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Agendas & Minutes Posted:
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LEHIGH COUNTY AUTHORITY

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BOARD MEETING AGENDA – January 27, 2025 – 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 the 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

- *January 13, 2025 Board Meeting minutes*

4. Public Comments

5. Action / Discussion Items:

FINANCE AND ADMINISTRATION

- *Resolution 1-2025-1: Omnibus Resolution - Delegation of Authority Responsibilities (Approval) (blue) (digital Board packet, pages 8-19)*
- *LCA Strategic Plan – Progress Reporting (Information) (yellow) (digital Board packet, pages 20-24)*

WATER

- *Suburban Division – NBMA / North Whitehall Division Water System Interconnection (Approval) (green) (digital Board packet, pages 25-28)*

WASTEWATER

- *Allentown Division I&I Program – Programmatic Support – Trout Creek & Eastside Basins (Approval) (gray) (digital Board packet, pages 29-35)*
- *Sewer Operations Agreement – Upper Macungie Township Sewer Pump Stations (Approval) (purple) (digital Board packet, pages 36-46)*

6. Monthly Project Updates / Information Items (1st Board meeting per month)

7. Monthly Financial Review (2nd Board meeting per month) – **December 2024 report to be distributed at the February 10, 2025 Board meeting.**
8. Monthly System Operations Overview (2nd Board meeting per month) (*digital Board packet, pages 47-50*) – **December 2024 report attached**
9. Staff Comments
10. Solicitor's Comments
11. Public Comments / Other Comments
12. Board Member Comments
13. Executive Sessions
14. Adjournment

UPCOMING BOARD MEETINGS		
February 10, 2025	February 24, 2025	March 10, 2025

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

January 13, 2025

The Regular Meeting of the Lehigh County Authority Board of Directors was called to order at 12:02 p.m. on Monday, January 13, 2025, Vice Chairman Amir Famili 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. Amir Famili, Ted Lyons, Jeff Morgan, Norma Cusick, Linda Rosenfeld, and Marc Grammes were present for Roll Call, and remained for the duration of the meeting. Kevin Baker entered the meeting at 12:05 p.m. and was present for the duration of the meeting. Sean Ziller entered the meeting at 12:50 p.m. and was present for the remainder of the meeting.

Attorney Kevin Reid, the Authority's Solicitor, was present along with Authority Staff, Liesel Gross, Ed Klein, Andrew Moore, Chris Moughan, AJ Capuzzi, Chuck Volk, Phil DePoe, Susan Sampson, and Lisa Miller.

Vice Chairman Famili announced that the Board received their electronic and hard copies of the Board packet in advance. A copy of the packet is also available online.

REVIEW OF AGENDA

Liesel Gross announced that there are no changes to the agenda; however, the agenda was reformatted to add the Special Agenda Items for the Lead Service Line Replacement. Also, an Executive Session is planned after the regular meeting to discuss potential litigation.

APPROVAL OF MINUTES

December 9, 2024 Meeting Minutes

On a motion by Jeff Morgan, seconded by Linda Rosenfeld, the Board approved the minutes from the December 9, 2024 meeting as written (6-0).

PUBLIC COMMENTS

Liesel Gross introduced Shorav Kaushik from King Spry's office who will be taking on some of the Authority's projects. She also introduced Reni Keane-Dengel who started work as the Authority's Lead Program and Compliance Manager in December. The Board welcomed Mr. Kaushik and Mr. Keane-Dengel to the meeting.

Rescinding Approval for Resolution 11-2024-2: Revised Borrowing Resolution, PENNVEST Financing

Liesel Gross explained the background of the planned Pennvest funding for the Lead Service Line Replacement Program, Cycle 1 project. The Authority applied for funding in 2023 and received a partial grant award in July 2023. The Authority planned to close on the funding on November 14, 2024, but closing was postponed indefinitely following notification from Pennvest of an obstacle within the Authority's existing bond document. Pennvest's stated concern related to the Allentown Water & Sewer Lease Bonds and associated Trust Indenture, which does not allow for adequate security for Pennvest to feel comfortable with the subordinate debt position of the funding offered to the Authority for this project.

After reviewing several options with Pennvest, it was determined that there would be no avenue available to resolve the issue in a timely manner. This resulted in an internal discussion to determine a different approach and how to reshape the scope of the project. As part of the alternative strategy, the Board needs to rescind its approval of Resolution 11-2024-2, which was approved in November 2024 and authorized the Authority to accept funding from Pennvest. By rescinding approval of Resolution 11-2024-2, the Authority would formally decline the funding from Pennvest for this project.

On a motion by Linda Rosenfeld, seconded by Jeff Morgan, the Board rescinded its prior approval of Resolution 11-2024-2 (7-0).

Allentown Water & Sewer Lease Bonds, Trust Indenture Amendment: Bondholder Consent Process Authorization

Ed Klein explained the bondholder consent process that would be required to amend the Trust Indenture for the Allentown Water & Sewer Lease Bonds. An amendment to the Trust Indenture is required to make the language more favorable to subordinate lienholders. In particular, Pennvest requires this change in order for the Authority to receive grant or low-interest loan funding through the Pennvest program. Mr. Klein explained the lengthy process that may take six months or longer, to identify the bondholders and receive consent from a majority – 51 percent – of the bondholders for the change in the Trust Indenture. He noted that a special consultant will be required to complete this work. He has spoken with some qualified firms and selected one that will begin the process for a nominal fee of \$4,000 to begin identifying the bondholders. Future costs will be determined after the bondholders have been identified.

Tim Horstmann, the Authority's bond counsel from McNees, Wallace & Nurick, was present for the meeting and clarified what language changes would satisfy Pennvest. He will be working directly with Pennvest to ensure their objections are addressed in the amendment.

There was further Board discussion regarding the bondholder consent process and what would motivate a bondholder to approve of the language change in the Trust Indenture. Liesel Gross commented that the primary driver for the language change is to ensure the Authority is eligible to receive grants and low-interest loans from programs like Pennvest, which will have a beneficial impact for the system and customers, as well as the Authority's overall financial performance.

Ed Klien said he will keep the Board updated on the bondholder consent process as it progresses.

Lead Service Line Replacement Program, Cycle 1 – Capital Project Authorization Amendment – Construction Phase

Liesel Gross provided background on the new regulations driving the Lead Service Line (LSL) Replacement Program and the specific challenges with the Cycle 1 project related to the loss of Pennvest grant funding, as discussed in detail in prior agenda items during this meeting. She reviewed the project alternatives that were evaluated by the Authority staff, and emphasized the importance of completing the project, which was intended to serve as a pilot project to develop the procedures and documents that will be used for the remainder of the program over the next 13 years. She also noted that 44 customers have already signed Right-of-Entry agreements, and it is important for the Authority to follow-up with those customers to complete the lead service line replacements for them in a timely manner. As a result of the internal staff evaluations, Ms. Gross recommended a change in project scope that would result in a lower project cost while still achieving the goals of a pilot project. With a narrower project scope and lower cost, the Authority will self-fund the project and minimize the financial impact of losing the Pennvest grant.

Chris Moughan reviewed the three major components to the revised project scope: Self-Performed LSL Identification & Public Service Line Replacements, Plumbing Contractor Performed Private Service Line Replacements, and Post-Construction Paving. The Authority's Field Services department staff are prepared to remove the targeted 100 public-side lead lines in the project area. In 2024, the team replaced 168 public-side lead lines in emergency situations, and the Authority has the equipment and expertise to perform the work. A plumbing contractor will be required to complete the private-side lead line replacements.

Ted Lyons asked for a description of the service line replacement process, with more detailed description of the technical process and the differentiation between the public and private facilities. Liesel Gross provided a diagram of the service line configuration and explained the requirements of the program. Chris Moughan reviewed the technical components of the service line replacement process. There was additional discussion regarding the excavating process. Ms. Gross explained that the technical aspects of the project are well understood and historically completed by Authority staff or qualified contractors for other projects. However, the main driver for this project is to develop all the remaining processes, documentation, and data tracking systems that will support the program moving forward. The projects are heavily focused on individual customer interactions to gain entry to complete the replacements and identify where the lead service lines are that need to be replaced.

Based on the scaled-down project scope and approach, the Authority will achieve the goals of the pilot project while eliminating approximately \$2.3 million in project costs. There was further discussion regarding funding. Ms. Gross reviewed the Board actions requested, including termination of the general construction contract due to the change in project scope and funding.

On a motion by Linda Rosenfeld, seconded by Norma Cusick, the Board approved the Capital Project Authorization Amendment: Lead Service Line Replacement Program, Cycle 1, Construction Phase in the amount of \$1,756,514.00 (8-0).

On a motion by Norma Cusick, seconded by Marc Grammes, the Board approved termination in full of the General Construction Contract with Pact One LLC in the amount of \$2,376,445.00 effective immediately and in a manner consistent with the contract, further authorizing the CEO and CFO to take any actions associated with this contract termination (8-0).

Regional Sewer Capacity & Wet-Weather Planning – Regional Act 537 Plan Preparation

Liesel Gross provided background of the project and reviewed a presentation showing updates and next steps. She noted that some of the challenges are with the complex relationships related to the ownership of the systems and the old inter-municipal agreements that are not structured to address the challenges the system faces today. The Kline's Island Sewer System (KISS) faces significant challenges related to aging infrastructure, leaking pipes and manholes, and undersized interceptors. These problems result in sanitary sewer overflows during peak wet-weather events, and regulatory oversight of new connections to the system is in place until a solution is in place. She reviewed the status of the evaluation of alternatives for the Industrial Pretreatment Plant, which requires full-scale replacement, noting that a solution has been developed to design a smaller plant for specific current industries.

Phil DePoe reviewed the specifics of the project including a brief history of the engineering work that has been completed since 2021. After reviewing the options, the KISS municipalities have agreed on an approach to expand the existing infrastructure at the Kline's Island Wastewater Treatment Plant to handle the wet-weather flows, expand the interceptors to remove bottlenecks, address pretreatment needs with industries directly, and reduce the inflow and infiltration. However, in discussion with the Pa. Department of Environmental Protection (DEP), it was determined that the actual Act 537 Plan submission will focus on the projects to be completed in the next five year.

Liesel Gross explained the cost summary for the full scope of projects expected in the next 10 years, and how that compares to the five-year plan to be submitted to DEP. She reviewed the timeline and sequence of actions that will be required to formally present the KISS Act 537 Plan to the municipalities and the public, with the goal of receiving municipal approvals by the end of August 2025. The six-month review and approval process is scheduled to begin in March. She explained that while the plan documents are being finalized, the primary remaining challenge is to develop the proposed terms of a new intermunicipal agreement. A draft "term sheet" has been prepared to provide details of the proposed new cost-sharing methodology for future operations and capital costs, and other updated agreement terms. The term sheet is currently under review by the municipalities.

Sean Ziller commented on the duration of the program, noting that staff turnover and consultant turnover will occur over the course of a lengthy program like this. He expressed interest in understanding the Authority's approach to managing knowledge sharing and succession planning to ensure the continuity of the program over time. Liesel Gross explained the mix of internal and external resources in place today, and general plans to add resources that will help expand the Authority's internal capacity to manage the program.

