Audit Committee

Friday, April 20, 2018 at 8:00 a.m.

5th Floor Board Room, Water Board Building
735 Randolph Street, Detroit, Michigan 48226
GLWater.org

MEETING BINDER ADDENDUM #1

- ✓ *Agenda Item #6D - Report: Responses to Questions from Oakland County Drain Commissioner's Office*

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MEMORANDUM

FY 2019 Sewer Charges to OMID April 19, 2018

To: Nicolette Bateson

From: Bart Foster

You have asked for commentary and observations regarding a potential response to public comments made by representatives of the Oakland Macomb Interceptor Drain District (OMID) at the GLWA Audit Committee meeting on February 23. We have reviewed the comments, which appear to request modifications to proposed FY 2019 Sewer Charges to reflect four specific areas of inquiry. Herein we present background information, set forth our understanding of OMID's request, and provide a summary of our analyses and perspective regarding the request.

Background:

The GLWA cost allocation methodology[1] for purposes of establishing Sewer service charges includes a "customer specific" cost pool designed to capture the costs related to GLWA facilities that serve only the OMID. These facilities include the Northeast Sewer Pumping Station ("NEPS"), and the portion of the North Interceptor East Arm ("NIEA") downstream of the NEPS that conveys flow ***only from*** OMID. The cost of service allocation methodology has traditionally employed slightly different approaches for assigning capital and operating revenue requirements to this cost pool.

Capital Revenue Requirement Allocations

Since the establishment of the FY 2011 Sewage Disposal Charges, GLWA allocations of capital revenue requirements (including debt service) have been allocated to cost pools and Customers based on a "Utility Basis" approach. Under this approach statistics from the fixed asset records of the Sewer Utility are used to allocate capital costs. For instance, if 1% of the representative capital asset value for the Sewer System is related to OMID specific assets, then 1% of the capital revenue requirements (including debt service) are allocated to OMID.

GLWA's review of the interceptor inventory indicates that the NIEA segment in question represents approximately 3.5% of all GLWA interceptors, based on an "inch mile" analysis. For purposes of the FY 2019 Cost of Service Study, we assigned 3.5% of all interceptor capital revenue requirements to the OMID cost pool. This created a direct capital revenue requirement of approximately $0.78 million.

[1] The GLWA methodology is consistent with the methodology of the predecessor entity, DWSD.

Our cost of service study included a review of the GLWA asset records, which indicated that the net book value of $19.6 million assigned to the NEPS. This NEPS asset value (and the representative annual depreciation expense) amounted to approximately 1.2% of the overall capital asset structure, and we used this ratio to subsequently allocate approximately $2.81 million of direct capital revenue requirements. So our FY 2019 Cost of Service Study included $3.59 million of direct capital revenue requirements assigned to the OMID cost pool, which was then directly assigned to the OMID Customer[2].

Operating Revenue Requirement Allocations

For purposes of assigning operating costs to the OMID cost pool, the same approach (relative inch miles) is used to assign NIEA related *interceptor* costs. In the FY 2019 Cost of Service Study this resulted in approximately $0.43 million of direct operating revenue requirements allocated to the OMID cost pool.

With regard to the NEPS operating costs, GLWA allocations of all budget operating expenses related to sewer pumping stations (including maintenance, SCADA, etc.) have been assigned to individual sewer pumping stations based on relative electric usage or costs. This approach was established several years ago, as detailed specific pumping station maintenance costs, etc. were difficult to isolate. For purposes of the FY 2019 Cost of Service Study, we obtained budgeted electric utility costs for several years. The relative budgeted electric utility costs for the NEPS, as a proportion of budgeted electric utility costs for all GLWA sewer pumping stations, ranged from 24% to 40%. In our FY 2019 Cost of Service Study we allocated 25% of all sewer pumping station operating expenses to the NEPS, which resulted in direct operating costs totaling $5.88 million being assigned to the OMID cost pool. So our FY 2019 Cost of Service Study included $6.05 million of direct operating revenue requirements assigned to the OMID cost pool, which was then directly assigned to the OMID Customer[3].

The combined total revenue requirement allocated to the OMID cost pool in the FY 2019 Cost of Service Study was $10.50 million.

Pending Potential Operating Agreement

We have participated in several meetings between GLWA and OMID representatives as they have sought to establish an "operating agreement regarding the OMID specific facilities addressed in this memorandum. Elements of that potential operating agreement would impact the cost allocation approaches and results discussed above.

[2] Table 3 in the FY 2019 Cost of Service Study Report contains a "Net Capital" Revenue Requirement line item that includes proportional allocation of certain other "indirect" non-operating items, such as the Lease Payment, etc. These indirect elements result in the OMID "Net Capital" Revenue Requirement totaling $3.99 million in the Cost of Service Study Report.

[3] Table 3 in the FY 2019 Cost of Service Study Report contains a "Net Operating Expenses" Revenue Requirement line item that includes proportional allocation of certain other "indirect" operating items, such as the operating portion of the pension obligation, etc. These indirect elements result in the OMID "Net Operating Expenses" Revenue Requirement totaling $6.52 million in the Cost of Service Study Report.

