

**SARATOGA COUNTY SEWER COMMISSION  
Draft AGENDA  
January 26, 2023  
3:00 PM Meeting at the Treatment Plant**

**PLEDGE OF ALLEGIANCE**

**PUBLIC COMMENT**

**CHAIRMAN'S COMMENTS**

**APPROVAL OF MINUTES of December 8, 2022**

**2020 CAPITAL PROJECTS**

**HVAC Upgrade at WWTP– Motion to Award**

**Interceptor Relining Phase VIIB – Status Update**

**Saratoga Springs Pump Station and F.M Evaluation and Design – Status Update**

**2021 CAPITAL PROJECTS**

**Secondary Clarifier Gate and MCC Replacement – Status Update**

**Technical Determination of Local Limits/Inhibition Testing – Status Update**

**2022 CAPITAL PROJECTS**

**Biosolids Handling Facility – Status Update**

**Ammonia related WWTP Upgrades – Engineering Contract Amendment**

**Aeration Tank Improvements – Status Update**

**D&R P.S. Upgrade – Status Update**

**Capacity Evaluation – Status Update**

**523 South Main Roof Projects – Status Update**

**523 South Main Abatement – Motion to Award**

**2023 CAPITAL PROJECTS**

**Moreau Forcemain Extension – Motion to Award**

**MISCELLANEOUS**

**DOT Resolution for Raising Manholes – Status Update**

**UV Quarterly Maintenance Contract - Motion to Award**

**Septage Receiving Rates - Discussion**

**ATTORNEY REPORT**

**DEDICATIONS**

**Next meeting February 23, 2023 (March Meeting)  
3:00 P.M. at the Treatment Plant**



December 16, 2022

Daniel Rourke, P.E.  
Executive Director  
Saratoga County Sewer District No. 1  
1002 Hudson River Road  
Mechanicville, New York 12118

Re: Ammonia Upgrade Project – Amendment to B&L Agreement for Construction Phase Services

File: 702.4147

Dear Dan:

Please find Barton & Loguidice's proposed scope of services and associated professional fee for the bidding and construction services for the above-referenced project.

The scope of services outlined herein presents the effort needed to facilitate the construction of the final design of the ammonia removal upgrade project as modified by the February 2021 change in design scope.

This supplement outlines services associated with bidding, construction administration, on-site construction observation, special inspections, grant funding and design changes associated with Rambol's structural modifications to the existing South Aeration tanks.

We look forward to continuing to work with you and the SCSD No. 1 team on this important project.

Sincerely,

BARTON & LOGUIDICE, D.P.C.

Richard A. Straut  
Executive Vice President

KWC/tlh

Attachment

## Saratoga County Sewer District #1

### Ammonia Removal Project

#### Bidding, Construction Administration and Construction Observation Services Supplement

The following outlines the additional Bidding, Construction Administration, Construction Observation, and Special Inspection testing services necessary to complete the Ammonia Removal Project. Additional monthly services to support the three (3) grants that were obtained during the course of the project as well as design changes to incorporate tank modifications proposed by Rambol are also included.

These services are to supplement the original bidding and CA/CO services proposed in September 2017 for the original project. The original project entailed only the upgrade of the North Aeration blowers in the current building footprint and upgrades to the North Aeration Basins diffusion system, and a small prefabricated building for chemical addition.

The final project recommendations designed in 2021 expanded the project to include:

- Conversion of the North and South Aeration Tanks to the MLE process by adding baffle walls. The tanks will be constructed with a 15% dedicated anoxic zone, a middle zone of 25% that will swing from anoxic to aerobic based on temperature conditions and an 60% aerobic zone
- The anoxic zones will contain mixers
- The Swing zones will contain mixers and diffusers
- The North and South Side Aeration Tanks will incorporate new diffusers into the swing and aerobic zones
- Submersible axial recycle pumps for each of the 10 tanks to convey up to 200% of the forward flow back to the anoxic zone.
- Two additional South Side Aeration Tanks (designed for MLE process) including connections into the existing influent and effluent channels
- Modifications to the RAS splitter boxes to facilitate flow split to each side
- Three new high-speed turbo Turblex blowers in the North Side along with the expansion of the North Blower Building
- Three new high-speed turbo Turblex blowers in the South Blower Building. The current chemical feed area was modified to incorporate one new blower
- Modifications to HVAC for both the North and South Blower buildings to accommodate building expansions/modifications
- All new air piping on the North and South Tanks
- All new DO control systems for both the North and the South basins
- All new spray water piping for all tanks
- A chemical feed building for associated chemical storage and feed equipment, including necessary power and controls to support the process equipment and associated HVAC / architectural / site design for the building.
- Electrical to support the blowers and chemical feed building.
- New Plant Wide Back-up generator

