



August 4, 2022

Supervisor Michael Donalty
Town of Walworth
3600 Lorraine Drive
Walworth, NY 14568

RE: Review of Estimated Project Costs Associated with Recommended Improvements to the Town of Walworth Water Pollution Control Facility
LaBella Project No. 2180272

Dear Supervisor Donalty:

At the Town of Walworth's direction, LaBella Associates, D.P.C. reviewed the recommendations in the following engineering reports and prepared an updated opinion of probable project costs to implement the reports' recommended improvements to the Town's Water Pollution Control Facility (WPCF):

- *Map, Plan, and Report / Preliminary Engineering Report for the Town of Walworth Water Pollution Control Facility Improvements*, prepared by LaBella in August 2018.
- *Town of Walworth WPCF Improvement Study Summary Report*, completed by Hunt Engineers in March 2019.

Attached is the updated opinion of probable construction costs we prepared. While reviewing it, please note the following comments and assumptions:

- Regulatory - During the preparation of this estimate, we did not contact NYSDEC. Therefore the following was assumed:
 - It is expected that when NYSDEC issues a new SPDES permit for the WPCF, the effluent limits and associated requirements will match those in the modified permit presented to the Town in 2018.
 - We assume NYSDEC will allow the implementation of improvements to the WPCF to proceed per the schedule outlined below despite the presence of an effluent disinfection compliance schedule in the modified SPDES permit.
- Schedule - We assume the project would proceed as one project including all recommended improvements (rather than a phased approach) generally according to the following schedule:

○ Write updated engineering report	September 2022 - March 2023
○ Complete SEQR/NEPA/SERP	April - June 2023
○ Submit funding applications	June - September 2023
○ Notification of funding award	December - March 2023
○ Design/Permitting	January - August 2024
○ Regulatory review	August - September 2024
○ Construction Procurement	October - December 2024
○ Construction	Spring 2025 - end of Summer 2026
- Scope and Design of Improvements - Given the time constraints to prepare this report, the volatile nature of the construction market, the difficulty of material deliveries and the conceptual



nature of equipment selections, we have made numerous assumptions that may affect the final design and ultimate costs:

- We assume the scope of necessary improvements is limited to those presented in the reports listed above.
 - This report assumes the design flow and loading calculation presented in LaBella's 2018 report still apply. If the Town chooses to proceed with upgrades and improvements to Walworth WPCF this data would need to be confirmed.
 - Our estimate includes a third sequenced batch reactor (SBR) tank, an additional blower to serve it, and a new control panel to control all three SBRs, as recommended in the Hunt report. Per discussions with operators in July 2022, this approach is preferred to provide operational flexibility and facilitate maintenance instead of furnishing only a post-SBR equalization tank.
 - It was assumed that the WPCF hydraulics will allow for the installation of an ultraviolet disinfection system in the former RBC building.
 - Our estimate includes a third disk filter to be installed adjacent to the existing filters and assumes that, when combined with the addition of a 3rd SBR, SBR cycles could be adjusted to decrease decant rates to a level acceptable to the disk filters and UV disinfection system without requiring a post-SBR equalization tank.
 - Per discussions with operators, we understand rehabilitation of the existing below-grade tanks to allow for their use as sludge holding tanks is not desired due to concerns about contaminated air in operational/shop areas and the perceived costs (both capital and O&M) associated with the odor control system that would be required to mitigate said odor. We therefore assume that a new sludge holding tank, as recommended in the Hunt report, would be built approximately in the location of the former aerobic digester tank that is planned for demolition.
 - We assume that repair (interior patching and re-coating) of the existing tertiary Aeration Tanks is preferable to replacing one of them with a new tank (as the Hunt report recommends) in the same area. The existing tanks are located in the 100-foot buffer zone of a NYS-Regulated Wetland; therefore, there would be significant effort associated with procuring the permit that would allow for construction of a new tank in that area. We have not yet completed a structural evaluation of the tanks; we have therefore estimated the effort required to repair them.
 - The Hunt report recommends completing a structural assessment of the waste sludge holding tanks and completing necessary repairs. We have not yet completed a structural evaluation of the tanks; we have therefore estimated the effort required to repair them.
 - We assume soil on-site is of sufficient bearing capacity for construction of new structures (e.g., new SBR Tank, new Thickened Sludge Holding Tank) with standard foundations (i.e., no helical piles or other special foundation required).
 - It is assumed that contaminated soils will not be encountered on-site, including during removal of buried diesel storage tank.
- Project Costs -
 - Per the schedule above, we anticipate the midpoint of construction to be the end of 2025. We have escalated the estimated costs 10% per year to account for inflation between the present and the end of 2025.



- We have included a 35% construction contingency given the conceptual nature of the estimate.
- O&M and short-lived assets costs were escalated 4% annually for the 30-year planning period.
- The estimation of project costs assumes zero grant or other outside funding. Obviously, costs to the residents of Walworth may be reduced through grants or low-interest loans.
- Equivalent Dwelling Unit (EDU) costs –
 - This report assumes that Macedon customers will stay on Walworth infrastructure.
 - We have assumed that the 2022 EDU count is 3,295, based on the following:

Walworth residential	1,756 units
Walworth known growth	206 units
Walworth commercial	649 units
Out-of-district	10 units
Macedon	674 units

Based on the information above, we forecast that the Town of Walworth will need to invest up to \$15,200,000 at the existing Water Pollution Control Facility so it will operate in compliance with regulatory requirements and generally accepted standards. Over 30 years, at 2.25% interest, the annual debt service for this project will be \$702,000 per year. In 2025 the O&M cost of \$ 1,033,422 and debit service will result in an annual charge of \$534 per EDU.

Though we have done our best to provide a conservative opinion of probable project costs, we simply are unable to precisely predict construction pricing in the present market, which is being far more driven by labor shortages and supply chain issues (that, in turn, drive material prices higher) than things we would have considered to calculate real value in the past. Vendors across the board tell us daily that we need to lock in pricing (which we cannot do at this time), because their costs are constantly increasing by 10% or 15% .

We trust that the information we have provided will help the Town Board in its deliberations on the future of wastewater treatment in Walworth. You have a difficult choice and LaBella stands by to provide any assistance we can to help you make the best selection for your constituents.

As always, we appreciate the opportunity to partner with the Town and look forward to continuing to assist the Town of Walworth.

Respectfully submitted,
LABELLA ASSOCIATES, D.P.C.

Michael A. Simon
Senior Civil Engineer, Rochester Regional Leader