

The following summarizes our recent activities performed on behalf of the West Goshen Sewer Authority (Authority) and West Goshen Township (Township) from January 3 through February 2, 2018:

Projects in Construction

Contracts 17-1 and 17-2: WWTP Headworks Improvement Project (007608.0440):

Contract 17-1 has completed installation of effluent weir gate (10WG-101) and the associated remaining channel work. Additionally, two of the three screw pumps have been repaired and are currently in operation. As a result, both screens were tested and placed into operation. There are several punch-list items that Lakeside must correct when the screens are in operation mode; however, they will continue to run until all final work has been completed with the screw pumps. At that time, we will schedule Lakeside to return and complete all final adjustments and provide complete training to the Township Staff. Currently, the screens are in operation and are removing rags and debris.



Work is scheduled to begin the week of January 29 on the grit system. The by-pass pumps and piping are being removed and excavation is scheduled to begin.

A field meeting was held on January 25 with Walabax and Township Staff to review upcoming work, coordination of utility water relocation and temporary shut-down, and the by-pass pumping tear-down.

Job Conference No. 10 is scheduled for February 14, 2018 at the WWTP.

We have reviewed the claims submitted by the Contractor associated with miscellaneous additional work (some involve both time and additional costs). As a result, HRG recommends that the Authority approve Change Order No. 1 for Contract 17-1 for an increase to the Contract Price of \$4,404.00 and an increase to the Contract Time for Substantial Completion of 39 days. The increase in the Contract Price is formalizing the previously approved Work Change Directives No. 1 and No. 2 as well as provides for change proposal no. 1 that summarizes a number of small changes required to work in and around the existing headworks structure(s).

We also recommend that the Authority approve Application for Payment No. 9, as submitted by Walabax Construction Services, Inc., in the amount of \$52,776.00 for work completed through January 19, 2018 for Contract 17-1.



Contract 17-4: By-Pass Pump Station Connections (007608.0435):

The Contractor began work with their subcontractor to construct two dewatering wells between the stream and Westtown Way Pump Station. During the course of their work, they drilled through an existing 12-inch diameter asbestos cement influent sewer main. The location of the influent sewer was in a different location than what was provided on the Contract Drawings and there was no mark-out of the sewer on-site, as the upstream manhole was not accessible. The Township Staff immediately implemented emergency operating procedures and the Contractor mobilized equipment to the site to repair the sewer main. A change order request (no. 4) was provided on January 19, 2018, requesting an increase to the cost in the amount of \$19,918.29 and an additional 5 days. This change order request is currently under review.

Following repair of the sanitary sewer main, the Contractor began work on the excavation, and was not able to complete the work due to a lack of adequate shoring. The Contractor has identified that they are re-evaluating their methods and bringing in larger equipment to complete the work. We have not received a date as to when they will be re-mobilizing.

2017 Sanitary Sewer System Repairs (007608.0436):

The following work has been completed to-date:

- Spot Repair No. 1 on Caswallen Drive
- Spot Repair No. 3 on Oak Circle
- Installation of the 8-inch cleanout
- Spot Repair No. 4 on Isabel Lane
- Spot Repair No. 5 on Isabel Lane
- Spot Repair No. 6 on Spring Lane
- Spot Repair No. 9 on Paoli Pike

Contractor is scheduled to continue proceeding with the remaining spot repairs including Change Order No. 1, if approved.



Draft Application for Payment No. 2 was submitted for review on February 1, 2018 after the Treasurer's Report was issued. Therefore it will be submitted for the Authority's approval in March 2018.

Contract Nos. 17-3, 17-6, and 17-7 Anaerobic Digester Replacement (007608.0433):

Contract 17-3 is scheduled to mobilize to the site to begin demolition work on February 12. Job Conference No. 1 is scheduled for February 21 at the WWTP. We anticipate reviewing the selective demolition requirements in the basement of the Operations Building at that time. Submittal review continues from all three contractors and we have just received the submittals for the digester tanks, draft tube mixers, and primary digester cover.

We have requested pricing from the Contractors for the following changes:

1. Revisions to the existing door (requests costs for modifications to existing and pricing for a new door) of the new electrical room to swing out. This is necessary as the proposed control panel is larger than what was initially proposed and the existing door would swing into it.