## Additional Scope of Services

### 1. Rebid of the Plumbing Contract

The Plumbing Contract was bid in conjunction with the three other prime contracts as part of the main project in March - May 2022. Only one bid was received and ultimately the bidder withdrew their bid and no award recommendation was established. Therefore, the County desires to rebid this contract. B&L will provide the following:

- a. Develop new front end contract documents just for the plumbing contract.
- b. Develop technical specifications from the prior set for Divisions 1 and 22. Documents will be revised to indicate coordination with the three other contracts that were awarded and integrate the necessary contract timelines to ensure the Plumbing Contract is completed in association with the General, Electrical and Mechanical Contracts.
- c. Prepare new Title sheet and modify associated plumbing drawings for a complete bid package.
- d. Provide bidding documents to the County for bid procurement via their online system
- e. Conduct one prebid meeting for potential contractors.
- f. Address contractor questions and issue addendum to the contract via the County Purchasing Department.
- g. Review and prepare a bid tabulation and recommendation letter to the County for the proposed Plumbing contractor.

All other CA services for the Plumbing contract will be completed in conjunction with the main construction project.

### 2. Additional Bidding Effort for Base Project

Additional bidding effort was needed due to the expansion of the project scope as outline above and the current project now includes four (4) prime construction contracts. An extended bidding timeframe was allocated due to the complexity of the project. Original project was estimated to be four (4) weeks and the actual project allocated a nine (9) week bidding timeframe.

A second bid walkthrough was conducted at the request of contractors to secure additional site information.

In addition, the County requested a significant design addition at the end of March 2022 just prior to the release of the initial drawing set. The request was to modify the Return Activated Sludge channel in the existing South Aeration Basins. This was issued as part of Addendum 3 and included the following design attributes:

- a. Modification of Drawing S131 Existing South Aeration Basin – Sections and Details to incorporate RAS channel changes
- b. Addition of Drawing S135 Existing South Aeration Basin – RAS Channel Sections for the RAS channel changes

- c. Modification to Drawing S150 South Aeration Basin – Foundation Plan to incorporate RAS channel changes
- d. Modification to Drawing S151 South Aeration Basin – Walkway Plan to incorporate RAS channel changes
- e. Modification to Drawing S156 South Aeration Basin – Sections and Details to incorporate RAS channel changes
- f. Modification to Drawing D130 Existing South Aeration Basin – Upper Demolition Plan to incorporate RAS channel changes
- g. Modification to Drawing D132 Existing South Aeration Basin Demolition Sections 1 to incorporate RAS channel changes
- h. Modification to Drawing D133 Existing South Aeration Basin Demolition Sections 2 to incorporate RAS channel changes
- i. Modification to Drawing D134 Existing South Aeration Basin Overall Upper Improvements Plan to incorporate RAS channel changes
- j. Modification to Drawing D136 Existing South Aeration Basin Enlarged Upper Improvement Plan to incorporate RAS channel changes
- k. Modification to Drawing D138 Existing South Aeration Basin Sections 1 to incorporate RAS channel changes
- l. Modification to Drawing D140 Existing South Aeration Basin Section 3 to incorporate RAS channel changes
- m. Modification to Drawing D600 Gate Schedule to incorporate gate changes due to RAS channel changes

### 3. Additional Construction Administration Services

Due to the significant expansion of the project scope effort associated with the Construction Administration services of the project will need to be increased. The original project, proposed in September 2017, was intended to be a 7 month construction project. The current construction contracts were awarded in September 2022 with substantial completion in December 2024, with a final completion estimated to be in March 2025. This results in 30 months of construction administration services.

Overall the project has increased in scope substantially from the original project intent. Additional discipline review is required due to the addition on the work in the South Aeration tanks, two new aeration tanks, the chemical feed building and new blowers in the South Blower building and a full plant wide generator system, and mechanical and plumbing support for the new and revised buildings. Shop drawing review time is significantly more than originally intended. Initially shop drawings were estimated at 212 hours in the September 2017 proposal.

