



LCA Main Office:
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Agendas & Minutes Posted:
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LEHIGH COUNTY AUTHORITY

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BOARD MEETING AGENDA – April 22, 2024 – 12:00 p.m.

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

1. Call to Order

- NOTICE OF MEETING RECORDINGS

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

- *Public Participation Sign-In Request*

2. Review of Agenda / Executive Sessions

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

3. Approval of Minutes

- *March 25, 2024 Board Meeting minutes*

4. Public Comments

5. Action / Discussion Items:

FINANCE AND ADMINISTRATION

- *Resolution No. 4-2024-1: Authorizing the Authority’s Application for Pennvest Funding (Approval) (blue) (digital Board packet, pages 7-8)*

WATER

- *Water Main Replacement Program Cycles 7 & 8 (Approval) (yellow) (digital Board packet, pages 9-27)*

WASTEWATER

- *Kline’s Island WWTP – Final Settling Tanks 1-4 Upgrades (Approval) (green) (digital Board packet, pages 28-37)*

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

7. Monthly Financial Review (2nd Board meeting per month) (digital Board packet pages 38-50) – **March 2024 report attached**

8. Monthly System Operations Overview (2nd Board meeting per month) (digital Board packet, pages 51-53) – **March 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		
May 13, 2024	May 20, 2024	June 10, 2024

PUBLIC PARTICIPATION POLICY

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

REGULAR MEETING MINUTES

March 25, 2024

The Regular Meeting of the Lehigh County Authority Board of Directors was called to order at 12:00 p.m. on Monday, March 25, 2024, Chairman Brian Nagle presiding. The meeting was hybrid via in-person and video and audio advanced communication technology ("ACT"), using the Zoom internet application, including telephone option. Each Board member and other attendees of the meeting were able to hear each other attendee and be heard by each other attendee. The public could also participate in the meeting in-person or via ACT, using the Zoom internet application, including telephone option. A Roll Call of Board members present was taken. Brian Nagle, Amir Famili, Ted Lyons, Jeff Morgan, Norma Cusick, Linda Rosenfeld, Marc Grammes, and Sean Ziller were present for Roll Call, and remained for the duration of the meeting.

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

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

REVIEW OF AGENDA

Liesel Gross announced that there are no changes to the agenda and no Executive Session is planned. She noted that the February 2024 Financial Statements will be reviewed at the Board meeting in April.

APPROVAL OF MINUTES

March 11, 2024 Meeting Minutes

On a motion by Jeff Morgan, seconded by Linda Rosenfeld, the Board approved the minutes from the March 11, 2024 meeting as presented (8-0).

PUBLIC COMMENTS

None.

Lehigh River Pump Upgrades

Chuck Volk provided an overview of the project at the raw water intake of the Lehigh River to increase resiliency and redundancy in an event that the Little Lehigh Creek is unavailable. To fully utilize the Lehigh River as a water source, pump upgrades are required along with a chemical feed system to address taste and odor issues. Amy Rohrbach described the project in more detail stating the purpose of the authorization requested is to develop a report on the basis of design for the upgrades. The basis of design will be based on a prior study completed in 2018 related to the chemical feed system and existing taste and odor issues.

There was some discussion regarding the timing of the project and the delay since the study was completed several years ago. Ms. Rohrbach explained that the Lehigh River is currently used as backup water supply or during an emergency. The project was prioritized a bit lower than other projects that had a more immediate need to be completed with the funding available at that time. Andrew Moore commented that other projects had been completed in the intervening period to improve the intake at the Little Lehigh Creek source, which allowed this project to be deferred for a short period of time.

There was also some discussion about the source of the taste and odor issues, and the use of powder activated carbon to address it, and any benefits that may be gained in addressing other emerging contaminants in the raw water source.

On a motion by Linda Rosenfeld, seconded by Amir Famili, the Board approved the Capital Project Authorization for Preliminary Design Phase in the amount of \$92,000.00 which includes the Professional Services Authorization to HDR, Inc. in the amount of \$77,000.00 (8-0).

Lead Service Line Replacement Program Documents & Agreements

Liesel Gross gave an overview of the lead service line replacement program, noting the regulatory drivers for the program. Lead is not naturally present in the Authority's water sources, but lead can enter a customer's tap water by leaching from lead service lines or other lead fixtures in the home plumbing system. Andrew Moore provided a regulatory review stating that an inventory of all lead lines will need to be completed, along with removal of all lead service lines within 10 years, on both the public and private side. He also gave an overview of the removal process. Ms. Gross explained the challenge associated with replacing the private side of the service lines and the risks associated with partial replacements when the private-side service line cannot be replaced.

Chris Moughan provided an explanation of the replacement efforts of service lines currently taking place in the City of Allentown water system.

Ms. Gross reviewed the program documents: Lead Service Line Replacement Policy and the Customer Agreement. The primary thrust of these documents is to formally approve the use of public funds for the program, including the replacement of private-side service lines, and to detail the agreement that would be required for the Authority to complete replacement of privately owned service lines.

Brian Nagle commented that the customer agreement is a long and detailed document that some customers may have difficulty understanding. He suggested a review of other methods to ensure customers will understand what they are being asked to sign. Liesel Gross explained the agreement was written in "plain language" to the extent possible while covering all the required legal points needed. However, the information that will be sent to customer will include other documents, fact sheets, and materials that will be more customer-friendly and help explain the agreement more clearly.

There was some discussion regarding the follow-up with customers if there are any issues or non-compliance with the agreement. Kevin Reid explained that the agreement is written to protect both the Authority and the customers and is written to outline responsibilities of both parties. He also noted that there may be minor adjustments made as the program rolls out.

On a motion by Sean Ziller, seconded by Linda Rosenfeld, the Board approved the Lead Service Line (LSL) Replacement Policy and the LCA Property Owner Agreement, allowing for flexibility for the Staff, in consultation with the Solicitor, to make adjustments to the Agreement from time to time to reflect current program requirements (8-0).

Industrial Pretreatment Plant Master Plan

Liesel Gross provided a presentation and update of the Pretreatment Plant (PTP) master planning effort. The plant was constructed to provide centralized industrial pretreatment service to Lehigh County to support economic growth in the region. The industries that have located in the region have brought jobs and economic benefits to the region. Mr. Gross reviewed the Authority's Mission and Vision statements and the goals for the project to upgrade and expand the PTP. She noted a

preliminary presentation was provided in March 2023 from Jacobs outlining the upgrades required due to the age and condition of the PTP, and the existing and future capacity constraints.

