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Agendas & Minutes Posted:
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LEHIGH COUNTY AUTHORITY

Published: November 6, 2023

BOARD MEETING AGENDA – November 13, 2023 – 12:00 p.m.

In-Person or Virtual Meeting Attendance Options Available: Meetings of the LCA Board of Directors will be held at LCA's Main Office as well as online using the Zoom Meetings application, which includes a telephone option. Public participation is welcomed both in-person or virtually. Instructions for joining the meeting online or by phone are posted on the LCA website in the morning on the day of the meeting, prior to the start of each meeting. You may also issue comment to LCA via email to LCABoard@lehighcountyauthority.org in advance of any meeting or view the meeting at a later time by visiting the LCA website. Please visit <https://www.lehighcountyauthority.org/about/lca-board-meeting-videos/> for specific instructions to join the meeting if you are attending virtually. If attending in-person at LCA's Main Office, please follow all safety and sanitation protocols posted.

1. Call to Order

- NOTICE OF MEETING RECORDINGS

Meetings of Lehigh County Authority's Board of Directors that are held at LCA's Main Office at 1053 Spruce Road, Wescosville, PA, may be recorded for viewing online at lehighcountauthority.org. Recordings of LCA meetings are for public convenience and internal use only and are not considered as minutes for the meeting being recorded, nor are they part of public record. Recordings may be retained or destroyed at LCA's discretion.

- *Public Participation Sign-In Request*

2. Review of Agenda / Executive Sessions

- Additions to Agenda (vote required if action will be taken)

3. Approval of Minutes

- *October 9, 2023 Board Meeting minutes*
- *October 23, 2023 Board Meeting minutes*

4. Public Comments

5. Action / Discussion Items:

FINANCE AND ADMINISTRATION

- *PFAS Class Action Settlement – Authority Determination (Approval)*
- *Authority Solicitor Contract (Approval) (goldenrod) (digital Board packet, pages 12-18)*
- *2024 Water & Wastewater Rate Schedules (Approval) (pink) (digital Board packet, pages 19-40)*
- *2024 Board Meeting Schedule (Approval) (salmon) (digital Board packet, page 41)*

WATER – LEAD PROGRAM ITEMS

- *Resolution No. 11-2023-1 PENNVEST Reimbursement for Lead Service Line Cycle 1 Project (Approval) (gray) (digital Board packet, pages 42-44)*
- *Lead Service Line Inventory Program & Compliance Planning – Allentown Division & Suburban Division (Approval) (blue) (digital Board packet, pages 45-50)*
- *Lead Service Line Replacement Program Cycle 1 (Approval) (yellow) (digital Board packet, pages 51-54)*

WATER – OTHER AGENDA ITEMS

- *Water Main Replacement Program Cycle 7 (Approval) (**green**) (digital Board packet, pages 55-60)*

WASTEWATER

- *LCA Sewage Transportation Agreement – Upper Macungie & Lower Macungie Townships (Approval) (**white**) (digital Board packet, pages 61-81)*
 - *Lynn Township WWTP Final Clarifier Project (Approval) (**purple**) (digital Board packet, pages 82-85)*
 - *Pretreatment Plant (PTP) Near-Term Facility Improvements (Approval) (**ivory**) (digital Board packet, pages 86-91)*
6. Monthly Project Updates / Information Items (1st Board meeting per month) (digital Board packet, pages 92-99) – **November 2023 report attached**
 7. Monthly Financial Review (2nd Board meeting per month)
 8. Monthly System Operations Overview (2nd Board meeting per month)
 9. Staff Comments
 10. Solicitor's Comments
 11. Public Comments / Other Comments
 12. Board Member Comments
 13. Executive Sessions
 14. Adjournment

UPCOMING BOARD MEETINGS

November 27, 2023

December 11, 2023

January 8, 2024

PUBLIC PARTICIPATION POLICY

In accordance with Authority policy, members of the public shall record their name, address, and discussion item on the sign-in sheet at the start of each meeting; this information shall also be stated when addressing the meeting. During the Public Comment portions of the meeting, members of the public will be allowed 5 minutes to make comments/ask questions regarding non-agenda items, but time may be extended at the discretion of the Chair; comments/questions regarding agenda items may be addressed after the presentation of the agenda item. Members of the public may not request that specific items or language be included in the meeting minutes.

REGULAR MEETING MINUTES

October 9, 2023

The Regular Meeting of the Lehigh County Authority Board of Directors was called to order at 12:00 p.m. on Monday, October 9, 2023, Chairman Brian Nagle presiding. The meeting was hybrid via in-person and video and audio advanced communication technology ("ACT"), using the Zoom internet application, including telephone option. Each Board member and other attendees of the meeting were able to hear each other attendee and be heard by each other attendee. The public could also participate in the meeting in-person or via ACT, using the Zoom internet application, including telephone option. A Roll Call of Board members present was taken. Brian Nagle, Ted Lyons, Linda Rosenfeld, Jeff Morgan, Sean Ziller, and Marc Grammes were present for Roll Call, and remained for the duration of the meeting.

Attorney Mike Gaul of KingSpry, the Authority's Solicitor, was present along with Authority Staff, Liesel Gross, Ed Klein, Andrew Moore, Albert Capuzzi, Sue Sampson, Phil DePoe, Chuck Volk, and Lisa Miller.

Chairman Nagle announced that the Board received their electronic and hard copies of the Board packet in advance. He then asked if anyone did not receive their copy of the packet. A copy of the packet is also available online.

REVIEW OF AGENDA

Liesel Gross noted that there are no additions to the agenda or Executive Sessions planned; however, the Sand Spring WWTP Treatment Process Modification item listed on the agenda will not be presented at today's meeting.

Kevin Baker entered the meeting at 12:02 p.m.

APPROVAL OF MINUTES

September 11, 2023 Meeting Minutes

On a motion by Linda Rosenfeld, seconded by Sean Ziller, the Board approved the minutes of the September 11, 2023 meeting (7-0).

September 18, 2023 Meeting Minutes

Linda Rosenfeld noted a grammatical error. On a motion by Linda Rosenfeld, seconded by Sean Ziller, the Board approved the minutes of the September 18, 2023 meeting as corrected (7-0).

PUBLIC COMMENTS

None.

2024-2028 Capital Plan

Liesel Gross provided a presentation summarizing the 2024-2028 Capital Plan and recapped the planning process and public input process. Comments were received from the City of Allentown and the Lehigh Valley Planning Commission. The comments will not require any changes to the Plan. Chuck Volk reviewed the minor adjustments and refinements made to the project costs for 2024 since the Plan was presented to the Board in August. Ed Klein noted that these minor project cost adjustments did not impact the financial analysis. He reviewed the results of that analysis, which illustrates the need for rate increases and additional borrowing to complete all the listed projects in the Plan.

Ms. Gross provided a total Plan summary, noting \$261 million in project costs is a significant increase from prior Capital Plans. She reviewed the drivers for the cost increases, including the sewer wet-weather program and the regulatory-driven projects. The regulatory drivers are PFAS Treatment and Lead Service Line Replacement projects, and the Authority will be working to secure grant funding for these projects.

Norma Cusick entered the meeting at 12:13 p.m.

There was some discussion regarding the approach to replacing the lead service lines.

Ms. Gross explained the 2024-2028 Capital Plan does not include major projects that are being developed as part of the regional Act 537 Plan for the Kline's Island Sewer System. These projects will be incorporated into future capital plans after the program is more fully developed.

Ed Klein reviewed the funding sources for the Plan, stating that 50 percent will come from operating revenue and 50 percent from new borrowing and grants. He also reviewed rate projections for the next five years based on the Plan financial analysis.

On a motion by Sean Ziller, seconded by Jeff Morgan, the Board approved the 2024-2028 Capital Plan (8-0).

2024 Budget: Preliminary Review

Liesel Gross noted that today's presentation is focused on reviewing any changes from the prior presentation and the proposed 2024 rates. Approval of the Budget will be requested at the October 23rd Board meeting with rate adoption at the November 13th Board meeting. A printed copy of the proposed 2024 Budget was provided to all Board members and posted on the Authority's website along with the presentation from today's meeting.

Ed Klein reviewed the Budget summary including financial metrics and analysis of reserve balances. He then reviewed the changes to the Budget since it was presented at the September 18 meeting. In the Suburban Water Division budget, the revenue was lowered slightly and operating expenses adjusted downward due to refined calculations of the cost of water purchases. These changes resulted in improved cash flows for this fund.

Liesel Gross reviewed the proposed Suburban Water Division rates for 2024. She reviewed the primary results of the Water Rate Study that was completed in September 2022. Based on this study, the proposed 2024 water rates were developed including no change in the standard fixed charges or private fire service fees. The volume charge includes a proposed increase of 5 to 6 percent depending on usage. The public fire hydrant charges will increase 4 percent. The average residential customer will see a change in their water bill of approximately 3.9 percent, and industrial customers will see their water bill increase by up to 6 percent, depending on usage.

Mr. Klein then reviewed the Suburban Wastewater Division budget noting that there were some significant changes since the previous meeting. There is an increase in operating expenses due to higher treatment and transportation charges resulting from a refinement of the signatory rate model. Revenues were reduced by nearly \$2 million based on signatory rate model refinements as well. The capital budget was increased slightly to reflect additional work expected in 2024 on the regional Act 537 Plan. Borrowing has also increased. Ms. Gross explained that the Suburban Wastewater Division rates are determined by the signatory agreements and will be presented separately later in the meeting. The current Budget proposal shows no change in sewer rates to the Authority's direct customers, but these rates will be reviewed in 2024 to consider the increased capital needs of the Authority's small sewer systems.

For the City Division budget, Mr. Klein noted the revenue was increased following a review of the 2024 water and sewer rates. Other minor adjustments in expenses were made following staff review. Ms. Gross reviewed the process for updating the City Division water and sewer rates, which are calculated based on the formulas included in the Allentown Water & Sewer Lease Agreement. In 2024, the standard fixed charges will increase by inflation (CPI-U), plus 2.5 percent, plus a final step increase determined in the 2020 Lease amendment. The water volume and sewer flow charges will increase by inflation (CPI-U), plus 2.5 percent, totaling to a 4.7 percent increase. Other rates will increase based on updated information on completed capital improvements and updated expenses related to the Administrative Order. After reviewing all the individual rate components, Ms. Gross summarized the overall impact to the average residential customer, whose 2024 water and sewer bill will increase by approximately 11.6 percent.

Mr. Klein reviewed the capital spending included in the proposed 2024 Budget, noting that spending in 2024 is approximately \$51 million split between all three funds, which is in line with the 2024-2028 Capital Plan discussed earlier in the meeting.

He reviewed the next steps in the budget process, including review of the Suburban Division Wastewater User Charge Report. Presentation of the final 2024 Budget for approval will be made at the October 23rd meeting. The 2024 water and sewer rates will be presented for adoption at the first meeting in November. Rates will be published following today's meeting, allowing for public comments prior to adoption.

There was some discussion regarding capital spending and rate increases. Sean Ziller asked about the use of reserves and the appropriateness of the reserve balances. There was some discussion about the need for reserves for emergency situations and risks associated with reliance on large industrial user revenue. Marc Grammes noted that the County of Lehigh uses a financial model to show budget impacts based on different tax rate proposals, including options for no tax increases, and inquired if the Authority has a model like this to show budget alternatives. Mr. Klein explained that revenue requirements and rate increase recommendations are determined based on ensuring the Authority maintains strong performance on its financial metrics including debt service coverage ratios and days of cash on hand. These metrics are important for achieving high bond ratings.

Liesel Gross asked that any questions or comments from the Board about the proposed 2024 Budget be sent to her by the end of next week so the staff can consider any final changes to the Budget prior to seeking Board approval at the next meeting.

Western Lehigh Interceptor (WLI) User Charge Report

Jennifer Montero, the Authority's Contracts Administrator, presented the 2024 Wastewater User Charge Report explaining the derivation of the various billing rates that are charged to the users of the Western Lehigh Interceptor, Little Lehigh Relief Interceptor Phase 1, and Little Lehigh Relief Interceptor Phase 2. The rate calculation reflects the actual 2024 capital spending being recovered in the calendar year through the rates. For 2024, the rate increases will have the impact of increasing charges to an average residential customer by 0.1 percent.

Ms. Montero commented that the rates shown in this report are charged to the municipalities. The municipalities then determine their own sewer rates to their customers, so the rate impact calculated in this report may be different depending on the actual municipal sewer rates applied to the customers. The municipalities received this User Charge Report in September, and no comments were received. She explained that the municipalities understand the rate increases because the subject is discussed at the regular monthly meetings that LCA staff and the municipalities' representatives hold.

On a motion by Ted Lyons, seconded by Linda Rosenfeld, the Board gave preliminary approval of the 2024 WLI, LLRI-Phase 1 and Phase 2 User Charges (8-0).

Allentown Division – 30” & 36” East Side Transmission Main Repair Report

Chuck Volk summarized the project that is based on the Smart Ball study that was performed on the East Side Transmission Main in Allentown to locate potential points of failure in this critical asset. Jason Peters described how the Smart Ball inspection works and how leaks are discovered. He noted that six leaks were identified at various locations on the transmission line as a result of the study. The project will address all six leaks due to the amount of water loss and the critical nature of this facility.

On a motion by Sean Ziller, seconded by Marc Grammes, the Board approved the Capital Project Authorization, Design Phase, for the East Side Transmission Main Repair project in the amount of \$104,300.00 which includes the Professional Services Authorization to Gannett Fleming in the amount of \$89,300.00 (8-0).

MONTHLY PROJECT UPDATE REPORT

Liesel Gross highlighted the items in the report that are listed for the next meeting in October and a few items that will be covered in November.

STAFF COMMENTS

None.

SOLICITOR’S COMMENTS

None.

PUBLIC COMMENTS / OTHER COMMENTS

None.

BOARD MEMBER COMMENTS

Sean Ziller commended the staff and their teams for their work on the Budget.

EXECUTIVE SESSION

None.

ADJOURNMENT

There being no further business, the Chairman adjourned the meeting at 1:53 p.m.

Linda A. Rosenfeld
Secretary

REGULAR MEETING MINUTES

October 23, 2023

The Regular Meeting of the Lehigh County Authority Board of Directors was called to order at 12:00 p.m. on Monday, October 23, 2023, Chairman Brian Nagle presiding. The meeting was hybrid via in-person and video and audio advanced communication technology ("ACT"), using the Zoom internet application, including telephone option. Each Board member and other attendees of the meeting were able to hear each other attendee and be heard by each other attendee. The public could also participate in the meeting in-person or via ACT, using the Zoom internet application, including telephone option. A Roll Call of Board members present was taken. Brian Nagle, Amir Famili, Ted Lyons, Linda Rosenfeld, Norma Cusick, Jeff Morgan, Sean Ziller, and Marc Grammes were present for Roll Call, and remained for the duration of the meeting except for Sean Ziller who left the meeting at 1:25 p.m.

Attorney Mike Gaul of KingSpry, the Authority's Solicitor, was present along with Authority Staff, Liesel Gross, Ed Klein, Chris Moughan, Andrew Moore, Phil DePoe, Chuck Volk, and Lisa Miller.

Chairman Nagle announced that the Board received their electronic and hard copies of the Board packet in advance. He then asked if anyone did not receive their copy of the packet. A copy of the packet is also available online.

REVIEW OF AGENDA

Liesel Gross noted that there are no additions to the agenda, but suggested the Board may wish to change the order of the items on the agenda to allow guests attending to speak first. An Executive Session is planned after the regular meeting to discuss a personnel matter.

APPROVAL OF MINUTES

October 9, 2023 Meeting Minutes

By Board consensus, review of the October 9, 2023 Meeting Minutes was tabled until the November 13, 2023 meeting because a printed copy was not included in the packet.

PUBLIC COMMENTS

None.

Water Main Extension Policy – Waiver Request: Fallbrooke Subdivision

Chairman Brian Nagle asked for this item to be heard first due to the presence of guests at the meeting who will address this item.

John McRoberts from The Pidcock Company and Nicole Galio from Jaindl Land Company were present to ask for a waiver of certain terms of the Authority's Water Main Extension Policy. Mr. McRoberts gave an overview of the Fallbrooke Residential Subdivision in Upper Macungie Township. In accordance with the Authority's policies, the developer would be required to extend the water main to the edge of the property, which equates to a 1,550-foot water main extension along the frontage of Schantz Road. Mr. McRoberts explained that under the Township's current Act 537 Plan, the Township's public sewer service area ends at the edge of the property included in the development and does not include adjacent properties. This reduces the likelihood of future development in the area adjacent to the Fallbrooke development. Therefore, the developer believes the water main extension should not be constructed, as it would leave a "dead end" in the water system that will require regular maintenance by the Authority for an unknown, and potentially lengthy, period of time. The developer is requesting the water main extension requirement be

deferred, and that the Authority hold the Authority's existing reimbursement obligation to Jaindl in the amount of \$102,300.00 as performance security for installation of the deferred main. The Authority's reimbursement obligation exists because the Authority required Jaindl to increase the size of the water main from 8 inches to 12 inches in diameter, to support potential future development in the area. Jaindl's representatives also requested a reduction of the deferral period from ten years to four years, so it coincides with the planned completion of the construction of the development.

Liesel Gross explained that the developer's request covers three main issues, two of which are already covered by the Authority's Main Extension Policy. The policy allows for the deferral of a water main extension and provides for methods to determine the value of the deferral in terms of the security requirement to be paid by the developer. These are issues that the Authority staff members have routinely worked through directly with the developers in prior projects. She noted the third issue raised in this situation relates to the length of the deferral period. The Authority's policy specifies a 10-year deferral period. If a shorter deferral period is desired, that would require approval by the Board.

Amy Kunkel and Chuck Volk reviewed the Authority staff's position on the developer's request. They stated that a portion of the main extension should be constructed now because it will run in between or behind the residential properties that are being constructed. If that portion of the water main extension is deferred, it will be difficult to construct later when it is needed due to the disruption to the homeowners. Staff are considering the developer's security proposal of \$102,300 for the remaining water main extension deferral. Because a portion of the deferred water main extension must be constructed in a state road, the costs are potentially higher than the developer's estimate.

There was some Board discussion regarding the deferral, costs of the security, and the number of years of the deferral. The Board asked about maintenance on the "dead end" water main that would potentially be constructed. Amy Kunkel and John McRoberts agreed that a blow-off valve for routine system flushing would most ideally be located near an existing culvert for discharge of the water. Board members expressed a willingness on the Authority's part to work on a compromise position to address the unique circumstances of this development.

On a motion by Sean Ziller, seconded by Jeff Morgan, the Board tabled the waiver request until the November 13, 2023, Board meeting to allow for further clarification and discussion between Authority staff and the developer (8-0).

2024 Budget – Final Review and Approval

Liesel Gross noted that today's presentation is a summary of 2024 Budget information previously provided to the Board, and the Board will be asked today to approve the Budget. Ms. Gross reviewed the highlights of the 2024 Budget, summarizing the impact of the strategic initiatives and staff changes. She also reviewed the proposed customer rates for 2024 and a rate comparison among other communities in the Lehigh Valley. Ms. Gross noted that the Authority has developed programs to assist low-income customers with the increasing cost for water and sewer service.

Ed Klein reviewed the 2024 Budget summary, noting the positive cash flows and achievement of the Authority's debt service coverage ratio goals. There was some Board discussion regarding the rate increases. Sean Ziller commended the Staff for their work on the Budget.

On a motion by Marc Grammes, seconded by Linda Rosenfeld, the Board approved the 2024 Budget as presented (8-0).

A roll call vote was taken, with the following votes cast:

Brian Nagle – yes
Amir Famili – yes
Ted Lyons – yes
Linda Rosenfeld – yes
Norma Cusick – yes
Jeff Morgan – yes
Sean Ziller – yes
Marc Grammes – yes

LCA Munis EERP System Planning & Implementation

Chris Moughan provided an overview of the project and explained the need to improve the Authority's administrative and financial processes. Through an evaluation by Raftelis, a needs analysis recommended a full re-implementation of the current enterprise resource planning (ERP) software system, called Munis by Tyler Technologies. The system has been renamed as Tyler EERP, but is essentially the same product the Authority has been using. However, the current system configuration dates back to 2007 and needs to be updated to reflect updated accounting needs and organizational changes that have occurred over time. This includes the need for a fully redesigned General Ledger string and Chart of Accounts, which serve as the foundation for all other financial processes and reporting capabilities. Some benefits of the re-implementation process include improved financial reporting, employee data management, employee self-service options, project accounting for capital projects, purchasing and inventory workflows, and customer self-service options. Mr. Moughan noted that the Board has asked for improvements on capital project reporting, and the new project accounting module to be implemented will allow for reporting on-time and on-budget performance of the capital program.

There was some discussion on the staffing and contingency costs included in the authorization. Mr. Moughan noted that staff time is expected to be significant during the project implementation, but there will be increased overall process efficiency following project completion. He also noted the prior authorization for Raftelis to provide implementation planning and support services will continue throughout the project.