The original construction administration tasks proposed in September 2017 remain valid, although expanded for the larger project, and include:

A Construction Manager will be assigned to the project to provide construction related services that include, but are not limited to:

- a. Pre-Construction Conference: Conduct a Pre-Construction Conference prior to commencement of work at the site. Prepare meeting minutes and action items.
- b. Defective Work: Reject work if, on the basis of Engineer's observations, Engineer believes that such work (a) is defective under the standards set forth in the Contract Documents, (b) will not produce a completed Project that conforms to the Contract Documents, or (c) will imperil the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
- c. Clarifications and Interpretations; Field Orders: Issue necessary clarifications and interpretations of the Contract Documents as appropriate to the orderly completion of Contractor's work. Such clarifications and interpretations will be consistent with the intent of and reasonably inferable from the Contract Documents. Subject to any limitations in the Contract Documents, Engineer may issue field orders authorizing minor variations in the work from the requirements of the Contract Documents.
- d. Change Orders and work Change Directives: Recommend change orders and work change directives to Owner, as appropriate, and prepare change orders and work change directives as required.
- e. Shop Drawings and Samples: Review and approve or take other appropriate action in respect to Shop Drawings and Samples and other data which Contractor is required to submit.
- f. Substitutes and "or-equal": Evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposed by Contractor.
- g. Inspections and Tests: Require such special inspections or tests of Contractor's work as deemed reasonably necessary, and receive and review all certificates of inspections, tests, and approvals required by Laws and Regulations or the Contract Documents. See Task 5 for estimate of Special Inspection Fees.
- h. Disagreements between Owner and Contractor: Render formal written decisions on all duly submitted issues relating to the acceptability of Contractor's work or the interpretation of the requirements of the Contract Documents pertaining to the execution, performance, or progress of Contractor's work; review each duly submitted Claim by Owner or Contractor, and in writing either deny such Claim in whole or in part, approve such Claim, or decline to resolve such Claim if Engineer in its discretion concludes that to do so would be inappropriate.
- i. Applications for Payment: Based on Engineer's observations as an experienced and qualified design professional and on review of Applications for Payment and

accompanying supporting documentation, determine the amounts that Engineer recommends Contractor be paid. It is assumed that work will be completed and paid in one payment application.

- j. Contractor's Completion Documents: Receive, review, and transmit to Owner maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance required by the Contract Documents, certificates of inspection, tests and approvals, Shop Drawings, Samples and other data approved as required, and transmit the annotated record documents which are to be assembled by Contractor in accordance with the Contract Documents to obtain final payment.
  - k. Substantial Completion: Promptly, after notice from Contractor that Contractor considers the entire work ready for its intended use, in company with Owner and Contractor, visit the Project to determine if the work is substantially complete. If after considering any objections of Owner, Engineer considers the work substantially complete, Engineer shall deliver a certificate of Substantial Completion to Owner and Contractor.
  - l. Substantial Completion Inspection: Together with Owner, conduct an inspection of the substantially completed work. Develop a list of deficiencies and issue said list to contractor. Manage, supervise and reinspect deficiencies until final resolution.
  - m. Final Notice of Acceptability of the work: Conduct a final visit to the Project to determine if the completed work of Contractor is acceptable so that Engineer may recommend, in writing, final payment to Contractor. Provide a written notice of completion to regulatory agencies as required.
  - n. Record Drawings: Prepare Record Drawings showing appropriate information and furnish to Owner. One (1) electronic copy in PDF format, one (1) electronic copy in AutoCAD format, two (2) sets of 22" x 34" sheets in paper shall be provided to the Owner. One copy of the project specifications in electronic format and one paper copy. Electronic copy of all approved shop drawings.
4. Additional Construction Observation Services

Due to the significant expansion of the construction project, the scope effort associated with the Construction Observation services will need to be increased. The original project, proposed in September 2017, was intended to provide 700 hours of field representative time.

As a final construction schedule has not been obtained from Jensen an estimated of construction observation hours was developed. Based upon information presented in the schedule contained



in the construction bids and discussed at the Construction kick-off meeting the following is understood:

October 2022 – February 2023: Miscellaneous field investigation for utility location: estimated 100 hours of construction observation time over this five month time period to support this effort.

March 2023 – December 2024 : Full time construction observation time utilizing the following assumptions:

- 10 hour days from April 2023 – October 2023 to observe construction of the new South Aeration Tanks. (estimate of 1,500 hours)
- 8 hours per day from April 2023 to October 2023 for a second inspector, if needed, to assist with the observation of the construction of the new South Aeration tanks (estimate of 1,200 hours)
- 10 hour days from April 2024 to September 2024 for the conversion of the existing South Aeration tanks (estimate of 1,300 hours)
- 8 hour days in March 2023, November 2023– March 2024, October 2024 – December 2024 (estimate of 1,500 hours)

January 2025 to April 2025, on a PT basis to support the final punchlist and closeout. It is estimated that 2.5 days per week will be needed equating to 300 hours

The total hours of construction inspection is estimated to be 5,900 hours (4,700 hours CO #1, 1,200 CO#2). Should a second inspector not be required for the full 1,200 and the overall contract time get extended B&L anticipates transferring hours between staff to meet the project goals. Furthermore, it is agreed that B&L may reallocate fee to/from construction observation and construction administrative, depending upon the needs of the project.