Albert Capuzzi provided an overview of the critical facility improvements that are needed for the near term to allow for reliable plant operations. Since the master plan was prepared and presented by Jacobs in 2023 showing an investment of \$267 million would be required, the Authority conducted a detailed value engineering effort to review many alternatives. Mr. Capuzzi reviewed the evaluation process, including the use of several industry experts to review the alternatives, and provided an overview of the results of that work. The refined alternative would involve segregation of certain industrial wastes into a new anaerobic treatment process and repair and replacement of a smaller number of components at the existing PTP, with a total cost estimate of \$181 million. A major driver for the reduction in cost from the prior study is the elimination of the high purity oxygen system.

Liesel Gross reviewed the financial structure of the PTP and how the Authority currently receives revenue for the PTP operation. She explained the current challenge lies in the absence of necessary contracts or direct relationships with most of the industrial users, such that there is limited opportunity to capture capital costs for upgrades, repairs, and expansion. She reviewed opportunities to support the project financially via tax credits available through the Inflation Reduction Act and the potential revenue to be generated by capturing and selling renewable natural gas from the anaerobic treatment process.

Due to the financial constraints reviewed in the presentation, Ms. Gross explained that a financial consultant, Raftelis, has been working on a detailed financial analysis for the PTP, and detailed discussions have been conducted with the industrial users. This work will continue, along with a review with other agencies within the region, to develop a final plan for the PTP.

There was some additional discussion about revenue sources and regional participation in the evaluation of the alternatives.

Regional Sewer Capacity & Wet-Weather Planning: Engineering & Program Support

Phil DePoe gave an overview of the planning process and services provided by AECOM as the Act 537 Program Manager and provided a list of authorizations to date. He explained the fifth and final authorization is needed to finalize the Act 537 Plan for submission to DEP in March 2025.

On a motion by Linda Rosenfeld, seconded by Amir Famili, the Board approved the Capital Project Authorization: Regional Act 537 Plan Program Management, Planning Phase in the amount of \$315,400.00 which includes a Professional Services Authorization to AECOM – Regional Act 537 Plan Program Management, 2024 Amendment in the amount of \$275,400.00 (8-0).

Sand Spring WWTP: Treatment Process Modification

Chuck Volk provided an overview of the project to implement short-term recommendations as outlined in a compliance study performed by Tetra Tech, Inc. to eliminate DEP NPDES permit violations and bring the Sand Spring Wastewater Treatment Plant into compliance. The process will utilize Integrated Fixed Film Activated Sludge (IFAS), which will add additional surface area in the tank allowing the micro-organisms to nitrify. There was some discussion about the media and the duration of its use, and the cause of the overloading to the plant.

On a motion by Amir Famili, seconded by Linda Rosenfeld, the Board approved the Capital Project Authorization for the Construction Phase in the amount of \$303,077.00 which includes the Construction Contract to DESCCO Design & Construction, Inc. in the amount of \$273,077.00 (8-0).

Emergency Declaration – Oswald Road Sanitary Replacement

Anrew Moore provided an overview of the Emergency Declaration to repair two significant sewer lateral leaks on Oswald Road located within the Lynn Township sewer service area. Due to the depth of the laterals, the Authority utilized Scheuermann Excavating LLC to make the repairs. The repair significantly improved the flows at the plant. The cost of the work was \$56,662.50.

On a motion by Marc Grammes, seconded by Jeff Morgan, the Board approved the emergency declaration retroactive to February 7, 2024 for the Lynn Township sewer lateral replacement (8-0).

MONTHLY SYSTEM OPERATIONS OVERVIEW

Andrew Moore reviewed the February 2024 report and reported that there were four vehicle incidents and one injury. The injury was non-recordable and only required minor first-aid. Water production is normal for this time of the year and wastewater flows remain slightly elevated due to rain events this month. A complete description of sanitary sewer overflows and permit exceedances for the month of February was provided.

STAFF COMMENTS

None.

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 2:05 p.m.

Jeffrey J. Morgan
Secretary

RESOLUTION NO. 4-2024-1

(Duly adopted 22 April 2024)

A RESOLUTION OF LEHIGH COUNTY AUTHORITY APPROVING THE SUBMISSION OF A FINANCIAL ASSISTANCE APPLICATION TO THE PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY (PENNVEST) FOR FUNDING FOR THE REPLACEMENT OF PUBLIC AND PRIVATE LEAD SERVICE LINES AND SERVICE LINES OF OTHER MATERIALS REQUIRING REPLACEMENT IN THE AUTHORITY'S ALLENTOWN DIVISION WATER SYSTEM IN ORDER TO MEET FUTURE REQUIREMENTS OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY'S LEAD AND COPPER RULE REVISION ENACTED IN 2021, AND PROVIDING FOR OTHER MISCELLANEOUS MATTERS.

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

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

WHEREAS, the City of Allentown, Pennsylvania (the "City") owns the Allentown Sewer Utility System and the Allentown Water Utility System (the "System"); and

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

WHEREAS, the Authority Board desires to undertake a project, identified as City of Allentown Lead Service Line Replacements, Cycle 2 - 2024, (the "Project") in the Allentown Water Utility System consisting of the replacement of public and private lead service lines and service lines of other materials requiring replacement in order to meet future requirements of the U.S. Environmental Protection Agency's Lead and Copper Rule Revision enacted in 2021; and

WHEREAS, the Authority Board desires to apply to the Pennsylvania Infrastructure Investment Authority (PENNVEST) for financial assistance in paying the Project's costs.

NOW THEREFORE, be it resolved by the Board of this Authority, as follows:

Section 1. The Authority shall be, and is hereby, authorized to submit a Financial Assistance Application (the "Application") to the Pennsylvania Infrastructure Investment Authority (PENNVEST), for the purpose of financing/partially financing the construction, rehabilitation and/or extension of the Authority's Allentown Water Utility System, including the Project.