On a motion by Marc Grammes, seconded by Linda Rosenfeld, the Board approved the Capital Project Authorization to Munis/Tyler EERP Re-Implementation Project in the amount of \$905,620.00, which includes the Professional Services Authorization to Tyler Technologies for Implementation Support Services in the amount of \$595,620.00 (8-0).

Suburban Division Western Lehigh Manhole Rehabilitation Project – Phase 4

Jason Peters provided an overview of the Phase 4 Western Lehigh Manhole rehabilitation project to upgrade and seal manholes and reduce infiltration and inflow. The work will raise manhole tops at or above floodplain elevation, repair concrete, and install 160 new composite water-tight frames and covers. He reviewed the bidding results and explained the plan to purchase materials through a Co-Stars contract. There was some brief Board discussion.

On a motion by Marc Grammes, seconded by Norma Cusick, the Board approved the Capital Project Authorization for the Construction Phase in the amount of \$519,363.00 which includes Contract Award for General Construction to Scheuermann Excavating, Inc. in the amount of \$219,925.00, Contract Award for the Manhole Frames and Covers Material Procurement to Ferguson Supply in the amount of \$221,438.00 and a Professional Services Authorization for Construction Phase Services to Keystone Consulting Engineers in the amount of \$48,000.00 (8-0).

Suburban Division – Park Pump Station Phase 2 Upgrade

Amy Kunkel provided an overview of Phase 2 of the upgrade project to replace the existing original backup generator at the Park Pump Station. Albarell Electric, Inc. was the low bidder and also the electrical contractor for the project. Their bid reflects savings on mobilization, insurance, and coordination efforts by having a single contractor complete both contracts. Albarell has completed numerous projects of similar scope and appears well qualified to perform the work.

On a motion by Norma Cusick, seconded by Amir Famili, the Board approved the Capital Project Authorization for the Construction Phase, Amendment No. 1 in the amount of \$319,308.00 which includes the Construction Contract to Albarell Electric, Inc. in the amount of \$294,308.00 (8-0)

Allentown Division – Kline’s Island WWTP: 2023-2024 Architectural and Structural Upgrades

Amy Rohrbach provided a background of the project that addresses the structural deficiencies at the Kline’s Island Wastewater Treatment Plant identified in the annual engineer’s report that is required by the Trust Indenture for the Allentown Water & Sewer Lease bonds. Most of the work included in this project is located at the Plastic Media Trickling Filters and the Primary Settling Basins.

On a motion by Norma Cusick, seconded by Linda Rosenfeld, the Board approved the Capital Project Authorization for the Construction Phase in the amount of \$336,190.00 which includes the Professional Services Authorization to D’Huy Engineering, Inc. in the amount of \$16,900.00 and the General Contract Award to Mar-Allen Concrete Products, Inc. in the amount of \$299,290.00 (8-0).

MONTHLY FINANCIAL REVIEW

Ed Klein gave an overview of the September 2023 financial statements, highlighting variances between actual expenses and budgeted or forecasted expenses. Mr. Klein reported that all three funds are positive against the forecast.

MONTHLY SYSTEM OPERATIONS OVERVIEW

Andrew Moore reviewed the September 2023 Operations report and noted that water production and wastewater treatment has not varied much this month. The total precipitation for September was 4.03 inches, and the Drought Watch issued by the Pa. Department of Environmental Protection was lifted for Lehigh County on Friday, October 20th. He noted the work included in the emergency declaration previously approved by the Board to remove and dewater solids from Kline’s Island WWTP was completed over a two-week period, which allowed the plant’s treatment to stabilize and achieve permit compliance in September.

Andrew Moore commented that the report format will be changing next month to add a more in-depth report on injuries and safety incidents.

STAFF COMMENTS

None.

SOLICITOR’S COMMENTS

None.

PUBLIC COMMENTS / OTHER COMMENTS

None.

BOARD MEMBER COMMENTS

Chairman Nagle thanked the Staff for getting through the Agenda quickly and helping them understand projects.

EXECUTIVE SESSION

There will be an Executive Session after the regular meeting to discuss a personnel matter.

ADJOURNMENT

There being no further business, the Chairman adjourned the meeting at 1:43 p.m.

Linda A. Rosenfeld
Secretary

MEMORANDUM

TO: LCA Board of Directors
FROM: Liesel Gross, Chief Executive Officer
DATE: November 6, 2023
RE: Authority Solicitor Engagement

Attachment: Engagement Letter Agreement – KingSpry

Over the past several months, Lehigh County Authority (LCA) staff have undertaken a review of current needs for legal support services. This follows receipt of notice of organizational changes within the law firm of the LCA's current solicitor, King Spry Herman Freund & Faul, LLC (KingSpry), which would end the current LCA relationship with KingSpry attorney Michael Gaul by the end of 2023.

LCA staff believed it would be in the organization's best interests to review offerings from other firms, in addition to KingSpry, to determine how future legal support needs would be met. Qualifications of 16 law firms located in Eastern and Central Pennsylvania were reviewed, and a Request for Proposals (RFP) issued to seven firms. Five proposals were received. Three firms were invited to interview with a team of LCA staff members who represented various interests within the organization for which legal services are most often required. All three firms provided comparable pricing and range of services, and are well qualified to serve as LCA's Solicitor. The three firms interviewed were:

KingSpry – Allentown, PA
Gross McGinley – Allentown, PA
Salzman Hughes – Camp Hill, PA

Staff Recommendation: KingSpry's updated proposal and engagement letter is attached for review by LCA's Board of Directors, and approval recommended at the November 13, 2023 meeting. Key reasons for this recommendation include:

- KingSpry has proposed to assign Kevin Ried, Esquire, as the new Solicitor for LCA. Attorney Ried has served LCA admirably for many years as bond counsel, and his familiarity with the LCA organization, Board, and staff will allow him to quickly assume the Solicitor responsibilities.
- In the staff group interview and subsequent individual follow-up discussions, Attorney Ried has offered approaches that will streamline the legal services provided, increase the LCA staff's direct access to the Solicitor, and support timely, practical responses to address staff needs.
- KingSpry's team has historically been supportive of LCA's desire to use external special counsel from time to time. As LCA's legal needs expand in the years ahead to address critical items such as implementation of a regional Act 537 Plan, and related complex environmental and intermunicipal concerns, flexibility and collaboration with other law firms will be needed.
- KingSpry's pricing included in their updated proposal is aligned with their prior contract pricing, and termination with 30 days' notice is allowable at any time.



KINGSPRY

November 6, 2023

**VIA E-MAIL: lieselgross@lehighcountyauthority.org
and FIRST CLASS MAIL**

Liesel Gross, Chief Executive Officer
Lehigh County Authority
1053 Spruce Road
P.O. Box 3348
Allentown, PA 18106

**RE: Proposed Scope of Services and Compensation Agreement for
Lehigh County Authority**

Dear Ms. Gross:

Our understanding is that Lehigh County Authority (the "Authority") is considering the retention of the law firm of King, Spry, Herman, Freund & Faul, LLC ("KingSpry" or "Firm"), to serve as Solicitor to the Authority. Over the years we have enjoyed the opportunity to work with the Authority and we would be delighted to remain in that capacity. This letter sets forth our proposal for the terms of our engagement for legal services.

SERVICES

KingSpry will provide comprehensive general counsel, legal consultation services, and representation on all legal matters affecting the Authority. It is anticipated that, from time to time, after consultation with KingSpry, the Authority may engage special counsel as may be recommended by KingSpry, as required by the Attorney's Code of Professional Responsibility, or in the best interests of the Authority.

**PERSONNEL ASSIGNED TO LEHIGH COUNTY AUTHORITY AND BIOGRAPHICAL
PROFILES**

The primary attorneys serving the needs of the Authority will be Partner Kevin Reid and Attorney Richard Campbell. Additional attorneys and paralegal staff will assist at the discretion of the primary attorneys based upon the ongoing needs of the Authority.

Attorney Reid graduated from Dartmouth College and received his Juris Doctorate from Villanova University School of Law. Attorney Reid has provided Bond Counsel services to the Authority since 2008. In addition to providing bond counsel services for a variety of authorities, municipalities and school districts, he has served as the primary or secondary

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*LICENSED IN PA AND NJ
**LICENSED IN PA AND NY
***LICENSED IN PA, NJ AND NY

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solicitor to multiple clients attending hundreds of meetings. Attorney Campbell graduated cum laude from Widener University and graduated cum laude from Villanova University School of Law. Attorney Campbell has assisted clients and worked in our Municipal Law Practice Group, Public Finance Group and Real Estate Group throughout his tenure with the Firm.

As you are aware, the Firm has multiple practice groups including the Business and Real Estate Law Group, which regularly handles land use, real estate development issues, easements, operating agreements and regulatory matters. While Attorney Reid and Attorney Campbell would be involved in such matters, Partners Matthew Tranter, Kent Herman and Karley Biggs Sebia would provide specialized assistance and handle matters. Attorney Matt Tranter is the Deputy Managing Partner of the Firm and chairs the Business and Real Estate Law Practice Group. He has handled a variety of business and real estate transactions for municipalities, authorities and individuals.

The Firm also has provided employment counsel to the Authority. Attorney Reid has a background in human resources and would assist on general employment matters. Partner Avery Smith, who chairs the Employment Group, along with other members of the Employment Group would assist the Authority. Attorney Smith graduated cum laude from Franklin & Marshall College and earned her Juris Doctorate from Temple University Beasley School of Law.

Biographical profiles for the attorneys who would be assigned to the needs of the Authority are enclosed with this proposal and available on our website at www.kingspry.com.

TERM

Should the Authority elect to retain KingSpry, the engagement shall be from the date of the Authority's acceptance of this engagement letter through December 31, 2026. Prior to the expiration of the term the Authority and the Firm will discuss extending the term of engagement. While we have entered into a variety of arrangements, historically our clients renew their engagement with the firm in three (3) year increments.

KingSpry acknowledges that the Authority reserves the right to terminate the engagement, for its convenience, prior to the end of the term upon 30 (thirty) days advance written notice to KingSpry. In the event that KingSpry's engagement is terminated, the Authority will be responsible for all fees earned and costs incurred to date, as well as fees reasonably necessary to protect the client's interest until substitute counsel is in place. (Code of Professional Responsibility 1.16(d)).

COMPENSATION

1. Annual Fee. The Authority shall pay to KingSpry an annual retainer fee in the amount of \$27,000, payable in equal monthly installments. The services included under the Annual Fee are as follows:

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- All telephone conferences and email exchanges between KingSpry and the Authority officials involving general legal advice which resolves the issue in the telephone conference or email exchange;
- Attendance at two (2) public Board meetings monthly, together with any executive sessions which immediately precede or follow the public meeting;
- Any email exchanges or telephone calls with the Authority officials and resolution of any Authority issues that do not involve extensive research;
- Attend one (1) monthly Board preparation meeting with the Authority's CEO and her designee(s) to review matters for the upcoming Board meeting;
- Attend one (1) monthly office hours/cabinet meeting of up to two (2) hours prior to a Board meeting with the Authority's CEO and her designee(s) to review current, pending and new legal matters;
- Preparation of Board resolutions; review of Board policies; and assistance in preparation of legal notices;
- Right To Know Law opinions and advice, but not including the filing or appearance in appeals at the administrative or judicial level or extensive redacting of documents;
- Review legal specifications for bidding for routine Authority purchases. Routine Authority purchases shall not include construction projects;
- Routine review of contracts and agreements; and
- Preparation of letters to state and local auditors regarding claims against the Authority.

2. Services Outside of the Annual Fee for General Legal Matters (other than litigation or Bond Counsel services). For all general legal matters outside of the Annual Fee, not involving litigation or Bond Counsel services, the Authority will be billed at the blended rate of \$180.00 per hour for services performed by KingSpry attorneys. Paralegal services when utilized will be billed at \$85.00 per hour. There would be no charge for clerical or secretarial time.

3. Services Involving Litigation. For matters where we represent the Authority in litigation, the Authority will be billed at a blended rate of \$195.00 per hour. The Paralegal hourly rate is \$85.00. Litigation shall include identifiable disputes or claims against the Authority where the Authority will need to be represented before courts, administrative agencies, or mediation or arbitration panels.

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Where the firm is approved as defense counsel by the Authority's insurance carrier, our rates will be consistent with those rates approved by the carrier. The firm is approved and qualified as defense counsel for a number of insurance carriers, including those that cover errors and omissions insurance. In the event of litigation, or a claim or suit within the coverage of the Authority's insurance policy, and assuming the Authority agrees to submit such claims for coverage and defense, we will handle such claims upon the request of the Authority designating our firm as the defense counsel for the Authority. In the event of such designation, we agree to accept the hourly rate approved by the insurance carrier in lieu of our normal rate.

4. Reimbursable Expenses. We shall bill to the Authority out-of-pocket expenses advanced on behalf of the Authority, including, but not limited to, filing fees for legal documents, legal advertising, experts, exhibit preparation, stenographical services and deposition transcripts, extraordinary photocopying, and overnight or courier delivery costs. Long distance telephone charges, normal photocopying and mail postage will not be charged.

5. Billing. On a monthly basis, we will submit itemized invoices for services performed on an hourly rate basis. Litigation matters, to be paid by the insurance carrier, will be invoiced separately from the Authority Solicitor services. Bond counsel fees for a specific transaction will be paid at and upon a successful closing.

Time charges are based upon the professional nature of the task and not personnel assigned. Task assignments shall be at the sole discretion of the primary responsible attorneys.

6. Finance and Bond Counsel Services. KingSpry is qualified and experienced in the handling of finance and bond counsel matters. In the event we are selected to provide the Authority services for bond counsel purposes in a typical revenue financing, our fee structure will be calculated as follows:

<u>Issue Amount</u>	<u>Fee Amount/Multiplier</u>
Up to \$3,500,000	\$7,500.00 - Flat
Between \$3,500,000 to 10,000,000	.0015 x total issue up to \$10,000,000
Over \$10,000,000 to 35,000,000	Above multiplier plus .0010 x issue over \$10,000,000
Over \$35,000,000	Above multiplier plus .0005 x issue over \$35,000,000

Should the finance or bond transaction present unusual issues or complexity, we will advise the Authority and arrive at a mutually agreed upon fee before undertaking the assignment.

In situations where KingSpry would serve as bond counsel in an Authority financing transaction, KingSpry would waive any Solicitor's fee in connection with the transaction but would charge its usual bond counsel fee. In the event we are not selected to provide services for bond counsel purposes, the firm will continue to provide general counsel services as required on behalf of the Authority.

INSURANCE

KingSpry shall maintain insurance coverages in the types and limits as required by the Authority.

CONFLICTS OF INTERESTS

The KingSpry law firm uses a screening process in connection with the undertaking of new clients, or new client matters involving third parties. Information regarding new matters, including names of potential new clients and adverse parties, are reviewed by Firm attorneys and staff to ascertain whether a conflict of interest would exist, in addition to checking the new information against Firm computer records on prior/existing clients and matters.

KingSpry has provided legal services to the Authority several times in the past. On each of those occasions, there was no conflict of interest involving another client of the Firm. The Firm is not aware of any material conflicts that would likely arise if the Firm were appointed Authority Solicitor. The Firm is not currently handling any matters that would be adverse to the Authority, and has not been involved in a matter previously that was adverse to the Authority.

If any conflict or potential conflict should arise, it would be handled in accordance with the Pennsylvania Rules of Professional Conduct, including disclosure to the Authority. If the Rules prohibited the Firm from representing a client due to a conflict, the Firm would follow the Rules, unless the effected parties waived the conflict. If the Authority policies imposed a standard in excess of the Rules, the Firm would adhere to the Authority policies.

MISCELLANEOUS

It is impossible to determine, in advance, the amount of time that will be needed to complete the work assigned to KingSpry. We shall use our best judgment to determine the amount of time who is to perform the work, and the nature of the services to be performed in the Authority's best interest, all in accordance with the Authority's directions. If the Authority desires that a budget be developed for any project, the Authority should discuss that with us and we will work with the Authority to develop a budget. However, a budget should not be considered a not-to-exceed amount for the costs of services, unless otherwise expressly stated, in writing, by an authorized Member of the firm.

The Authority acknowledges that we have made no guarantees as to the disposition of any phase of the matters for which we have been engaged, or will be engaged, as all statements made by us are our opinions only.

Should the Authority elect to retain KingSpry, please date and countersign this Engagement Letter and return it to us by e-mail and regular mail, so that we will have a mutual memorandum of our

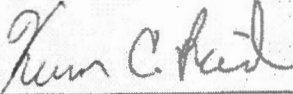
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understanding. Enclosed is a self-addressed stamped envelope for your convenience. Please also retain a signed copy for the Authority's files.

KingSpry looks forward to serving the needs of the Authority.

Very truly yours,

KING, SPRY, HERMAN, FREUND, & FAUL, LLC



Kevin C. Reid, Esquire, Partner
Municipal Law Practice Group Member
Chair of Public Finance Practice Group

KCR/dm

cc: Kent H. Herman, Esquire
Matthew T. Tranter, Esquire
Avery E. Smith, Esquire
Karley Biggs Sebia, Esquire
Richard L. Campbell, Jr., Esquire

Acknowledged and Agreed By:

Lehigh County Authority

By: _____
Title: _____
Date: _____

MEMORANDUM

TO: LCA Board of Directors
FROM: Liesel Gross, CEO
DATE: November 6, 2023
RE: 2024 Water & Sewer Rates

Attached: Sample Residential Bill Calculations for LCA Service Areas
Lehigh Valley Water & Sewer Rate Comparison
Proposed 2024 Water & Sewer Rate Schedules

Important Reminders

1. Lehigh County Authority is a non-profit, municipal authority. All revenues collected through our water and sewer rates are used for the sole benefit of the system to pay for current expenses or to fund future capital improvements. Our Board of Directors are unpaid volunteers, and LCA has no shareholders to pay.
2. While LCA operates as a single organization, the water and sewer revenues collected from our customers in Suburban communities may not be used to pay for expenses associated with the Allentown Division lease agreement, or vice versa. This is specified in all LCA bond documents that prohibit the mixing of revenues.
3. Our nation's water and wastewater systems face staggering public investment needs over the next several decades. In April 2023, the U.S. Environmental Protection Agency released its updated Drinking Water Infrastructure Needs Survey and Assessment, which estimates \$625 Billion will be needed for drinking water infrastructure improvements over the next 20 years. The need for investment in clean water (wastewater) infrastructure is expected to be similarly daunting. In LCA's service area, local needs to address changing regulations, aging infrastructure, and expanded service needs will place continued stress on the annual budget and rates to all customers. However, these system improvements and associated rate increases are necessary for the protection of public health and the environment, and to support a vibrant economy.
4. LCA's mission is to protect public health and the environment by providing high-quality, safe, and reliable water and wastewater services. We take this responsibility very seriously. The decision to raise rates is weighed carefully against the long-term needs of the system so that we can fulfill this mission.

Rate Setting & Review Process

Lehigh County Authority's 2024 water and sewer rates are presented in the attached schedules for the Board of Director's consideration for adoption on November 13, 2023. They have been posted on the LCA website in advance of their proposed adoption and shared with key customers directly in accordance with any existing service agreements. Should any customer or member of the general public

have questions or comments about these rates prior to their effective date of January 1, 2024, LCA staff will bring them back to the Board for consideration and to record them publicly for the record.

To assist the Board and the public with reviewing the proposed rates, a summary of the proposed rate changes is shown on the table below, and all changes are highlighted / shaded grey within the rate schedule documents attached. A calculation of the impact to a typical residential customer is also attached to this memo along with a comparison of how LCA's rates compare to other water/sewer utilities in the Lehigh Valley region.

It is important to note that these rates were discussed, reviewed, and preliminarily approved as part of the 2024 Budget process that began in July and was concluded in October. This submission represents formal adoption of the rates that were generated based on 2024 Budget calculations of revenue requirements as well as contractual requirements for rate-setting.

Water Rates

Rate	Page #	Description / Discussion
Suburban Water Volume Charges	1	Proposed changes in the volume rates align with recommendations made by LCA's rate consultant in 2022 using a "cost of service" model designed to distribute actual system costs to customers in accordance with their water usage.
Public Fire Protection	2	Fire hydrant and system charges for public fire service provided by the Authority were also evaluated as part of the 2022 water rate study.
Allentown Water Rates	6	The 2024 rates reflect increases based on the terms of the Concession Lease Agreement with the City of Allentown, as amended in the summer of 2020. Such increases include an overall 4.7% increase in general rates, phased in increases to fixed charges, plus an updated calculation of the Capital Cost Recovery Charge and other fees per the methodology included in the Lease.

