchased water.
5. Purchased water costs were projected to increase by approximately 6.0 percent per year, based on historical increases in the allowance and excess rates charged by the New York City Water Board and a review of the Town’s allowance and excess quantities in prior years.
6. New debt was assumed to be in the form of general obligation bonds issued by the Town on behalf of the water system. It was assumed that the water system would then pay its

proportional share of principal and interest payments on the new debt issued by the Town. At the direction of the Town, new general obligation bonds were assumed to be issued in each year of the forecast period to fund future capital project costs. It was assumed that cash will be used to fund approximately \$11.8 million in capital in FY 2022 (out of a total of roughly \$36.3 million). All other capital project costs were assumed to be financed with new general obligation bonds.

7. New general obligation bonds were assumed to carry an interest rate of 3.0 percent per year and a term of 20 years, with issuance costs estimated to be 1.5 percent of the funding need. These terms were assumed based on the terms of recent general obligation bonds issued by the Town and guidance from the Town's Comptroller.
8. With the exception of the current and projected levels of unrestricted and available operating cash reserves attributable to the Consolidated Water District, no other sources of cash, such as an existing capital reserve or existing bond proceeds, were assumed to be available to fund future capital projects in any year of the forecast period.
9. A minimum operating reserve target of at least three months (90 days) of annual operating expenses was assumed each year for liquidity purposes. This assumption was developed in consideration of the Town's bill collection period of one to three months following the provision of service, the small amount of fixed revenue generated by the minimum monthly/quarterly charge, the degree to which billable water consumption has historically varied from year to year, the water system's proportion of fixed and variable operating expenses, and the Town's conservative budget practices for the water system.
10. A minimum debt service coverage target of at least 1.05 times total annual debt service related to all outstanding debt of the system was assumed to ensure an adequate level of net revenues for debt service payments and based on the assumption that the water system will continue to borrow money using general obligation debt. Annual debt service coverage is calculated as net revenues (operating revenues less operating expenses) divided by total annual debt service.

Based on these assumptions, as well as the updated inputs related to revenues and expenses, capital, and debt service, the system's annual rate revenue requirements were projected each year from FY 2019 through FY 2023. These projections are provided in Table 2. As shown in the table, a rate adjustment of 8.5 percent was proposed for FY 2019. This adjustment was anticipated to become effective on May 1, 2019 based on discussions with the Town. Planning level rate adjustments of 8.0 percent in FY 2020 and 7.5 percent in FY 2021 and FY 2022, respectively, were proposed, along with a 5.0 percent adjustment in FY 2023. The planning level rate adjustments proposed in FY 2020 through FY 2023 were assumed to be in effect for the full amount of the fiscal year. It should be noted that the projected rate adjustments shown in the table (Line 17) assumed the use of cash reserves in FY 2022 to fund a portion of capital costs in order to offset the need for larger rate revenue increases than those proposed. In FY 2022, approximately \$11.3 million in cash reserves was projected to be used for this purpose.

Table 2. Projected Annual Rate Revenue Requirements – FY 2019 to FY 2023

| Line No. | Description | Budget | | Projected | | |
|--|------------------------------------|------------------|------------------|------------------|---------------------|------------------|
| | | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 |
| O&M and Transfers | | | | | | |
| 1 | Operating and Maintenance Expenses | \$ 12,620,944 | \$ 13,199,329 | \$ 13,807,903 | \$ 14,448,357 | \$ 15,122,480 |
| 2 | Transfers | <u>2,127,031</u> | <u>2,190,842</u> | <u>2,256,567</u> | <u>2,324,264</u> | <u>2,393,992</u> |
| 3 | Total O&M and Transfers | 14,747,975 | 15,390,171 | 16,064,470 | 16,772,621 | 17,516,472 |
| Capital Expenditures | | | | | | |
| 4 | Minor Capital | \$ 242,850 | \$ 250,136 | \$ 257,640 | \$ 265,369 | \$ 273,330 |
| 5 | Debt Service | 2,658,645 | 3,091,177 | 3,084,869 | 4,316,467 | 4,415,999 |
| 6 | Cash Funded Capital | <u>-</u> | <u>-</u> | <u>-</u> | <u>11,759,646</u> | <u>-</u> |
| 7 | Total Capital Expenditures | \$ 2,901,495 | \$ 3,341,312 | \$ 3,342,508 | \$ 16,341,481 | \$ 4,689,329 |
| 8 | Total O&M and Capital | \$ 17,649,470 | \$ 18,731,483 | \$ 19,406,978 | \$ 33,114,102 | \$ 22,205,801 |
| Less Non-Rate Revenues | | | | | | |
| 9 | Other Revenue | \$ (899,513) | \$ (899,513) | \$ (899,513) | \$ (899,513) | \$ (899,513) |
| 10 | Interest Revenue | (43,978) | (44,994) | (47,242) | (31,100) | (14,194) |
| 11 | Sources and Uses of Funds | <u>232,842</u> | <u>415,651</u> | <u>1,019,712</u> | <u>(11,326,164)</u> | <u>531,592</u> |
| 12 | Total Non-Rate Revenues | \$ (710,649) | \$ (528,855) | \$ 72,957 | \$ (12,256,777) | \$ (382,115) |
| 13 | Rate Revenue Requirement | \$ 16,938,821 | \$ 18,202,628 | \$ 19,479,936 | \$ 20,857,325 | \$ 21,823,686 |
| Adjustment for Revenue from Other Sources | | | | | | |
| 14 | O&M and Transfers | \$ 13,804,484 | \$ 14,445,664 | \$ 15,117,715 | \$ 15,842,008 | \$ 16,602,765 |
| 15 | Capital Expenditures | <u>3,134,337</u> | <u>3,756,964</u> | <u>4,362,220</u> | <u>5,015,317</u> | <u>5,220,921</u> |
| 16 | Rate Revenue Requirement | \$ 16,938,821 | \$ 18,202,628 | \$ 19,479,936 | \$ 20,857,325 | \$ 21,823,686 |
| 17 | Proposed Rate Adjustment | 8.5% | 8.0% | 7.5% | 7.5% | 5.0% |