Section 2. The Chair, Vice Chair of the Board, or the Chief Executive Officer or Chief Financial Officer of the Authority (the "Authority Officials") are hereby authorized, collectively and



Lehigh County Authority

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MEMORANDUM

Date: April 22, 2024

To: Lehigh County Authority Board of Directors

From: Jason Peters, Capital Works Linear Asset Project Manager

Subject: Allentown Division - Cycles 7 & 8 Water Main Replacement Project -
Construction Phase

MOTIONS /APPROVALS REQUESTED:

No.	Item	Amount
1	<u>Capital Project Authorization - Construction Phase:</u> Allentown Division Cycle 7 & 8 Water Main Replacement	\$5,053,203
2	<u>Professional Services Authorization:</u>	
**	<ul style="list-style-type: none"> • Construction Engineering and Administration Services - <i>Gannett Fleming Inc.</i> • Construction Inspection Services - <i>Keystone Consulting Engineers</i> 	<p style="margin-top: 0;">\$89,280</p> <p style="margin-top: 10px;">\$89,300</p>
3	<u>General Construction Contract:</u>	
**	<ul style="list-style-type: none"> • General Construction – <i>N. Abbonizio Contractors, Inc.</i> 	\$3,912,403
4	<u>Final Paving Restoration Contract:</u>	
**	<ul style="list-style-type: none"> • Cost Sharing Agreement – <i>City of Allentown</i> 	\$737,220

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

PROJECT OVERVIEW:

The amended Operating Standards of the Lease Agreement (Agreement) in the 2020 settlement with the City of Allentown (City) requires LCA to replace four (4) miles of aged spun and/or pit cast-iron water main through the end of 2024. The water main replacement projects are closely coordinated with the City’s Compliance Office, Streets Program, PennDOT, and private utilities (such as UGI). Given the complex nature of a project that includes construction in a highly

populated urban area with many underground facilities and maintenance of traffic flow, the many challenges presented require a significant amount of coordination and public relations efforts.

Approximately two miles of water main have been replaced since 2020, and the scope of this project (“cycles 7&8”) consists of approximately two miles of water main replacement as well and will satisfy the lease requirement through 2024.

FUNDING:

The Project will be funded by the LCA Allentown Division and City grant funds from the American Rescue Plan Act of 2021. Annual Water Main Replacement is identified as required work in the Agreement and is classified as a Major Capital Improvement.

PROJECT STATUS:

In August 2022 the Board approved the engineering consultant proposal for Design Phase (including pipe replacement prioritization) for Cycles 7 & 8 of the Allentown Division Annual Water Main Replacement Programs. Working closely with the City to obtain Major Capital Improvement approvals (as required by the Agreement) and outside agencies, Capital Works has obtained all approvals and permits required for the Cycles 7 & 8 Construction Phase.

Prioritization of water mains to be replaced as part of this Cycle was completed in early 2023, and the substantially complete plans were submitted to the City in late 2023 in accordance with Agreement requirements.

THIS APPROVAL: CONSTRUCTION PHASE CYCLES 7&8

The Allentown Division Cycles 7 & 8 Water Main Replacement Project includes a pipe replacement length of 2.20 miles to satisfy the Lease Agreement requirement of 4 miles of main replacement by the end of 2024. All water main pipe sections are located within City-owned streets.

BIDDING SUMMARY - CONSTRUCTION CONTRACTS

The project was advertised for bid on February 12, 2024 and a mandatory pre-bid meeting was held virtually on February 28, 2024, with six contractors in attendance. Bids were opened on March 15, 2024. The bidding results are as shown in Table 1 below.

Table 1	
General Construction	
Bidder	Amount
<i>N. Abbonizio Contractors, Inc.</i>	<i>\$3,912,403</i>
Joao & Bradley Construction Co., Inc.	\$3,929,811
Pact One LLC	\$4,194,775
RIII Construction Inc	\$4,560,663
Barrasso Excavation, Inc	\$4,887,143
James T. O'Hara, Inc.	\$4,988,395
DOLI Construction Corporation	\$6,569,528

Reference checks for, N. Abbonizio Contractors, Inc. have identified no issues. In fact, through prior experience with LCA's design engineer Gannett Fleming, N. Abbonizio Contractors, Inc. has successfully performed several water main replacement Projects yielding a satisfactory level of quality and performance. Therefore, we recommend awarding the General Construction contract to N. Abbonizio Contractors, Inc., subject to the receipt of the necessary Performance Bonds, Insurance, and other required documentation.

FINAL RESTORATION COST SHARING AGREEMENT:

In 2021, Capital Works reviewed paving restoration cost data from prior City water main replacement projects and determined that a cooperative arrangement with the City Streets Department would yield significant cost savings, better control over construction schedule, and improved quality control. Capital Works and the City Compliance Office worked together to develop a Cost Sharing Agreement for final restoration of streets. The Agreement contains clearly outlined procedures and responsibilities for each party, that includes provisions for scheduling, payment, material handling, inspection, and notification of completion. This was first applied during Cycles 5 & 6 Water Main Replacement Projects.

The Agreement for the Cycles 7 & 8 street restoration work includes pavement milling, pavement overlay, and ADA ramp construction within City rights-of-way. Per the terms of the Agreement, LCA's payment to the City is for compensation of labor and paving materials costs for work performed by the COA paving department.

PROFESSIONAL SERVICES CYCLE 7 & 8:

1. Construction Engineering & Management

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

- Conduct preconstruction conference.
- Review contractor's construction schedule and updates for compliance with project.
- Arrange and conduct monthly progress meetings and provide meeting minutes.
- Review all contractor submittals to ensure that design objectives and requirements of the Contract Documents are met.
- Prepare Change Orders.
- Respond to contractor Requests-for-Information.
- Review certified payrolls.
- Conduct walkover of the project site with contractors and LCA representatives.
- Provide LCA with recommendation on completeness of work, final acceptance and release of final payment.

2. Construction Inspection

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

- Act as the daily field contact person for the project.
- Attend pre-construction & monthly progress meetings.
- On-site contract management and coordination

- Maintain daily record of project activities, quantities of work performed, site conditions, etc.
- Review documentation for change order requests.
- Review monthly pay estimates.
- Perform substantial and final completion inspections.

Keystone Consulting Engineers (KCE) previously provided construction inspection services in Cycles 3 through 6 AD water main replacement projects and has provided construction phase services on other LCA water and wastewater projects. KCE's provided a consistently high level of technical expertise at a reasonable cost.

A Professional Services Authorization is attached for both firms for LCA Board approval.

SCHEDULE

Assuming approval of the Construction Phase at the April 22, 2024 LCA Board meeting, construction will commence in late Spring and all water main replacements for Cycles 7 & 8 will be operational by October 15, 2024 (the substantial completion date).

2024 CYCLES 7 and 8 WATERMAIN REHABILITATION
COST-SHARING AGREEMENT FOR STREET RESTORATION AND REPAVING

This COST-SHARING AGREEMENT FOR STREET RESTORATION AND REPAVING is made and entered into on the Effective Date defined herein by and between the City of Allentown, a Home Rule Third-Class City organized and existing under the laws of the Commonwealth of Pennsylvania, having a place of business at 641 South 10th Street, Allentown, PA 18103 (the "City"), and the Lehigh County Authority, organized and existing under the Municipal Authorities Act of 1945, as amended, having a place of business at 1053 Spruce Rd, Allentown, PA 18106 ("LCA") (hereinafter referred to as "a/the Party," singularly and the "Parties" collectively.)