Wastewater Rates

Rate	Page #	Description / Discussion
Suburban Exceptional Strength Charge	5	As calculated in the Western Lehigh Interceptor User Charge Report that was submitted to municipal signatories in October 2023. Rates are calculated by formula in compliance with municipal agreements.
Western Lehigh Interceptor & Little Lehigh Relief Interceptor User Charges	7	As calculated in the Western Lehigh Interceptor User Charge Report that was submitted to municipal signatories in October 2023. Rates are calculated by formula in compliance with municipal agreements.

Rate	Page #	Description / Discussion
Allentown Sewer Rates	8	The 2024 rates reflect increases based on the terms of the Concession Lease Agreement with the City of Allentown, as amended in the summer of 2020. Such increases include an overall 4.7% increase in general rates, phased in increases to fixed charges, plus an updated calculation of the Capital Cost Recovery Charge and Administrative Order Fee per the methodology included in the Lease.
Allentown Exceptional Strength Charge	9	As calculated by formula and applied to the City’s municipal signatories and in-City customers with high-strength waste discharges.
Allentown Industrial Pretreatment Charges	9	Fees that may apply to individual customers depending on permit parameters, based on actual costs.

2024 Tapping Fees / Customer Facilities Fees

Any updates to these fees that may be required will be brought to the Board at a later date with required documentation and Resolution.

Lehigh County Authority - Proposed 2024 Rates

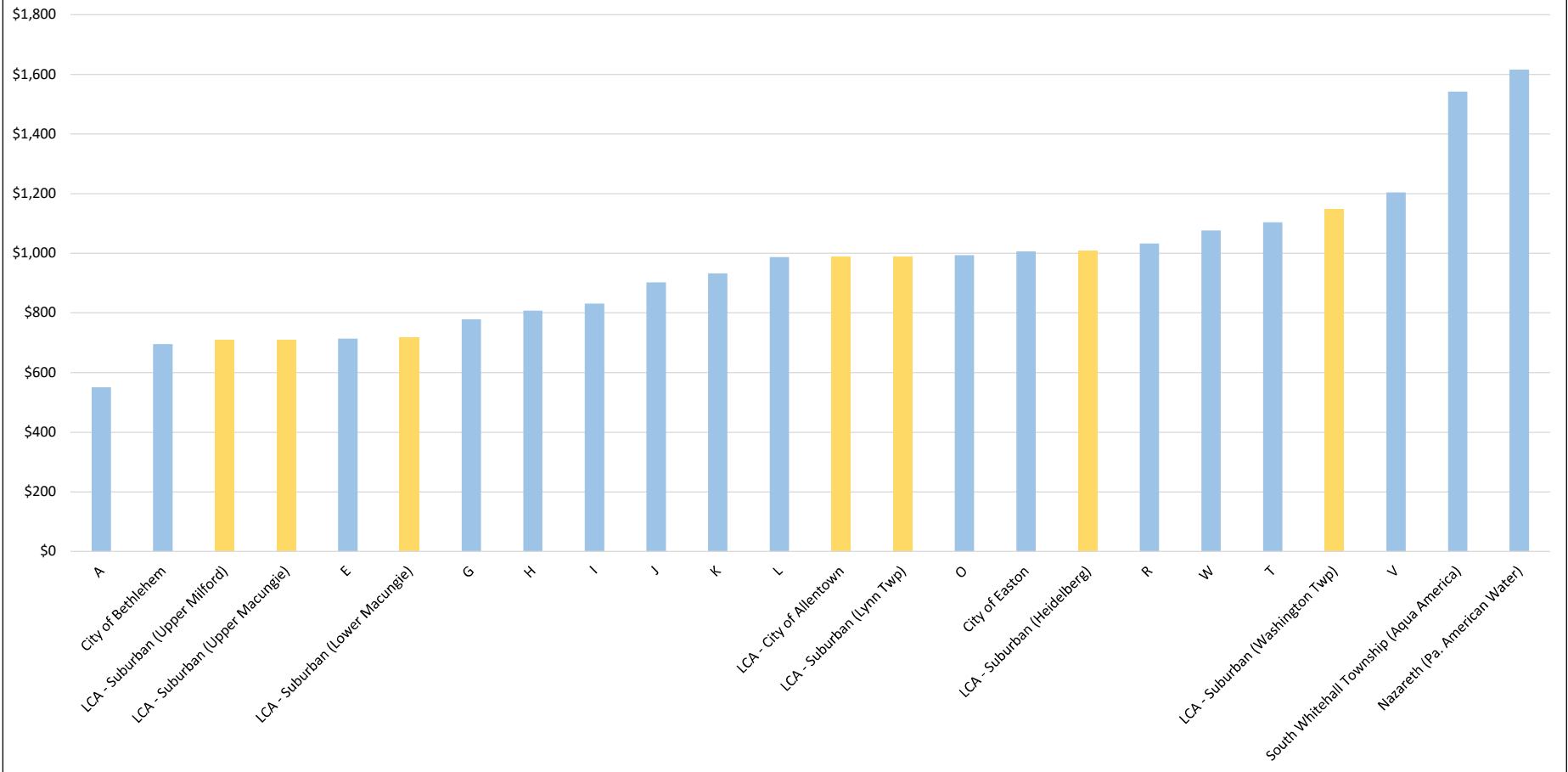
Bill Sample: Average Residential Customer, 15,000 gallons per quarter

	Upper Milford Twp**	Upper Macungie Twp*	Lower Macungie Twp*	Allentown Division	Lynn Twp**	Heidelberg Heights **	Washington Twp **
Water Fixed Charge	\$31.30	\$31.30	\$31.30	\$80.50	\$31.30	\$31.30	\$31.30
Water Volume Charge	\$57.00	\$57.00	\$57.00	\$78.98	\$57.00	\$57.00	\$57.00
Quarterly Water Bill	\$88.30	\$88.30	\$88.30	\$159.48	\$88.30	\$88.30	\$88.30
Sewer Fixed Charge	\$21.00	\$89.00	\$67.00	\$27.98	\$158.98	\$21.00	\$124.00
Sewer Flow Charge	\$67.95	n/a	\$24.00	\$59.56	n/a	\$142.95	\$75.00
Quarterly Sewer Bill	\$88.95	\$89.00	\$91.00	\$87.54	\$158.98	\$163.95	\$199.00
TOTAL QUATERLY BILL	\$177.25	\$177.30	\$179.30	\$247.02	\$247.28	\$252.25	\$287.30
ANNUAL WATER & SEWER BILL	\$709.00	\$709.20	\$717.20	\$988.08	\$989.12	\$1,009.00	\$1,149.20

* LCA customers in Lower Macungie and Upper Macungie townships receive sewer service and sewer bills directly from the township.
Rate information reflects the township's most recently published rate schedule.

** No rate changes are proposed for sewer service in Upper Milford, Lynn, Heidelberg or Washington townships at this time.
A rate study for these areas will be conducted in 2024.

Lehigh Valley Water & Sewer Rate Comparison (Data from 2023, LCA 2024 Rates)
 24 communities in Lehigh Valley - average annual residential water & sewer bill (5000 gallons per month)



**LEHIGH COUNTY AUTHORITY
SCHEDULE OF WATER RATES AND CHARGES**

**CENTRAL LEHIGH, NORTH WHITEHALL, WASHINGTON TOWNSHIP,
HEIDELBERG HEIGHTS, ARCADIA, PINE LAKES, MILL CREEK, BEVERLY HILLS,
CLEARVIEW FARM ESTATES, UPPER MILFORD CENTRAL, EMMAUS CONSECUTIVE,
AND MADISON PARK NORTH DIVISIONS**

I. Schedule of Water Rates

A. Metered Water Use

**Central Lehigh, North Whitehall, Washington Township, Heidelberg Heights,
Arcadia, Pine Lakes, Mill Creek, Beverly Hills, Emmaus Consecutive,
Madison Park North, Upper Milford Central & Clearview Farm Estates
Divisions**

(adopted 11/13/2023; effective 1/1/2024)

Current Fixed Charges	
Meter Size	Fixed Charge
<i>Quarterly</i>	
5/8" & 3/4" *	\$31.30
1"	55.48
<i>Monthly</i>	
1-1/2"	42.04
2"	58.18
3"	105.05
4"	154.00
6"	288.54
8"	448.27
10"	631.04

*Typical residential.

Current Volume Charges			2024
Quarterly Usage (gal.)	Monthly Usage (gal.)	Rate per 1,000 Gal.	Rate per 1,000 Gal.
First 120,000	First 0 - 40,000	\$3.58	\$3.80
Next 2,880,000	Next 960,000	\$3.24	\$3.43
Next 24,000,000	Next 8,000,000	\$2.83	\$3.00
Next 147,000,000	Next 49,000,000	\$2.63	\$2.75
Over 174,000,000	Over 58,000,000	\$2.44	\$2.55

Welshtown Road (Washington Township Division)

(adopted 9/19/95; effective 10/1/95)

Volume		Rate per 1,000 Gal.
First 8,000 gal./qtr.	*Minimum Charge/Quarter	
All over 8,000 gal./qtr.	\$ 5.50	
Meter Size	*Minimum Charge/Quarter	
5/8" & 3/4"	\$ 60.00	
1"	72.00	
1-1/4"	84.00	
1-1/2"	108.00	
2"	133.00	
3"	169.00	
4"	266.00	
6"	459.00	

LEHIGH COUNTY AUTHORITY
SCHEDULE OF WATER RATES AND CHARGES (cont'd)

B. Public Fire Protection

(adopted 11/13/2023; effective 1/1/2024)

Each Public Fire Hydrant (O&M Charge)	\$10.41/month
Each Inch-Squared Foot (System Charge)	\$0.00174/year

2024 Rates:

\$10.83/month
 \$0.00181/year

C. Private Fire Protection

(adopted 7/12/10; effective 7/12/10)

Fire Line Size	Charge per Month
Single Family Residential	\$ 5.00
2"	13.61
2-1/2"	21.26
3"	30.62
4"	54.43
6"	122.47
8"	217.72
10"	340.18
12"	489.87

Arcadia West Division – Direct Fire Protection Service

(adopted 5/12/03; effective 5/12/03)

	Charge per Sq. Ft. of Building Space
Monthly	\$.00321
Quarterly	.00963

II. Meter Test Fee

(adopted 12/15/14; effective 1/1/15)

Meter Size	Fee
5/8", 3/4", 1"	\$50.00
Larger than 1"	Actual Cost if >\$50

III. Meter Inspection Fee

(adopted 12/15/14; effective 1/1/15)

\$50.00**IV. Service Order / Site Visit Fees**

(adopted 12/15/14; effective 1/1/15)

Business Hours – 7:00 a.m. and 4:45 p.m., Monday through Friday (except holidays)	\$50.00
After Hours	\$150.00
Service Termination & Restoration Charge	\$100.00

V. Site Revisitation Charge

(adopted 12/15/14; effective 1/1/15)

\$100.00

LEHIGH COUNTY AUTHORITY
SCHEDULE OF WATER RATES AND CHARGES (cont'd)

VI. Lien Administration Fee

(adopted 12/13/04; effective 01/1/05)

\$56.50 + Current Lehigh County Clerk of Court's Filing Fee**VII. Hydrant Security Device Fee****Central Lehigh Division**

(adopted 11/28/16; effective 1/1/17)

\$140.00**VIII. Fire Flow Test Charge**

(adopted 12/07/11; effective 01/01/12)

\$180.00**IX. Use of Easement Preparation Fee**

(adopted 12/07/11; effective 01/01/12)

\$90.00**X. Backflow Prevention Non-compliance Charge**

(adopted 12/07/11; effective 01/01/12)

\$50.00

LEHIGH COUNTY AUTHORITY
SCHEDULE OF WATER RATES AND CHARGES (cont'd)

IX. Tapping, Connection and Customer Facilities Fees

(adopted 7/24/2023; effective 8/1/2023)

**Central Lehigh, North Whitehall, Washington Township, Heidelberg Heights,
Pine Lakes, Mill Creek, Beverly Hills, Madison Park North, Upper Milford
Central & Clearview Farm Estates Divisions**

Size of Service Line	Tapping Fee		Connection Fee	Customer Facilities Fee
	Distribution	Capacity		
MFR*	\$ 159.72	\$ 497.78	Actual Cost See fee schedule	
3/4"	239.57	746.68		
1"	399.29	1,244.46		
1-1/2"	798.58	2,488.92		
2"	1,277.72	3,982.28		
3"	2,395.73	7,466.77		
4"	3,992.88	12,444.62		
6"	7,985.76	24,889.25		
8"	12,777.22	39,822.80		
10"	18,367.25	57,245.27		
12"	34,338.77	107,023.77		

Emmaus Consecutive Division

Inquire with Lehigh County Authority. Tapping fee subject to intermunicipal agreement for water capacity provided by Borough of Emmaus.

Arcadia Division

Size of Service Line	Tapping Fee		Connection Fee	Customer Facilities Fee
	Distribution	Capacity		
MFR*	\$ 194.11	\$ 1,815.88	Actual Cost See fee schedule	
3/4"	291.17	2,723.83		
1"	485.28	4,539.71		
1-1/2"	970.56	9,079.42		
2"	1,552.89	14,527.08		
3"	2,911.67	27,238.27		
4"	4,852.79	45,397.12		
6"	9,705.58	90,794.24		
8"	15,528.93	145,270.78		
10"	22,322.83	208,826.74		
12"	41,733.99	390,415.22		

Special Purpose Fee		
Fire Service System	\$ 0.17	Per Square Foot of Building Space

Notes:

MFR - Applicable to each dwelling unit in a mobile home park or multi-family dwelling with individual service and individually metered.

Connection Fee is based on actual cost of connecting to the Authority water line, extending the service line to the property line, and inspecting the Customer Service Line.

LEHIGH COUNTY AUTHORITY
SCHEDULE OF WATER RATES AND CHARGES (cont'd)

Customer Facilities Fee

(adopted 12/12/2022; effective 1/1/2023)

This fee includes the supply and installation of a water meter and a backflow protection device for residential facilities (meter component). The fee can also include, at the customer's option and based on actual cost, installation of a service line from the property line to the customer's facility by the Authority.

All service lines must have an approved backflow protection device installed. The Authority will furnish a DC (dual check) device for residential facilities.

Meter Size	Meter Fee - With DC Backflow	Meter Fee - With No Backflow
5/8"	\$471	\$437
5/8" Pit	\$493	\$459
3/4"	\$490	\$456
3/4" Pit	\$509	\$475
1"		\$561
1" Pit		\$538
1 1/2" Displacement *		\$862
1 1/2" Turbine *		\$1,326
1 1/2" Compound *		\$1,818
2" Displacement *		\$1,121
2" Turbine *		\$1,402
2" Compound *		\$2,074

* LCA will install all meters 1" or smaller. Larger meters may be purchased from LCA at the prices listed above, which includes a \$50 inspection fee. If LCA installation of a larger meter is requested, the customer will pay actual costs, on a time and materials basis.

Notes:

Backflow protection devices for commercial/industrial facilities or other facilities with a 1" or larger meter shall be approved by the Authority, and supplied, installed and tested by the applicant. Meters larger than 2" shall be approved by the Authority, supplied and installed by the applicant, and inspected by the Authority at the applicant's expense.

X. Non-Sufficient Funds (NSF) Fee

All Divisions

(adopted 9/24/01, effective 1/1/02)

\$25.00

XI. Service Initiation Fee

All Divisions

(adopted 9/24/01, effective 1/1/02)

\$15.00

LEHIGH COUNTY AUTHORITY
SCHEDULE OF WATER RATES AND CHARGES (cont'd)

CITY OF ALLENTOWN

Adopted 11/13/2023; Effective 1/1/2024

NOTE: Unless expressed specifically in this Schedule of Rates and Charges, customers of the City of Allentown water system are subject to any and all additional charges, fees, penalties and policies stated in Lehigh County Authority's Rules & Regulations for Water Service and its Schedule of Water Rates and Charges duly adopted for its non-City systems.

A. Metered Water Use

Meter Size	2023 Monthly Charge	2024 Monthly Charge	2023 Quarterly Charge	2024 Quarterly Charge
5/8"	n/a	n/a	\$66.95	\$80.50
3/4"	n/a	n/a	\$75.35	\$89.30
1"	n/a	n/a	\$92.46	\$107.34
1 1/2"	\$48.32	\$50.59	n/a	n/a
2"	\$65.25	\$68.32	n/a	n/a
3"	\$110.32	\$115.51	n/a	n/a
4"	\$161.29	\$168.87	n/a	n/a
6"	\$302.42	\$316.63	n/a	n/a
8"	\$471.96	\$494.15	n/a	n/a

Volume	2023 Rate per 1,000 Gallons*	2024 Rate per 1,000 Gallons*
All Volume	\$4.56266	\$4.87604

* Volume charge includes cost recovery for any Change of Law and cost passed through from the Delaware River Basin Commission as allowed under the Lease Agreement with the City of Allentown.

B. Capital Cost Recovery Charge

\$0.39028 per 1000 gallons

2024 Rate: \$0.38958

C. Private Fire Protection

Each Hydrant	\$454.94 per year (may be billed monthly or quarterly)	<u>2024 Rate:</u> \$476.32
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D. Tapping Fees

Part 1 – Pre-Concession Rate for Pre-Concession Capital Cost Recovery

\$7.46 per gallon

2024 Rate: \$7.81

Part 2 – Post-Concession Rate for LCA Capital Cost Recovery

Capacity Part \$0.00851 per gallon

Distribution Part \$0.02551 per gallon

LEHIGH COUNTY AUTHORITY
SCHEDULE OF WATER RATES AND CHARGES (cont'd)

E. Customer Facilities Fees

Adopted 12/12/2022; Effective 1/1/2023

Fees includes the supply and installation of a water meter and associated components.

Meter Size	With LCA Installation*	Without LCA Installation*
5/8"	\$348	
3/4"	\$422	
1"	\$398	
1 1/2"	\$706	
2"	\$889	
3" Compound		\$2,550
3" Turbine		\$1,870
4" Compound		\$4,219
4" Turbine		\$3,359
6" Compound		\$7,099
6" Turbine		\$5,830
8" Compound		\$11,339
8" Turbine		\$9,727
* LCA will install all meters 2" or smaller. Larger meters may be purchased from LCA at the prices listed above, which includes a \$50 inspection fee. If LCA installation of a larger meter is requested, the customer will pay actual costs, on a time and materials basis.		

Other Components	Price
5/8" Meter Horn	\$60.65
3/4" Meter Horn	\$71.00
Curb Box	\$75.08

LEHIGH COUNTY AUTHORITY
SCHEDULE OF WATER RATES AND CHARGES (cont'd)

F. Connection Fee

Adopted 12/12/2022; Effective 1/1/2023

Actual cost of connecting to the Authority water line, completed by Authority personnel. Additional fees may apply for service line inspection, plan review, construction permits and/or capital recovery charges. Please contact the Authority's Capital Works department for more information.

Tap Size	Connection Fee
3/4"	\$458
1"	\$487
1 1/2"	\$717
2"	\$892
4" x 4"	\$3,124
6" x 4"	\$3,158
6" x 6"	\$3,662
8" x 4"	\$3,187
8" x 6"	\$3,672
8" x 8"	\$4,550
12" x 4"	\$3,428
12" x 6"	\$3,928
12" x 8"	\$4,828
12" x 12"	\$8,635

**LEHIGH COUNTY AUTHORITY
SCHEDULE OF WASTEWATER RATES AND CHARGES**

**UPPER MILFORD TOWNSHIP, WEISENBERG TOWNSHIP,
HEIDELBERG HEIGHTS, WYNNEWOOD, SAND SPRING, WASHINGTON
TOWNSHIP, LOWHILL TOWNSHIP, LYNN TOWNSHIP, WESTERN LEHIGH
INTERCEPTOR & LITTLE LEHIGH RELIEF INTERCEPTOR SYSTEMS**

I. Schedule of Wastewater Rates

NOTE: For Subsections A – F of this schedule, the following shall apply:

- All residential properties shall be billed based on the first-quarter usage based on water meter readings. If no first-quarter usage data is available, or the property is unmetered, residential properties shall be billed based on an assumed usage of 180 gallons per day.
- All commercial properties shall be billed based on actual usage based on water meter readings.
- Where a per-EDU fixed charge is applied to commercial properties, the assumed value of an Equivalent Dwelling Unit is 235 gallons per day.