2. Asbestos abatement for approximately 20 L.F. of heating pipe insulation and 55 square feet of laboratory countertops.
3. New drain location directly under the new boiler/heat exchanger to allow draining of the emergency pressure relief valve.

Contract Nos. 17-8 and 17-9: Enhanced Chemical Addition Project (007608.0432):

Contract 17-9 has started layout of conduit and installation of the disconnect switches. Both Contract 17-8 and 17-9 have been providing submittals for review and action. Approximately 60 percent of the submittal review has been completed.

HRG recommends that the Authority approve Application for Payment No. 1, as submitted by The Williams Group Electrical Contractors in the amount of \$14,115.60 for work completed through January 18, 2018 for Contract 17-9. 85 percent of total will be submitted to the Department of Community and Economic Development for reimbursement upon payment.

Other Projects/Tasks

Pump Station Phase II Improvements (007608.0442):

We received flow meter data for Taylor Run and Trinity Drive Pump Stations and have set-up the flow monitoring spreadsheets for evaluation. The flow meter collection should be completed by June 2018, once we receive data through the spring rains.

WWTP Phase II Improvements / TMDL (007608.0442):

Work continues on preparation of an updated cost estimate specifically related to the COMAG tertiary treatment component of the Project. The estimated difference in the cost of the building for covering the reaction tanks or not is approximately \$172,000. In order to adequately update the cost estimate, significant work needs to be completed to evaluate the original clarifier rehabilitation work vs. the new proposed 40-ft diameter clarifiers as part of the COMAG system. Similarly, the aeration system improvements, if funded through CFA, would reduce the WWTP Phase II Construction Estimate. Work will continue on updating these costs over the next several months.

CFA Small Water & Sewer Grant Application

The planning letters, grant applications, and exhibits have been prepared for the application. The Resolution to approve submission of the grant and allocation of the 15 percent matching funds is being presented at the meeting by the Solicitor. The revised estimated cost for purposes of the grant application is \$324,892.00. If awarded at the full grant amount, this would require a \$48,733.80 match.

Sewer Rate Study:

A full verbal update will be provided at the Authority's Meeting by HRG's Financial Services Group.

2018 Sanitary Sewer Repair Project:

HRG met with the Township Staff on January 4, 2018 to review the CCTV records and suggested repairs that they have identified over the last year. Based on the information provided, we prepared a conceptual level cost estimate for the construction of the repairs. The estimated construction cost is \$805,000, which is approximately \$265,000 over the budget for 2018 Sanitary Sewer Repairs. If necessary, we believe the scope of the Project could be reduced by moving lower priority repairs to 2019. We recommend that the entire scope be completed in 2018, and the 2019 budget be reduced accordingly, based on the final cost. We are also recommending that the Project be divided into two contracts (traditional replacement and repair, and trenchless rehabilitation and repair). Based on the 2016 and 2017 Projects, we believe that having two prime contractors for this work will be easier and more effective to administer than one single contract where the prime has struggled to manager their subcontractors.

Several priority areas have been identified that need to be excavated and replaced, as the pipe is almost entirely crushed. The excavation of these areas will require General Permits from PA DEP, extensive wetland delineation, and a Phase 1 Bog Turtle Survey.

We have prepared a confirmation of assignment for your review and consideration to begin the work. We anticipate starting the survey of the replacement areas immediately in order to meet the schedule to have this work completed in 2018.

2017 Bond – Consulting Engineer's Report:

The first inspection of the WWTP and Pump Stations and corresponding consulting engineer's report is due on March 31, 2018 concurrently with the PA DEP Chapter 94 (Wasteload Management) Report. There are several alternative for completing the report that we will discuss with the Authority at the meeting.

Please feel free to contact me if you have any questions regarding this report or other items.

Respectfully submitted,

Herbert, Rowland & Grubic, Inc.



Joshua T. Fox, P.E.
Regional Service Group Manager

JTF/
007608.0426

- c: West Goshen Sewer Authority (w/encl.)
- Casey LaLonde, Township Manager (w/encl.)
- Dave Woodward, Public Works Director (w/encl.)
- Mike Moffa, WWTP Superintendent (w/encl.)
- Edward A. Ellinger, P.E., HRG (w/encl.)
- Adrienne Vicari, P.E., HRG (w/encl.)
- File (w/encl.)