WHEREAS, the City owns and has jurisdiction over street rights-of-way within the City's limits, excluding streets designated as State highways and roads, which are under the exclusive jurisdiction and control of the Commonwealth of Pennsylvania, Department of Transportation ("PennDOT").

WHEREAS, LCA maintains public utility facilities, particularly underground water and sewer mains and related lines located within City street rights-of-way, pursuant to Section 5607 (a) (5) and (10) of the Municipal Authorities Act, 53 Pa. C. S. §§ 5607 (a) (5), 5607(a)(10).

WHEREAS, the City has adopted a Street Excavation Ordinance, appearing as Article V11 *Street Excavations* establishing certain requirements for street openings and excavations.

WHEREAS, in connection with LCA's occupancy of City street rights-of-way ("the Streets"), LCA has planned in 2022 certain work in connection with main replacements (hereinafter referred to as the "Betterment Projects") listed on Exhibit "A" attached hereto, made a material part hereof and incorporated herein by reference.

WHEREAS, LCA, in the usual course, would be obligated to restore and repave the Streets affected by the Betterment Projects pursuant to all the applicable provisions of the Streets Ordinance.

WHEREAS, given that the City has its own program for the restoration and repaving of the Streets, involving a milling, overlay and paving process ("City Restoration Work"), the Parties discussed LCA's Betterment Projects and each Party's desire to coordinate the performance of LCA's Betterment Project work so as to maximize efficiencies and minimize the possibility of LCA performing Betterment Project work on any Streets recently subjected to City Restoration Work. For purposes of this Agreement, "City Restoration Work" shall also include the design and installation of ramps, in compliance with the Americans with Disabilities Act and related regulations (collectively, "ADA") and City Ordinances for the streets that are subject to the Betterment Projects in Exhibit "A" hereto.

WHEREAS, as a result of those discussions, the Parties have reached an understanding regarding the scope, allocation of work and costs for Streets which are the subject of Betterment Projects, including the reimbursement of certain costs associated with the City Restoration Work ("City Street Repair Costs") subject to the terms and conditions as set forth in this Agreement.

NOW, THEREFORE, in consideration of the mutual promises of the Parties and for good and other valuable consideration and agreeing to be legally bound hereby, the Parties agree as follows:

1. incorporation of Recitals. The Parties do hereby incorporate by reference the terms, definitions and descriptions set forth in the forgoing recitals of this Agreement as though the same were fully set forth at length herein.
2. LCA's Cost-Sharing Payment to the City.
 - A. It is acknowledged and agreed that, subject to the City's continuing full and timely performance of its duties and obligations under this Agreement, LCA shall pay to the

City the total amount of seven hundred thirty-seven thousand two hundred nineteen and 43/100 (\$737,219.43) dollars toward the City Street Repair Costs (the "Cost-Sharing Payment"), payable as indicated below. It is further agreed the Cost-Sharing Payment consists of \$307,035.43 relating to and associated with costs of labor and paving materials for the milling and overlaying paving work on Streets to be performed by the City as the City Restoration Work hereunder, plus \$430,184.00 toward the cost of materials and for the installation of ramps, in compliance with the American Disabilities Act and related regulations (collectively "ADA") for the roads which are the subject of the Betterment Projects under this Agreement. The Cost-Sharing Payment is allocated between the various Betterment Projects and ADA ramp installation work as indicated in Exhibit "A" hereto. The Cost-Sharing Payment shall also be in lieu of any other City fees that would ordinarily be payable by LCA in connection with the LCA Betterment Projects and LCA Restoration Work.

- B. LCA shall pay to the City the entire Cost-Sharing Payment no later than July 18, 2024 (i.e., the tenth day following the LCA Board's first regular meeting in July 2024), subject to any later potential LCA additional payment in connection with LCA's modification of the Betterment Projects, as discussed in subparagraph C. below. The payment shall be made by check in the applicable amount. There shall be no penalty, assessment of interest, accrued or unaccrued, or any other charge for any prepayments of this obligation.

- C. The agreed amount of the Cost-Sharing Payment shall be subject to adjustment based on modification of the Betterment Projects in the following circumstances. LCA may perform additional work in an area near or adjacent to a Betterment Project street, or otherwise expand the scope of a project, based on operational, financial, convenience, or other considerations. In the event that LCA desires to perform such additional work, the City shall provide a cost analysis for the additional work, using the same methodology for establishing cost as used in Exhibit "A" hereto. LCA will review the costs analysis and

determine whether to include such work as part of the Betterment Projects under this Agreement, at the cost provided by the City. In the event that LCA decides to include such additional work as part of the Betterment Projects under this Agreement, LCA shall pay to the City the additional Cost-Sharing Payment amount within thirty (30) days of LCA giving the City notice of the completion of the LCA Restoration Work (defined below) for a Betterment Project, including its modified or expanded scope. All additional work shall follow procedures set forth in section 3.

3. Procedures to be Followed for Work to be Performed Pursuant to this Agreement. The Parties agree that the following procedures shall apply to LCA's Betterment Project street-opening work ("the LCA Restoration Work") and the City Restoration Work applicable thereto:

A. LCA Obligations.

(1) LCA will submit, in part with the requirements of the lease for Major Capital Project Improvements, the Substantially Complete Design plan submission for the Betterment Projects, which the City will review and, when satisfied with the submission, will issue a conditional approval at the plan review stage in the form of a letter noting that project is approved as designed. As part of the conditional approval, COA will establish an expiration date on the conditional approval covering a yearly construction season for a cycle. Prior to initiating construction in a given road segment, LCA's contractor will then submit for a formal City permit which will be good for 60-days upon issuance.

(2) LCA shall not be required to pay the Permit Fee required under Chapter 545 Streets and Sidewalks, Article VII Street Excavations §545-53.A Permit Fee and the fee required under Chapter 545 Streets and Sidewalks, Article VII Street Excavations §545-53.A Inspection; However, the City may impose this fee onto the associated contractor at the time of formal submission to the City.

(3) LCA will install its facilities by open trench cut in continuing sections along the route or routes of the particular Street which is the subject of each such Project.

(4) The existing water main line (which is being replaced) is permitted to be left in place under the street surface.