A. Lowhill Township System

(adopted 06/13/16; effective 06/08/16)

Flow Charge	<u>\$/1,000 gals</u>
All Flow	4.53
Fixed Charge per Quarter	<u>\$ per Equivalent Dwelling Unit (EDU)</u>
- Multi-Family Residential	10.50
- All Other Accounts	21.00

B. Upper Milford Township System

(adopted 12/10/12; effective 01/01/13)

Flow Charge	<u>\$/1,000 gals</u>
All Flow	4.53
Fixed Charge per Quarter	<u>\$ per Equivalent Dwelling Unit (EDU)</u>
- Multi-Family Residential	10.50
- All Other Accounts	21.00

C. Weisenberg Township System

(adopted 12/10/12; effective 01/01/13)

Flow Charge	<u>\$/1,000 gals</u>
All Flow	4.53
Fixed Charge per Quarter	<u>\$ per Equivalent Dwelling Unit (EDU)</u>
- Multi-Family Residential	10.50
- All Other Accounts	21.00

**LEHIGH COUNTY AUTHORITY
SCHEDULE OF WASTEWATER RATES AND CHARGES**

Western Weisenberg Township System (Arcadia West)

(adopted 12/11/06; effective 01/01/07)

Quarterly Flow Charge	<u>\$/1,000 gals</u> 58.00
Quarterly Fixed Charge	<u>\$/1000 gals of Allocation</u> <u>per day</u> 7.55

C. Heidelberg Heights System

(adopted 12/10/12; effective 01/01/13)

Flow Charge	<u>\$/1,000 gals</u>
All Flow	9.53
Fixed Charge per Quarter	<u>\$ per Equivalent Dwelling Unit (EDU)</u>
- Multi-Family Residential	10.50
- All Other Accounts	21.00

D. Wynnewood System

(adopted 12/10/12; effective 01/01/13)

Flow Charge	<u>\$/1,000 gals</u>
All Flow	9.53
Fixed Charge per Quarter	<u>\$ per Equivalent Dwelling Unit (EDU)</u>
- Multi-Family Residential	10.50
- All Other Accounts	21.00

E. Sand Spring System

(adopted 12/10/12; effective 01/01/13)

Flow Charge	<u>\$/1,000 gals</u>
All Flow	9.53
Fixed Charge per Quarter	<u>\$ per Equivalent Dwelling Unit (EDU)</u>
- Multi-Family Residential	10.50
- All Other Accounts	21.00

**LEHIGH COUNTY AUTHORITY
SCHEDULE OF WASTEWATER RATES AND CHARGES**

F. Wastewater Treatment Plant Direct Customer

(adopted 12/10/12; effective 01/01/13)

Flow Charge	<u>\$/1,000 gals</u>
All Flow	4.53
Fixed Charge per Quarter	<u>\$ per Equivalent Dwelling Unit (EDU)</u>
- Multi-Family Residential	10.50
- All Other Accounts	21.00

G. Washington Township System

(adopted by resolution of Washington Township Board of Supervisors 12/2/08; effective 1/1/09 – Administered by Lehigh County Authority per agreement, as operator, approved 4/13/09; effective 1/1/09. Current rate adopted by LCA 12/10/12; effective 01/01/13). All other Authority administrative fees shall apply to these customers, including those set forth in the Metering Fees and Other Charges categories of this schedule.

Fixed Charge	<u>\$/qtr</u>
All customers	\$124.00

Flow Charge	<u>\$/1,000 gals</u>
All flow	\$5.00

H. Lynn Township

(adopted 12/07/11; effective 01/01/12)

Flow Charge	<u>\$/1,000 gals</u>
Commercial accounts, flow in excess of 15,000 gallons per quarter	7.20
Fixed Charge per EDU per Quarter	\$158.98

**LEHIGH COUNTY AUTHORITY
SCHEDULE OF WASTEWATER RATES AND CHARGES**

II. Metering Fees

A. Meter Purchase/Installation Fee

(adopted 12/12/2022; effective 1/1/2023)

Meter Size	Purchase & Inspection *
5/8"	\$387
5/8" Pit	\$409
3/4"	\$406
3/4" Pit	\$425
1"	\$510
1" Pit	\$488
1-1/2"	\$862
1-1/2" Pit	\$1,326
2" Displacement	\$1,818
2" Displacement Pit	\$1,121
2" Turbine	\$1,402
2" Compound	\$2,074

* Prices include ECR meter with touchpad, radio read unit and installation wire, plus \$50 inspection fee. Plumber shall install all components and call for meter inspection by LCA personnel.

B. Meter Inspection Fee

\$50.00

(adopted 12/15/14; effective 1/1/15)

C. Meter Test Fee

(adopted 12/15/14; effective 1/1/15)

Meter Size	Fee
5/8", 3/4", 1"	\$50.00
Larger than 1"	Actual Cost if >\$50

III. Other Charges

A. Service Order / Site Visit Fee

(adopted 12/15/14; effective 1/1/15)

Business Hours – 7:00 a.m. and 4:45 p.m.,
Monday through Friday (except holidays) **\$50.00**

After Hours **\$150.00**

B. Site Revisitation Charge

\$100.00

(adopted 12/15/14; effective 1/1/15)

**LEHIGH COUNTY AUTHORITY
SCHEDULE OF WASTEWATER RATES AND CHARGES**

- C. Lien Administration Fee**
(adopted 12/13/04; effective 01/01/05)

\$56.50 + Current Lehigh County Clerk of Court's Filing Fee

- D. Non-Sufficient Funds (NSF) Fee** **\$25.00**
(adopted 9/24/01, effective 1/01/02)

- E. Service Initiation Fee** **\$15.00**
(adopted 9/24/01, effective 1/01/02)

- F. Sampling and Testing Charges** **\$182.00/day**
(adopted 11/11/19; effective 1/1/20)
(Commercial & Industrial)

Fats-Oils-Greases Analysis **\$43.75/sample**
(adopted 11/9/2020; effective 1/1/2021)

- G. Exceptional Strength Charges**
(adopted 11/13/2023; effective 1/1/2024)

(Commercial & Industrial)	2023 Rates \$ / pound	2024 Rates \$ / pound
BOD	0.33	0.37
TSS	0.30	0.31
TKN	0.43	0.51

- H. Use of Easement Preparation Fee** **\$90.00**
(adopted 12/07/11; effective 01/01/12)

LEHIGH COUNTY AUTHORITY
SCHEDULE OF WASTEWATER RATES AND CHARGES

IV. Capital Recovery Charges

(adopted 7/24/2023; effective 8/1/2023)

System	Tapping Fee \$/gallon/day	Tapping Fee \$/EDU	Connection Fee	Customer Facilities Fee
Upper Milford System			Actual Cost Trended*	Actual Cost Trended*
Route 29 Service Area				
Contributed Area (includes Western Lehigh fees plus UMiT Capacity & Planning Parts)	22.34	5,134.79		
LCA-Installed Area (includes Contributed Area fees plus UMiT Collection Part)	34.81	8,164.91		
Lower Macungie Twp. Customer	3.16	738.52		
Other Service Areas				
Contributed Area (includes Western Lehigh fees plus UMiT Capacity Part- Other)	15.40	3,448.02		
Non-Contributed Area (includes Contributed Area fees plus UMiT Collection Part)	27.87	6,478.13		
Western Weisenberg Twp System				
LCA Planning Fee	3.25	85248	Historical Cost plus Financing	
LCA Land Fee	5.58	1,463.74	Actual Cost Trended	
Wastewater Treatment Plant	49.71	13,049.49	Actual Cost Trended	
Wynnewood System				
Capacity	88.52	20,712.81	Actual Cost	Actual Cost
Collection	21.22	4,966.28		
Heidelberg Heights System				
Capacity	35.26	8,250.51	Actual Cost	Actual Cost
Collection	4.39	1,027.54		
Sand Spring System				
Capacity	158.90	37,182.85	Actual Cost	Actual Cost
Collection	4.34	1,014.84		

*If constructed by Authority; if constructed by property owner, a \$90 inspection fee applies.

The capital recovery fees set forth in this schedule do not apply to the Washington Township sewer system since the Washington Township Board of Supervisors establishes such fees and administers capital recovery fees directly.

**LEHIGH COUNTY AUTHORITY
SCHEDULE OF WASTEWATER RATES AND CHARGES**

WESTERN LEHIGH INTERCEPTOR SYSTEM

I. Schedule of Wastewater Rates

(adopted 11/13/2023; effective 1/1/2024)

LCA Signatories	2023 Rates (\$)	2024 Rate (\$)
Flow (per 1,000 gallons)	1.17	1.36
BOD (per pound)	0.33	0.37
TSS (per pound)	0.30	0.31
TKN (per pound)	0.43	0.50
Allocation (per 1,000 gallons per day)	0.21	0.27
Emmaus		
Flow (per 1,000 gallons)	0.39	0.40

II. Tapping Fee

(adopted 7/24/2023; effective 8/1/2023)

<u>System</u>	<u>Tapping Fee \$/gal/day</u>	<u>Tapping Fee \$/EDU</u>	<u>Costing Method</u>
Treatment Allocation	7.52	1,678.49	Historical Trended Cost
Western Lehigh Interceptor	5.18	1,154.55	

LITTLE LEHIGH RELIEF INTERCEPTOR SYSTEM

I. Schedule of Wastewater Rates

(adopted 11/13/2023; effective 1/1/2024)

	2023 Rates (\$)	2024 Rates (\$)
LCA Signatories – Phase 1	0.57	0.18
Flow (per 1,000 gallons)		
Other Users – Lower Macungie Phase 2 & Brookside Road, Salisbury, and So. Whitehall Townships		
Flow (per 1,000 gallons)	0.51	0.21
LCA Signatories – Phase 2 Flow (per 1,000 gallons)	0.013	.017

II. Tapping Fee

(adopted 7/24/2023; effective 8/1/2023)

<u>System</u>	<u>Tapping Fee \$/gal/day</u>	<u>Tapping Fee \$/EDU</u>	<u>Costing Method</u>
Little Lehigh Relief Interceptor	1.98	442.62	Historical Trended Cost

LEHIGH COUNTY AUTHORITY SCHEDULE OF WASTEWATER RATES AND CHARGES

CITY OF ALLENTOWN

Adopted 11/13/2023; Effective 1/1/2024

NOTE: Unless expressed specifically in this Schedule of Rates and Charges, customers of the City of Allentown wastewater system are subject to any and all additional charges, fees, penalties and policies stated in Lehigh County Authority's Rules & Regulations for Sewerage Service and its Schedule of Wastewater Rates and Charges duly adopted for its non-City systems.

A. Sewer Usage Charges

Meter Size	2023 Monthly Charge	2024 Monthly Charge	2023 Quarterly Charge	2024 Quarterly Charge
5/8"	n/a	n/a	\$23.27	\$27.98
3/4"	n/a	n/a	\$26.16	\$31.01
1"	n/a	n/a	\$31.96	\$37.09
1 1/2"	\$16.64	\$17.42	n/a	n/a
2"	\$22.43	\$23.49	n/a	n/a
3"	\$38.00	\$39.78	n/a	n/a
4"	\$55.38	\$57.99	n/a	n/a
6"	\$103.79	\$108.67	n/a	n/a
8"	\$190.41	\$199.36	n/a	n/a

Flow Charge	2023 Rate per 1,000 Gallons*	2024 Rate per 1,000 Gallons*
All flow based on metered water usage**	\$3.28408	\$3.43916

* Flow charge includes cost recovery for any Change of Law and cost passed through from the Delaware River Basin Commission as allowed under the Lease Agreement with the City of Allentown.

** Unmetered residential accounts will be charged for flow based on an average usage of 180 gallons per day.

B. Capital Cost Recovery Charge

\$0.19343 per 1000 gallons

2024 Rate:
\$0.32742

C. Administrative Order Fee

\$0.16700 per 1000 gallons

2024 Rate:
\$0.20419

Administrative Order Fee is collected to reimburse the City of Allentown for expenses associated with complying with the USEPA Administrative Order to correct / eliminate sanitary sewer system overflows.

D. Tapping Fees

Part 1 – Pre-Concession Rate for Pre-Concession Capital Cost Recovery

\$5.69 per gallon

2024 Rate: \$5.95

Part 2 – Post-Concession Rate for LCA Capital Cost Recovery

Capacity Part **\$0.01538 per gallon**

Collection Part **\$0.00052 per gallon**

**LEHIGH COUNTY AUTHORITY
SCHEDULE OF WASTEWATER RATES AND CHARGES**

E. Exceptional Strength Charges

(Commercial & Industrial)	2023 Rate \$ / pound	2024 Rate \$ / pound
BOD	0.321	0.381
TSS	0.280	0.314
TKN	0.411	0.469

F. Industrial Pretreatment Program Fees

Program Charge / Testing Fees	2023 Rate	2024 Rate
Issue Initial Two (2) Year Permit	\$1,200.00	\$1,200.00
Renewal Fee	\$575.00	\$575.00
Review of Monitoring Reports Required by Federal Regulations	\$275.00	\$275.00
Single Occurrence Review	\$350.00	\$350.00
Site Visitations and Inspection	\$130.00	\$130.00
Monitoring Reports Preparation	\$135.00	\$135.00
Placement of Chemical Samplers	\$105.00	\$105.00
Sample Collection and Preparation	\$52.50	\$52.50
Biochemical Oxygen Demand	\$27.50	\$28.50
Cyanide, Total	\$30.00	\$31.00
Oil & Grease	\$66.00	\$68.50
pH	\$12.50	\$13.00
Phenols	\$36.00	\$37.50
Solids, Total Dissolved	\$21.50	\$22.00
Solids, Total Suspended	\$17.50	\$18.00
Solids, Total	\$15.00	\$15.50
Sulfides	\$48.00	\$50.00
Total Kjeldahl Nitrogen (TKN)	\$28.50	\$30.00
Total Petroleum Hydrocarbons	\$72.00	\$75.00
Total Phosphorous as P	\$14.50	\$15.00
Cadmium	\$15.00	\$15.50
Chromium	\$15.00	\$15.50
Copper	\$15.00	\$15.50
Lead	\$15.00	\$15.50
Molybdenum	\$15.00	\$15.50
Nickel	\$15.00	\$15.50
Silver	\$15.00	\$15.50
Selenium	\$15.00	\$15.50
Zinc	\$15.00	\$15.50
Mercury	\$25.00	\$26.00
Cobalt	\$15.00	\$15.50
Lithium	\$15.00	\$15.50
SVOA 625	\$228.00	\$237.00
VOA 1666	\$432.00	\$449.00
VOA 624	\$120.00	\$125.00
Diesel Range Organics	\$75.00	\$78.00
PFAS	\$343.50	\$357.00



LEHIGH COUNTY AUTHORITY BOARD 2024 MEETING SCHEDULE

Meetings of the Lehigh County Authority ("LCA") Board are held on the 2nd & 4th Mondays of each month, except as noted below. All LCA Board meetings begin at Noon, 12:00 p.m. LCA Board meetings will be held at LCA's Main Office located at 1053 Spruce Road, Wescosville PA, 18106, as well as online using the Zoom Meetings internet application, or other video and audio advanced communication technology (ACT). LCA Board meetings are open to the public. Public participation at the meeting is welcomed. Instructions for joining the meeting online or by phone are posted on the LCA website the morning on the day of the meeting, prior to the start of each meeting. Please visit <https://www.lehighcountyauthority.org/about/lca-board-meeting-videos/> for specific instructions to join the meeting. The Board's meeting agenda and other meeting materials are also posted on LCA's website. You may also issue comment to LCA via email to LCABoard@Lehighcountyauthority.org in advance of any meeting or view a recording of the meeting at a later time by visiting the LCA website. Comments received prior to a meeting will be read at the Board's meeting and become part of the public record.

Board Meetings

January 8, 22

February 12, 26

March 11, 25

April 8, 22

May 13, 20

June 10, 24

July 8, 22

August 12, 26

September 9, 23

October 14, 28

November 11, 25

December 9

BRIAN NAGLE
Chair

RESOLUTION NO. 11-2023-1

Reimbursement Resolution

(Duly adopted 13 November, 2023)

DECLARATION OF OFFICIAL INTENT TO REIMBURSE ITS GENERAL FUNDS USED TO PLAN, DESIGN AND CONSTRUCT THE REPLACEMENT OF PUBLICLY OWNED AND PRIVATELY OWNED LEAD SERVICE LINES LOCATED IN THE WATER DISTRIBUTION SYSTEM IN THE CITY OF ALLENTOWN WITH FUNDS RECEIVED FROM THE PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY.

WHEREAS, the Lehigh County Authority (the “Authority”) is a body corporate and politic organized by the Board of County Commissioners of the County of Lehigh, Pennsylvania under the provisions of the Pennsylvania Municipality Authorities Act, 53 Pa. C.S. §5601 *et seq.*, as amended (the “Act”); and

WHEREAS, the powers of the Authority are exercised by its Board of Directors (the “Board”), who have full authority to manage the properties and business of the Authority, *inter alia*; and

WHEREAS, pursuant to the terms and conditions of the Allentown Water and Sewer Utility System Concession and Lease Agreement, dated initially as of May 1, 2013, as amended, supplemented and restated from time to time (collectively, the “Concession Agreement”), by and between the City of Allentown (“City”) and the Authority, the City leased to the Authority, and the Authority leased from the City, the System, upon the terms and conditions set forth therein; and

WHEREAS, the Authority, has determined that it is necessary to undertake a capital project (the “Project”) consisting of the replacement of publicly owned and privately owned lead service lines located in the water distribution system in the City of Allentown; and

WHEREAS, in order to pay the costs of the Project, the Authority has obtained a Funding Offer from the Pennsylvania Infrastructure Investment Authority (“PENNVEST”) in the total amount of \$4,939,400.00, consisting of a loan amount of \$1,555,508.00 and non-repayment amount of \$3,383,892.00 (the “PENNVEST Funding”); and

WHEREAS, the Authority intends to issue a Subordinate Lien Water and Sewer Revenue Bond (City of Allentown Concession), in the maximum principal amount of \$1,555,508.00 (or such higher nominal amount as required by PENNVEST to evidence the total PENNVEST Funding), to be purchased by PENNVEST (the “PENNVEST Debt Obligation”);

WHEREAS, the Authority will be the “Issuer” of the PENNVEST Debt Obligation as that term is defined in 26 C.F.R. §1.150-2(c); and

WHEREAS, the Authority intends to pay certain costs and expenses of the Project, on an interim basis, using funds from its General Fund until the proceeds of the PENNVEST Funding, including PENNVEST Debt Obligation, are received.

NOW, THEREFORE, the Authority Board hereby declares as follows:

Pursuant to federal requirements set forth at 26 C.F.R. § 1.150-2, the Authority officially intends to reimburse its General Fund for Project costs incurred by the Authority with the proceeds of the PENNVEST Funding, including PENNVEST Debt Obligation, up to the maximum principal amount of \$4,939,400.00, consisting of a loan amount of \$1,555,508.00 and non-repayment amount of \$3,383,892.00.

NOW THEREFORE, BE IT RESOLVED that the Lehigh County Authority Board hereby approves Resolution No. 11-2023-1.

On motion of _____, seconded by _____,
_____, this resolution was adopted the 13th day of November 2023.

Tally of Votes: Yeas _____ Nays _____



I, Linda A. Rosenfeld, Secretary of the Lehigh County Authority Board of Directors, do hereby certify that the foregoing is a true, correct and complete copy of a resolution which was duly adopted by the Authority at a public meeting of the Authority held on 13 November 2023, after notice thereof had been duly given as required by law, at which meeting a quorum was present and voting and which Resolution No. 11-2023-1 is now in full force and effect on the date of this certification.

Linda A. Rosenfeld
Secretary
Lehigh County Authority Board of Directors

Attest:

Lisa J. Miller
Executive Administrative Support Specialist

MEMORANDUM

Date: November 13, 2023

To: Lehigh County Authority Board of Directors
From: Charles Volk and Andrew Moore
Subject: Lead Service Line Inventory Program & Compliance Planning – Allentown Division and Suburban Division

MOTIONS / APPROVALS REQUESTED:

No.	Item	Amount
1	Capital Project Authorizations: Lead Service Line Program Planning Phase	
	■ AD-W-27 – Allentown Division	\$153,000
	■ SD-W-37 – Suburban Division	\$68,000
	Total Capital Project Authorizations:	\$221,000
2 *	Professional Services Authorization – GHD Engineering	
	■ Allentown Division	\$108,000
	■ Suburban Division	\$48,000
	Total Professional Services Authorization:	\$156,000

** Included in the Capital Project Authorizations*

PROJECT BACKGROUND

In December 2021, the US Environmental Protection Agency (US EPA) issued the final regulatory framework for the Lead and Copper Rule Revisions (LCRR). Among the LCRR mandates is the requirement that water utilities complete a detailed service line material inventory and develop strategies to reduce the risk of lead exposure to the customers. An accurate service line inventory is vital to compliance with the LCRR and acquiring funding, as it provides the framework for replacement rates and prioritization. A complete service line inventory must be submitted to the Pa. Department of Environmental Protection and shared with the public before October 16, 2024. Note that the USEPA plans to propose Lead and Copper Rule Improvements (LCRI) later this year.