MONTHLY PROJECT UPDATES / INFORMATION ITEMS

Liesel Gross reviewed the January report and noted the items for the January 27 meeting. Review of the December 2024 Financial report will be moved to the February 10 agenda to allow the accounting department to complete various year-end processes. She also noted that the Main Parking Lot expansion is currently underway and is expected to be completed in April.

STAFF COMMENTS

Liesel Gross reported that the Omnibus Resolution has been updated and reviewed by the Governance Committee and will be brought before the Board at the next meeting.

Ms. Gross also reported that the Emmaus Interconnection project that was discussed at the December meeting has been removed from the project listing. She noted that after staff review, it was determined the project did not present a cost-effective or timely approach for addressing PFAS in the water supplied by the Borough of Emmaus. The Authority will pursue purchase of water filter pitchers for customers who request them in the interim period while the Borough is completing their treatment upgrade project.

Ms. Gross also reported that Upper Macungie Township has approved a contract with the Authority to maintain six of the Township's sewer pump stations. This was discussed conceptually by the Authority Board during the 2025 Budget discussions as a potential opportunity for expansion for the Authority's services to the municipalities. The agreement with the Township will be brought before the Board for approval at the next meeting.

SOLICITOR'S COMMENTS

None.

PUBLIC COMMENTS / OTHER COMMENTS

None.

BOARD MEMBER COMMENTS

None.

EXECUTIVE SESSION

None.

ADJOURNMENT

There being no further business, the Chairman adjourned the meeting at 1:41 p.m.

Jeffrey J. Morgan
Secretary

Omnibus Resolution – LCA Board Memorandum, January 2025

Prepared by Authority Solicitor, King, Spry, Herman, Freund & Faul, LLC

The LCA Board has delegated authority to the administration through a series of resolutions. According to LCA records, approximately fifty-two (52) resolutions delegating authority have been adopted since 1975. The proposed Omnibus Resolution seeks to (1) consolidate the Board's delegation of authority resolutions; (2) remedy inefficiencies created by the current piecemeal approach; and (3) introduce certain new delegated powers consistent with current needs.

The Pennsylvania Municipality Authorities Act, 53 Pa.C.S. Sec. 5601-5623, as amended (the "Act" or "MAA"), grants Municipal Authorities all powers necessary or convenient for carrying out the purposes set forth in the Act. At Section 5607(d)(7), the Act grants the LCA Board the power "to make bylaws for the management and regulation of its affairs." At Section 8 of the LCA Bylaws, it states, "[The] Board shall have the general control of the business and affairs of the Authority and shall exercise all powers that may be exercised or performed by the Authority under existing laws . . ." The Bylaws at Section 8 continue, "C. Delegation of Powers – [the Board may] delegate powers or duties of the Board or its officers in the current business of the Authority to any officer, agent or employee, or to appoint any person or persons to be the agent or agents of the Authority, with such powers (including the power to sub-delegate) and upon such terms as the Board shall see fit."

In sum, under the MAA, the Authority has the power to do all things necessary and convenient for its operation. Under the LCA Bylaws, the Board controls all the powers vested in the Authority, and the Board may delegate any of its powers or duties to LCA employees.

The form of the proposed Omnibus Resolution was adopted after review of LCA's current delegation structure, consideration of the MAA, and review of delegation of authority resolutions adopted by similarly situated authorities. Specifically, resolutions adopted by the North Penn Water Authority, the Lancaster Area Sewer Authority, and the Pittsburgh Water and Sewer Authority were referenced. The structure and scope of operations of these Authorities are closely aligned with LCA and provided an 'apples to apples' comparison.

The proposed Omnibus Resolution largely consolidates and restates the authority delegated by the Board over time. Existing resolutions and LCA records were consulted to formalize and restate the existing delegation structure. In addition, certain additions were made to build upon past practice and to update LCA's delegation practices. The sections of the proposed Resolution that are updated include:

1. Section 4(C)(iii)—(iv): The Operations Purchasing Approval Thresholds and Capital Expenditures Approval Thresholds. Generally, the approval threshold was increased to \$250,000 and the professional services threshold was increased to \$100,000. This

increase mirrors similarly situated authorities, including the Pittsburgh Water and Sewer Authority. MAA rules must be followed in parallel with the proposed thresholds.

2. Section D(ix) governing intermunicipal operational agreements was added to allow the administration to enter certain operational and other agreements not exceeding three (3) years or a total cost of \$100,000 per year. Intermunicipal water or sewer service agreements must be approved by the Board.
3. Section E(xii) delegates general authority to engage in all aspects of real property procurement or transfers for an amount less than \$50,000 per parcel. This provision allows flexibility to negotiate for and obtain easement rights and other property rights essential to Authority projects. Real property interests equal to or in excess of \$50,000 per parcel require Board approval.

On October 2, 2024, the LCA Board Governance Committee met with the administration and the Solicitor to review the proposed Omnibus Resolution. Comments were received and certain revisions were proposed to the working draft. The Committee concluded that, once the revisions were made, the Omnibus Resolution was ready for Board consideration. The requested revisions were incorporated and this matter is now ripe for Board review.

RESOLUTION No. 1-2025-1

(Duly adopted 27 January 2025)

A RESOLUTION CONFERRING APPROVAL AND SIGNATORY POWERS FOR CERTAIN CONTRACTS, AGREEMENTS, FINANCIAL TRANSACTIONS, AUTHORITY DOCUMENTS AND AUTHORITY OPERATIONS.

WHEREAS, the Lehigh County Authority (“LCA” or “Authority”) has been incorporated and established for the purpose, in part, of providing water and sewer service in the Lehigh Valley; and

WHEREAS, the Pennsylvania Municipality Authorities Act, 53 Pa.C.S. Sec. 5601-5623, as amended (the “Act” or “MAA”), grants Municipal Authorities all powers necessary or convenient for the carrying out of the purposes in the Act, including the power to make contracts of every name and nature and to execute all instruments necessary or convenient for the carrying on of its business, and to appoint agents and employees and prescribe their duties; and

WHEREAS, the Authority has adopted Bylaws for the purpose of managing and regulating its affairs, and subsequently approved an amendment to the Bylaws on August 26, 2013, which restated the Bylaws of the Authority in their entirety (the current governing Bylaws hereafter referred to as “Bylaws”); and

WHEREAS, the Bylaws state that the members of the Authority’s Board (“Board”) acting collectively shall exercise all powers that may be exercised or performed by the Authority under existing laws; and

WHEREAS, the Bylaws state that the Board may delegate any of its powers or duties to any officer, agent or employee upon such terms as the Board shall see fit, and the Board may also determine who shall be authorized on behalf of the Authority to sign bills, notes, receipts, acceptances, endorsements, checks, releases, contracts and other documents; and

WHEREAS, the Authority often requires approval and/or signatures on certain contracts, agreements, reports, and other documents which occur during the normal course of business which may or may not need formal Board approval or must be approved and/or executed prior to a meeting in order to conduct business in an orderly and timely fashion; and

WHEREAS, the Authority has adopted prior resolutions which conferred upon certain management employees the power to approve certain contracts, agreements, reports, financial transactions and other documents, and the powers to sign certain contracts, agreements and other documents on behalf of the Authority, and has adopted various revisions and amendments thereto; and

WHEREAS, the Board, pursuant to its powers, wishes to revise and update the approval and signatory power for certain contracts, agreements, financial transactions, general Authority operations and other documents; and

WHEREAS, to the extent this Resolution conflicts with any prior resolution of the Board, all prior resolutions that are inconsistent, or any part thereof, are hereby repealed; and

WHEREAS, to the extent any prior Resolution, or any part thereof, provides for any delegation of authority not expressly stated or controlled in this Resolution, said prior resolution, or any part thereof, shall remain in full force and effect.

NOW, THEREFORE, BE IT RESOLVED and by the Board of Directors of the Lehigh County Authority that:

1. The Chief Executive Officer, Chief Financial Officer, their designees, or such titles or similar functions that may be designated by the Board, are hereby authorized to both approve and sign certain contracts, agreements and other documents as listed in this Resolution, on behalf of the Authority, hereinafter called "Approvers."
2. The Chief Executive Officer, Chief Financial Officer, Accounting Supervisor, Controller, or such titles or similar functions that may be designated by the Board, are hereby authorized to both approve and sign certain financial documents, transactions, communications and other documents or transactions listed in this Resolution with certain financial institutions and banks, on behalf of the Authority, hereinafter called "Authorized Financial Transaction Persons."
3. The Solicitor, Executive Administrative Support Specialist, Human Resources Manager, Controller, or such titles or similar functions that may be designated by the Board, are hereby authorized to attest, endorse or certify any signature or action indicated or authorized by this Resolution.
4. The aforesaid Approvers are hereby authorized to approve and sign the following contracts, agreements and other documents, and to take actions necessary or convenient thereto, on behalf of the Authority:
 - A. Bond Issue Related Documents Subject to the Requirement that the Authorization of the Issuance of Bonds or Debt Requires Board Approval
 - i. Applications to rating agencies.
 - ii. Acceptance of bond insurance quotations with approval of bond counsel.
 - iii. Any offering documents including, but not limited to, the Preliminary Official Statement and Official Statement.
 - iv. Any bond or note purchase agreements and any disclosure documents or contracts including, but not limited to, continuing disclosure agreements, dissemination agent contracts and continuing disclosure postings.

- B. Insurance and Employee Related Matters Including Payroll Within Board-Approved Budgets
- i. Acquisition of commercial package insurance including automobile, umbrella, and public liability coverage.
 - ii. Acquisition or renewal of, and amendments to health insurance plans, including medical, dental, vision, and prescription drug.
 - iii. Acquisition or renewal of worker's compensation insurance.
 - iv. Acquisition or renewal of short term and long-term disability insurance.
 - v. Acquisition or renewal of life insurance.
 - vi. Acquisition or renewal of any other policies of insurance required by the Authority.
 - vii. Enroll or remove participants and manage documentation for health, dental, vision, disability, and life insurance programs.
 - viii. Wage tax reports.
 - ix. Defined Benefit and Deferred Compensation Pension Plan creation and amendment forms.
 - x. Defined Benefit and Deferred Compensation Pension Plan payments, distributions, and withdrawals.
 - xi. Any other instrument or documentation necessary to implement approved employee benefits.
 - xii. Establish job descriptions, organization and department structures, compensation structure, and other personnel systems as needed for the effective and efficient operation of the Authority.
 - xiii. Implement pay increases, performance programs, promotions and other personnel actions as required.
 - xiv. Hire employees to fill open positions in the Authority and engage in all aspects of the hiring process, including, but not limited to, identifying and interviewing candidates, coordinating with the hiring team, making hiring decisions, onboarding new hires, and analyzing the hiring process to make improvements.
 - xv. Terminate employees consistent with applicable legal requirements.

- xvi. Negotiate collective bargaining agreements, subject to Board approval, and execute various agreements with the collective bargaining unit(s) required for the resolution of employee matters.