5. Special Inspections (Time and Materials)

Due to the modification of the project several new concrete structures as well as a new building is required to support this project.

Many inspection tasks can be completed by the B&L construction observation staff under the B&L engineering license but other tasks require special inspections. A table outlining the various inspection requirements and associated testing costs received from testing agencies is attached to this supplement. Multiple third party quotes for these services were obtained in June 2022 to develop the most cost effective.

Outside third party inspections are required per the NYS Building Code to test the following items:

- Soils and Foundations : Foundation Excavation, Controlled Fill Placement, Helical Piles
- Cast in Place Concrete : Reinforcement Inspection, formwork, concrete placement, sampling and testing of concrete
- Masonry : Grouting Operation, Grout Strength

- Structural Steel : Special Inspection of Structural Steel Elements

Based on the original construction schedule proposed by Jersen a total special inspection budget of \$196,400 is estimated, or roughly 0.5% of the total project costs.

Special Inspections will be coordinated at the bi-monthly meetings to ensure B&L can cost effectively manage the outside inspection firm within the project estimate. Should contractor delays extend services requiring additional field trip by the special inspections firm costs associated with these will be discussed with SCSD and a determination of back charges can be established if desired by SCSD.

#### 6. Funding Support Services:

The project was successful in securing three major grants to fund this project, namely.

- a. Empire State Development (ESD) Grant
- b. Water Quality Improvement Program (WQIP) Grant
- c. Water Infrastructure Improvement Act (WIIA) Grant

Each grant will require development of initial submissions as well as monthly/quarterly paperwork submissions for review and approval. The following tasks will be performed on an hourly basis to support SCSD with the program compliance requirements:

- a. M/WBE Work Plans for each funding agency
- b. Quarterly M/WBE Paperwork
- c. Project work Plan for WQIP program

We have assumed 40 hours for the initial set up with contractors and agencies and 8 hours per month for the submissions. Submissions are anticipated through June 2025.

#### 7. Modifications to Design Drawings to Incorporate Rambol design changes to the existing South Aeration Basins:

Rambol is currently designing modification to the existing South Aeration Tanks. Based on discussions with Rambol in August 2022 it appears that modifications to the B&L design will be required to incorporate this work into the project.

The extent of the structural, process and site drainage requirements are not known until final documents are provided by Rambol.

This work will be completed on an hourly basis and it is assumed that 40 hours of structural work, 40 hours of process/PM work and 24 hours of site drainage work may be required. An additional 40 hours of CAD support is assumed to support production of the overall change order and 40 hours of Construction Manager effort for the change order negotiations and associated paperwork.

## EFFORT HOURS FOR SERVICES

TASK DESCRIPTIONS	Principle	Sr Associate	Managing Eng	Project Engineer (process/structural)	Sr Designer	Sr. Engineer (Structural)	Sr Engineer (Electrical)	Electrical/Mech/Plumbing Eng - Eng II	Managing Engineer (Stormwater)	Sr Tech (Electrical and Process)	Construction Manager	Senior Construction Inspector	Senior Construction Inspector	Total Hours
Rebid of Plumbing Contract														
Contract Documents for Rebidding		16		16				40		16	12			100
Additional Bidding and Award														
Additional Requested Design for RAS Channel		18.5	32.5	37	16	28								132
Expanded Bidding Services for Expanded Project	6.5	40.5	36.25	52.25	34.5	23	10.5	21		32	24			281
Administration of Construction - Total														
Contract Management of Four Prime Contracts (24 months)											480			480
Shop Drawings/Field Changes	24	230	400	400		320	200	400	40	200	200			2414
RFIs		60	80		40	60	80				80			400
Progress Meetings (2x month)		192									192			384
Pay Applications (24 Months)		24									384			408
Phased Start-up and Troubleshooting		120	40				80				40			280
Substantial (Multiple) and Final Walkthrough		24									40			64
Record Drawings		40				16	40			264	40			400
Inspection														
Full Time Senior Inspector												4700		4700
Second Inspector													1200	1200
Funding Support Services														
	8	40		240							40			
Modifications to Design to Incorporate Rambol Plans														
	4	40		40	24	40			24		40			212
HOURS TOTAL	42.5	845	588.75	785.25	114.5	487	410.5	461	64	512	1572	4700	1200	11,783

FEE FOR SERVICES:

Barton & Loguidice, D.P.C. proposes to provide the scope of services described herein for a total fee of \$1,974,300 as outlined below.