(5) LCA will excavate and install its new water line within the excavated area. LCA will then backfill and compact the excavated area and place "hot mix" temporary paving material on top to match the road surface. Materials must be approved by the City. Final base restoration must be inspected and approved by the City.

(6) LCA shall notify the City's Engineering Bureau, Department of Public Works in writing when LCA has completed the LCA Restoration Work and within thirty (30) days of receiving said notification, weather permitting, the City shall commence performance of the City Restoration Work, to be completed such that the Street involved is improved to its final fully paved condition.

(7) When the Street is ready for the City Restoration Work, LCA will remove the hot mix temporary asphalt paving material and install and compact 25mm Bituminous Concrete Base Course (BCBC) to the final level and height designated for the LCA Restoration Work, at which point the LCA Restoration Work will be completed.

(8) LCA agrees to indemnify and save harmless the City and its officers, employees, and agents from any and all costs, claims, loses, injuries, damages, liabilities, or expense which may accrue or be claimed to accrue by reason of LCA's Restoration Work.

B. City Obligations.

(1) The City shall provide appropriate inspection of the LCA Restoration Work;

(2) The City agrees to accept as satisfactory work performed by LCA in connection with any Street openings for Betterment Projects which are the subject of this Agreement, so long as that work has been performed to comply with the applicable standards of PennDOT;

(3) The City will then commence the City Restoration Work, which shall include inspecting the rolling of the 25mm BCBC to ensure proper compaction, following which the City will mill to the depth specified on the approved detail Exhibit "B" and following which it will install, including rolling, the final paving material of hot mix asphalt.

Upon receipt of the Cost-Sharing Payment, the City agrees to indemnify, and save harmless, LCA and its officers, employees and agents, from any and all costs, claims, losses, injuries, damages, liabilities or expense, which may accrue or be claimed to accrue by reason of the City's Restoration Work, including, without limitation, the City's installation of ADA ramps for the streets that are subject to Betterment Projects.

4. Term. It is the intent and agreement of the Parties that the term of this Agreement shall be for the period from January 1, 2024 through December 31, 2024, inclusive; provided, however, if any LCA's Betterment Project street-opening work and the City Restoration Work is not yet complete, the agreement shall continue through the completion of such work.

5. No Degradation Fee to be Assessed Against LCA. Notwithstanding any provisions of the Ordinance to the contrary, particularly Chapter 545 Streets and Sidewalks, §53.A Degradation Fee and §56.B. Prerequisites to obtaining excavation permit, and out of recognition for the fact that the Streets which are the subject of this Agreement are being restored partially by LCA, and then completed by the City Restoration Work (following inspection and approval by the City of the LCA Restoration Work) and as a material consideration to this Agreement, the City acknowledges and agrees that it shall at no time attempt to charge or assess a degradation fee against or from LCA in connection with the Betterment Projects which are the subject of this Agreement, and related street openings and excavations.

6. Additional Modifications to Streets Ordinance Provisions. In light of the fact that road restoration work is being performed both by the LCA Restoration Work as well as the City Restoration Work, it is acknowledged and agreed that the following provisions of the Streets and Sidewalks Ordinance shall not apply to LCA and these Betterment Project street openings: Chapter 545 Streets and Sidewalks, §56.B. (relating to permanent surface restoration work being performed by a permittee) and deposits to be paid by any permittee in connection therewith; the requirement of maintaining convenience to the public and temporary approaches to and crossings of intersecting streets to be provided for and kept in good condition where practicable, shall apply to LCA only until the LCA Restoration Work has been

performed (Chapter 545 Streets and Sidewalks, §56.H.), which those responsibilities shall belong to the City;

LCA's obligation to safeguard and maintain in good order the excavation (Chapter 545 Streets and Sidewalks, §56.G) shall apply only until such time as the LCA Restoration Work has been completed and approved by the City and after which it shall be the responsibility of the City; the milling and overlay requirements of Chapter 545 Streets and Sidewalks, §56.O, shall not apply to LCA, but instead shall apply to the City, as being part of the City Restoration Work, and any permittee responsibility set forth therein associated with final restoration shall not be applicable to LCA, nor shall any inspection and repair obligations relating to or associated with any final restoration, and/or milling and overlay; any obligation of LCA to indemnify or hold the City harmless (under Chapter 545 Streets and Sidewalks, §56.P) shall not apply to any of the City Restoration Work, and/or any consequences, claims, damages, or losses to the extent arising or resulting therefrom, LCA shall not be obligated to save and hold harmless the City for any damages or liability (under Chapter 545 Streets and Sidewalks, §56.Q.) for personal injury or property damage to the extent arising directly or indirectly from the City Restoration Work; any indemnification agreement provided previously or to be executed by LCA (pursuant to Chapter 545 Streets and Sidewalks, §56.R.) shall not apply to any of the City Restoration performed; and the guarantee and maintenance requirements (under Chapter 545 Streets and Sidewalks, §56.T. Prerequisites to obtaining excavation permit) shall not apply to any correction of Work to the extent arising or resulting from the City Restoration Work.

7. Notification to Property Owners. It is LCA's practice to send notification letters to property owners along streets on which Betterment Projects are being undertaken to advise that work will be done within each street. With respect to the Betterment Projects which are the subject of this Agreement, it is agreed that LCA may include in any such communications reference to the fact that the City will be performing the final milling and overlay work upon completion of LCA Restoration Work, and that, as such, any inquiries, telephone calls, voice messages, and emails regarding concerns or complaints following completion of the LCA Restoration Work should be directed to the City representatives.

8. Notice. The Parties agree to designate specific representatives to be the principal contact person regarding ongoing street opening and repaving projects set forth on Exhibit A attached hereto. All notices are to be given by either Party to the other shall be in writing and delivered personally, by email, sent by Certified Return Receipt First Class United States Mail, postage prepaid or by recognized overnight delivery service providing positive tracking of items (such as Federal Express) as follows:

TO THE CITY:

Mark Shahda, Director of Public Works City of Allentown
6415. 10th Street, Allentown, PA 18103
610-437-7587
Mark.shanda@allentownpa.gov

TO LCA:

Jason Peters, Project Coordinator, Lehigh County Authority,
1053 Spruce Rd, Allentown, PA 18106
610-972-0619,
jasonpeters@lehighcountyauthority.org

9. Changes and Modifications Must be in Writing. This Agreement may not be modified, amended, or otherwise changed in any way except in writing signed by both Parties.

10. Binding Upon Successors. This Agreement shall be binding upon and inure to the benefit of the Parties and each one's successors and assigns. The City acknowledges and agrees that this Agreement may extend beyond the time period for the current City administration, but that this Agreement shall nonetheless be binding on any subsequent Administration, meaning both the Mayor and City Council.