C. General purchasing and equipment related matters

- i. Vehicle owner cards and titles to vehicles.
- ii. Tax exemption forms.
- iii. Authorization to utilize cooperative purchasing programs, including but not limited to COSTARS and health insurance consortiums, consistent with this Resolution.
- iv. The following Operations Approval Thresholds Table is adopted by the Board and includes approval thresholds for purchasing, including approval of purchase orders and agreements for new procurement and existing agreements. Purchases which exceed these thresholds shall require Board approval. The financial thresholds are established separate from the MAA bidding threshold law. The MAA rules must be followed in parallel with the established financial thresholds for approval.

Operations Purchasing Approval Thresholds
Purchase of individual items or contracts for a specific project or service less than \$250,000.
Professional services less than \$100,000.
Construction contracts less than \$250,000.
All other purchasing and contracts less than \$250,000.
Change Orders (COs): Aggregate COs less than 10% of initial contract and less than \$100,000 <u>or</u> COs less than \$50,000.

- v. The following Capital Expenditures Thresholds Table is adopted by the Board and includes approval thresholds for purchasing, including approval of purchase orders and agreements for new procurement and existing agreements. Purchases which exceed these thresholds shall require Board approval. The financial thresholds are established separate from the MAA bidding threshold law. The MAA rules must be followed in parallel with the established financial thresholds for approval.

Capital Expenditures Approval Thresholds
Upsizings and extensions less than \$250,000
Stand-alone engineering studies less than \$100,000
Construction projects less than \$250,000

For projects budgeted for more than \$250,000, all professional services less than \$100,000 in preliminary design phase only
Other capital expenses, equipment, or other capital purchases less than \$250,000
Change Orders (COs): Aggregate COs less than 10% of initial contract and less than \$100,000 <u>or</u> COs less than \$50,000.

All COs approved by the Chief Executive Officer shall be reported to the Board via monthly Board meeting reports.

- vi. Authorization to make or authorize others to make an emergency procurement when there exists a threat to public health, welfare or safety, or circumstances outside the control of the Authority create an urgency of need which does not permit the delay involved in using more formal competitive methods. Any emergency approval less than \$50,000 does not require retroactive Board review or ratification. Any emergency approval greater than or equal to \$50,000 shall require retroactive Board review and ratification.

D. Miscellaneous operational items

- i. Authorization letters for auditor.
- ii. Local, state, and federal surveys and reports.
- iii. Authorization to act as the delegate to vote on matters of interest pursuant to Authority's membership in the worker's compensation trust and health insurance cooperative.
- iv. Join, participate and act as voting members in any and all professional associations, mutual aid networks, cooperative purchasing organizations, trusts and organizations related to water and wastewater.
- v. Prepare, submit, sign and approve permits and any required documentation for any regulatory agency, including, but not limited to DEP, EPA and PennDOT.
- vi. DEP, EPA and any other regulatory agency reports: Reports required under the treatment plant NDPES Permit, including, but not limited to, the Monthly Discharge Monitoring Report, Pretreatment Annual Report, 503 Biosolids Report (letter on file with DEP authorizing signatures), and EPA Industrial Pretreatment Annual Report.
- vii. DEP Laboratory Accreditation applications.

- viii. Any and all matters additional or incidental to ensure the regulatory compliance of the Authority with local, state and federal agencies.
- ix. Inter-municipal operational agreements, including, but not limited to, service contracts, shared services agreements, mutual aid agreements, and joint purchasing contracts not exceeding three (3) years or a total cost of \$100,000 per year. Intermunicipal Water (or Sewer) Service Agreements must be approved by the Board.
- x. Settle claims and lawsuits up to \$50,000, upon consultation with the Solicitor or other legal review provided by an approved third party, and with notification to the Board within 30 days of settlement.

E. Real estate and contract matters

- i. Highway Occupancy Permit applications.
- ii. Professional Services Contracts consistent with this Resolution.
- iii. Construction contracts and related agreements consistent with this Resolution.
- iv. Notice of award of construction contracts and any additional required Notices.
- v. Contract change orders and fee amendments consistent with this Resolution.
- vi. Agreements with developers, grantors or grantees of any kind granting or relinquishing property interests of any kind to or from the Authority, with said Agreements entered into consistent with Authority rules and regulations and policies, including security agreements.
- vii. Acceptance of dedication of property or facilities to the Authority upon developer's satisfaction of all maintenance responsibilities and posting of appropriate bonds.
- viii. Easement agreements and release or relinquishment of easements.
- ix. Negotiating and entering escrow or other acceptable security agreements as authorized by LCA Rules, Regulations or policies.
- x. Requisitions for payment under escrow or related agreements.
- xi. Contracts for the lease of Authority-owned property and land.
- xii. General authority to negotiate, obtain appraisals, settle, make payment for, and perform any other actions essential for the procurement or transfer of real property interests of any nature for LCA projects, both of an operational and capital nature, for any transaction less than \$50,000 per parcel. Any real property procurements or transfers which require payment or receipt of

consideration equal to or in excess of \$50,000 per parcel shall require Board approval by a majority of the Board then in office.

- xiii. File with the appropriate County, Commonwealth and Federal agencies, departments and offices any documents necessary to procure and perfect any real property interests, with the Solicitor having authority to so file.

F. Policies

- i. Develop and execute policies required to properly implement statutory requirements which have a de minimis financial impact to LCA or its customers.
 - ii. Develop and execute other policies and procedures either necessary or convenient for effective and efficient Authority operation which have a de minimis financial impact on LCA or its customers, including, but not limited to, employee policies, security and technology policies and bill collection procedures.
5. The aforesaid Authorized Financial Transaction Persons are hereby authorized to approve and sign the following financial documents, transactions, communications and other documents or transactions, and to take actions necessary or convenient thereto, on behalf of the Authority:
- A. The Chief Executive Officer is authorized and empowered as the primary contact for all accounts and transactions with any financial institution or bank and the Chief Executive Officer may designate specific persons to perform transactions, including signing signature cards and any other transaction deemed necessary or convenient.
 - B. The Authorized Financial Transaction Persons are authorized and empowered to perform any one or more of the following actions for and on behalf of the Authority and on such terms and conditions as such Authorized Financial Transaction Persons may deem advisable in his/her sole discretion, all in accordance with Authority resolutions, actions, policies, guidelines, statements, procedures, etc., with signatures required by two of the Authorized Financial Transaction Persons:
 - i. Open and maintain any safe deposit boxes, lockboxes and escrow, savings, checking, depository, or other accounts with a financial institution, and transfer of same to other financial institutions.
 - ii. Withdraw, transfer or deposit any funds or draw, sign and deliver in the name of the Authority any check or draft against funds of the Authority accounts in such boxes or accounts.
 - iii. Implement additional depository and funds transfer services (including, but not limited to, facsimile signature authorizations, wire transfer agreements, night depository agreements, automated clearinghouse agreements, and payroll deposit programs).

- iv. Appoint the Bank as attorney-in-fact for any purpose (including, but not limited to, endorsing any checks, drafts, notes or other instruments payable to the Authority).
- v. Execute any document (including, but not limited to, facsimile signature, authorization agreements, wire transfer agreements, automated clearinghouse agreements, powers of attorney, and waivers) and take any action on behalf of the Authority.
- vi. Designate from time to time the person or persons to receive from the Bank any and all canceled checks and/or statements of account.
- vii. Purchase, hold, finance, pledge, exercise, convert, tender, redeem, exchange, transfer, assign, sell, enter into, write, issue, terminate, amend and otherwise deal and trade, singly or in combination, in the manner and with the types of investments set forth in the Authority's then-current Financial Guideline on Cash & Investment Management.
- viii. Give to and receive from the financial institution oral, written or electronic instructions, confirmations, notices or demands with respect to any account, activity or transaction.
- ix. Bind the Authority to enter into and perform any transaction or agreement, amendment or modification thereof, relating to any account, activity or transaction involving the Authority.
- x. Pay in cash or by check or by credit or debit card or draft drawn upon the funds of the Authority any sums required to be paid in connection with any account, activity or transaction.
- xi. Execute or otherwise assent to or enter into on behalf of the Authority all agreements, confirmations, releases, receipts, acknowledgements, assignments, powers of attorney or other documents in connection with any account, activity or transaction.
- xii. Establish and maintain an asset management account with debit card, check writing and margin privileges, from which account funds are directly spent.
- xiii. Exercise power to open and keep any account or special account with a financial institution as from time to time may be required, or shall be required by resolution or so designated by the Board, and, to the extent such accounts are not insured, require such security from any financial institution as may be directed by the Board or required by law.
- xiv. Establish and/or transfer employee flexible spending accounts and approving and executing all documents related thereto.
- xv. Where appropriate, authorize transfers to cover budget overruns.

- xvi. Authorize budget amendments required for specific capital project budget or line item exceedances.
 - xvii. Transfer budgeted amounts between line items within the budget; however, revisions that alter the total expenses or revenues of any budget shall be approved by the Board.
 - xviii. Establish and maintain petty cash fund with checks for routine cash disbursements.
- C. The Authorized Financial Transaction Persons are authorized and empowered to perform any one or more of the following actions for and on behalf of the Authority and on such terms and conditions as such Authorized Financial Transaction Persons may deem advisable in his/her sole discretion, all in accordance with Authority resolutions, actions, policies, guidelines, statements, procedures, etc., with a signature required by one of the Authorized Financial Transaction Persons:
- i. Assign, negotiate, endorse and deposit in and to such boxes and accounts any checks, drafts, notes, and other instruments and funds payable to or belonging to the Authority.
 - ii. Endorse to the Bank any checks, drafts, notes, or other instruments payable to the Authority.
 - iii. Order the transfer of record of any securities, funds or other property to any name and to accept delivery of any securities, funds or other property or direct the sale or exercise of any rights with respect to any securities or other property.
- D. The endorsement of items for deposit may be by the written or stamped endorsement of the Authority without designation of the person making endorsement.
- E. All books, records and accounts of the Authority shall be kept in the custody and possession of the following designees: CEO, CFO and their designees.
- F. The Executive Administrative Support Specialist, Human Resource Manager and Controller of the Authority, or such titles or similar functions that may be designated by the Board, are authorized to attest to the signatures of any of the Authorized Financial Transaction Persons.
6. For all Board authorized actions, the CEO and CFO shall be authorized signatories.
7. The Secretary, Assistant Secretary or Solicitor of the Authority is authorized from time to time to certify the adoption of the foregoing Resolution to any interested party, the continuing effect of this Resolution, and the incumbency of the various parties authorized to exercise the rights in this Resolution.

- NOW THEREFORE, BE IT RESOLVED that the Lehigh County Authority Board hereby approves Resolution No. 1-2025-1.**

Tally of Votes: Yeas _____ Nays _____

I, Kevin C. Reid, of the law firm of King, Spry, Herman, Freund & Faul, LLC, Solicitor to the Lehigh County Authority, do hereby certify that the foregoing is a true, correct and complete copy of a resolution which was duly adopted by the Authority Board at a public meeting of the Authority Board held on 27 January 2025, after notice thereof had been duly given as required by law, at which meeting a quorum was present and voting and which resolution No. 1-2025-1 is now in full force and effect on the date of this certification.