PROJECT SCOPE

The consultant's project scope includes both the Allentown and Suburban Divisions. The general planning phase scope or services is similar for both divisions, with two exceptions. The use of an artificial intelligence Predictive Modeling tool is specific to the Allentown Division, which statistically predicts service line materials based on available system data and input from Lehigh County Authority (LCA). The GIS Inventory Framework item is specific to the Suburban Division. The scope of work is summarized as follows:

- 1) Project Initiation and Management: In person progress meetings; monthly LCRR compliance reports and monthly LSLR program progress reports.
- 2) Inventory Enhancement: Existing inventory data evaluation; develop compliance strategy and schedule; inventory gap analysis.
- 3) GIS Inventory Framework (Suburban Division only): Establish framework for ESRI Inventory for SD service area based on GIS data water billing data, US Census data, and tax parcel information.
- 4) Future Data Population Workshop: Evaluate inventory data gaps for LCRR compliance; develop digital data forms/surveys and associated tracking dashboards.
- 5) Predictive Modeling (Allentown Division only): Complete iterative statistical analysis and predictive model for Allentown system based on data in the ESRI ArcGIS online LSLI app and supplemental field investigations; develop Predictive Modeling methodology and plan for PADEP approval; develop Comprehensive Statistical Analysis Report on the service line inventory for PADEP compliance; develop ESRI lead service line inventory program dashboard.
- 6) Field Verification Integration (Allentown Division only): Integrate field data from Cycle 1 LSLR project; issue memo comparing collected data to predicted values.
- 7) Prioritized Planning: Develop prioritization strategy in alignment with LCA Strategic Plan and funding guidelines, incorporating factors of public health risks, equity, cost and feasibility.
- 8) On-Call Services: Allowance as directed by LCA.

FINANCIAL

For the Allentown Division, this project represents a Change of Law and will be funded through via a Change of Law Fee to be added to future customer bills. For the Suburban Division, project costs will be paid from the Suburban Water Division.

THIS APPROVAL – LEAD SERVICES REPLACEMENT PROGRAM INVENTORY PHASE

LCA conducted an extensive review of qualifications from several engineering firms in 2022 to begin developing concepts for this inventory phase work. Based on this review, LCA intends to retain the services of GHD Engineering to provide the planning phase services. The Project Scope presented above represents a summary of their services.

PROJECT SCHEDULE

The planning phase work is anticipated to begin in November 2023 and is anticipated to be completed by early April 2024.

FUTURE AUTHORIZATIONS – CONSTRUCTION PHASE

Future annual lead service line replacement projects will follow in accordance with regulatory requirements.

CAPITAL PROJECT AUTHORIZATION

PROJECT NO.:	<u>AD-W-27</u>	BUDGET FUND:	<u>Allentown Div\Water\Capital</u>
PROJECT TITLE:	<u>Allentown Division – Lead Services Replacement Program Planning Phase</u>		PROJECT TYPE:
		<input type="checkbox"/>	Construction
		<input checked="" type="checkbox"/>	Engineering Planning/Design
		<input type="checkbox"/>	Equipment Purchase
		<input type="checkbox"/>	Amendment No. 1
THIS AUTHORIZATION:	<u>\$153,000</u>		
TO DATE (W/ ABOVE)	<u>\$153,000</u>		

DESCRIPTION AND BENEFITS:

In December 2021, the US Environmental Protection Agency issued the final regulatory framework for the Lead and Copper Rule Revisions (LCRR). Among the LCRR mandates is the requirement that water utilities complete a detailed service line material inventory and develop strategies to reduce the risk of lead exposure to the customers. This authorization will include development of the lead services inventory and prioritization strategies for the Allentown Division.

Please see attached LCA Board Memo for additional project details.

Authorization Status:

Requested This Authorization	
Inventory Phase	
Staff	\$25,000
Engineering Consultant – GHD Engineering	\$108,000
Contingencies	\$20,000
Total This Authorization	\$153,000

Future Authorizations	
Construction Phase	TBD

REVIEW AND APPROVALS:

_____	_____	_____	_____
Project Manager	Date	Chief Executive Officer	Date
_____	_____	_____	_____
Chief Capital Works Officer	Date	Chairman	Date

CAPITAL PROJECT AUTHORIZATION

PROJECT NO.:	<u>SD-W-37</u>	BUDGET FUND:	<u>SD\Water\Capital</u>
PROJECT TITLE:	<u>Suburban Division – Lead Services Replacement Program Planning Phase</u>	PROJECT TYPE:	<input type="checkbox"/> Construction <input checked="" type="checkbox"/> Engineering Planning/Design <input type="checkbox"/> Equipment Purchase <input type="checkbox"/> Amendment No. 1
THIS AUTHORIZATION:	<u>\$68,000</u>		
TO DATE (W/ ABOVE)	<u>\$68,000</u>		

DESCRIPTION AND BENEFITS:

In December 2021, the US Environmental Protection Agency issued the final regulatory framework for the Lead and Copper Rule Regulations (LCRR). Among the LCRR mandates is the requirement that water utilities complete a detailed service line material inventory and develop strategies to reduce the risk of lead exposure to the customers. This authorization will include development of the lead services inventory and prioritization strategies for the Suburban Division.

Please see attached LCA Board Memo for additional project details.

Authorization Status:

Requested This Authorization	
Inventory Phase	
Staff	\$10,000
Engineering Consultant – GHD Engineering	\$48,000
Contingencies	\$10,000
Total This Authorization	\$68,000

Future Authorizations	
Construction Phase	TBD

REVIEW AND APPROVALS:

<u>Project Manager</u>	<u>Date</u>	<u>Chief Executive Officer</u>	<u>Date</u>
<u>Chief Capital Works Officer</u>	<u>Date</u>	<u>Chairman</u>	<u>Date</u>



Lehigh County Authority

1053 Spruce Street * P.O. Box 3348 * Allentown, PA 18106-0348
(610)398-2503 * FAX (610)398-8413 * Email: service@lehighcountyauthority.org

PROFESSIONAL SERVICES AUTHORIZATION

Professional: GHD
1225 Grandview Avenue
Harrisburg, PA 17011

Date: November 13, 2023

Requested By: Matt Dörner

Approvals

Department Head: _____

Chief Executive

Officer: _____

Allentown Division – LCRR Lead Services Replacement Program Planning Phase

GHD will perform engineering services for the Planning Phase of the City Division Lead Services Replacement Program in accordance with their proposal dated 9/28/23. GHD will perform the following tasks:

Professional Services ⁽¹⁾
1. Project Initiation and Management
2. Inventory Enhancement
3. Future Data Population Workshop and Data Gap Analysis
4. Predictive Modeling
5. Field Verification Integration
6. Prioritized Planning
7. On-Call Services

(1) Reference GHD proposal dated 9/28/23

Cost Estimate (not to be exceeded without further authorization): \$108,000

Time Table and Completion Deadline: Anticipate completion of Inventory Phase early April 2024.

(For Authority Use Only)

Authorization Completion:

Approval: _____ **Actual Cost:** _____ **Date:** _____



Lehigh County Authority

1053 Spruce Street * P.O. Box 3348 * Allentown, PA 18106-0348
(610)398-2503 * FAX (610)398-8413 * Email: service@lehighcountyauthority.org

PROFESSIONAL SERVICES AUTHORIZATION

Professional: GHD
1225 Grandview Avenue
Harrisburg, PA 17011

Date: November 13, 2023

Requested By: Matt Dörner

Approvals

Department Head: _____

Chief Executive

Officer: _____

Suburban Division – LCRR Lead Services Replacement Program Planning Phase

GHD will perform engineering services for the Planning Phase of the Suburban Division Lead Services Replacement Program in accordance with their proposal dated 9/28/23. GHD will perform the following tasks:

Professional Services ⁽¹⁾
1. Project Initiation and Management
2. Inventory Enhancement
3. GIS Inventory Framework and Compliance Strategy
4. Future Data Population Workshop and Data Gap Analysis
5. Field Verification Integration
6. Prioritized Planning
7. On-Call Services

(1) Reference GHD proposal dated 9/28/23

Cost Estimate (not to be exceeded without further authorization): \$48,000

Time Table and Completion Deadline: Anticipate completion of Inventory Phase early April 2024.

(For Authority Use Only)

Authorization Completion:

Approval: _____ **Actual Cost:** _____ **Date:** _____

MEMORANDUM

Date: November 13, 2023

To: Lehigh County Authority Board of Directors
From: Charles Volk and Jason Peters
Subject: Allentown Division – Lead Service Line Replacement Program Cycle 1 Project

MOTIONS / APPROVALS REQUESTED:

No.	Item	Amount
1	Capital Project Authorization – Lead Services Replacement Program Cycle 1 Design & Bid Phase	\$225,700
2	Professional Services Authorization – Gannett Fleming, Inc. (1)	\$125,700

(1) Included in the Capital Project Authorization

PROJECT BACKGROUND

In December 2021, the US Environmental Protection Agency (US EPA) issued the final regulatory framework for the Lead and Copper Rule Revisions (LCRR). Among the LCRR mandates is the requirement to replace both public and private Lead Service Lines (LSL). Lehigh County Authority (LCA) has taken a proactive approach and is developing an in-depth LSL replacement program. The scope of the Cycle 1 project was determined based on existing LSL inventory data, which was incorporated with LCA's PennVest funding application (submitted in May 2023). The PennVEST funding was awarded July 19, 2023, consisted of a \$1,555,508 loan and \$3,383,892 grant. The funding will be applied to the Cycle 1 project.

PROJECT SCOPE

The project scope includes design and bid phase for the replacement of approximately 150 LSLs and the pot-holing investigation of approximately four hundred and fifty LSLs in the Allentown Division, as identified in the PennVest Grant application. Coordination with the City of Allentown (COA) and its many departments along with other outside agencies and private utilities such as UGI is critical to obtain the necessary approvals for this project. As is the case with the annual water main replacement projects, the Cycle 1 project will be performed under a single construction contract.

The consultant's scope of work is summarized as follows:

- 1) Assist LCA in developing the project approach, including attending meetings with LSL Steering Committee, develop communication and coordination plan for public outreach, develop inventory approach, develop design/bid approach, and construction plan.
- 2) Perform topographic survey, including PA One Call utility location requests.
- 3) Prepare design plans for the replacement of LSL within the survey area. Design will include replacements of the private and public portions of the services where identified. Design will also include installation of backflow preventers and expansion tanks within those residences (to be performed by a licensed plumber).

- 4) Prepare and submit electronic set of preliminary design plans and a construction cost estimate for LCA review and comment. The preliminary construction cost opinion will facilitate verifying the amount of services to be replaced are within the available PennVEST funding project budget. If needed, additional service replacements within the survey area may be added to the project to utilize available funding.
- 5) Submit prefinal electronic set of drawings for LCA review at 90% completion and incorporate LCA review comments.
- 6) Prepare final plans and contract specifications suitable for construction of the project.
- 7) Prepare bid documents and upload to PennBid
- 8) Administer PennBid electronic bidding platform
- 9) Respond to bidder RFIs.
- 10) Issue addenda as needed.
- 11) Review bids and issue summary to LCA with recommendation.
- 12) Issue Notice of Intent to Award.
- 13) Assistance and participation in PennVEST settlement as needed.
- 14) Prepare and submit LCA's Disadvantaged Business Enterprise (DBE) solicitation effort and documentation required by PennVEST.
- 15) Assemble Contractor's DBE solicitation effort documentation required by PennVEST.

FINANCIAL

This Project represents Change of Law and will be funded via a combination grant and loan funding via PennVEST.

THIS APPROVAL – LEAD SERVICE LINE REPLACEMENT PROGRAM CYCLE 1 DESIGN & BID PHASE

Lehigh County Authority (LCA) intends to retain the services of Gannett Fleming, Inc. to provide the Design & Bid phase services. The Project Scope presented above represents a summary of their services. Gannett Fleming has served as design and construction phase engineer for all of LCA's water main replacement projects in the City Division and has provided excellent service with high quality plans and specifications. The firm is familiar with the City's water system and is recommended for this Project.

PROJECT SCHEDULE

The Design & Bid phase work is anticipated to begin in November 2023 and is anticipated to be completed by early March 2024.

FUTURE AUTHORIZATIONS

Construction Phase of the Allentown Division Lead Service Line Replacement Program Cycle 1.

CAPITAL PROJECT AUTHORIZATION

PROJECT NO.:	AD-W-23-1	BUDGET FUND:	Allentown Div\Water\Capital
PROJECT TITLE:	Allentown Division -Lead Service Line Replacement Program Cycle 1	PROJECT TYPE:	<input type="checkbox"/> Construction <input checked="" type="checkbox"/> Engineering Design <input type="checkbox"/> Equipment Purchase <input type="checkbox"/> Amendment
THIS AUTHORIZATION:	\$ 225,700		

DESCRIPTION AND BENEFITS:

Following the US Environmental Protection Agency (US EPA) regulatory framework for the Lead and Copper Rule Revisions (LCRR). Lehigh County Authority (LCA) has developed an in-depth Lead Service Line (LSL) replacement plan program. Cycle 1 of this program is anticipated to replace 150 LSL and include the pot-holing investigation of approximately four hundred and fifty (450) LSL in the Allentown Division as identified in the PennVEST Grant application.

The LSL replacement program is critical in meeting the regulatory requirements of the US EPA, and to provide reliable safe drinking water for our City customers.

Please reference the cover Memo for additional information.

Authorization Status:

+

REQUESTED THIS AUTHORIZATION	
Design & Bid Phase	
Staff	\$50,000
Engineering Consultant Gannett Fleming, Inc. Design & Bid phase Services	\$125,700
Contingencies ⁽¹⁾	\$50,000
Total This Authorization	\$225,700

Future Authorization	
Construction Phase	\$4,719,700

Total Estimated Project	\$4,945,400
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(1) Includes subsurface investigations such as geo-tech work, soft digs, ground penetrating radar if required; also permit fees and other miscellaneous costs.

REVIEW AND APPROVALS:

Project Manager	Date	Chief Executive Officer	Date
Chief Capital Works Officer	Date	Chairman	Date



Lehigh County Authority

1053 Spruce Road * P.O. Box 3348 * Allentown, PA 18106-0348
(610)398-2503 * FAX (610)398-8413 * Email: service@lehighcountyauthority.org

PROFESSIONAL SERVICES AUTHORIZATION

Professional: GANNETT FLEMING, INC.
P.O. Box 67100
Harrisburg, PA 17106

Date: November 13, 2023

Requested By: Jason Peters

Approvals

Department Head: _____

Chief Executive

Officer: _____

Allentown Division – Lead Service Line Replacement Program Cycle 1

This Authorization - Design and Bid Phase, Cycle-1: \$125,700

Gannett Fleming, Inc. will provide Design and Bid phase services for the City of Allentown Lead Service Line Replacement Program Cycle 1 as outlined within LCA's PennVest grant and low interest loan approval, in accordance with their proposal dated 10/19/23.

Professional Services
1. Aid LCA in finalizing project approach
2. Physical Site Survey
3. Prepare plans and specification
4. Prepare bidding documents
5. Assistance in PennVest settlement
6. Prepare and submit LCA's Disadvantaged Business Enterprise
7. Assemble contractor's Disadvantaged Business Enterprise Solisitation

Cost Estimate (not to be exceeded without further authorization): \$125,700

Time Table and Completion Deadline: As required to meet various critical deadlines as set forth in the proposal.

(For Authority Use Only)

Authorization Completion:

Approval: _____ **Actual Cost:** _____ **Date:** _____



Lehigh County Authority

1053 Spruce Road * P.O. Box 3348 * Allentown, PA 18106-0348
(610)398-2503 * FAX (610)398-8413 * Email: service@lehighcountyauthority.org

MEMORANDUM

Date: November 13, 2023

To: Lehigh County Authority Board of Directors

From: Jason Peters, Linear Asset Project Manager

Subject: Suburban Division- Water Main Replacement Program Cycle 7
Construction Phase

MOTIONS /APPROVALS REQUESTED:

No.	Item	Amount
1	<u>Capital Project Authorization:</u> Construction Phase, Cycle 7	\$2,042,979
2 *	<u>Professional Services Authorization Cycle 7:</u> <ul style="list-style-type: none">Construction Engineering Services, - <i>Gannett Fleming Inc.</i>	\$50,000
3 *	<u>Professional Services Authorization Cycle 7:</u> Construction Inspection Services, - <i>Keystone Consulting Engineers.</i>	\$75,000
4 *	<u>Contract Award Cycle 7:</u> <ul style="list-style-type: none">General Construction – PACT ONE LLC	\$1,767,979

(*) *Included in the Capital Project Authorization*

PROJECT OVERVIEW:

The Suburban Division water system serves multiple municipalities in Lehigh and Northampton Counties. The Cycle 7 main replacement project includes approximately 1.22 miles of pipe in North Whitehall Township to replace developer-installed piping and appurtenances.

The primary driver for the project is asset management, which is intended to reduce the risk and consequence of system failure, maintain an acceptable level of service, and extend the service life. The project will replace the aging and failing infrastructure, which currently experiences excessive leakage (water loss) and occasional emergency water main breaks that create service outages. Given the complex nature and size of the project, it will require a significant amount of utility coordination and public relations communication.

FUNDING:

The Project will be funded by the LCA Suburban Division.

PROJECT STATUS:

In April 2023, the Board approved the Design Phase for SD Water Main Replacement Program Cycles 7-8.

Working closely with all necessary Municipalities and other outside agencies, LCA obtained all approvals for Cycle 7 Construction Phase.

THIS APPROVAL: CONSTRUCTION PHASE CYCLE 7

Cycle 7 includes 1.22 miles of water main replacement in North Whitehall Township.

BIDDING SUMMARY: CONSTRUCTION CONTRACTS CYCLE 7

The project was advertised for bid on October 4, 2023. A mandatory pre-bid meeting was held on October 16, 2023, and bids were opened on October 30, 2023. The bidding results are as shown in Table 1 below.

Table 1	
General Construction	
Bidder	Amount
<i>Pact One LLC</i>	<i>\$1,767,979.00</i>
N. Abbonizio	\$1,915,798.90
Barrasso Excavation Inc.	\$2,234,326.30
JOAO & Bradley Construction Co., Inc.	\$2,259,036.50
James T. O'Hara Inc.	\$2,595,206.50
Doli Construction Corporation	\$2,623,762.50

PACT ONE, LLC (PACT) from Ringoes, NJ is low bidder for the contract. PACT specializes in site work and installation of water, sanitary sewer and storm sewer systems and has successfully completed numerous municipal utility projects in eastern Pennsylvania. The firm completed the Vera Cruz sanitary sewer project for LCA (in Upper Milford Township) and their performance was satisfactory. The bid documents are in order and the firm appears qualified to perform the work for the contract. LCA staff recommend award of the construction contract to PACT.

PROFESSIONAL SERVICES: CONSTRUCTION PHASE CYCLE 6***1. Construction Engineering & Management***

Gannett Fleming Inc., the design engineer of record, will provide construction engineering and administration services for the construction phase of the project. The work will generally include:

- Conduct preconstruction conference.
- Review contractor's construction schedule and updates for compliance with project.
- Arrange and conduct monthly progress meetings and provide meeting minutes.
- Review all contractor submittals to ensure that design objectives and requirements of the Contract Documents are met.
- Prepare Change Orders.

- Respond to contractor Requests-for-Information.
- Review certified payrolls.
- Conduct walkover of the project site with contractors and LCA representatives.
- Provide LCA with recommendation on completeness of work, final acceptance and release of final payment.

2. *Construction Inspection*

Keystone Consulting Engineers (KCE) will provide daily construction inspection related services for the project. The work will generally include:

- Provide full-time construction observation and act as the daily field contact person for the project.
- Attend pre-construction & monthly progress meetings
- On-site project coordination
- Maintain daily record of project activities, quantities of work performed, site conditions, etc.
- Review documentation for change order requests
- Review monthly pay estimates
- Perform substantial and final completion inspections

SCHEDULE:

Assuming approval of the Construction Phase at the November 13, 2023 Board meeting, all work is anticipated to be operational by June 14, 2024 (i.e., the substantial completion date).

FUTURE AUTHORIZATIONS:

Cycle 8 construction phase authorization.

CAPITAL PROJECT AUTHORIZATION

PROJECT NO.:	<u>SD-W-23-1</u>	BUDGET FUND:	<u>Suburban Div\Water\Capital</u>
PROJECT TITLE:	<u>Suburban Division -Water Main Replacement Program Cycles 7-8</u>	PROJECT TYPE:	<input checked="" type="checkbox"/> Construction <input type="checkbox"/> Engineering Study <input type="checkbox"/> Equipment Purchase
THIS AUTHORIZATION	<u>\$ 2,042,979</u>	<input checked="" type="checkbox"/> Amendment No. 1	
TO DATE (W/ABOVE)	<u>\$ 2,325,979</u>		

DESCRIPTION AND BENEFITS:

The Suburban Division water systems serve multiple municipalities in Lehigh and Northampton Counties. This Program covers Cycles 7-8 which includes the replacement of approximately 2 miles of watermain pipe due to aging infrastructure that has reached the end of its useful life, in order to prevent excessive leakage or disruptive water main breaks that can impact our customers.

Cycle 7 main replacement project includes replacement of 1.22 mile of pipe.
Please reference the cover Memo for additional information.