11. Execution and Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original and all of which shall constitute one and the same document. A signature transmitted by facsimile or other electronic means shall be considered an original.

12. Entire Agreement: Prior Communications, Agreements Superseded and Extinguished. This Agreement supersedes and terminates any and all prior or contemporaneous oral or written agreements between or among any of the Parties hereto regarding cost sharing relating to City Restoration Work on the Betterment Projects referenced herein, all of which shall be deemed merged herein and extinguished hereby. This Agreement does not impact the Amended and Restated Concession and Lease Agreement between the Parties, or any other existing agreements between the Parties, all of which shall remain in full force and effect, and are not amended or extinguished by this Agreement, and do not merge into this Agreement. This Agreement sets forth the entire understanding and agreement of the Parties with respect to the matters set forth herein and there are no other promises, representations, warranties, agreements, or undertakings (written or verbal) between the Parties hereto, regarding the subject matter hereof.

13. Product of Mutual Negotiation and Draftsmanship. This Agreement is the product of negotiations between the Parties and each Party's counsel, and as a consequence, in construing the provisions of this Agreement, no inference or presumption shall be drawn against any Party on the basis of which party or its attorney may have drafted any portion of this Agreement, and further, the doctrine of contract interpretation relating to ambiguities being interpreted against the drafter of the document shall not be applicable.

14. Adoption by Appropriate Municipal Action and Authority. The City and LCA warrant and represent, recognizing that the Parties are materially relying thereon in entering into this Agreement, that the terms of this Agreement have been authorized and approved by all necessary and appropriate municipal action and authority.

15.Recording. This Agreement shall not be recorded in the Lehigh County Office of Judicial Records-Recorder of Deeds Division without the express written consent of the City and LCA.

16.Disputes. in the event of a dispute arising under this Agreement, the Parties shall confer and make good faith efforts to resolve any such dispute prior to instituting legal action to enforce the terms of this Agreement. Such good faith efforts shall include, without limitation, written notice of any alleged breach sent to the purported breaching party with reasonable opportunity for the purported breaching party to respond. Notice of alleged breach shall be issued within fifteen (15) days of the non- breaching party learning of such alleged breach and shall be sent to the purported breaching party with a copy to such party's counsel in a method that confirms receipt (i.e., overnight mail, electronic mail with a return receipt confirmation, etc.) Such good faith efforts shall also include reasonable consideration by both parties of mediation and arbitration. in no event shall any party institute legal action until the purported breaching party has had an opportunity to respond to the allegations and engage in meaningful communications with the other party or counsel to try to resolve any concerns. in no event shall litigation be commenced until seven (7) days after receipt of such notice. Nothing in this section shall limit either party from initiating legal action in the event that the good faith efforts described above have not led to a satisfactory resolution of a dispute.

17.Interpretation. This Agreement shall be construed, interpreted, and enforced in accordance with the laws of the Commonwealth of Pennsylvania.

18.Captions. The captions preceding the paragraphs of this Agreement are inserted for the convenience of reference only and shall not constitute, nor shall they in any way affect its meaning, construction and effect a part of this Agreement.

19.Effective Date. The Effective Date if this Agreement shall be the date of the last authorized signature appearing hereon.

20.LCA Reservation of Rights.

A. This agreement, the plans prepared or approved under it, and work performed pursuant to such plans, shall not constitute a precedent as to the level or scope of work required under the City Street Ordinance, or any other City rule or regulation; nor shall it constitute an admission or acceptance by LCA of the City's requirements. LCA and the City are entering into this agreement merely as matter of convenience to them in this instance, and without prejudice to their rights except as may be limited by this agreement. This agreement shall not have any impact or consequence as to any other agreement between LCA and the City, whether currently existing or in the future.

B. This agreement shall not constitute a waiver of any right of LCA under the Concession Lease with the City to receive additional compensation, or to recovery through utility system rate increases, the expense related to a Change of Law applicable to the standards for LCA Restoration Work on Betterment Projects, or other related costs. LCA reserves its right to recover such additional costs due to any Changes of Law.

IN WITNESS WHEREOF, the undersigned, intending to be legally bound, and representing that each has authority to execute this Agreement on behalf of its respective Party, have executed this Agreement effective as of the Effective Date.

By: _____
(Witness)

LEHIGH COUNTY AUTHORITY

Name: Liesel Gross
Title: Chief Executive Officer
Date: _____

By: _____
(Witness)

CITY OF ALLENTOWN

Name: Matthew Tuerk
Title: Mayor
Date: _____

Exhibits

A Cycles 7 and 8 Water Main Rehabilitation

B Bituminous Pavement Replacement with Overlay in City Streets (Diagram)

CAPITAL PROJECT AUTHORIZATION

PROJECT NO.:	AD-W-24-1	BUDGET FUND:	Allentown Div\Water\Capital
PROJECT TITLE:	Allentown Division -Water Main Replacement Cycles 7&8	PROJECT TYPE:	
THIS AUTHORIZATION	<u>\$ 5,053,203</u>	<input checked="" type="checkbox"/> Construction	
		<input type="checkbox"/> Engineering Study	
		<input type="checkbox"/> Equipment Purchase	
		<input type="checkbox"/> Amendment No.	

DESCRIPTION AND BENEFITS:

The amended Operating Standards of the Lease Agreement (Agreement) in the 2020 settlement with the City of Allentown requires Lehigh County Authority to replace a minimum of four (4) miles of water main from 2021 through the end of 2024. The replacements of these mains are critical in maintaining infrastructure reliability and meeting the requirements of the Agreement.

The scope of this CPA consists of 2.20 miles of water main replacements.

Allentown Division Water Main Replacement Project Cycles 7&8 - Construction Phase

Please reference the cover Memo for additional information.

REQUESTED THIS AUTHORIZATION	
Construction Phase Cycle 6	
Staff	\$75,000
Professional Services	
Construction Engineering / Management	\$89,280
Inspection	\$89,300
General Construction Contract	\$3,912,403
Cost Sharing Agreement	\$737,220
Contingency	\$150,000
Total This Authorization	\$5,053,203

REVIEW AND APPROVALS:

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



Lehigh County Authority

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

PROFESSIONAL SERVICES AUTHORIZATION

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

Date: April 22, 2024

Requested By: Jason Peters

Approvals

Department Head: _____

Chief Executive

Officer: _____

Allentown Division – Water Main Replacement Program Cycles 7&8

This Authorization- Construction Phase, Cycles 7&8: \$89,280

Gannett Fleming, Inc. will provide construction phase services including the following:

Professional Services
1. Conduct preconstruction conference & monthly progress meetings
2. Review all contractor schedules and submittals for compliance with specs
3. Prepare change orders as necessary
4. Respond to contractor RFIs
5. Review certified payroll receipts
6. Perform substantial and final completion inspections
7. Provide recommendations regarding release of payment, completeness of work, and final acceptance

Please reference the cover Memo for additional information.