Attest:

10

LCA Strategic Plan (2022-2027)

2024 Semi-Annual Progress Report: January 2025

Overview

Lehigh County Authority (LCA) adopted an updated Strategic Plan in December 2021, which included a refreshed look at our Mission, Vision, Values and Priorities. An ambitious list of strategies, activities, and tasks were developed to support the achievement of LCA's plan over the next five years. This progress report was developed to help our employees and Board of Directors keep a sharp focus on the plan and, specifically, the work we plan to achieve in the current year. While not all inclusive, milestones outlined in this report describe the breadth of activities LCA focused on in 2024. A dashboard of key performance indicators is included on the last page of this report. Any questions about this report should be directed to LCA's Chief Executive Officer, Liesel Gross.

KISS Act 537 Plan

2024 Target:

Complete development of Kline's Island Sewer System (KISS) Act 537 Plan in a form that can be issued to KISS municipalities for adoption in 2025.

2024 Progress (1/1/2025):

- ☒ Final selection of technical solutions is nearing completion.
- ☒ Deep stakeholder engagement on Pretreatment Plant (PTP) future is nearing completion.
- ☒ Intermunicipal cost-sharing agreements under review, with legal support in place.
- ☒ Significant work ongoing to coordinate technical reviews and details with each KISS municipality.
- ☒ Significant work required on intermunicipal agreements, cost-sharing, and new programs such as for sewage billing meters, regional I&I approaches, and high-strength surcharge program.
- ☒ Conduct public open house meetings to share plan details including future rate projections. Incorporate public input into final plan document; prepare to kick-off municipal approval process.

2024 Work Outstanding:

- ☐ Finalize all technical inputs to the Act 537 Plan, including PTP final solution and municipal inputs for inflow and infiltration (I&I) plans, maps, etc.
- ☐ Write the plan and complete internal reviews.

Tyler EERP Implementation

2024 Target:

Full re-implementation of Tyler EERP system with updated financial structure and additional modules to support cross-organizational process improvement. Preparation for a January 1, 2024 "go live" date.

2024 Progress (1/1/2025):

- ☒ Updated financial structure (General Ledger) is fully redesigned and implemented.
- ☒ Deep review of previously unused Human Capital Management (HCM) module is under way.
- ☒ Initial phases of financial process improvements is in progress.

2024 Work Outstanding:

- ☐ Finalized implementation of HCM; integration with Payroll and Employee Self-Service modules.
- ☐ Full implementation of financial process improvements and new modules: Project Accounting, Inventory, Purchasing, etc.
- ☐ Migration of existing utility billing data, and implementation of Customer Access module.
- ☐ Employee training and process documentation.

Lead Program

2024 Target:

Substantial completion of Cycle 1 Lead Service Line (LSL) replacement program with grant funds secured for Cycle 2. Achieve October 2024 regulatory deadlines for LSL inventory submission and public communication.

2024 Progress (1/1/2025):

- ☒ Board adoption of LSL Replacement Policy and customer agreement for LSL replacements.
- ☒ Cycle 1 bid documents being finalized for publication; Pennvest grant/loan closing preparations.
- ☒ Cycle 2 scope nearing finalization, preparing for Pennvest grant application by 7/31/2024.
- ☒ Ongoing collaboration with City of Allentown on many project details related to cost-recovery, coordination with water main replacement work, paving requirements, plumbing code requirements, and more.
- ☒ Draft public interface developed for display of LSL location records.
- ☒ Prepare LSL inventory in format acceptable to Pa. Department of Environmental Protection.
- ☒ Implement advanced public outreach strategies to increase engagement in Cycle 2 project and achieve regulatory requirements for public notification.

2024 Work Outstanding:

- ☐ Hire Lead Program Manager and Lead Replacement Project Manager.
- ☐ Begin construction phase of Cycle 1 and design phase of Cycle 2 projects.
- ☐ Finalize program details with City of Allentown to support future phases of LSL replacement.

Asset Management

2024 Target:

Complete facility specific Asset Management Plans (AMPs) for at least two critical facilities using new standardized risk scoring system. Develop internal staff capacity for continued implementation of the Strategy Asset Management Plan roadmap.

2024 Progress (1/1/2025):

- ☒ Facilities selected for 2024 AMPs: Kline's Island Wastewater Treatment Plant and Lynn Township Wastewater Treatment Plant.
- ☒ External consultant on board to develop the Kline's Island AMP, to ensure compliance with Allentown Lease Agreement requirements.
- ☒ Internal staff working collaboratively on Lynn Township AMP.
- ☒ Internal staff review of updates Computerized Maintenance Management System (CMMS) options to better manage vertical assets.
- ☒ Hire Asset Management Engineer.

- ☑ Complete two facility-specific AMPs already under way; determine if additional AMPs can be completed in 2024.
- ☑ Decide on future CMMS implementation: enhance current CityWorks process, or new system.

2024 Work Outstanding:

- ☐ Complete implementation of ProCore for enhancements to project management processes; integrate with Tyler EERP implementation of Project Accounting module.

Employee Engagement & Safety

2024 Target:

Enhance the capture of safety data from daily operations to improve metrics and responses to increase employee safety, safety awareness, and compliance. Develop employee and workforce engagement programs related to enhanced onboarding program and a new internship program.

2024 Progress (1/1/2025):

- ☑ New Safety Manager and Human Resource Manager hired; onboarding nearing completion.
- ☑ Employee Health & Safety (EHS) Steering Committee working with new Safety Manager on full review of operational and safety protocols.
- ☑ WaterWORKS internship program developed; five interns on board for summer 2024.
- ☑ Fill vacant Human Resources positions.
- ☑ Evaluate WaterWORKS internship program and develop enhancements for 2025.
- ☑ Evaluate and recommend enhancements to current Excel-based safety incident management system to support increased visibility of safety metrics and more consistent employee reporting.

2024 Work Outstanding:

All 2024 targets achieved.

Staffing & Building Plan

2024 Target:

Develop future staffing plan to address rapidly expanding project workload. Complete review of workspace requirements for expanded staffing.

2024 Progress (1/1/2025):

- ☑ Utility benchmarking survey completed to identify best practices and areas of opportunity for LCA related to staffing adequacy for core utility functions.
- ☑ Initial 2024 staff additions reviewed and approved by LCA Board.
- ☑ Initiate office building “master plan” review to identify rehabilitation and upgrade needs.
- ☑ Nearing complete digitization of engineering plans; files moved off-site to create work space.
- ☑ Initial concepts developed for Main Office expansion and lead program office consolidation.
- ☑ Preliminary design under way for Capital Works area to create additional work spaces.
- ☑ Review potential purchase of property adjacent to Main Office.
- ☑ Consolidate various planning efforts into single plan for future employee work space.

2024 Work Outstanding:

- ☐ Develop staffing plans for 2025 and beyond; include succession planning component.

Other High-Priority Goals

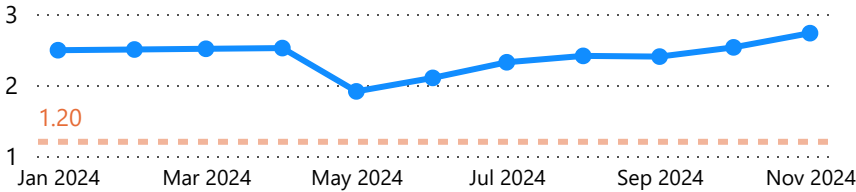
Discussion:

There are many additional high-priority goals that LCA seeks to achieve in 2024. Some major items are listed below as a reminder to staff and the Board of their importance. Progress on these goals will be ongoing, and may be raised or lowered on the priority list as new information is developed.

- ☒ Complete Sand Spring Wastewater Treatment Plant upgrade to support regulatory compliance.
- ☒ Initiate design phase for PFAS treatment for Allentown and Buss Acres water systems.
- ☐ Adopt Resolution updating and consolidating delegated duties and authorization thresholds.
- ☐ Complete review and update of Emergency Response and Risk & Resiliency plans.
- ☐ Pursue additional grant funding for high-priority projects.

Financial

2024 Debt Service Coverage Ratio - Total LCA



Debt Service Coverage Ratio - Current

City Division	Suburban Wastewater	Suburban Water
2.64	5.39	2.16

Unrestricted Days Cash On Hand

City Division	Suburban Wastewater	Suburban Water
273	467	317

* Target of 180 days.

Customer Care

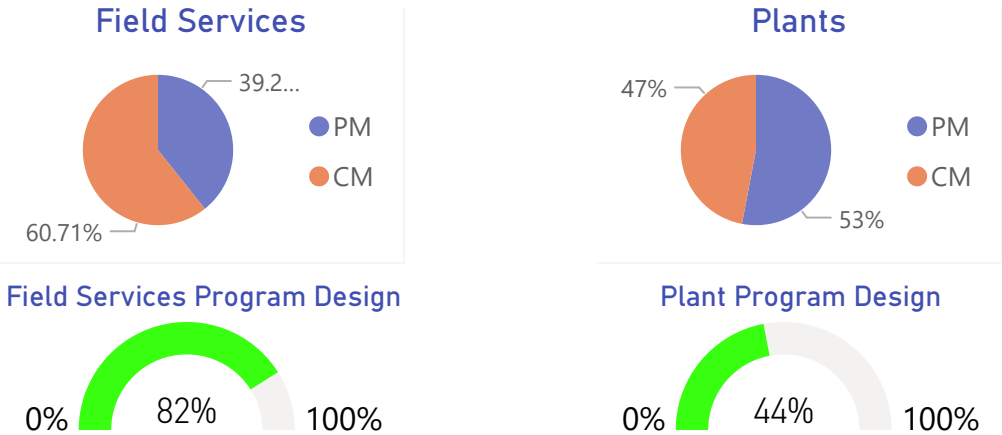
DEVELOPING
METRIC

Capital Program

DEVELOPING
METRIC

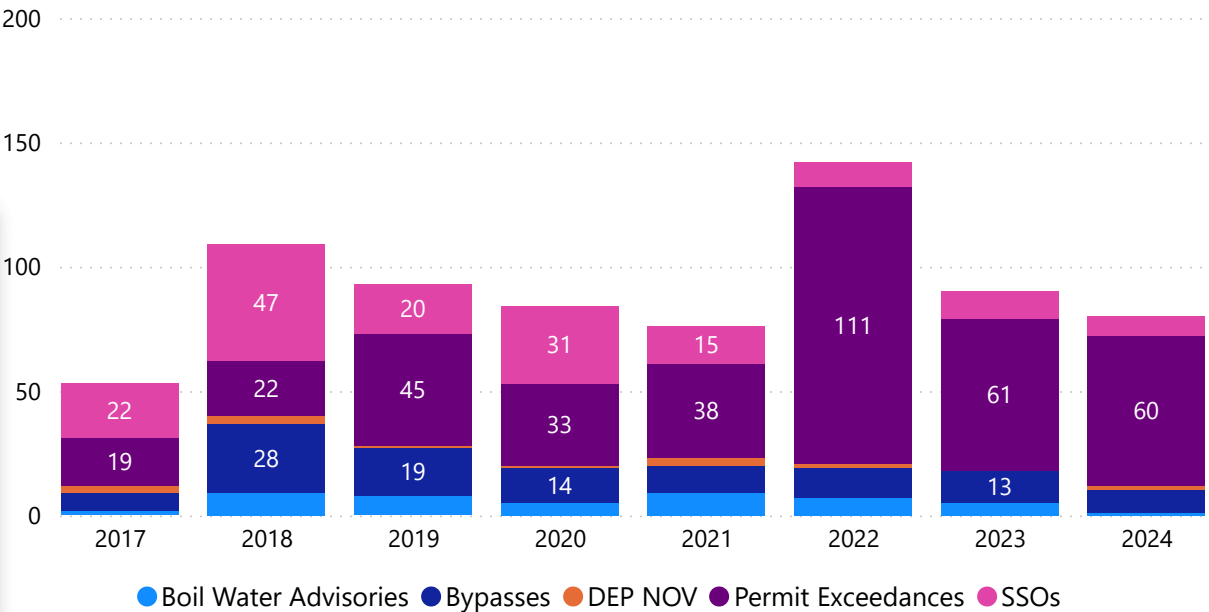
Asset Management

2024 Corrective Maintenance vs. Preventative Maintenance Hours



*Metric to show 2023 progress on preventative maintenance program redesign and implementation