THIS AMENDMENT –Construction Phase, Cycle 6

Please reference the cover Memo for additional information.

Previous Authorizations	
Design Phase Cycles 7-8	\$283,000

REQUESTED THIS AUTHORIZATION	
Construction Phase Cycle 7	
Staff	\$50,000
Professional Services	
Construction Engineering / Management	\$50,000
Construction Inspection	\$75,000
General Construction Contract	\$1,767,979
Contingency	\$100,000
Total This Authorization	\$2,042,979

Total Project	\$2,325,979
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REVIEW AND APPROVALS:

_____ Project Manager	_____ Date	_____ Chief Executive Officer	_____ Date
_____ Chief Capital Works Officer	_____ Date	_____ Chairman	_____ Date



Lehigh County Authority

1053 Spruce Road * P.O. Box 3348 * Allentown, PA 18106-0348
(610)398-2503 * FAX (610)398-8413 * Email: service@lehighcountyauthority.org

PROFESSIONAL SERVICES AUTHORIZATION
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Professional: GANNETT FLEMING, INC.
P.O. Box 67100
Harrisburg, PA 17106

Date: November 13, 2023

Requested By: Jason Peters

Approvals

Department Head: _____

Chief Executive Officer: _____

Suburban Division – Water Main Replacement Program Cycle 7

This Authorization- Construction Phase, Cycle 7: \$50,000

Gannett Fleming, Inc. will provide construction related services including but not limited to conducting pre-construction, progress and close out meetings, catalog cut / shop drawing review and approval, change orders, RFI response, and technical assistance within the following Professional Services.

Professional Services
1. Construction Engineering / Management

Please reference the cover Memo for additional information.

Cost Estimate (not to be exceeded without further authorization): \$50,000

Time Table and Completion Deadline: As required to meet various critical deadlines as set forth in the proposal.

(For Authority Use Only)

Authorization Completion:

Approval: _____ **Actual Cost:** _____ **Date:** _____



Lehigh County Authority

1053 Spruce Road * P.O. Box 3348 * Allentown, PA 18106-0348
(610)398-2503 * FAX (610)398-8413 * Email: service@lehighcountyauthority.org

PROFESSIONAL SERVICES AUTHORIZATION
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Professional: KEYSTONE CONSULTING
ENGINEERS
6235 Hamilton Boulevard,
Suite 100
Wescosville, PA 18106

Date: November 13, 2023

Requested By: Jason Peters

Approvals

Department Head: _____

Chief Executive Officer: _____

Suburban Division – Water Main Replacement Program Cycle 7

This Authorization- Construction Phase, Cycle 7: \$75,000

Keystone Consulting Engineers will provide construction inspection related services including but not limited to attending pre-construction, progress and close out meetings, and technical assistance for the following Professional Service.

Professional Service
1. Construction Inspection Services

Please reference the cover Memo for additional information.

Cost Estimate (not to be exceeded without further authorization): \$75,000

Time Table and Completion Deadline: As required to meet various critical deadlines as set forth in the proposal.

(For Authority Use Only)

Authorization Completion:

Approval: _____ **Actual Cost:** _____ **Date:** _____

MEMORANDUM

TO: LCA Board of Directors
FROM: Liesel Gross, Chief Executive Officer
DATE: November 6, 2023
RE: Sewage Transportation Agreement - Upper Macungie & Lower Macungie Townships

Attachment: Agreement

The Kline's Island Sewer System Interim Act 537 Plan was approved by the Pa. Department of Environmental Protection in June 2021, and the Plan included a requirement for Lehigh County Authority (LCA) to address the capacity deficiencies in a portion of the Western Lehigh Interceptor (WLI) that serves the Trexlertown and Ancient Oaks areas (known as the "Trexlertown Bottleneck"). The Trexlertown Special Study was prepared in late 2021 to evaluate alternatives to temporarily resolve this issue until a long-term solution is developed as part of the regional Act 537 Plan.

The alternative recommended in the Trexlertown Special Study consists of a 2.5 million gallons per day (MGD) pump station located near LCA's Industrial Pretreatment Plant and approximately 1.5 miles of force main connecting to the Upper Macungie Trunk Line (UMTL) at a manhole located north of Route 222 and west of Grange Road. This project is now known as the Upper Western Lehigh Pump Station & Force Main. The purpose of the project is to divert dry-day flow from the WLI to the UMTL, which has capacity to accept these additional flows, thereby bypassing the Trexlertown Bottleneck area.

Because the flows diverted via this project will enter the UMTL, a Sewage Transportation Agreement is desired between LCA and Upper Macungie Township to codify this arrangement. In addition, Lower Macungie Township holds certain rights to the UMTL. Therefore, the agreement involves all three parties: LCA, Upper Macungie Township, and Lower Macungie Township.

LCA staff have worked collaboratively with officials from both townships to develop the attached agreement, which is recommended for approval by LCA's Board of Directors at the November 13, 2023 meeting. The townships expect to consider approval within the next 30 days as well. Key terms of the agreement include:

- Assurance of capacity for the townships' flows by limiting LCA's pumping capacity to 2.5 MGD and 1,736 gallons per minute. Level sensors will be installed that will restrict LCA pumping into the UMTL during periods of higher flows.
- LCA will pay Upper Macungie Township a flat fee of \$10,000 per year for use of the UMTL.
- The townships will share costs, as specified, to address necessary upgrades to the UMTL.
- Due to the planned effort to develop a final long-term solution as part of the regional Act 537 Plan, this agreement will expire December 31, 2040, unless the parties agree to extend it.

The attached agreement is undergoing final review by all parties, and is recommended for approval by the LCA Board, with authorization for the Chief Executive Officer to execute the agreement in substantially the same form as the document attached.

SEWAGE TRANSPORTATION AGREEMENT

**(Western Lehigh Interceptor to Upper Macungie Phase 3 Trunkline
to Spring Creek Pump Station)**

THIS AGREEMENT, made as of the _____ day of December 2023,
by and between UPPER MACUNGIE TOWNSHIP, a Pennsylvania township
with offices at 8330 Schantz Road, Breinigsville, Pennsylvania,
(hereinafter referred to as "UMT"), party of the first part,

AND

LOWER MACUNGIE TOWNSHIP, a Pennsylvania township with
offices at 3400 Brookside Road, Macungie, Pennsylvania,
(hereinafter referred to as "LMT"), party of the second part,

AND

LEHIGH COUNTY AUTHORITY, a Pennsylvania municipal authority
with offices at 1053 Spruce Road, Wescosville, Pennsylvania
(hereinafter referred to as the "Authority"), party of the third
part.

WITNESSETH:

WHEREAS, the Authority was formed by the Commissioners of
Lehigh County, in part, to provide water and sewer service in
the Lehigh Valley; and

WHEREAS, in furtherance of such purposes, the Authority has
constructed and operates the Western Lehigh Interceptor ("WLI"),

which serves the sewage conveyance needs of a group of municipalities sometimes referred to as the Western Lehigh Sewer Partnership municipalities ("WLSP Municipalities"), consisting of the Townships of Upper Macungie, Lower Macungie, Upper Milford, Lowhill and Weisenberg, and the Boroughs of Alburtis and Macungie, pursuant to various agreements, including, without limitation, initial agreements dated January 22, 1970, and August 1, 1970 and agreements concerning additional wastewater treatment capacity acquisitions dated April 1, 1983 with amendments through 2006, and August 4, 1987, with amendments through 2007, (collectively, the "WLSP Agreement"); and

WHEREAS, all operating, maintenance and capital costs associated with operating the WLI, including costs described in this Agreement, are shared among the WLSP Municipalities in accordance with the WLSP Agreement; and

WHEREAS, UMT owns and operates a certain sewage collection and conveyance system, commonly known as UMT's Phase 3 Trunkline (hereafter, "UMT Trunkline") that discharges to the WLI; and

WHEREAS, the WLI conveys sewage to the Kline's Island Waste Water Treatment Plant for treatment; and

WHEREAS, UMT and LMT (sometimes hereafter referred to, individually and collectively, as the "Townships") have entered

into an Agreement, dated December 21, 1988, and Addenda thereto (along with Upper Macungie Township Authority and Lower Macungie Township Authority, both of which have since been dissolved), whereby LMT authorized UMT to build a portion of the UMT Trunkline through LMT, and provided limited interconnection rights between the LMT sewer system and UMT sewer system, including without limitation at the UMT Trunkline; and

WHEREAS, LMT expects additional sewage flow and connections in its Sewer Basin District IA, which is the LMT geographical area interconnected with the UMT Trunkline, as shown on the District IA map attached hereto as Exhibit A and incorporated by reference as if set forth in full; and

WHEREAS, the anticipated additional sewage flow from Sewer Basin District IA is [REDACTED] gallons per day; and

WHEREAS, the WLI experiences both dry day and wet day surcharging issues in LMT's Trexlertown area (hereafter, "Trexlertown Bottleneck"); and

WHEREAS, the Authority and other local municipal and municipal authorities served by the Kline's Island Waste Water Treatment Plant (the "KISS Municipalities"), submitted an Interim Act 537 Plan to the Pennsylvania Department of Environmental Protection (hereafter referred to as "DEP") on September 4, 2020, identifying the Trexlertown Bottleneck as a

problem to be addressed, among others, which Plan DEP approved on June 25, 2021; and

WHEREAS, the KISS Municipalities are required to submit a Final Act 537 Plan to DEP by 2025 identifying, inter alia, a long-term solution to the Trexlertown Bottleneck problem (the "Trexlertown Bottleneck Long-term solution"; and

WHEREAS, the Authority, through consultants, has developed an interim plan (the "WLI Interim Relief Plan") to mitigate the Trexlertown Bottleneck problem until the Trexlertown Bottleneck Long-term solution is implemented in accordance with the Final Act 537 Plan and its implementation schedule; and

WHEREAS, the WLI Interim Relief Plan will (i) divert a portion of the WLI sewage flow upstream of the Trexlertown Bottleneck (and downstream of the Authority's industrial pretreatment plant ("PTP") in UMT) to a pump station, having a design capacity of 2,500,000 gpd, which will be constructed on an easement adjacent to the PTP, (ii) convey the diverted flow an approximate one mile and a half through a force main to be constructed by the Authority (hereafter, "Upper Western Lehigh Interceptor Pump Station and Force Main", abbreviated as, "WLI PS and FM"), and (iii) connect the Authority's Force Main to the UMT Trunkline at the approximate location of manhole number PH3-035, which will transport the sewage to the Authority's existing

Spring Creek Pump Station ("SCPS") wet well at Authority manhole L255-A; and

WHEREAS, a drawing of the expected route of the WLI PS and FM, subject to final adjustment as deemed necessary or convenient by the Authority, is attached hereto as Exhibit "B" and incorporated by reference as if set forth in full; and

WHEREAS, sewage sent to the SCPS wet well will be pumped to the Authority's existing SCPS Force Main, or will flow via an outlet gate to an existing extension of the WLI's gravity line, in accordance with the Authority's operating procedures, thereby mitigating any impact the WLI Interim Relief Plan would have on downstream portions of the Authority's system; and

WHEREAS, UMT has evaluated and concluded that sufficient capacity exists in the UMT Interceptor to transport additional sewage flows from the WLI PS and FM as defined in this Agreement; and

WHEREAS, the Parties desire to implement the WLI Interim Relief Plan, subject to the terms and conditions contained in this Agreement.

NOW THEREFORE, in consideration of foregoing premises, and the promises, covenants, terms and conditions herein, as well as for diverse other considerations affecting the public welfare

which they seek to advance, the parties agree as follows,
intending to be legally bound:

1. Incorporation of Recitals. The above recitals shall form a part of this Agreement as fully as though the same were set forth at length.

2. Available Capacity. UMT represents that excess capacity in the UMT Interceptor for the foreseeable future will be at least 2,500,000 gallon per day (at a maximum sustained peak of 1,736 gallons per minute) during dry-weather flow conditions, as defined by sewage flows in the UMT Interceptor on a typical day without precipitation and with minimal baseline infiltration.

3. Sewage Transportation. UMT and LMT are hereby granted the right to use the UMT Trunkline to fulfill their respective sanitary sewer demand. UMT hereby grants the Authority the right to use the UMT Trunkline for the transportation of sewage flows in accordance with Section 2 of this Agreement between the Authority's WLI and the Authority's SCPS, and such additional flow to the extent capacity is available in the UMT Trunkline, after subtracting the gallons per day sewage demand used by UMT and LMT. Additional flow and available capacity shall be determined by the ability to obtain accurate meter data from UMT metering manholes MM-3 and MM-7 (below the meter/flume maximum head/flow rate constraints) at

all times. The Authority shall install 2 level sensors within the UMT Trunkline, at manholes MM-3 and MM-7 , for purpose of continuously monitoring the flow levels within the UMT Trunkline. This flow level data shall be monitored by telemetry and shall have the ability to automatically adjust the output of the WLI PS. This level sensor data shall also be available to both UMT and LMT via a web-based data acquisition and retrieval system which allows for continuous real-time monitoring of flow levels. In the event the flow levels are at or approaching the agreed-upon maximum operational constraints in the UMT metering manholes, the output of the WLI PS shall be adjusted accordingly to prevent the exceedance of the defined maximum constraints.

4. Authority Sewage Transportation Fee. The Authority agrees to pay UMT a sewage transportation fee (rental fee) in the annual amount of Ten Thousand (\$10,000.00) Dollars, beginning on January 1st, following the date of connection of the Authority force main to the UMT Trunkline. UMT will invoice the Authority quarterly, in equal installments. The annual rental fee will be escalated by 2.5% each year while the connection is in use. The aforesaid transportation fee shall be in lieu of any and all capacity, collection and conveyance, operation and maintenance, and other charges; provided, however, UMT shall be entitled to reimbursement of certain costs in accordance with Section of this Agreement.

5. Authority Pump Station, Force Main and Connection to UMT Trunkline.

(a) UMT agrees that the Authority may connect a force main between (1) a 2.5 million gallon per day pump station to be constructed on an easement adjacent to the Authority's PTP Property and (2) UMT's Trunkline at approximately the location of Manhole PH3-035. The pump station shall have a design capacity of 2,500,000 gallons of sewage per day. The pumping rate may be variable, however the maximum sustained peak shall be 1,736 gallons per minute, subject to other restrictions in this Agreement. The Authority shall pay the cost of the pump station, force main and the connection.

(b) Upon termination of the Agreement, the Authority may, at its option, leave all of its WLI PS and FM infrastructure in place, but shall take the necessary steps to prevent WLI flow from entering the UMT Trunkline. Prior to periods of extended non-use, the Authority shall adequately flush the WLI FM to prevent issues with odor or hydrogen sulfide corrosion within the UMT Trunkline.

6. Connection Design and Construction Standards. The Authority shall prepare the design and construction specifications for the connection of the Authority's force main to the UMT Trunkline. All such design and construction specifications shall be subject to the approval of UMT, prior to

the Authority making physical connection between its Force Main and the UMT Trunkline. Upon completion of construction, the Authority shall provide UMT and LMT with as-built drawings of the connection. The Authority shall not transport sewage flow through the connection prior to UMT's inspection and approval of the connection.

7. Authority Operation and Maintenance of WLI Pump Station and Force Main.

(a) The Authority agrees to maintain the WLI PS and FM in good repair and operation condition and to make all repairs, renewals, replacements and improvements thereto as required to maintain adequate transportation of the diverted WLI flow, which includes the Authority repairing and/or eliminating, any infiltration/inflow entering UMT's Trunkline from the WLI PS and FM that exceeds engineering standards for allowable infiltration/inflow.

(b) The Authority shall be responsible to UMT and LMT for, and shall repair or pay for the repair of, any damages or disturbances to the UMT Trunkline resulting from or arising out of the Authority's making connection thereto, or resulting from the operation of the WLI PS and FM.

(c) The Authority agrees that if, during the operation of the WLI PS and FM, there arises an issue of the expulsion of noticeable foul odors at the air relief manhole

located on the premises of Grange Road Park, so as to negatively impact the enjoyment of the park by the general public, then the air release valve will be subsequently maintained in a "normally-closed" position, and shall be operated only manually thereafter by Authority personnel during off-peak (non-use) hours of the park's amenities, in order to bleed off any accumulated air at this high point in the system.

8. UMT Operation of the UMT Trunkline.

(a) UMT agrees to maintain the UMT Trunkline in good repair and operating condition, and to make all repairs, renewals, replacements and improvements as required to maintain adequate transportation of the diverted WLI flow to the Authority's SCPS.

(b) During the term of this Agreement, sewage flows or connections from the Sewer Basin District IA of LMT, as shown on Exhibit A, into the UMT Trunkline shall be permitted to the extent provided for in the approved LMT Act 537 Plan and/or as approved by UMT. UMT shall in its sole discretion determine additional connections or sewage flow to the UMT Interceptor over existing connections and flow.

(c) LMT and UMT will work together on the design of the UMT Trunkline to eliminate the current restrictions between UMT manholes PH3-007F and PH3-007B and create additional capacity. LMT will contribute up to \$160,000.00 to UMT for the

construction of this section of the UMT Trunkline.

Notwithstanding the foregoing, LMT and UMT work on the design and construction of the UMT Trunkline, including expected monetary and non-monetary contributions, and any performance or non-performance of those requirements, shall not alter LCA's sewage transportation rights under this Agreement.

9. Authority Access Rights to the UMT Trunkline.

(a) The Authority shall have the right, but not the obligation, to access, inspect, maintain, repair and/or make replacements to the UMT Trunkline (collectively referred to as "Remedial Action") in order to ensure that the UMT Trunkline can effectively and safely transport the Authority's diverted WLI flow to its SCPS. UMT shall cooperate with the Authority in its undertaking of Remedial Actions.

(b) UMT agrees to provide the Authority access to all of UMT's past, present and future records concerning the UMT Trunkline, including without limitation, record plans, operation and maintenance reports and inspection reports, including videotape of the UMT Trunkline.

10. Term of Transportation Agreement.

(a) The term of this Agreement shall be from the date of this Agreement to December 31, 2040.

(b) All parties agree, that within a three (3) to five (5) year period prior to the expiration date, to evaluate the

conditions of sanitary sewer service in the Western Lehigh Interceptor service area, the condition and status of the Trexlertown Bottle-Neck Long-term solution, and the decisions made to comply with the solutions proposed in the long-term Act 537 plan.

(c) All parties in this agreement agree to enter good faith negotiations to create a new agreement based upon the conditions and projects at the time of this agreement's expiration based upon the conclusions agreed upon in the discussions outlined in paragraph (b) of this section.

11. Reimbursement of UMT Costs. The Authority shall reimburse UMT for all salary expenses, engineering and legal fees related to the approval of design, construction and inspection of facilities at the point of connection to the UMT System, and capacity determination approval. UMT shall provide estimates of the cost of such services to the Authority before commencing any work.

12. Indemnification. Each Party to the Agreement (each an "Indemnitor") hereby agrees to indemnify and hold each other party (an "Indemnatee") harmless from any and all liability (including without limitation reasonable attorney fees and litigation expense) arising out of the Indemnitor's performance and obligations under the terms of this Agreement. The Indemnitor shall not, however, be liable for any portion of a

judgment or associated litigation expenses, including attorney's fees, ultimately determined to be the result of the negligence or willful misconduct of the Indemnatee, or any of its employees, agents and officials.

13. Governmental Approvals. The Authority shall be responsible for paying the cost of all the necessary governmental approvals for the Project, including without limitation a Part II Water Quality Permit for the connection infrastructure, Act 537 planning approvals for Upper Macungie Township and Lower Macungie Township, and any applicable erosion and sedimentation, stream encroachment and stormwater management approvals. The Townships agree to cooperate in obtaining the necessary governmental approvals. The implementation of the Agreement shall be conditioned upon the obtaining of all such approvals.

14. UMT Easements and Right of Ways. UMT agrees to grant and convey to the Authority all easements over UMT property, and access to all UMT right of ways, the Authority determines necessary or convenient for the installation of the WLI PS and FM, and future maintenance, repairs and replacements of the WLI PS and FM.

15. Third-Party Easements and Right of Ways. The Townships acknowledge that the Authority will need to acquire easements or right of ways over third-party property owners or

currently existing holders of rights of way, in order to install the WLI PS and FM, and in the future maintain, repair and make replacements to the WLI PS and FM. The Townships agree to cooperate in obtaining the necessary approvals from third-party property owners and holders of rights of way. The implementation of the Agreement shall be conditioned upon the obtaining of all such approvals.

16. Authority Flow Monitoring and Data.

(a) The Authority shall install a sewage meter or other monitoring device in order to ascertain the instantaneous rate of flow from the WLI PS and FM to the UMT Trunkline.

(b) The flow data collected at the WLI PS and FM or other flow monitoring devices installed by the Authority on the UMT Trunkline shall be made available to the Townships via a web-based data acquisition and retrieval system which allows for continuous real-time monitoring of the flow rates from the WLI PS and FM to the UMT Trunkline.