Cost Estimate (not to be exceeded without further authorization): \$89,280

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

(For Authority Use Only)

Authorization Completion:

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



Lehigh County Authority

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

PROFESSIONAL SERVICES AUTHORIZATION

Professional: KEYSTONE CONSULTING
ENGINEERS
5012 Medical Center Circle,
Suite 1
Allentown, PA 18106

Date: April 22, 2024

Requested By: Jason Peters

Approvals
Department Head: _____
Chief Executive Officer: _____

Allentown Division – Water Main Replacement Program Cycles 7&8

This Authorization- Construction Phase, Cycle 7&8: \$89,300

Keystone Consulting Engineers will provide construction inspection related services including the following:

Professional Service
1. Provide full-time field inspection services
2. Attend pre-construction meeting, progress meetings, and other field meetings as necessary
3. Provide on-site contract management and coordination
4. Maintain daily inspection records and quantity tracking
5. . Review change order documentation
6. Review monthly payment applications
7. Perform substantial & final completion inspections and issue punchlists

Please reference the cover Memo for additional information.

Cost Estimate (not to be exceeded without further authorization): \$89,300

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

(For Authority Use Only)

Authorization Completion:

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

MEMORANDUM

Date: April 22, 2024

To: Lehigh County Authority Board of Directors
From: Amy Rohrbach, Project Manager
Subject: Allentown Division – KIWWTP Final Settling Tanks 1-4 Upgrades –Design & Bidding Services

MOTIONS / APPROVALS REQUESTED:

No.	Item	Amount
1	Capital Project Authorization – Design & Bidding Phase	\$166,400
2	Professional Services Authorization – GHD (1), (2)	\$146,400

- (1) *Included in the Capital Project Authorization*
- (2) *Does not include construction phase related engineering services*

PROJECT BACKGROUND

The Kline’s Island Wastewater Treatment Plant (KIWWTP) currently has ten (10) final settling tanks (FSTs) of varying sizes built at various times. The four (4) smallest tanks, approximately 70-foot diameter, are also the oldest and were part of the original plant construction back in 1931. The most recent upgrades were performed in the 1960s when the launderers were changed and new clarifier mechanisms and associated electrical components were installed. The existing components are at the end of their useful life and in need of replacement. This project proposes upgrades to the existing clarifier rake mechanisms and structural repairs to the tanks. Electrical upgrades are also proposed to replace the aging system. LCA recently replaced the drive unit on FST 1 and recently received a new drive unit for FST 2. Two additional drive units are currently on order from the drive manufacturer, GMH Associates of America, Inc. One will be for FST 4 and the other to be used as a spare. FST 3 is currently being utilized as a leachate receiving tank and will remain as such.

GHD was retained to perform the preliminary engineering report, and they have proven experience and familiarity with the KIWWTP so it is recommended they perform the final design.

FINANCIAL

This Project has received conceptual design approval from the City of Allentown, and is considered a Major Capital Improvement project; therefore, costs will be recovered in Capital Cost Recover Charges (CCRC).

THIS APPROVAL – DESIGN AND BIDDING PHASE SERVICES

Lehigh County Authority (LCA) intends to retain the services of GHD to provide the detailed design and bidding phase services for the project. The following table summarizes the professional services to be performed under this approval:

Professional Services ⁽¹⁾
1. Project Management, Meetings, and Design Coordination
2. Bid Documents Preparation (Drawings & Specifications)

3. Pre-Bid Meeting attendance and Bid Phase Administration
4. Expenses (printing & mileage)

(1) See GHD proposal dated 4/9/2024

PROJECT SCHEDULE

Assuming approval of the Design & Bidding Phase Services at the April 22, 2024 Board meeting, it is anticipated that the work will be completed by December 31, 2024.

FUTURE AUTHORIZATIONS – FINAL ENGINEERING DESIGN & BIDDING PHASE

Following Design and Bidding services, Capital Project Authorization will be requested from the Board for a construction contract and Construction Administration services PSA.



Our ref: 12624159

April 09, 2024

Amy Rohrbach
Project Manager
Lehigh County Authority
112 Union Street
Allentown, PA 18102

**Re: Proposal for Professional Engineering Services
Final Settling Tank (FST) Rehabilitation – Final Design Phase Services**

Dear Ms. Rohrbach:

GHD is pleased to submit this proposal to Lehigh County Authority (LCA) to provide final design phase services associated with the rehabilitation of the final clarifiers at the Kline's Island WWTP.

Project Understanding

The Kline's Island WWTP is located in the City of Allentown and serves about a quarter million people in Allentown and 13 surrounding municipalities, treating about 32 million gallons of wastewater per day (mgd). The 40 mgd facility is a two-stage trickling filter plant, providing secondary treatment and tertiary nitrification of both municipal and industrial wastes.

As part of the secondary treatment process, the WWTP has ten (10) final settling tanks of varying sizes that were built at different times. The four (4) oldest final settling tanks date back to the original plant construction in 1928. These tanks are referred to as FST 1 through FST 4. Settling tanks 1, 2, and 4 are operated as clarifiers, while FST 3 is utilized for leachate receiving.

The last major work done in these tanks was completed in the 1960s, when the external launders were replaced with an internal configuration, and the clarifier mechanisms were replaced. The final settling tanks themselves are in generally good condition for their age, but the associated mechanical and electrical equipment has either reached or exceeded the end of its useful service life.

GHD prepared a 30% design memorandum report (dated February 22nd, 2024) summarizing needed mechanical and electrical improvements as well as concrete rehabilitation and repair work that will increase the performance, reliability, and lifespan of the final settling tanks. The scope of work recommended by GHD in the report includes mechanical, structural, and electrical improvements.

Mechanical improvements include the following:

- Demolition of existing Dorr-Oliver clarifier mechanisms, effluent launders and weirs, walkway, and 30" influent pipe from FSTs 1, 2, and 4.
- Demolition of existing Dorr-Oliver clarifier drive, mechanism, effluent launders and weirs, and 30" influent pipe from FST 3. The walkway for FST 3 shall remain.
- Demolition of drives from FSTs 2, 3, and 4, and salvage drive from FST 1.