Environmental Compliance



Safety
Days No
Vehicle Accident

155

Days No Lost
Time

436

Of Recordable
Injuries YTD

2

Employees

Total Employees

171

Average Age

45.1

Average Yrs of Service

9.8

Total Vacancies

20

MEMORANDUM

Date: January 27, 2025

To: LCA Board of Directors
From: Amy Kunkel, Chuck Volk
Subject: Suburban Division – NBMA / North Whitehall Division Water System Interconnection – Design Phase

MOTIONS / APPROVALS REQUESTED:

No.	Item	Amount
1	Capital Project Authorization – Design Phase – NBMA / North Whitehall Division Water System Interconnection	\$340,600
2	Professional Services Authorization – Gannett Fleming, Inc. – Design & Bid Phases (1), (2)	\$240,600

(1) *Included in the Capital Project Authorization.*

(2) *Does not include Construction phase related engineering services.*

PROJECT OVERVIEW:

Lehigh County Authority (LCA) provides water service in the North Whitehall Division (NWD) to approximately 2,800 residents through 986 service connections. Water is supplied to the system through an interconnection with Northampton Borough Municipal Authority (NBMA) via a single pipeline that is approximately one mile long. Up until 2021, water purchased from NBMA was supplemented with water from five well sources. These wells are no longer operational and have been disconnected due to water quality, specifically high manganese, and low productivity. In January of 2024, Gannett Fleming completed a Source Water Assessment of the Central Lehigh and North Whitehall Divisions. The Assessment looked at enhancing the reliability of service and concluded that a second interconnection with NBMA would be the most feasible option to provide redundancy of supply.

The second interconnection consists of approximately 1.5 miles of 12-inch ductile iron water main and an interconnection vault to connect the two systems. Approximately one mile of water main would be within the NBMA system and 0.5 miles would be within LCA's North Whitehall Division. Per the current agreement between NBMA and LCA, NBMA can supply up to 1 million gallons per day (MGD) to North Whitehall. NBMA does have excess capacity and would be amenable to increasing capacity to accommodate future demand if needed. In addition to providing a redundant supply to North Whitehall, the second interconnection will enhance flow capacity, including fire flows, within the system.

FUNDING:

This project will be funded by the LCA Suburban Division. Prior to entering the bid phase of this project, LCA will review opportunities for grant funding for this project via the Pennsylvania Emergency Management Agency's Building Resilient Infrastructure & Communities (BRIC) grant program.

BUDGET AMENDMENT

Not required for this approval.

PROJECT STATUS:

Pending Board approval of the Design Phase.

THIS APPROVAL – DESIGN PHASE

LCA recommends retaining the services of Gannett Fleming, Inc. to provide design and bid phase related services. Approval for construction related engineering services will be requested with the Construction Phase authorization. The following table summarizes the professional services to be performed:

Professional Services ⁽¹⁾
1. Water system modeling to verify main size and supply and fire flow improvements.
2. Planning services with LCA and NBMA for general agreement on design concept.
3. Simultaneous compliance analysis as per regulatory requirements.
4. Complete state and local permit applications and administer submissions.
5. Prepare route survey, waterline and meter vault design and associated environmental assessments.
6. Prepare construction bid documents (plans and specifications).
7. Provide bid phase services.

1. For Design and Bid Phase.

CONSULTANT PROJECT BACKGROUND:

Gannett Fleming has served as design engineer for both the Allentown and Suburban Divisions' water main replacement programs as well as numerous other water projects. They prepared the Source Water Assessment and have extensive knowledge of the North Whitehall Division system. Gannett Fleming and LCA have established an excellent partnership working together on projects over the last 10 years. They are also the longtime engineer for NBMA which will greatly assist with coordination and cooperation between the two Authorities during this project.

Based upon our review of all aspects of the design proposal submitted, we recommend award of the Design Phase services to Gannett Fleming, Inc. Their proposal is on scope and represents what LCA believes is the best overall value for the Authority.

PROJECT SCHEDULE:

At this juncture the construction portion of this project is anticipated to be bid in January of 2026 with completion of construction by the first quarter of 2027. As noted above, prior to releasing the bids for this project, staff will review the potential for grant funding through the BRIC program.

FUTURE AUTHORIZATIONS- CONSTRUCTION PHASE:

After the construction contract(s) bids are received, a Capital Project Authorization (CPA) Amendment will be presented to the Board for approval of the Construction Phase; and will include construction contract award(s), professional services amendment for construction related services, staff costs and other related components.

CAPITAL PROJECT AUTHORIZATION

PROJECT NO.:	SD-W-25-1	BUDGET FUND:	Suburban Div\Water\Capital
PROJECT TITLE:	NBMA/North Whitehall Second Interconnection	PROJECT TYPE:	<input checked="" type="checkbox"/> Construction <input type="checkbox"/> Engineering Study <input type="checkbox"/> Equipment Purchase <input type="checkbox"/> Amendment
THIS AUTHORIZATION:	\$340,600		
TO DATE (W/ ABOVE)	\$340,600		

DESCRIPTION AND BENEFITS:

This Project is for the design of the Northampton Borough Municipal Authority/North Whitehall Second Interconnection. The project is intended to provide a redundant source of supply to the North Whitehall Division and improve flow capacities and fire flow. The design includes construction of a meter pit including site work and related mechanical and electrical work, and the construction of a 12" DIP water main. Gannett Fleming will be used for the engineering consulting services. The project is anticipated to be bid ready by January of 2026.

Reference the attached Memorandum for additional information.

Previous Authorizations	
None	

REQUESTED THIS AUTHORIZATION	
Design Phase	
Staff	\$30,000
Engineering Consultant – Gannett Fleming, Inc.	\$240,600
Land Acquisition	\$10,000
Legal	\$20,000
Contingency	\$40,000
Total This Authorization	\$340,600

Future Authorization	
Construction Phase	\$2,600,000

Total Estimated Project	\$2,940,600
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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

PROFESSIONAL SERVICES AUTHORIZATION

Design Phase

Professional: Gannett Fleming, Inc.
PO Box 67100
Harrisburg, PA 17106-7100

Date: January 27, 2025

Requested By: Amy Kunkel

Approvals

Department Head: _____

Chief Executive

Officer: _____

Suburban Division- NBMA/North Whitehall Second Interconnection

Previous Authorizations- None

This Authorization – Design Phase: \$240,600.00

Gannett Fleming, Inc will provide design engineering related services for the aforementioned project that includes the following tasks:

Professional Services ⁽¹⁾
1. Water system modeling to verify main size and supply and fire flow improvements.
2. Planning services with LCA and NBMA for general agreement on design concept.
3. Simultaneous compliance analysis as per regulatory requirements.
4. Complete state and local permit applications and administer submissions.
5. Prepare route survey, waterline and meter vault design and associated environmental assessments.
6. Prepare construction bid documents (plans and specifications).
7. Provide bid phase services.

1. For Design and Bid Phase.

Cost Estimate (not to be exceeded without further authorization):

\$ 240,600.00

Time Table and Completion Deadline: As required to meet design timeline requirements

(For Authority Use Only)

Authorization Completion:

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

MEMORANDUM

Date: January 21, 2025

To: LCA Board of Directors
Liesel Gross, CEO

From: Albert Capuzzi, Director of Engineering and Asset Management
Stephen Boone, Asset Management Engineer

Subject: Allentown Division – Sanitary Sewer Evaluation Survey (SSES) – Trout Creek and Eastside Basins, Programmatic Support

MOTIONS / APPROVALS REQUESTED:

No.	Item	Amount
1	Capital Project Authorization: Allentown Division I&I Program - Programmatic Support, Trout Creek & Eastside Basins	\$3,141,000
1A*	Professional Services Authorization: Arcadis, Inc. – SSES – Trout Creek & Eastside Basins, Programmatic Support	\$2,641,000

*Included in the Capital Project Authorization

AUTHORIZATION OVERVIEW:

As part of the development of a regional Act 537 Plan for the Kline's Island Sewer System (KISS), Lehigh County Authority (LCA) is leading the effort to reduce inflow and infiltration (I&I) in the City of Allentown (City) sewer collection system. By taking a comprehensive approach to identifying specific sources of I&I and monitoring the success of projects designed to remove I&I, LCA hopes to develop standards that will be acceptable to the Pa. Department of Environmental Protection that may be extended to other KISS municipalities. The intent is for the program to pinpoint the specific areas in the City's Trout Creek (359,530 linear feet of pipe) and Eastside (254,664 linear feet of pipe) sewer basins where private and public side rehabilitation projects (e.g., CIPP, grout, laterals, removal of illicit private side connections, etc.) are needed to reduce I&I. Recommended early action projects will focus on the public side. Post-rehabilitation monitoring will allow for an understanding of the effectiveness of the solutions and a clearer quantification of private side vs public side I&I contributions. Should any early action projects include private side work, it will be limited to clipped cleanouts, connected downspouts and laterals up to the right of way (~15 feet). These projects are also called source reduction projects (SRPs) within the Act 537 Plan.

One primary goal is to understand and monitor I&I relative to the metric outlined in EPA guidance documents for I&I, which is 120 gallons per capita per day during dry weather and high groundwater conditions, and 275 gallons per capita per day during wet-weather events. The Pa. Department of Environmental Protection (DEP) has expressed interest in seeing the KISS municipalities use this metric as a target for the determination of a cost-effective I&I program.

Another important goal for the region is to identify and complete projects that reduce baseline infiltration and rainfall derived I&I, which will have the positive effect of recapturing system capacity that is being utilized today by the current levels of infiltration. This Sanitary Sewer Evaluation Survey (SSES) program will enable an effective performance assessment of the projects after completion, including quantification of leakage removed, which will be a key component of the future DEP connection management plan that will be described in the KISS Act 537 Plan that is nearing completion.

In sum, LCA hopes to create a defensible, successful I&I reduction program with cost-effective, data-confirmed reductions. In discussions with DEP over the past four years, DEP has expressed a desire to see data submissions that prove the effectiveness of I&I rehabilitation efforts to validate the region's progress. The intent of this initial project is to develop an approach and lessons learned that will inform how best to perform SSES work in remaining basins in the City system. This information will be shared with the 14 other KISS municipalities to support further discussions of I&I program administration for the entire KISS region.