A cash flow forecast summarizing the projected cash revenues and expenses of the water system for FY 2019 through FY 2023 was prepared and is shown in Table 3. The projection of rate revenue (Line 1) over the forecast period was based on the rate adjustments proposed in Table 2 and the assumed annual change in billable consumption discussed previously. In addition, total O&M and capital related costs were projected to increase from approximately \$19.4 million to about \$33.1 million (about 70.6 percent) from FY 2021 to FY 2022. This is largely due to additional debt service resulting from the proposed financing of a portion of the Knollwood Pump Station improvement project (financing requirement of \$20.5 million, escalated dollars) and the use of approximately \$11.8 million in cash to fund the remaining portion of this project, which is scheduled to occur in FY 2022. The majority of the cash required for this purpose was obtained from excess cash reserves, which served to significantly reduce the rate revenue adjustment in this year.

As shown in the forecast, it is anticipated that unrestricted and available cash will be maintained at a level of at least 90 days of annual operating expenses in each year. In addition, it is also anticipated that debt service coverage will be maintained at 1.05 times or greater over the forecast period.

Table 3. Summary Cash Flow Forecast – FY 2019 to FY 2023

| Line No. | Description | Budget | | Projected | | |
|-----------------------------|---|---------------|---------------|---------------|-----------------|---------------|
| | | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 |
| Revenues | | | | | | |
| 1 | User Charges | \$ 16,938,821 | \$ 18,202,628 | \$ 19,479,936 | \$ 20,857,325 | \$ 21,823,686 |
| 2 | Other Revenues | 943,491 | 944,507 | 946,755 | 930,613 | 913,707 |
| 3 | Total Revenues | \$ 17,882,312 | \$ 19,147,135 | \$ 20,426,690 | \$ 21,787,938 | \$ 22,737,393 |
| Revenue Requirements | | | | | | |
| 4 | Operating Expenses | \$ 12,620,944 | \$ 13,199,329 | \$ 13,807,903 | \$ 14,448,357 | \$ 15,122,480 |
| 5 | Interfund Transfers | 2,127,031 | 2,190,842 | 2,256,567 | 2,324,264 | 2,393,992 |
| 6 | Minor Capital Purchases | 242,850 | 250,136 | 257,640 | 265,369 | 273,330 |
| 7 | Debt Service | 2,658,645 | 3,091,177 | 3,084,869 | 4,316,467 | 4,415,999 |
| 8 | Cash-Funded Capital | - | - | - | 11,759,646 | - |
| 9 | Total Revenue Requirements | \$ 17,649,470 | \$ 18,731,483 | \$ 19,406,978 | \$ 33,114,102 | \$ 22,205,801 |
| 10 | Surplus / (Deficit) | \$ 232,842 | \$ 415,651 | \$ 1,019,712 | \$ (11,326,164) | \$ 531,592 |
| 11 | Beginning Cash Balance | \$ 13,923,588 | \$ 14,156,430 | \$ 14,572,081 | \$ 15,591,793 | \$ 4,265,629 |
| 12 | Surplus / (Deficit) | 232,842 | 415,651 | 1,019,712 | (11,326,164) | 531,592 |
| 13 | Ending Cash Balance | \$ 14,156,430 | \$ 14,572,081 | \$ 15,591,793 | \$ 4,265,629 | \$ 4,797,221 |
| 14 | Days Cash On-Hand (90 day min target) | 340 | 335 | 344 | 90 | 97 |
| 15 | Debt Service Coverage (1.05x min target) | 1.06 | 1.11 | 1.30 | 1.08 | 1.11 |
| 16 | Proposed Rate Increase | 8.5% | 8.0% | 7.5% | 7.5% | 5.0% |