<u>OMID Request, Analyses, and Perspective:</u>

1. *Reflect the treatment of debt service for the OMID only rate category consistent with the October 22, 2009 Settlement and Release of Certain Rate Disputes as stated in paragraph 3.a of that document.*
   - We believe that the reference in the OMID correspondence is taking a position that the district should not be allocated **<u>any</u>** capital revenue requirements associated with the portion of the NIEA that conveys only OMID flow. We do not agree with that conclusion. We believe that the agreement that is cited in the referenced document predates the agreements established as part of the Rate Simplification Initiative. In any event, we encourage this issue to be further explored and discussed as part of the negotiations towards the Operating Agreement. For purposes of our hypothetical analysis summarized in the table that follows, we have reflected the calculated effect of removing such capital revenue requirements from the OMID cost pool, which would ***reduce*** the direct OMID cost pool allocated revenue requirements by approximately $0.78 million. However the OMID share of the reallocated common-to-all ("CTA") revenue requirement would ***increase*** by $0.13 million, resulting in a net ***decrease*** of $0.65 million.

2. *Adjust the assets of the Northeast Pump Station based on the results of the Northeast Pump Station asset inventory review performed on February 2, 2018 with representatives from OMID and GLWA.*
   - As noted in the request, subsequent to the establishment of the proposed FY 2019 charges, additional review of the capital asset data reported for the NEPS has been conducted. It is our understanding that the parties are in basic agreement that the asset records should be adjusted to reflect the results of that review, and that the adjustments will result in a $5.2 million reduction in the 6/30/17 net book value allocated to the NEPS – which would result in a revised total of approximately $14.4 million. For purposes of our hypothetical analysis summarized herein, we have reflected the calculated effect of adjusting the capital revenue requirement allocations accordingly. Based on our analysis, this would ***reduce*** the direct OMID cost pool allocated revenue requirements by approximately $0.82 million. However the OMID share of the reallocated common-to-all ("CTA") revenue requirement would ***increase*** by $0.12 million, resulting in a net ***decrease*** of $0.70 million.

3. *Adjust the OMID only cost category revenue requirements to reflect any changes which may occur pending the review of electrical costs.*

- As noted in the request, subsequent to the establishment of the proposed FY 2019 charges, additional review of the sewer pumping station electric use and costs has been conducted. While the analysis continues[4], the initial findings indicate that the NEPS accounts for approximately 36% of recent pumping station electric ***bills***, and approximately 44% of recent total pumping station electric ***usage***. Had we the benefit of this additional analysis at the time we conducted the FY 2019 Cost of Service Study, we likely would have allocated ***at a minimum*** 35% (rather than the 25% original figure) of total sewer pumping station operating revenue requirements to the NEPS. This hypothetical adjustment would have resulted in a $2.74 million ***increase*** to the operating revenue requirements allocated to the OMID cost pool. However the OMID share of the reallocated common-to-all ("CTA") revenue requirement would ***decrease*** by $0.45 million, resulting in a net ***increase*** of $2.49 million.
- As shown in the table, the net impact of incorporating all of the hypothetical adjustments noted above would result in a net increase of approximately $0.94 million. Given that the parties are negotiating an Operating Agreement, and that GLWA is exploring a "Charges Stability Adjustment" to reflect potential adjustments of actual costs, we do not believe it is prudent to modify the originally proposed FY 2019 Sewer Charges.

Hypothetical Analysis Summary
FY 2019 OMID Cost of Service Calculations - *$ millions*

	OMID Specific	Share of CTA	TOTAL
Proposed FY 2019 Charges	10.50	67.79	78.29
What If Remove NIEA Int Capital?	(0.78)	0.13	(0.65)
What If Adjust NEPS Capital?	(0.82)	0.12	(0.70)
Subtotal Hypothetical Capital Adjustments	(1.60)	0.25	(1.35)
What If Adjust NEPS O&M Alloc to 40%?	2.74	(0.45)	2.29
Total Hypothetical Adjustments	1.14	(0.20)	0.94
Hypothetically Recalculated Rev Req'ts	11.64	67.59	79.23

4. *At the January 31, 2018 GLWA/OMID meeting, GLWA stated depreciation expenses for the 2018-19 sewer rates will be utilized at 60% of the book value. For the formation of GLWA, Duff and Phelps analyzed the GLWA assets, stated their values for the beginning*

[4] The additional review includes an analysis of the amount of wastewater volume handled by each sewer pumping station. The initial estimate indicates that the NEPS handles approximately one-third of all flows that utilize GLWA sewer pumping stations.

balances, and revised the remaining lives of the assets. Why use 60% instead of the full amount of the depreciation expenses, does GLWA dispute the accuracy of their book values? Further, if GLWA goes forward with the 60% for 2018-19 sewer rates, is there a plan to move towards utilizing the full amounts of depreciation expense in the future?

- As noted in the request, the GLWA capital assets were subjected to a valuation analysis conducted by Duff and Phelps, which was required to complete the creation of GLWA. The leased regional assets were booked at an acquisition value based on the Duff and Phelps analysis, which resulted in an increase in the net book value of the "acquired" assets. However it also resulted in a significant increase in the annual depreciation expense. In our opinion, GLWA does not dispute the accuracy of the book values not the depreciation expense, but also recognizes (as do we) that the changes produced by the asset valuation changed the dynamic of the overall asset structure. For purposes of the FY 2019 Cost of Service Study, we sought to strike a balance between the portion of the capital revenue requirements that were allocated (under the Utility Basis approach) based on net book value, and the portion that were allocated based on annual deprecation expense. The approach we applied successfully accomplished this balance, and adhered to the overarching stability objectives of the GLWA charge methodology initiatives. We recommend that future cost of service studies continue to embrace these objectives with respect to this specific issue.

We trust that this discussion is responsive to the request, and we are prepared to discuss this matter at your convenience.