FINANCIAL:

This project will be funded by the LCA Allentown Division, has received conceptual approval from the City, and is considered a Major Capital Improvement project. Therefore, costs will be recovered in Capital Cost Recovery Charges (CCRC). Additionally, LCA and the City continue to collaborate on grant applications which may be beneficial in reducing the rate impact of these projects.

THIS APPROVAL:

Lehigh County Authority (LCA) intends to retain the services of Arcadis to provide these services. These services include, but are not limited to, the following:

Professional Services	
•	Task 1 – Communications; Data Collection and Management Plan, Public Notifications, Scheduling, QA/QC Plan
•	Task 2 – SSES; Pre- and Post- Rehab Flow Monitoring, Flow Depth Screening, CCTV, Smoke/Dye Testing
•	Task 3 – Analysis; Conditions Assessment, Problem ID, Early Action Projects and Effectiveness Assessments
•	Task 4 – Programmatic Efforts; Establish SSES Standards, SOPs

Much of the work for this effort resides in Task 2 – SSES. For reference and a more detailed description of SSES work, the successful firm is expected to perform the following Task 2 – SSES items:

2A. Install flow meters every 40,000 feet and perform six months pre-rehabilitation and 6 months post-rehabilitation plus four control basin meters for 20 total. Continuous monitoring at key outlet points for each basin will be performed.

2B. Install 6 rain gauges and use MRMS Radar Rainfall Dats to supplement the gage data.

2C. Install and maintain level sensors and redeploy/relocate as needed to capture three significant events (>0.5 inches of rain). This effort will allow for the investigation to cascade from larger problem areas to smaller problem areas, with the identification of larger areas of I&I through the initial flow metering and level monitoring. Then redeployment occurs and areas are further refined / pinpointed.

2D. Provide flow isolation for 50% of basins at maximum 1,000 feet segments during high groundwater season to further narrow the location of significant sources of I&I. Provide photos of weir readings.

2E. Conduct CCTV, smoke testing, and dye testing, the location and extent of which will be based on the results of the flow and level monitoring. CCTV will allow for the identification of structural integrity, infiltration, location of laterals, connection integrity. Smoke Testing will be performed at a maximum 400 feet spacing. A public relations campaign before and during smoke testing operations will be conducted to explain work to customers, fire

officials, etc. Dye testing will be performed to detect any public sector cross-connections with storm drainage systems.

CONSULTANT SELECTION PROCESS:

A Request for Proposals (RFP) was sent to four engineering consulting firms – AECOM, Arcadis, RJN, and Stantec. All firms responded with a proposal by the 12/18/2024 due date. Proposers were asked to provide a scope and fee that aligned with the tasks set forth in the RFP (base), as well as an alternative scope and fee. The alternatives were reviewed to understand innovative approaches that were proposed by each firm, from a qualitative perspective, and to understand future cost savings that may be realized as the project progresses. The base RFP scope and corresponding fees, however, were used as the basis of comparison for consultant selection. Additionally, firms were asked to provide pricing for each basin (Trout Creek Basin and Eastside Basin) separately. Stantec did not provide a proposal based on the base RFP scope and could therefore not be compared against the other proposers. A summary comparison of the fees is provided below:

	AECOM	Arcadis	RJN
Trout Creek Basin (if performed separately)	\$1,708,232	\$1,976,000	\$2,040,753
Eastside Basin (if performed separately)	\$1,285,585	\$1,368,000	\$1,612,828
Total Project (both basins combined)	\$2,733,567	\$3,040,000	\$3,266,690

A thorough review of each responding firm’s proposal was conducted independently by the four lead LCA staff members for this project. A standardized scoring matrix was utilized for individual scoring and ranking. Subsequent to the independent and individual scoring, two group reviews were held by the lead LCA staff which determined the top three firms for interviewing. Based on interviews conducted on January 9, 2025, AECOM and Arcadis were selected as the top two firms for this work. During the final review, it was discovered that AECOM and Arcadis assumed different total lengths of CCTV inspections, had different assumptions for traffic control, and proposed different deployment of post-rehabilitation monitoring devices. LCA therefore prepared a standardized cost comparison spreadsheet to eliminate the discrepancies, which both AECOM and Arcadis completed. With the assumptions now uniform between both firms, the updated pricing is as follows:

	AECOM	Arcadis
Trout Creek Basin (if performed separately)	\$1,708,232	\$1,716,650
Eastside Basin (if performed separately)	\$1,285,585	\$1,188,450
Total Project (both basins combined)	\$2,733,567	\$2,641,000

Based on reviews of the consultant qualifications, experience, technical approach, and schedule, and the final cost to deliver the services, it was determined to select Arcadis to perform the work. In addition to serving as LCA’s engineering consultant for annual ongoing sewer program support services, Arcadis has worked with the City since the 2009 Administrative Order. They are also a critical Act 537 Partner and are developing crucial elements related to the Plan’s development. Recent work performed since the commencement of the mandated Act 537 planning include:

- Sewer Billing Meter (SBM) investigations
- 2021 Flow Characterization Study
- 2021 Rain Derived Inflow and Infiltration (RDII) analysis
- 2021 KISS Model Development
- 2022 Nighttime Weiring investigations
- 2022 Capacity Problem Definition

- 2022 Preliminary Screening of Alternatives (PSOA)
- 2023 City of Allentown Interceptor Inspections

SCHEDULE:

SSES work will commence immediately upon approval by the LCA Board and issuance of notice to proceed. A critical target date of October 2025 is identified for the design packages of the early action projects. Upon completion of the early action rehabilitation projects, post-rehab monitoring will take place throughout 2026. Note that the success of the pre-rehab and post-rehab monitoring is dependent on the occurrence of appropriate wet-weather events during the monitoring period, and the schedule could be subject to change.

FUTURE AUTHORIZATIONS:

To be determined.

Item	Description	Units	Combined	Eastside	Trout Creek
1	Consultant Total Labor Revenue - Fully Burdened	\$	\$ 1,002,204	\$ 450,992	\$ 651,433
2	Consultant Expenses not including subs	\$	\$ 141,900	\$ 63,855	\$ 92,235
3	Consultant Labor Hours - total	#	6,860	3,087	4,459
4	Flow Monitoring Subcontract - Contract Value	\$	\$ 326,150	\$ 146,768	\$ 211,998
5	Number of Flow Monitors	#	20	10	10
6	Duration of Flow Monitoring (total, pre and post)	months	12		
7	Level Sensors SubContract Value	\$	\$ 417,584	\$ 187,913	\$ 271,429
8	Level Sensor Equipment Only (EO) or Subcontract for Equipment and installation, maintenance and relocation (S)	EO/S	EO		
9	Name of Firm installing, maintaing, relocating level sensors	N/A	Arcadis		
10	Flow Isolation Subcontract	\$	\$ -	\$ -	\$ -
11	Flow Isolation	Feet	307,097	138,194	199,613
12	CCTV Subcontract Value (includes pre-cleaning)	\$	\$ 591,162	\$ 266,023	\$ 384,255
13	CCTV Length of Pipe	Feet	153,549	63,666	89,883
14	Assumed CCTV in High Groundwater Condition (Y/N)	Y/N	Y		
15	Smoke Testing Subcontract Value (\$)	\$	\$ -	\$ -	\$ -
16	Smoke Testing Length of Pipe	Feet	460,646	207,290	299,420
17	Traffic Control Subcontract Value	\$	\$ 62,000	\$ 27,900	\$ 40,300
18	Traffic Control Assumed Number of Days	#	ALL		
19	Dye Testing Allowance	\$	\$ 100,000	\$ 45,000	\$ 65,000

Total	\$ 2,641,000	\$ 1,188,450	\$ 1,716,650
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CAPITAL PROJECT AUTHORIZATION

PROJECT NO.:	AD-S-25	BUDGET FUND:	Allentown Div\Wastewater\Capital
PROJECT TITLE:	Sanitary Sewer Evaluation Survey (SSES) – Trout Creek and Eastside Basins, Programmatic Support	PROJECT TYPE:	<input type="checkbox"/> Construction <input checked="" type="checkbox"/> Engineering Study <input type="checkbox"/> Equipment Purchase <input type="checkbox"/> Amendment
THIS AUTHORIZATION:	\$3,141,000		
TO DATE (W/ ABOVE)	\$3,141,000		

DESCRIPTION AND BENEFITS:

As part of the development of a regional Act 537 Plan for the Kline's Island Sewer System (KISS), Lehigh County Authority (LCA) is leading the effort to reduce inflow and infiltration (I&I) in the City of Allentown (City) sewer collection system. By taking a comprehensive approach to identifying specific sources of I&I and monitoring the success of projects designed to remove I&I, LCA hopes to develop standards that will be acceptable to the Pa. Department of Environmental Protection (DEP) that may be extended to other KISS municipalities. The intent is for the program to pinpoint the specific areas in the City's Trout Creek (359,530 linear feet of pipe) and Eastside (254,664 linear feet of pipe) sewer basins where private and public side rehabilitation projects are needed to reduce I&I. Recommended early action projects will focus on the public side. Post-rehabilitation monitoring will allow for an understanding of the effectiveness of the solutions and a clearer quantification of private side vs public side I&I contributions. LCA hopes to create a defensible, successful I&I reduction program with cost-effective, data-confirmed reductions. DEP has expressed a desire to see data submissions that prove the effectiveness of I&I rehabilitation efforts to validate the region's progress. The intent of this initial project is to develop an approach and lessons learned that will inform how best to perform SSES work in remaining basins in the City system. This information will be shared with the 14 other KISS municipalities to support further discussions of I&I program administration for the entire KISS region.

Prior Authorization: N/A

This Authorization: SSES – Trout Creek and Eastside Basins, Programmatic Support (\$3,141,000)

See attached Board Memo for further project details.