Task	Fee
Rebidding Plumbing Contract	\$16,000
Bidding Services (lump sum)	
Request RAS Channel Design Work (Add# 3)	\$23,600
Expanded Bidding Services	\$48,900
- Original Authorization	<u>-\$8,500</u>
Supplement Required	\$64,000
Construction Administration Services (lump sum)	\$831,100
- Original Authorization	<u>-\$64,800</u>
Supplement Required	\$766,300
Construction Observation (hourly + travel exp)	
Senior Inspector 4700 hours (@ \$132/hr)	\$620,400
Second Inspector 1200 hours (@\$121/hr)	\$145,200
Mileage	\$18,000
- Original Authorization	<u>-\$65,500</u>
Supplement Required	\$718,600
Special Inspections (outside services, see attached)	\$196,400
Grant Funding Assistance (hourly)	\$54,600
Modifications to Design Drawings for Rambol's Structural Design (hourly)	\$38,200
Total Supplement	\$1,854,100

B&L previously had \$138,800 allocated for bidding, CA and CO. As such, a supplemental fee authorization of \$1,854,100 is proposed for the additional services described herein.



SARATOGA COUNTY BID TABULATION AND SIGN IN SHEET

BID INFORMATION:

Opening Date: 1.19.23	10:00am	Bid Name: Saratoga County Sewer District #1 County Forcemain Connection Project – Contract 1	Specification: 23-SDMFC-1
Company: Bellany Construction	Signature: <i>Stephanie Bugay</i>	Bid: 1,750,500.00	
Company: NEW CASTLE PAVING	Signature: <i>[Signature]</i>	Bid: 2,618,840.00	
Company: W.M. J. KELLER + SONS CONST.	Signature: <i>[Signature]</i>	Bid: 2,535,869.00	
Company: Larerge Group	Signature: <i>[Signature]</i>	Bid: -	
Company: SAT Construction	Signature: <i>[Signature]</i>	Bid: 1,988,500	
Company: Tech Industries	Signature: <i>[Signature]</i>	Bid: 2,486,100.00	
Company: F.W. WEBB Waterworks	Signature: <i>[Signature]</i>	Bid:	
Company:	Signature:	Bid:	
Company:	Signature:	Bid:	
Company:	Signature:	Bid:	
Saratoga County Employee(s)	Signature:	Signature:	

BID INFORMATION:

Opening Date: 1.17.23 11:00am	Bid Name: HVAC Upgrades for the Saratoga County Sewer District #1 - Electrical	Specification: 23-SDHVACU-1(E) Electrical
Company: J. McBurn Inc	Signature: <i>[Signature]</i>	Bid: \$142,000.00 Alt #1: \$100,500.00 <i>Electrical</i>
Company: Stilsins electric	Signature: <i>[Signature]</i>	Bid: <i>Electrical</i> Alt #1: \$4353.00
Company: FEX Electric	Signature: <i>[Signature]</i>	Bid: \$198,000.00 Alt #1: \$15,000.00
Company:	Signature:	Bid:
Company:	Signature:	Bid:
Company:	Signature:	Bid:
Company:	Signature:	Bid:
Company:	Signature:	Bid:
Company:	Signature:	Bid:
Saratoga County Employee(s)	Signature:	Signature:

HVAC

SARATOGA COUNTY BID TABULATION AND SIGN IN SHEET

BID INFORMATION:

Opening Date: 1.17.23	11:00am	Bid Name: HVAC Upgrades for the Saratoga County Sewer District #1 - HVAC	Specification: 23-SDHVACU-1(H) HVAC
Company: T. McElligott Inc.	Signature: 	Bid: HVAC 1,873,000.00 Cmc. Add'l. 180,000.00	
Company: JMD	Signature: 	Bid: HVAC 1,545,000 ADD'L 185,000	
Company:	Signature:	Bid:	
Company:	Signature:	Bid:	
Company:	Signature:	Bid:	
Company:	Signature:	Bid:	
Company:	Signature:	Bid:	
Saratoga County Employee(s)	Signature:		