17. Authority Charges to WLSP Municipalities. The Townships acknowledge that the Authority may, and intends to, charge the transportation fee cost, planning, design and construction costs for the WLI PS and FM, UMT reimbursement costs, Remedial Action costs, and all other costs associated with the WLI Relief Plan to the WLSP Municipalities, including the Townships, in accordance with currently existing Agreements.

18. Townships' Representation of Warranties. The

Townships represent and warrant:

(a) That UMT is the sole owner of the UMT Trunkline, subject to any applicable rights of LMT, and that no other person has any right, title or interest in the UMT Trunkline, and that there are no liens, or encumbrances on the UMT Trunkline, or other restrictions on its use; and

(b) That the execution and delivery of this Agreement, and its performance, will not result in any breach of any other agreement or covenant, and does not require the approval of any third party; and

(c) That this Agreement has been duly authorized in accordance with its municipal code, and other applicable Pennsylvania law.

19. LMT Consent and Maintenance of Sewer Basin District IA Sewer System.

(a) To the extent required, LMT consents to the Authority's transportation of sewage flow through the UMT Trunkline.

(b) LMT agrees to maintain its Sewer Basin District IA sewer system in good repair and operational condition and to make all repairs, renewals, replacements and improvements required to maintain adequate transportation of the diverted WLI flow to the Authority's SCPS.

(c) The Authority shall have the right, but not the obligation, to access, inspect, maintain, repair and/or make replacements to the Sewer Basin District IA sewer system (collectively referred to as "Remedial Action") in order to ensure that the UMT Trunkline can effectively and safely transport the Authority's diverted WLI flow to its SCPS. All costs and expenses associated with the Remedial Action shall be borne by the Authority. LMT shall cooperate with the Authority in its undertaking of Remedial Actions. The Authority agrees to provide LMT access to all of the Authority's Remedial Action, including without limitation, record plans, operation and maintenance reports and inspection reports, including videotape of the Sewer Basin District IA Remedial Action.

(d) LMT agrees to provide the Authority access to all of LMT's past, present and future records concerning the Sewer Basin District IA sewer system, including without limitation, record plans, operation and maintenance reports and, inspection reports, including videotape of the Sewer Basin District IA sewer system.

(e) LMT acknowledges and agrees that its consent to the Authority's transportation of its sewage under this Agreement, LMT's non-interference with the capacity made available to the Authority, and LMT maintenance of its Sewer Basin District IA sewer system, are material to the Authority's

decision to enter into this Agreement and undertake the WLI Relief Plan.

20. This Agreement shall inure to the benefit of and shall be binding upon the parties hereto and their respective successors and assigns.

21. This Agreement may be amended at any time by mutual agreement, in writing, executed by all parties hereto.

22. If any provisions of this Agreement are held to be invalid or unenforceable, such invalidity will not affect any other provision hereof, and the remaining provisions hereof shall be construed and enforced as if such invalid provisions had not been contained herein.

23. This Agreement may be executed by electronic signature or electronic transmission which shall be regarded for all purposes as an original.

24. This Agreement will be governed by and constructed under the laws of the Commonwealth of Pennsylvania. Any action or proceeding seeking to enforce any provision of, or based on any right arising out of this Agreement may be brought against any of the parties in the Court of Common Pleas of the County of Lehigh, and each party consents to the jurisdiction of such court (and of the appropriate appellate courts) in any such action or proceeding and waives any objection to venue made therein.

[BALANCE OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, each of the parties hereto has caused this Agreement to be duly executed and attested by its proper officers, pursuant to proper action of its governing body, all as of the day of year first above written.

ATTEST: LEHIGH COUNTY AUTHORITY

By: _____
Liesel M. Gross
Chief Executive Officer

ATTEST: UPPER MACUNGIE TOWNSHIP

Name (Printed) _____
Title: _____
Name (Printed)
Title:

ATTEST: LOWER MACUNGIE TOWNSHIP

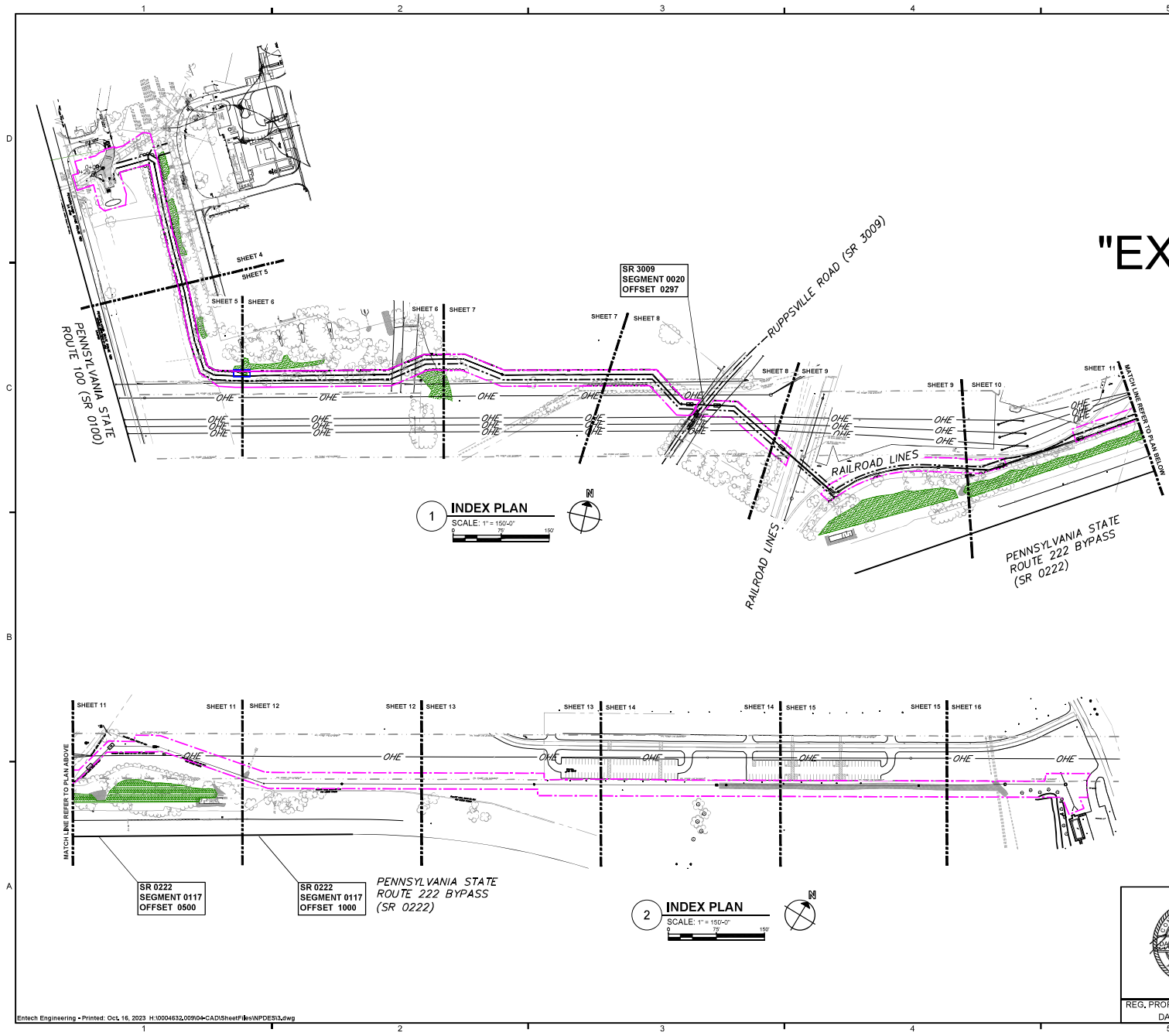
Name (Printed) _____
Title: _____
Name (Printed)
Title:

DISTRICT	COUNTY	ROUTE	SEGMENT	SHEET
5-0	LEHIGH	0100		3 OF 38
MUNICIPAL AUTHORITY OF THE TOWNSHIP OF UPPER MACUNGIE				
DATE	REV. NO.	REVISIONS	APPD	
10/16/2023	0	BIDDING	DJH	

GENERAL SHEET NOTES

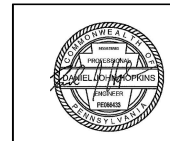
- REFER TO SHEET 1 FOR DRAWING INDEX, GENERAL PROJECT NOTES & REFERENCE LEGEND.
- REFER TO SHEET 2 FOR DRAWING LEGEND.

"EXHIBIT B"



1 INDEX PLAN
SCALE: 1" = 150'-0"

2 INDEX PLAN
SCALE: 1" = 150'-0"



LEHIGH COUNTY AUTHORITY
UPPER WESTERN LEHIGH
FORCE MAIN PROJECT

ENTECH ENGINEERING

1.800.825.1372
www.entecheng.com

SCALE: AS NOTED	DATE: 10/16/2023	PROJECT NO. 4632,009
DRAWN BY: CAD	CHKD BY: MJQ	APPROVED BY: DJH

REG. PROFESSIONAL ENGINEER
DATE: 10/16/2023

INDEX PLANS

MEMORANDUM

Date: November 13, 2023

To: Lehigh County Authority Board of Directors
From: Charles Volk, P.E., Chief Capital Works Officer
Subject: Suburban Division – Lynn Township Wastewater Treatment Plant New
Final Clarifier Project – Design Phase

MOTIONS / APPROVALS REQUESTED:

No.	Item	Amount
1	Capital Project Authorization – Design Phase	\$113,300
2*	Professional Services Authorization: Design Phase Engineering Services - D'Huy Engineering	\$93,300

** Included in the Capital Project Authorization*

BACKGROUND

The Lynn Township wastewater system, owned and operated by Lehigh County Authority (LCA), was constructed in the mid-1970s by Lynn Township and acquired by LCA in 2012. The sewerage system is entirely gravity-based (no pump stations) with approximately 41,000 linear feet of 8-inch PVC sewer collector and interceptor piping that directs residential, institutional, and commercial wastewater from 384 customers to the Lynn Township Wastewater Treatment Plant (WWTP), located along Allemaengel Road, for treatment before discharging to the Ontelaunee Creek.

The Lynn Township WWTP has a permitted capacity of 80,000 gallons per day. The original plant tankage and process equipment was upgraded over the years, with the construction of the final clarifier in 2001, a mechanical screen headworks addition in 2017, and miscellaneous asset management upgrades over the years. The plant utilizes an activated sludge process, including aeration tanks, sludge thickening, final settling, and effluent disinfection processes. Final settling consists of a single 20-foot diameter final clarifier tank. The final clarifier has been in 24/7 service since 2001 and is critical in maintaining compliance with DEP NPDES permit requirements.

PROJECT OVERVIEW AND OBJECTIVE

This project consists of the addition of a new final clarifier tank to mirror and supplement the existing tank. The original facility design plans delineated an area inside the plant fence line near the existing final clarifier for the addition of a future final settling tank and included buried capped influent and effluent lines for the future tank.

As the existing final clarifier is over 20 years old, the unit is in need of rehabilitation of aging mechanical equipment. The existing clarifier is also undersized based on current plant flows and loadings. The addition of a new final clarifier will facilitate rehabilitation of the existing tank, provide much needed redundancy for the final settling process, and enhance plant performance and regulatory compliance, particularly during peak storm events.

FINANCIAL

The Project will be funded by the LCA Suburban Division.

PROJECT STATUS

Board approval is requested for Design Phase.

THIS APPROVAL – DESIGN PHASE

PROFESSIONAL SERVICES

Design phase services are to be provided by D'Huy Engineering. D'Huy is familiar with the Lynn Township WWTP, as the firm was the design and construction phase engineer on the most recent upgrade project (2017), that included asset management related work. Design phase services include the following major tasks:

- 1) Preliminary Engineering: includes geotechnical investigation and survey.
- 2) Detailed Design Services: includes DEP permit level design, design review meetings with LCA operations and capital works staff, final design and bid document preparation.
- 3) Permitting Services: includes pre-application meeting with DEP, WQM Part 2 permit document preparation and submission, and addressing DEP review comments.
- 4) Bid Phase Services: includes administer bid phase through PennBid, attend pre-bid meeting, issue addenda, address RFIs from bidders, and bid review.

PROJECT SCHEDULE

Based on design phase authorization at the November 13, 2023 LCA Board meeting, it is anticipated that the project will be bid in May 2024 with construction phase to follow.

FUTURE AUTHORIZATIONS

Construction phase

CAPITAL PROJECT AUTHORIZATION

PROJECT NO.:	<u>SD-S-26</u>	BUDGET FUND:	<u>Suburban Div\Wastewater\Capital</u>
PROJECT TITLE:	<u>Suburban Division - Lynn Township WWTP New Final Clarifier Project</u>	PROJECT TYPE:	<input type="checkbox"/> Construction <input checked="" type="checkbox"/> Engineering Design <input type="checkbox"/> Equipment Purchase <input type="checkbox"/> Amendment
THIS AUTHORIZATION:	<u>\$ 113,300</u>		
TO DATE (W/ ABOVE)	<u>\$ 113,300</u>		

DESCRIPTION AND BENEFITS:

Lynn Township WWTP New Final Clarifier Project - Design & Bid Phase:

This authorization consists of providing design and bid phase services for Suburban Division Lynn Township Wastewater Treatment Plant New Final Clarifier Project. The design includes, but is not limited to, a new final clarifier of the same size as the existing unit, including drive unit, all mechanical equipment, access platform and stairs, yard piping, and a new return activated sludge pump in the control building.

Previous Authorizations	
none	

REQUESTED THIS AUTHORIZATION	
Design & Bid Phase	
Professional Services:	
Design & Bid Phase Services - D'Huy	\$93,300
Staff	\$10,000
Contingency	\$10,000
Total This Authorization	\$113,300

Future Authorization	
Construction Phase	TBD

Total Estimated Project	TBD
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REVIEW AND APPROVALS:

_____ Project Manager	_____ Date	_____ Chief Executive Officer	_____ Date
_____ Chief Capital Works Officer	_____ Date	_____ Chairman	_____ Date



Lehigh County Authority

1053 Spruce Street * P.O. Box 3348 * Allentown, PA 18106-0348
(610)398-2503 * FAX (610)398-8413 * Email: service@lehighcountyauthority.org

PROFESSIONAL SERVICES AUTHORIZATION

Professional: D;HUY ENGINEERING, INC.
One East Broad St., Suite 310
Bethlehem, PA 18018

Date: November 13, 2023

Requested By: Charles Volk, P.E.

Approvals

Department Head: _____

Chief Executive

Officer: _____

Suburban Division – Lynn Township WWTP New Final Clarifier Project

D'Huy Engineering, Inc. will perform the design and bid phase services for the New Final Clarifier Project at the Lynn Township Wastewater Treatment Plant. Professional services will include the following tasks:

Professional Services ⁽¹⁾
1. Perform preliminary engineering, including geotechnical investigation and site survey
2. Provide detailed design services, including structural, mechanical, and electrical design
3. Provide permitting services, including pre-application meeting with DEP, WQM Part 2 permit application submission and address DEP comments
4. Coordinate and attend progress meetings with LCA
5. Provide bid phase services, including pre-bid meeting attendance, issue addenda, respond to bidders RFIs, bid review

Cost Estimate (not to be exceeded without further authorization): \$93,300

Time Table and Completion Deadline: As required to meet deadlines as set forth in the proposal.

(For Authority Use Only)

Authorization Completion:

Approval: _____ **Actual Cost:** _____ **Date:** _____

MEMORANDUM

Date: November 13, 2023

To: LCA Board of Directors
Liesel Gross, C.E.O.
From: Albert J. Capuzzi, Director of Engineering & Asset Management
Subject: Suburban Division: Pretreatment Plant (PTP) Near-Term Facility Upgrades – Preliminary Design

MOTIONS / APPROVALS REQUESTED:

No.	Item	Amount
1	Professional Services Authorization – Preliminary Design – AECOM	\$282,225

PROJECT BACKGROUND:

The Lehigh County Authority (LCA) Pretreatment Plant (PTP) was placed online in 1990. The facility was originally constructed and operated by the County of Lehigh until being transferred to LCA in 2009. Jacobs is the contract operator for the facility, which treats industrial waste from large users located primarily in Upper Macungie Township before being discharged to the Western Lehigh Interceptor. Flows discharged from the PTP travel to the Kline's Island Wastewater Treatment Plant in Allentown for final treatment.

In April 2023, Jacobs completed a Master Plan for the facility, which the first effort in the plant's history to comprehensively assess the plant's near-term and long-term needs. While routine renewal and replacement (R&R) type upgrades have been made annually, no major upgrades have been undertaken other than the installation of a 3 million gallon flow equalization basin in 2010.

As part of the regional Act 537 Plan being developed for the Kline's Island Sewer System, the PTP has also been evaluated for upgrades that may be needed to address future industrial growth in the service area. The plant's design capacity is 5.75 million gallons per day in hydraulic capacity and 76,500 pounds per day in biochemical oxygen demand (BOD) loading. Due to growth in the industrial customer base over the past three decades, loadings of BOD and total dissolved solids often exceed the PTP's design capacity. The upgrades included in the Act 537 Plan will be developed to ensure the PTP can effectively treat flows and loads generated by current and future industrial users. Projects driven by the Act 537 Plan are several years from completion. In the meantime, some of the PTP's assets are at risk of failure. In sum, the long-term needs of the PTP will be addressed in the Act 537 Plan, but this project is intended to address near-term needs to address resiliency and redundancy concerns at this critical facility.

PROJECT SCOPE:

This study will identify the costs and timing of the near-term improvements. It will also help in the discussion of what improvements are needed now and which can be eliminated due to work planned for the long-term Act 537 Plan.

LCA recognizes the importance of the PTP for the economic vitality and environmental stability of the region. The Kline's Island Wastewater Treatment Plant (KIWWTP) in Allentown, which receives treated wastewater from the PTP, cannot treat the loads from the industries without adequate pretreatment. Failure of critical assets at the PTP could have a crippling effect on the industries and compliance at KIWWTP. Hence, LCA is considering this plan to address the most high-risk items in this project: highest likelihood of failure (LOF) and highest consequence of failure (COF). There are significant budget constraints preventing completing these items. A surgical approach is needed to maximize the value of the investment on the items expected to fail and whose loss or impairment would create the greatest impact.

In the Master Plan report, Jacobs identified immediate projects that should be completed in the 0–5-year timeframe. These are the recommendations from that report:

- New Secondary Clarifier
- Existing Secondary Clarifier Rehabilitation
- Rehabilitation for the Oxygen Generation Plant
- Aeration Basin Inspection and Repair
- Mechanical Aerator Replacement
- Swale cleanup, regrading, and flood mitigation
- Solids Processing Building Lighting
- Waste Receiving Roadway Upgrades
- Roofing Evaluation and Repair
- Digester Heating Boiler Replacements
- Sludge Cake Conveyors and Unloading Hopper

LCA staff have identified the following additional items requiring attention in this next upgrade:

1. Upgrade of critical electrical systems (assessment underway)
2. Assessment of and plan for the Flow Equalization Basin coatings
3. Assessment of and plan for buried and above-ground critical piping
4. Integration of new flow measurement systems

With this preliminary design, LCA will further refine the needs described above and develop a plan to address the most critical items using a risk-based prioritization approach. The work will consider the future work and how these upgrades will be integrated into the future upgrade plans.

THIS APPROVAL – PRELIMINARY DESIGN SERVICES:

LCA intends to retain the services of an engineering consulting firm, AECOM, to provide design related engineering services. The following tasks summarize the professional services to be performed:

1. Hold Kickoff Meeting; identify goals and objectives
2. Review of existing documents, review plant performance data
3. Review of ongoing work as noted above on clarifiers, agitators, electrical testing, oxygen equipment
4. Site walk-through by experienced condition assessment team; interview / discussions with Jacobs' operations staff
5. Develop summary of design criteria for new facilities; Develop summary of operational process improvement areas (areas where modifications to the process can result in improved performance)
6. Conduct workshop(s) with LCA and Jacobs to identify high LOF and high COF facilities.
7. Conduct financing workshop with LCA staff to understand near-term financing capacity.
8. Develop near-term prioritization and recommended sequence of work.
9. Evaluate options for upgrades – particularly for clarification.
10. Tech Memo: Recommend Improvements
11. Optional: Peer utility workshop(s) to review recommendations and unique project elements and to solicit feedback and share best practices.
12. Prepare 30% design including long lead purchase specifications; hold in-person design review workshop
13. Prepare cost estimates
14. Weekly project updates with LCA and Jacobs

CONSULTANT SELECTION PROCESS:

A Request for Proposals was issued to three firms on September 20, 2023 based on prior review of qualifications. Site tours were provided to two of the firms upon request. The proposals were received on October 26th. AECOM was selected for this work due to their knowledge of the plant based on past work, their technical approach, and their inclusion of elements of the 30% design. Ramboll excluded review of several critical upgrades from their proposal, and did not include the preparation of 30% design work. LCA team recommends AECOM for this work.