Authorization Status:

Requested This Authorization	
<i>Planning Phase</i>	
Staff	\$250,000
Engineering Consultant	\$2,641,000
Contingency	\$250,000
Total This Authorization	\$3,141,000

Prior Authorizations	\$0
Subtotal	\$3,141,000
<i>Future Authorizations</i>	<i>N/A</i>

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: Arcadis U.S., Inc.
1600 Market Street
Suite 1810
Philadelphia, PA 19103

Date: January 27, 2025

Requested By: Stephen Boone

Approvals

Department Head: _____

Chief Executive

Officer: _____

Sanitary Sewer Evaluation Survey – Trout Creek and Eastside Basins, Programmatic Support

As part of the development of a regional Act 537 Plan for the Kline's Island Sewer System (KISS), Lehigh County Authority (LCA) is leading the effort to reduce inflow and infiltration (I&I) in the City of Allentown (City) sewer collection system. By taking a comprehensive approach to identifying specific sources of I&I and monitoring the success of projects designed to remove I&I, LCA hopes to develop standards that will be acceptable to the Pa. Department of Environmental Protection (DEP) that may be extended to other KISS municipalities. The intent is for the program to pinpoint the specific areas in the City's Trout Creek (359,530 linear feet of pipe) and Eastside (254,664 linear feet of pipe) sewer basins where private and public side rehabilitation projects are needed to reduce I&I. Recommended early action projects will focus on the public side. Post-rehabilitation monitoring will allow for an understanding of the effectiveness of the solutions and a clearer quantification of private side vs public side I&I contributions. LCA hopes to create a defensible, successful I&I reduction program with cost-effective, data-confirmed reductions. DEP has expressed a desire to see data submissions that prove the effectiveness of I&I rehabilitation efforts to validate the region's progress. The intent of this initial project is to develop an approach that will inform how best to perform SSES work in remaining basins in the City system. This information will be shared with the 14 other KISS municipalities to support further discussions of I&I program administration for the entire KISS region. The scope of the work includes:

Professional Services ¹
• Task 1 – Communications; Data Collection and Management Plan, Public Notifications, Scheduling, QA/QC Plan
• Task 2 – SSES; Pre- and Post- Rehab Flow Monitoring, CCTV, Smoke/Dye Testing
• Task 3 – Analysis; Conditions Assessment, Problem ID, Early Action Projects and Effectiveness Assessments
• Task 4 – Programmatic Efforts; Establish SSES Standards, SOPs

(1) Refer to Arcadis' Base Proposal for detailed work breakdown

This Authorization: \$2,641,000

Time Table and Completion Deadline: A critical target date of October 2025 is identified for the design packages of the early action projects. Upon completion of the early action rehabilitation projects, post-rehab monitoring will take place throughout 2026.

(For Authority Use Only)

Authorization Completion:

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

**SEWER OPERATIONS AGREEMENT
BETWEEN
LEHIGH COUNTY AUTHORITY
AND
UPPER MACUNGIE TOWNSHIP**

THIS AGREEMENT made this ____ day of _____, 2025 between the ***LEHIGH COUNTY AUTHORITY*** (“LCA”), a Municipal Authority organized and existing under the Municipality Authorities Act of 1945, as amended, with its principal address at 1053 Spruce Road, P.O. Box 3348, Allentown, PA 18106 and ***UPPER MACUNGIE TOWNSHIP*** (“Township”), a Second Class Township with its principal address at 8330 Schantz Road, Breinigsville, PA 18031. LCA and the Township are collectively hereinafter referred to as “Parties”.

WHEREAS, LCA submitted a proposal appended hereto and attached as Exhibit “A” (the “Proposal”), to provide ongoing operation and maintenance services related to six (6) existing Township pump stations (“Sites”); and

WHEREAS, the Township has taken official action to accept the Proposal and in the mutual interests of all Parties hereto, LCA and Township desire to set forth terms and conditions related to services outlined in the Proposal.

NOW, THEREFORE, the Parties hereto, intending to be legally bound, and for the good, sufficient, and valuable consideration herein identified, and the mutual promises and covenants hereinafter set forth, do agree as follows:

1. Term. This Agreement shall be for a term of one (1) year with an effective date of February 1, 2025. This Agreement shall be renewable by the parties in writing. Any renewal shall specify the length of the renewed agreement and provided for such updated fees and terms and conditions as agreed upon by the Parties. The Township shall provide LCA with notice no less than sixty (60) days prior to expiration of this Agreement of its intent to renew. To the extent the Township fails to provide notice in a timely fashion, LCA shall in its sole discretion determine whether to negotiate with the Township for any subsequent renewals of this Agreement.

2. Billing Procedures. LCA shall bill the Township in accordance with its standard general billing procedures. By its execution of this Agreement, the Township acknowledges that it is aware and will abide by LCA's billing procedures.

3. Costs. As set forth in the Proposal, all costs including but not limited to equipment and large repair costs will be billed to the Township.

4. Insurance.

4.1(a) Obligation to Obtain. Township and LCA shall obtain and maintain the insurance set forth in Sections 4.1(b). Such insurance may be maintained under individual or blanket insurance policies that currently exist.

(b) Coverage. The Parties shall maintain during the term of this Agreement the insurance described below with insurance companies acceptable to the Parties with limits and coverage provisions as agreed upon by the Parties.

- (i) General Liability Insurance: Liability insurance on an occurrence basis against claims for personal injury (including bodily injury and death) and property damage.
- (ii) Automobile Liability Insurance: Automobile liability insurance against claims for personal injury (including bodily injury and death) or property damage arising out of the use of all owned, leased, non-owned and hired motor vehicles, including loading and unloading, and containing appropriate no-fault insurance provisions where applicable.
- (iii) Workers' Compensation Insurance: Workers' compensation insurance as required by applicable laws, including employers liability insurance for all employees of LCA.

- (iv) Excess Liability Insurance: Excess liability insurance on an occurrence basis covering claims in excess of the underlying insurance described in the foregoing subsections (i), (ii) and (iii).

5. Indemnification and Liability.

5.1 Indemnification.

5.1(a) Indemnification by LCA. LCA shall indemnify, defend and hold harmless the Township, the members thereof, and their respective officers, directors, employees, agents, affiliates and representatives (the "Township Indemnified Parties"), from and against any and all claims (in whatever form and to the fullest extent permitted by law) arising out of or in any way connected with, but only to the extent of, any gross negligence, fraud or willful misconduct of LCA or anyone acting on LCA's behalf or under its instructions, in connection with this Agreement and LCA's obligations thereunder. Any costs or expenses incurred by LCA pursuant to its indemnity obligations under this Section 5.1(a), including the cost of deductibles with respect to the insurance maintained by LCA or Township pursuant to Article 4.1 or losses in excess of such insurance coverage, shall not constitute a reimbursable cost under this Agreement.

(b) Indemnification by Township. Township shall indemnify, defend and hold harmless LCA, its officers, directors, employees, agents, affiliates and representatives (the "LCA Indemnified Parties") from and against any and all claims (in whatever form and to the fullest extent permitted by law) arising out of or in any way connected with, but only to the extent of, any gross negligence, fraud or willful misconduct of Township or anyone acting on Township's behalf or under its instructions (other than LCA and its suppliers, subcontractors, vendors, and their subcontractors and vendors and any employee or agent of the foregoing), in connection with this Agreement and Township's obligations thereunder.

5.2 Environmental Liability.

(a) LCA Liability. LCA shall not be responsible for claims directly or indirectly related to hazardous materials present at the Sites, before the date of this Agreement or transport to the Sites by the Township at any point, except to the extent LCA acted with respect to such materials in a grossly negligent manner. Township shall defend, indemnify and hold LCA harmless against such claims, except to the extent such claims arise from LCA's grossly negligent or intentional acts.

(b) Township Liability. Township shall not be responsible for claims directly related to hazardous materials at the Sites arising out of the grossly negligent or intentional acts of LCA. This provision of the Agreement shall not be construed to require LCA to take corrective action with respect to any hazardous materials at the Sites before the date of this Agreement or arising out of the transport of such material to the Sites by the Township.

(c) Governmental Actions. If action is required at the Sites to comply with any applicable environmental laws during the term of this Agreement, Township shall be solely responsible for the costs of compliance. Costs for such compliance action shall only be incurred by LCA only with Township's prior written consent, unless a governmental authority requires LCA to incur such costs and expenses prior to obtaining such written consent.

5.3 Limitations of Liability.

(a) Consequential Damages. Notwithstanding any provision in this Agreement to the contrary, LCA and Township each agree not to assert against the other any claim, demand or suit for consequential, incidental, indirect or special damages arising from any aspect of the performance or non-performance of the other party or any third party engaged by such other party under this Agreement, and each party hereto waives any such claim, demand or suit against the other in connection with this Agreement. Notwithstanding anything to the contrary in this Agreement, this Agreement shall not be

construed to waive any rights or privileges of the Parties under the Political Subdivision Torts Claim Act or any other statute providing immunity to the Parties.

6. Termination.

6.1 Termination Upon Notice By Township. The Township may terminate this Agreement upon fifteen (15) days prior written notice to LCA in the event (i) that LCA violates, or consents to a violation of, any laws applicable to the services provided under this Agreement, where the violation has or may have a material adverse effect on the maintenance or operation of the Sites or Township's interest, and LCA does not cure such violation within thirty (30) days (or, if not curable within thirty (30) days, within such period of time as is reasonably necessary, but in no event more than ninety (90) days, provided LCA diligently commences and pursues such cure and indemnifies Township for all related costs, of whatever kind), or (ii) of a material breach by LCA in the performance of the services to be provided under this Agreement, if LCA does not cure such breach within thirty (30) days from the date of LCA's receipt of notice from Township demanding cure (or, if not curable within thirty (30) days, within such period of time as is reasonably necessary, but in no event more than ninety (90) days, provided LCA diligently commences and pursues such cure and indemnifies Township for all related costs, of whatever kind). If the Agreement is terminated by Township pursuant to this Section 6.1, LCA shall be compensated for all reimbursable costs incurred by LCA and all unpaid fees due and owing including the date of termination.

6.2 Termination by Township Without Cause. In addition to its rights set forth in this Article 6, Township reserves the right to terminate this Agreement without cause upon ninety (90) days written notice to LCA. If the Agreement is terminated by Township pursuant to this Section 6.2, LCA shall be compensated for all costs incurred by LCA and all unpaid fees to and including the date of such termination under this Section 6.2. Such payments shall be LCA's sole remedy in respect of such termination and shall be made by Township within 30 days of receipt of a final invoice from LCA.

6.3 Termination by LCA for Cause. LCA may terminate this Agreement for cause upon fifteen (15) days prior written notice to Township in the event of Township's failure to perform in a timely manner any of its material obligations under this Agreement and such failure is not cured within 30 days of Township's receipt of a notice from LCA demanding cure (or, if not curable within 30 days, within such period of time as is reasonably necessary, but in no event more than 90 days, provided that Township diligently commences and continues to pursue such cure). LCA reserves the right to terminate this Agreement without cause upon ninety (90) days written notice to Township. If LCA terminates this Agreement for cause or without cause, LCA shall be compensated for all costs incurred by LCA and all unpaid fees to and including the date of such termination under this Section 6.3. Such payments shall be LCA's sole remedy in respect of such termination and shall be made by Township within thirty (30) days of receipt of a final invoice from LCA.

7. Access/Emergency Response/General Site Maintenance. The Parties agree to develop written procedures with respect to access to the pumps, general site maintenance and emergency response procedures.

8. Miscellaneous Provisions.

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

8.2 Force Majeure. If either Township or LCA is rendered wholly or partially unable to perform its obligations under this Agreement (other than payment obligations) due to a Force Majeure Event (as hereinafter defined), the party affected by such Force Majeure Event shall be excused from whatever performance is impaired by such Force Majeure Event, provided that the affected party promptly, upon learning of such Force Majeure Event and ascertaining that it will affect its performance hereunder, (i) promptly gives notice to the other party stating the nature of the Force Majeure Event, its anticipated duration, and any action being taken to avoid or minimize its effect and (ii) uses its reasonable commercial efforts to remedy its inability to perform. The suspension of

performance shall be of no greater scope and no longer duration than that which is necessary. No obligations of either party which arose before the occurrence causing the suspension of performance and which could and should have been fully performed before such occurrence shall be excused as a result of such occurrence. The burden of proof shall be on the party asserting excuse from performance due to a Force Majeure Event. Force Majeure Event is defined as:

Natural disasters such as hurricanes, earthquakes, floods, wildfires, and other natural disasters; Political events such as wars, political crises, embargoes, and other political actions; Public health crises such as pandemics, plagues, and other public health crises; Acts of terrorism such as acts of terrorism, sabotage, and other acts of violence; Industrial actions such as strikes, lockouts, work stoppages, and other industrial actions; and Government actions such as new laws, orders, and other government actions.