The results of the cash flow forecast indicate that the water system is expected to remain fiscally self-sufficient and will maintain a secure financial position in FY 2019 and over the next four fiscal years, from FY 2020 through FY 2023. The projected annual rate adjustments required to meet these objectives are relatively moderate, indicating that the water district will continue to be able to provide affordable water service to its customers over the forecast period.

The projections shown in Table 2 and Table 3 are forward looking projections and are subject to change as conditions change. Any modifications to the inputs and/or assumptions discussed previously could have a material impact on the proposed rate adjustments shown in Table 2. In particular, any changes to the capital plan, as shown in Table 1, could have a significant effect on the financial needs of the system, as the debt service resulting from the existing projects comprise a large portion of the forecasted additional rate revenue need in future years.

In-district monthly, in-district quarterly, and out-of-district water rates are projected from FY 2019 through FY 2023 as shown in Table 4. The existing water rates reflect the rates in effect at the date of this memorandum, while the May 1, 2019 rates reflect the rates that would result from the proposed rate adjustment for FY 2019. As shown in Table 4, the in-district monthly and quarterly Tier 1 rate would increase from \$5.86 per 1,000 gal. to \$6.36, the Tier 2 rate would increase from \$7.35 per 1,000 gal. to \$7.97, and the Tier 3 rate would increase from \$8.74 per 1,000 gal. to \$9.48 beginning May 1, 2019. A typical in-district customer using 15,000 gallons of water per quarter would see their bill increase from \$92.37 per quarter to \$100.22 per quarter, which represents an increase of about \$2.62 per month.

Table 4. Projected Water Rates – FY 2019 to FY 2023

| <u>In-District Monthly Customers:</u> | | | | | | | |
|--|---------------------------|-----------------|--------------------|----------------------------|----------------|----------------|----------------|
| Tier | Consumption (gal.) | Existing | May 1, 2019 | Rate per 1,000 gal. | | | |
| | | | | FY 2020 | FY 2021 | FY 2022 | FY 2023 |
| 1 | Up to 3,999 | \$5.86 | \$6.36 | \$6.87 | \$7.38 | \$7.94 | \$8.33 |
| 2 | 4,000 to 16,999 | \$7.35 | \$7.97 | \$8.61 | \$9.26 | \$9.95 | \$10.45 |
| 3 | 17,000 and greater | \$8.74 | \$9.48 | \$10.24 | \$11.01 | \$11.84 | \$12.43 |

| <u>In-District Quarterly Customers:</u> | | | | | | | |
|--|---------------------------|-----------------|--------------------|----------------------------|----------------|----------------|----------------|
| Tier | Consumption (gal.) | Existing | May 1, 2019 | Rate per 1,000 gal. | | | |
| | | | | FY 2020 | FY 2021 | FY 2022 | FY 2023 |
| 1 | Up to 11,999 | \$5.86 | \$6.36 | \$6.87 | \$7.38 | \$7.94 | \$8.33 |
| 2 | 12,000 to 50,999 | \$7.35 | \$7.97 | \$8.61 | \$9.26 | \$9.95 | \$10.45 |
| 3 | 51,000 and greater | \$8.74 | \$9.48 | \$10.24 | \$11.01 | \$11.84 | \$12.43 |

| <u>Out of District Customers:</u> | | | | | | | |
|--|---------------------------|-----------------|--------------------|----------------------------|----------------|----------------|----------------|
| Tier | Consumption (gal.) | Existing | May 1, 2019 | Rate per 1,000 gal. | | | |
| | | | | FY 2020 | FY 2021 | FY 2022 | FY 2023 |
| 1 | All | \$11.72 | \$12.72 | \$13.73 | \$14.76 | \$15.87 | \$16.66 |

Thank you for the opportunity to continue to provide financial planning services to the Town in support of the management of its water system. I look forward to discussing these projections in more detail and answering any questions you and the Water Advisory Committee may have at an upcoming Committee meeting. In the meantime, if you have any questions regarding the information discussed in this memorandum, please contact me at 518-982-4223.

Very truly yours,

RAFTELIS FINANCIAL CONSULTANTS, INC.

Philip Sapone
Senior Consultant

CC:
John Devany (Town of Greenburgh)
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