Firm	Fee
AECOM	\$282,225 (elements of 30% design included)
Ramboll	\$207,000 (no 30% design included)

CDM Smith	Invited, did not submit
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FINANCIAL:

This preliminary design phase work will be paid from the Suburban Wastewater Division – Pretreatment Plant capital budget.

PROJECT STATUS:

The Master Plan for the PTP is complete. Preliminary design of critical items (high likelihood of failure, high consequence of failure) is the next phase and is the subject of this task. This preliminary work may lead to additional projects. The intent is to develop the key short-term projects in this work to determine their cost and schedule. The work of this task will be evaluated for opportunities to coordinate with projects to be included in the long-term Act 537 Plan.

PRIOR AUTHORIZATIONS: None.

TOTAL AUTHORIZATIONS (INCLUDING THIS AUTHORIZATION): \$282,225

FUTURE AUTHORIZATIONS:

Future authorization for detailed design and construction costs are anticipated. However, more discussion about funding sources and coordination with long-term Act 537 Plan projects will be required prior to authorizing additional phases.

PROJECT SCHEDULE:

Assuming Board approval at the November 13 meeting, the work will be completed in 90 days. Work will start by November 15, 2023, and conclude by February 13, 2024.



Lehigh County Authority

1053 Spruce Street * P.O. Box 3348 * Allentown, PA 18106-0348
(610)398-2503 * FAX (610)398-8413 * Email: service@lehighcountyauthority.org

PROFESSIONAL SERVICES AUTHORIZATION

Professional: AECOM
625 West Ridge Pike, Suite E-100
Conshohocken, PA 19428

Date: November 13, 2023

Requested By: Albert J. Capuzzi

Approvals

Department Head:

Chief Executive

Officer:

Description of Services (Work Scope, Steps, Check Points, etc.):

LCA intends to retain the services of an engineering consulting firm, AECOM, to provide design related engineering services. The following tasks summarize the professional services to be performed:

1. Hold Kickoff Meeting; identify goals and objectives
2. Review of existing documents, review plant performance data
3. Review of ongoing work as noted above on clarifiers, agitators, electrical testing, oxygen equipment
4. Site walk-through by experienced condition assessment team; interview / discussions with Jacobs' operations staff
5. Develop summary of design criteria for new facilities; Develop summary of operational process improvement areas (areas where modifications to the process can result in improved performance)
6. Conduct workshop(s) with LCA and Jacobs to identify high LOF and high COF facilities.
7. Conduct financing workshop with LCA staff to understand near-term financing capacity.
8. Develop near-term prioritization and recommended sequence of work.
9. Evaluate options for upgrades – particularly for clarification.
10. Tech Memo: Recommend Improvements
11. Optional: Peer utility workshop(s) to review recommendations and unique project elements and to solicit feedback and share best practices.
12. Prepare 30% design including long lead purchase specifications; hold in-person design review workshop
13. Prepare cost estimates
14. Weekly project updates with LCA and Jacobs

PRIOR AUTHORIZATIONS: None.

TOTAL AUTHORIZATIONS (INCLUDING THIS AUTHORIZATION): \$282,225

FUTURE AUTHORIZATIONS:

Future authorization for detailed design and construction costs are anticipated. However, more discussion about funding sources and coordination with long-term Act 537 Plan projects will be required prior to authorizing additional phases.

PROJECT SCHEDULE:

Assuming Board approval at the November 13 meeting, the work will be completed in 90 days. Work will start by November 15, 2023, and conclude by February 13, 2024.

(For Authority Use Only)

Authorization Completion:

Approval: _____ Actual Cost: _____ Date: _____

Lehigh County Authority – Monthly Report to Board of Directors

Upcoming Board Agenda Items & Project Updates – November 2023

Published: November 6, 2023

PART 1 – Upcoming Agenda Items – Action & Discussion Items

FINANCE & ADMINISTRATION

Project Title: Authority Solicitor Contract

Division / Funding: All Divisions

Status or Action Desired: Approval

Board Action Date: 11/13/2023

Project Phase: n/a

Project Notes: Since December 2019, King Spry has served as LCA's Solicitor. In 2023, staff sought proposals from various legal firms to provide Solicitor services in an effort to ensure LCA is well represented and pricing is competitive. Proposals have been reviewed and three firms interviewed by a team of LCA staff members. LCA staff will recommend Board approval of a contract for Solicitor services at the November 13, 2023 meeting. Staff

Responsibility: Liesel Gross

Project Title: 2024 Water & Wastewater Rate Schedules

Division / Funding: All Divisions

Status or Action Desired: Approval

Board Action Date: 11/13/2023

Project Phase: n/a

Project Notes: Following completion of the 2024 Budget process, a complete package of water and wastewater rate updates is presented to the Board for consideration and adoption. The Suburban Water rates shown in proposed rate schedules are a result of the budget process and recent cost-of-service study. The City Division water and sewer rates reflect terms of the Concession Lease Agreement. Board approval for the updated rate schedule is requested at the November 13, 2023 meeting to allow for proper notification to customers prior the January 1, 2024 effective date.

Staff Responsibility: Liesel Gross

Project Title: Monthly Financial Review

Division / Funding: n/a

Status or Action Desired: Discussion

Board Action Date: 11/27/2023

Project Phase: n/a

Project Notes: The October 2023 monthly financial report will be presented. Staff Responsibility: Ed Klein

Project Title: LCA Strategic Plan - 2023 Quarterly Progress Reporting

Division / Funding: All Divisions

Status or Action Desired: Discussion

Board Action Date: 12/11/2023

Project Phase: n/a

Project Notes: A quarterly report of staff progress on key initiatives outlined in LCA's Strategic Plan will be presented for Board review and discussion. Staff Responsibility: Liesel Gross

SYSTEM OPERATIONS

Project Title: Monthly Operations Report

Division / Funding: n/a

Board Action Date: 11/27/2023

Status or Action Desired: Discussion

Project Phase: n/a

Project Notes: The October 2023 monthly operations report will be presented. Staff Responsibility: Andrew Moore & Chris Moughan

WATER PROJECTS

Project Title: Water Main Replacement Program Cycle 7

Division / Funding: Suburban Division

Board Action Date: 11/13/2023

Status or Action Desired: Approval

Project Phase: Construction Phase

Project Notes: This project covers the construction phase of the Suburban Division Cycles 7 water main replacement program, which includes a little more than one mile of water main to be replaced. The additional length over one mile is necessary to allow the main replacements to be constructed from roadway intersection to intersection, thus facilitating future replacements with minimal service interruptions. Construction phase authorization will be requested at the 11/13/23 LCA Board meeting. Staff Responsibility: Jason Peters

Project Title: Lead Service Line Replacement Project Cycle 1

Division / Funding: Allentown Division

Board Action Date: 11/13/2023

Status or Action Desired: Approval

Project Phase: Design Phase

Project Notes: This project focuses on Cycle 1 of the lead service line (LSL) replacement program in the City of Allentown. The scope of the project, which is being funded by a PennVEST grant, is the replacement of approximately 150 lead service lines within a prioritized project area. LCA is requesting authorization of design and bid phase services at the 11/13/23 Board meeting. Staff Responsibility: Jason Peters

Project Title: Allentown Division Lead Service Line Inventory Program & Compliance Planning

Division / Funding: Allentown Division

Board Action Date: 11/13/2023

Status or Action Desired: Approval

Project Phase: Planning Phase

Project Notes: This project is for the completion of a detailed lead service line material inventory in the Allentown Division, and includes use of predictive modeling, compliance strategy development, and development of prioritization strategies to reduce the risk of lead exposure. Staff Responsibility: Matt Dorner

Project Title: Suburban Division Lead Service Line Inventory Program & Compliance Planning

Division / Funding: Suburban Division

Board Action Date: 11/13/2023

Status or Action Desired: Approval

Project Phase: Planning Phase

Project Notes: This project is for the completion of a detailed lead service line material inventory in the Suburban Division, and includes GIS Inventory framework and compliance strategy and development of prioritization strategies to reduce the risk of lead exposure. Staff Responsibility: Matt Dorner

WASTEWATER PROJECTS

Project Title: LCA Sewage Transportation Agreement - Upper Macungie & Lower Macungie Townships

Division / Funding: Suburban Division

Board Action Date: 11/13/2023

Status or Action Desired: Approval

Project Phase: n/a

Project Notes: The Upper Western Lehigh Pump Station and Force Main project is in the final design and permitting stage and is anticipated to be bid later this year. The project is an interim solution to relieve the flow-restricted areas of the Western Lehigh Interceptor located in Trexlertown. A dry-weather pump station will be constructed at LCA's Pretreatment Plant in Fogelsville, and flows pumped through a force main to discharge into an Upper Macungie Township sewer trunkline, which carries flows from both Upper Macungie and Lower Macungie Townships. A sewage transportation agreement between LCA and the Townships has been developed to document this arrangement, which will continue for a limited time period until a long-term solution is constructed, as will be detailed in the regional Act 537 Plan currently under development. At the November 13, 2023 meeting, LCA's Board will be asked to consider the sewage transportation agreement for approval. Staff Responsibility: Liesel Gross

Project Title: Lynn Township WWTP Final Clarifier Project

Division / Funding: Suburban Division

Board Action Date: 11/13/2023

Status or Action Desired: Approval

Project Phase: Design Phase

Project Notes: The Lynn Township wastewater treatment plant was constructed in the mid-1970s and acquired by LCA in 2012. The existing activated sludge plant has a single 20-foot diameter final clarifier, which was constructed in 2001 with provisions to add a future second clarifier. The existing clarifier has been in continuous service since 2001 and is in need of rehabilitation. The unit was undersized with respect to current plant flows, and redundancy is needed to facilitate maintenance and improve effluent quality. Design phase authorization is anticipated to be requested at the 11/13/2023 LCA Board meeting. Staff Responsibility: Chuck Volk

Project Title: Pretreatment Plant (PTP) Near-Term Facility Improvements

Division / Funding: Suburban Division

Board Action Date: 11/13/2023

Status or Action Desired: Approval

Project Phase: Preliminary Design Phase

Project Notes: Following the completion of the Master Plan for the Pretreatment Plant in early 2023, several near-term improvements have been identified to address critical assets in poor condition at this facility. This project will include a preliminary evaluation of these near-term upgrades to develop a schedule and cost for addressing them, which will further be coordinated with work envisioned via the broader Act 537 Plan being developed for the Kline's Island Sewer System. At the November 13, 2023 meeting, Board approval will be requested to retain an engineering firm to assist with this preliminary design phase. Staff Responsibility: Albert Capuzzi

PART 2 – Project Updates – Information Items

WATER PROJECTS – ALLENTOWN DIVISION

Project Title: Water Filtration Plant: Filter Upgrade ProjectDivision / Funding: Allentown DivisionStatus or Action Desired: UpdatedBoard Action Date: 12/11/2023Project Phase: Design Phase

Project Notes: The WFP filter underdrains and associated mechanical equipment are approximately 60 years old and have reached the end of their useful life. This near-term Master Plan project is intended to improve reliability, extend service life, maintain high level of service and insure regulatory compliance. Preliminary engineering was completed in Spring 2022, and the basis of design includes replacement of the filter underdrains, installation of an air scour backwash system, replacement of old control panels and SCADA integration, and media replacement. The Conceptual Design was submitted to the City in May 2022 and approved in June 2022. Substantially complete design was approved by the City in August 2023, and the project is currently out to bid with bids due November 20, 2023. LCA staff anticipate authorization for construction request at the 12/11/2023 Board Meeting. Staff Responsibility: Amy Rohrbach

WASTEWATER PROJECTS – ALLENTOWN DIVISION

Project Title: Kline's Island WWTP: Substation No. 1 and Switchgear ReplacementDivision / Funding: Allentown DivisionStatus or Action Desired: UpdatedBoard Action Date: 12/11/2023Project Phase: Design Phase

Project Notes: The KIWWTP electrical service is supplied by two 12.4 kV power feeds from PPL, which enter Substation No. 1 and connect to the 12.4 kV switchgear, which distributes the 12.4 kV power to 480v Substation No. 1 and Substation No. 2. The substations distribute power to the various MCCs and loads throughout the plant. Per prior electrical condition assessments performed by consultants, the substations and primary switchgear (which are from the 1970s) are at the end of their useful life and in need of replacement. Substation No. 2 was replaced in 2019. This project will replace Substation No. 1 with a new 480v, 3,000 KVA walk-in type enclosure and replace the switchgear with new vacuum breaker technology equipment with automatic transfer capability designed to accommodate future plant upgrade loads. The preliminary basis of design was submitted to the City of Allentown as part of Major Capital Improvement approval process, with approval received in October 2022. Design phase approval was authorized at the 11/14/2022 Board meeting, and the project will be bid in Q3 of 2023. The Substantially Complete Design package was submitted to the City of Allentown on 7/13/2023 for review and comment. Approval was received from the City of Allentown on 8/1/2023. A third party QA/QC review was performed and comments provided to the consultant. Final bid documents were approved by LCA on 9/19/2023 and the bid is scheduled to advertise 10/2/2023 with bids due 11/8/2023. A request for construction authorization is anticipated at the December 11, 2023 Board Meeting. Staff Responsibility: Amy Rohrbach

PART 3 – Open Project List – No Updates

Project Category	Project Title	Division / Funding	Project Phase	Staff Responsibility
Finance & Administration	LCA Munis ERP System Planning & Re-Implementation	All Divisions	Planning Phase	Chris Moughan & Brooke Neve
Finance & Administration	Asset Management Roadmap & Strategic Asset Management Plan (SAMP)	All Divisions	Planning Phase	Albert Capuzzi
System Operations	Suburban Water Facilities - SCADA System Upgrade	Suburban Division	Construction Phase	Chris Moughan
System Operations	Watershed Monitoring Program	Suburban Division	Ongoing	Andrew Moore
Water - Suburban	Central Lehigh and North Whitehall Systems – Water Supply Study	Suburban Division	Planning Phase	Phil DePoe
Water - Suburban	2022 Commercial Meter Replacement Project	Suburban Division	Construction Phase	Amy Kunkel
Water - Suburban	Fixed Base Meter Reading Stations	Suburban Division	Planning Phase	Amy Kunkel
Water - Suburban	Upper System Pump Station and Main Extension	Suburban Division	Design Phase	Amy Kunkel
Water - Suburban	North Whitehall Meter Replacement	Suburban Division	Construction Phase	Amy Kunkel
Water - Suburban	Water Main Replacement Program Cycle 6	Suburban Division	Project Closeout	Jason Peters
Water - Suburban	Water Main Replacement Program Cycle 7 & 8	Suburban Division	Design Phase	Jason Peters
Water - Allentown	30" & 36" East Side Transmission Main Repair Project	Allentown Division	Design Phase	Jason Peters
Water - Allentown	Large Meter Chamber Replacement	Allentown Division	Construction Phase	Amy Kunkel
Water - Allentown	Water Filtration Plant: PFAS Compliance Study	Allentown Division	Planning Phase	Albert Capuzzi
Water - Allentown	Water Main Replacement Program Cycles 7 & 8	Allentown Division	Design Phase	Jason Peters

Project Category	Project Title	Division / Funding	Project Phase	Staff Responsibility
Water - Allentown	Large Diameter Valve Rehabilitation & Replacement Program	Allentown Division	Design Phase	Chuck Volk
Water - Allentown	Lead Service Line Replacement Program Planning	Allentown Division	Planning Phase	Andrew Moore
Water - Allentown	Water Main Replacement Program Cycle 6	Allentown Division	Project Closeout	Jason Peters
Water - Allentown	Water Filtration Plant: 2022-2023 Indenture Upgrades	Allentown Division	Construction Phase	Chuck Volk
Sewer - Act 537	Kline's Island WWTP - High-Rate Wet-Weather Treatment Pilot Study	Allentown Division	Planning Phase	Phil DePoe
Sewer - Act 537	Sanitary Sewer Collection System: City of Allentown Manhole Inspections	Allentown Division	Planning Phase	Phil DePoe
Sewer - Act 537	Sanitary Sewer Collection System: City of Allentown Interceptor Inspections	City of Allentown (AO)	Planning Phase	Phil DePoe
Sewer - Act 537	Regional Sewer Capacity & Wet-Weather Planning - Regional Act 537 Plan Preparation	City of Allentown (AO)	Planning Phase	Phil DePoe
Sewer - Act 537	KISS System Modeling - Final Alternatives Analysis (FAA)	City of Allentown (AO)	Planning Phase	Phil DePoe
Sewer - Act 537	KISS Act 537 Planning - Financial & Institutional Evaluation, Phase 2	City of Allentown (AO)	Planning Phase	Liesel Gross
Sewer - Act 537	KISS System Modeling - Preliminary Screening of Alternatives (PSOA)	City of Allentown (AO)	Planning Phase	Phil DePoe
Sewer - Act 537	Kline's Island WWTP: Phase 1 AO Design Improvements	City of Allentown (AO)	On Hold	Phil DePoe
Sewer - Act 537	KISS System Modeling - Sewage Billing Meter QA/QC Data Analytics and 2021 Flow Metering Preparation	City of Allentown (AO)	Planning Phase	Phil DePoe
Sewer - Act 537	Regional Sewer Capacity & Wet-Weather Planning: Engineering & Program Support	Suburban Division	Planning Phase	Phil DePoe
Sewer - Act 537	Industrial Pretreatment Plant Master Plan	Suburban Division	Planning Phase	Phil DePoe
Sewer - Act 537	Western Lehigh Interceptor Municipalities Test & Seal Lateral Grouting Project	Suburban Division	Construction Phase	Jason Peters

Project Category	Project Title	Division / Funding	Project Phase	Staff Responsibility
Sewer - Act 537	Upper Western Lehigh Pump Station & Force Main	Suburban Division	Design Phase	Amy Kunkel
Sewer - Act 537	Western Lehigh Service Area - Engineering & Program Support	Suburban Division	Planning Phase	Phil DePoe
Sewer - Suburban	Western Lehigh Manhole Rehabilitation Project - Phase 4	Suburban Division	Construction Phase	Jason Peters
Sewer - Suburban	Park Pump Station Phase 2 Upgrade	Suburban Division	Construction Phase	Amy Kunkel
Sewer - Suburban	North Whitehall Township Act 537 Plan	Suburban Division	Planning Phase	Phil DePoe
Sewer - Suburban	Heidelberg Heights Sanitary Sewer Consent Order & Agreement	Suburban Division	Construction Phase	Jason Peters
Sewer - Suburban	Spring Creek Pump Station Upgrades	Suburban Division	Design Phase	Amy Kunkel
Sewer - Suburban	Pretreatment Plant (PTP) Electrical Study	Suburban Division	Planning Phase	Albert Capuzzi
Sewer - Suburban	Heidelberg Heights Wastewater Treatment Plant - Mechanical Screen Project	Suburban Division	Construction Phase	Chuck Volk
Sewer - Suburban	Spring Creek Force Main Relocation - PA Turnpike Commission	Suburban Division	Design Phase	Amy Kunkel
Sewer - Suburban	Lynn Township Corrective Action Plan	Suburban Division	Ongoing	Jason Peters
Sewer - Allentown	Kline's Island WWTP: 2023-2024 Architectural and Structural Upgrades	Allentown Division	Construction Phase	Amy Rohrbach
Sewer - Allentown	Kline's Island WWTP: Main and Auxiliary Pump Station Improvements	Allentown Division	Preliminary Design	Amy Rohrbach
Sewer - Allentown	Sanitary Sewer Collection System: I&I Source Reduction Program (LCA Year 1)	Allentown Division	Design Phase	Albert Capuzzi
Sewer - Allentown	Kline's Island WWTP: Effluent Disinfection and Dechlorination System Improvements	Allentown Division	Construction Phase	Chuck Volk
Sewer - Allentown	Kline's Island WWTP: Solids Process Boiler and HVAC System Upgrade Project	Allentown Division	Construction Phase	Chuck Volk

Project Category	Project Title	Division / Funding	Project Phase	Staff Responsibility
Sewer - Allentown	Kline's Island WWTP: Wet Weather Capacity Enhancements - Tertiary Bypass	Allentown Division	Preliminary Design	Chuck Volk
Sewer - Allentown	Kline's Island WWTP: Intermediate Pump Station Improvements	Allentown Division	Preliminary Design	Chuck Volk
Sewer - Allentown	Lehigh Street (Rte. 145) Water and Sewer Main Relocation Project	Allentown Division	Construction Phase	Jason Peters
Sewer - Allentown	Kline's Island WWTP: Primary Digester No. 2 Cleaning and Rehabilitation Project	Allentown Division	Project Closeout	Chuck Volk
Sewer - Allentown	Sanitary Sewer Collection System: I&I Source Reduction Program (City Year 4)	City of Allentown (AO)	Construction Phase	Phil DePoe