8.3 Amendments. No amendments or modifications of this Agreement shall be valid unless evidenced in writing and signed by duly authorized representatives of both parties.

8.4 Notices. All notices and other communications (collectively "Notices") required or permitted under this Agreement shall be in writing and shall be given to each party at its address or fax number set forth in this Section 8.4 or at such other address or fax number as hereafter specified as provided in this Section 8.4. All Notices shall be (i) delivered personally or (ii) sent by fax, electronic mail, telegraph, registered or certified mail (return receipt requested and postage prepaid), or (iii) sent by a nationally recognized overnight courier service. Notices shall be deemed to be given (A) when transmitted if sent by fax, electronic mail, or telegraph (provided the transmittal is confirmed), or (B) upon receipt by the intended recipient if given by any other means. Notices shall be sent to the following addresses and contacts (or successors):

To LCA:

Lehigh County Authority
PO Box 3348
1053 Spruce Road
Allentown, PA 18106-0348
ATTN: Liesel Gross, CEO
Telephone: (610) 398-2503
E-Mail: lieselgross@lehighcountyauthority.org

To Township:

Upper Macungie Township
8330 Schantz Road
Breinigsville, PA 18031
ATTN: Robert Ibach, Jr., Township Manager
Telephone: (610) 395-4892
E-Mail: ribach@uppermac.org

8.5 Counterparts. The parties may execute this Agreement in counterparts, which shall, in the aggregate, when signed by both parties constitute one instrument. Thereafter, each counterpart shall be deemed an original instrument as against any party who has signed it.

8.6 Governing Law and Jurisdiction. This Agreement is executed and intended to be performed in Lehigh County, Pennsylvania and the laws of the Commonwealth of Pennsylvania shall govern its construction, interpretation and effect. Any disputes under this Agreement shall lie in the Court of Common Pleas of Lehigh County.

IN WITNESS WHEREOF, the Parties hereto have hereunder set their hands and seals the day and year first above written.

UPPER MACUNGIE TOWNSHIP

By: _____
Print Name: _____
Title: _____

LEHIGH COUNTY AUTHORITY

By: _____
Print Name: _____
Title: _____

Lehigh County Authority Cost Proposal

Project: Ongoing Operation & Maintenance of Upper Macungie Township Pump Stations

Overview

This cost proposal outlines the expenses associated with the operation and maintenance of six Upper Macungie Township Sewer Pump Stations. The proposed services include operational checks, emergency callouts, and generator servicing. Below is a detailed breakdown of the costs involved.

1. Weekly Checks of Pump Stations

- **Frequency:** Once per week
- **Personnel:** 2 technicians
- **Services:** Visual and vibration checks of pumps and equipment while operating
- **2025 Technician Rate (overhead included):** \$93.48 per hour
- **Estimated time per week:** 8 hours per employee
- **Estimated Weekly Cost:** \$1,495.73
- **Estimated Annual Cost:** \$77,777.86

2. Emergency Callouts

- **Rate per Callout:** \$93.48 per hour X 2 Technicians
- **Estimated Number of Callouts per Year:** 12 (4 Hours)
- **Estimated Annual Cost for Callouts:** \$8,974.08
- **Other emergency expenses:** Actual cost

3. Generator Servicing (OPTIONAL)

- **Service Frequency:** 2 times per year for each generator
- **Cost per Service:** \$1,200.00 per generator
- **Total Number of Generators:** 6
- **Annual Cost for Generator Servicing:** \$7,200.00

4. Quarterly & Annual Services (Optional)

- **Services:** Wet well cleaning, pump oil changes, electrical connection checks, etc.
- **Technician Rate:** \$93.48 per hour

Total Annual Expenses

1. **Estimated Weekly Checks:** \$77,777.86
2. **Estimated Emergency Callouts:** \$8,974.08
3. **Estimated Generator Servicing:** \$7,200.00
4. **Other Services:** Upon request.

Total Estimated Annual Cost: \$93,951.94

Summary

The estimated annual cost for Lehigh County Authority to operate and maintain six Upper Macungie Township Pump Stations is \$93,951.94. This proposal includes routine operational inspections, emergency response capabilities, and scheduled generator maintenance. All hours will be billed as actual hours worked, ensuring accurate and fair cost allocation. Additional expenses, such as generator maintenance fees and materials, will be billed directly to the Township. More significant repairs and replacements will be outlined in an annual report to the Township, or more frequently as needed, with a request to proceed with the work. This approach provides transparency in billing and ensures that the Township is only charged for actual services rendered and necessary maintenance costs.

Robert Murphy
TOWNSHIP MANAGER

1/8/25

BOARD APPROVED 1/6/25

Lehigh County Authority
System Operations Review - December 2024
Presented: January 27, 2025

		<u>Dec-24</u>	<u>2024</u> <u>Totals***</u>	<u>2023 Totals</u>	<u>2022 Totals</u>
Recordable Safety Incidents*	Total LCA	0	2	33	7
Non-Recordable Safety Incidents	Total LCA	2	25		
Incident Types **	Injuries	1	15		
	Property Damage	0	11		
	Near Miss	1	1		

***Numbers adjusted to match current tracking methodology

* Recordable Safety Incidents are those that result in death, days away from work, restricted duty, medical treatment beyond first aid.

** Safety incidents may be categorized in more than one incident type.

<u>Year To Date Safety Incidents</u>		<u>Root Cause Analysis Completed</u>	<u>Corrective Actions Identified</u>	<u>Corrective Actions Completed</u>
		13	8	1
<u>Current Month Incidents</u>				
<u>Description</u>	<u>Date</u>	<u>Type</u>	<u>Root Cause(s)</u>	<u>Corrective Action(s)</u>
Incident # 90 - While driving down highway 22 plastic rap ripped and a chair from the stack flew out onto the road. We pulled over with another driver who ran over the chair after it was on the road	12/6/2024	Near Miss	Improper strapping down of load	Reinforcement of proper protocols for loading and fastening loads
Incident # 91 - While cleaning a work surface debris was kicked up and entered eye	12/20/2024	Injury	Foreign object in eye	Reinforcement of proper eye protection and safety equipment

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Critical Activities	System	Description	Dec-24	2024 Totals	2023 Totals	Permit	
			Daily Avg (MGD)	Daily Avg (MGD)	Daily Avg (MGD)	Daily Max (MGD)	
Water Production	Allentown	Total	21.52	22.39	22.52	39.0	
		Schantz Spring	6.16	6.82	6.93	9.0	
		Crystal Spring	3.88	3.87	3.89	4.0	
		Little Lehigh Creek	11.47	11.47	11.66	30.0	
		Lehigh River	0.00	0.23	0.04	28.0	
	Central Lehigh	Total	10.32	11.49	11.27	19.04 MGD Avg	
		Feed from Allentown	6.70	6.88	7.28	7.0 MGD Avg 10.5 MGD Max	
		Well Production (CLD)	3.61	4.60	3.98	8.54 MGD Avg	
		Sum of all (12) other Suburban Water Systems	0.14	0.15	0.13	1.71 Sum of all wells	
Wastewater Treatment		Kline's Island	33.70	34.04	32.24	40.0	
		Pretreatment Plant	4.31	4.98	4.78	5.75 (design capacity)	
		Sum of all (5) other Suburban WW Systems	0.17	0.19	0.19	0.36	
			Dec-24	2024 Totals	2023 Totals	2022 Totals	
Precipitation Totals (inches)			3.68	41.88	46.38	46.47	
Compliance Reports Submitted to Allentown			18	278	280	277	
Notices of Violation (NOVs)			(Allentown + Suburban)	0	5	3	4
Sanitary Sewer Overflows (SSOs)/Bypasses			(Allentown + Suburban)	0	17	24	18
Main Breaks Repaired			Allentown	3	27	8	34
			Suburban	2	14	12	15
Customer Service Phone Inquiries			(Allentown + Suburban)	1139	16690	11,221	10,539
Water Shutoffs for Non-Payment			(Allentown + Suburban)	142	2010	1,995	1,975
Injury Accidents			(Allentown + Suburban)	1	15	19	7
Emergency Declarations			Allentown	0	2 @ 228,181.55	2	(3) @ \$386,225.43
			Suburban	0	1 @ 56,662.50	0	(4) @ \$933,077.1
Significant Repairs/Upgrades:							
Description of Non-Compliance Events:							
While we experienced four permit exceedances at the Sand Spring WWTP, the results of the new treatment technology has shown promising progress. Two of the exceedances were weekly violations that occurred at the beginning of the month. However, once we achieved our target mixed liquor concentration in mid-December, the plant began to fully nitrify, demonstrating improved performance and stability in treatment processes.							
Other:							

	<p style="text-align: center;">Lehigh County Authority</p> <p style="text-align: center;">System Operations Review - December 2024</p> <p style="text-align: center;">Presented: January 27, 2025</p> <p style="text-align: right;">Page 3</p>				
<u>Critical Activities</u>	<u>System</u>	<u>Description</u>	<u>Dec-24</u>	<u>2024 Totals</u>	<u>2023 Totals</u>
Wastewater Compliance	Allentown	Bypass	0	3	4
		Bypass Volume	0	1,713,644	1,589,466
		Permit Exceedances	0	0	0
		Sanitary Sewer Overflows	0	5	6
		COA Issued NOVs	0	0	1
		Regulatory Agency issued NOVs	0	0	0
	Arcadia	Bypass	0	0	0
		Bypass Volume	0	0	0
		Permit Exceedances	1	1	3
		Sanitary Sewer Overflows	0	0	0
		NOVs	0	1	0
	Heidelberg Heights	Bypass	0	4	8
		Bypass Volume	0	2,125,696	1,872,796
		Permit Exceedances	0	9	14
		Sanitary Sewer Overflows	0	0	0
		NOVs	0	0	0
	Lynn	Bypass	0	2	1
		Bypass Volume	0	1,010,000	350,000
		Permit Exceedances	0	2	1
		Sanitary Sewer Overflows	0	0	0
		NOVs	0	0	0
	Sand Spring	Bypass	0	0	0
		Bypass Volume	0	0	0
		Permit Exceedances	4	44	39
		Sanitary Sewer Overflows	0	0	1
		NOVs	0	1	0
	Wynnewood	Bypass	0	0	0
		Bypass Volume	0	0	0
		Permit Exceedances	0	9	5
		Sanitary Sewer Overflows	0	3	3
		NOVs	0	1	0
Water Compliance	Allentown	Boil Water Advisories	0	0	2
	Central Lehigh	Boil Water Advisories	0	0	1
	Suburban Water Systems	Boil Water Advisories	0	1	3