- Installation of new clarifier mechanisms, effluent launders and weirs, walkways, and 30" influent pipe in FSTs 1, 2, and 4.
- Installation of salvaged drive in FST 1 and new drives from DBS Manufacturing in FSTs 2 and 4.
- Installation of density current baffles to improve clarifier performance and reduce the chance of short circuiting in FSTs 1, 2, and 4.
- Installation of launder covers, similar to what LCA installed previously on the larger final settling tanks, in FSTs 1, 2, and 4.
- Installation of a new davit crane in FST 3.
- Surface preparation and painting of the existing walkway and center column in FST 3.

Structural improvements include the following:

- For each tank, any concrete spalls and cracks should be cleaned and repaired, as required, after removal of the existing clarifier mechanisms and before installation of the new ones, as applicable.
- The existing steel anchors that remain in the top of the walls from a prior railing upgrade, as well as any steel anchors that are cut off during demo of the effluent troughs or clarifier equipment shall be cut flush with the concrete surface and coated with an anti-corrosion primer to help reduce corrosion and potential freeze thaw and spalling at the anchor locations.
- FST 3 will remain a leachate holding tank, so it is not required to remove the grout topping on the tank bottom. However, the topping should be routed and sealed with a sealant to help reduce water ingress under the topping and to minimize the potential for freeze thaw damage to the underlying concrete.
- For FST 1, 2, and 4, assuming they are in the same condition as FST 3, the existing grout should be removed and a new grout layer installed when the new clarifier mechanisms are installed.
- For each tank, the existing brick should be cleaned and sounded to verify structural integrity. Loose and spalled brick should be removed and new brick and mortar should be installed to seal off existing ports. After completion of the repairs, a silane sealer should be installed on the exterior face of the brick to help waterproof the brick.
- For each tank, remove any loose cementitious coating on the interior of the tanks below the waterline and repair with a new cementitious coating.
- Remove existing asphalt and concrete caps over old effluent channel and install new concrete or asphalt to limit water penetration into the channel.
- Install a new coating from the top of the effluent troughs to the top of the tank walls.

Electrical improvements include the following:

- Replacement in-kind of MCC-5 and MCC-5A.
- New local pushbutton control stations installed by the drive motors for FSTs 1, 2, and 4.
- New local pushbutton control station installed at the leachate pump motor (FST 3).
- Two new post lanterns and a weatherproof convenience receptacle installed on each of the new bridges for FSTs 1, 2, and 4.
- Lighting and a weatherproof convenience receptacle installed near the leachate pump motor for FST 3.
- New wiring from FSTs 1, 2, 3, and 4 to the Final Sludge Pumping Station No. 1, run in new underground conduits.

- A new feeder installed from MCC-4A in the (old) Chlorination Building to MCC-5. The feeder will be installed in a new concrete-encased duct bank, which will include a spare conduit. This will be an improvement over the existing feeder, which is a direct-buried cable. The duct bank will provide superior protection for the feeder conductors and will facilitate feeder replacement if replacement becomes necessary.
- Install conduit with fiber between the PLC in the existing Chlorination Building / Effluent Pump Station to the PLC in the Final Sludge Pumping Station No. 1.

Scope of Services

GHD will prepare final design documents including plans and specifications suitable for public bidding, in accordance with the 30% design memorandum report submitted to the City of Allentown, dated February 22nd. 2024. The scope of work recommended in the report, which is summarized in the previous section, is the basis for the final design effort and associated cost. To streamline the design phase, GHD will proceed directly to the 90% design. This approach is possible due to the straightforward nature of the project scope.

In addition to preparing final design plans and specifications, GHD will update the opinion of probable construction cost for the project at major design milestones including the submission of the 90% design to the City of Allentown as well as the 100% design documents submitted to LCA. The construction schedule will also be revisited at each milestone, and adjustments made, as needed, based on input from vendors concerning equipment delivery times.

GHD understands that a Part II Water Quality Management Permit will not be required for this project since it involves in-kind replacement of existing equipment and no change in treatment capacities. This assumption will be confirmed with the PA Department of Environmental Protection.

GHD developed a list of final design drawings. A total of up to twenty-six (26) drawings are anticipated, as follows:

General Drawings

- G-1 Cover Sheet
- G-2 List of Drawings, Symbols, and Abbreviations

Demolition Drawings

- D-1 Final Settling Tank No. 1 – Demolition
- D-2 Final Settling Tank No. 2 – Demolition
- D-3 Final Settling Tank No. 3 – Demolition
- D-4 Final Settling Tank No. 4 – Demolition

Structural Drawings

- S-1 Concrete Notes and Details
- S-2 Concrete Repair Notes and Details
- S-3 Final Settling Tank No. 1 - Repair Plan and Section
- S-4 Final Settling Tank No. 2 - Repair Plan and Section
- S-5 Final Settling Tank No. 3 - Repair Plan and Section
- S-6 Final Settling Tank No. 4 - Repair Plan and Section

Mechanical Drawings

- M-1 Final Settling Tank No. 1 – Plan and Section
- M-2 Final Settling Tank No. 2 – Plan and Section
- M-3 Final Settling Tank No. 3 – Plan and Section
- M-4 Final Settling Tank No. 4 – Plan and Section
- M-5 Weir and Mechanical Details

Electrical Drawings

- E-1 Symbols & Abbreviations
- E-2 Site Plan
- E-3 Floor Plan - Final Sludge Pumping Station No. 1
- E-4 Floor Plan – Chlorination Building
- E-5 Settling Tank Plans
- E-6 MCC One-Lines and Elevations
- E-7 Elementary Diagrams
- E-8 Elementary Diagrams
- E-9 Schedules and Details

Two meetings are included during final design. The first is a kick-off meeting to review the project scope, goals, and objectives, and to make any final decisions resulting from the City's review of the 30% design memorandum. For example, materials of construction for the new mechanisms will be discussed, as well as the extent of concrete tank rehabilitation to be included as a base bid item, as opposed to an alternate. The second meeting will be a 90% design workshop with LCA. The purpose of this in-person meeting will be to review the complete drawing and specification package prior to sending it to the City for review.

Two formal submittals are including during final design. The first is the 90% design submittal. Since the 90% submittal will be reviewed by the City, it will be considered a 100% submittal in terms of content and quality. LCA comments will be incorporated into the 90% design drawings and specifications prior to transmitting to the City. The drawings and specifications will be nearly complete at this point, with only minor changes made between 90% and 100% based on comments received from the City.

The second formal submittal is the 100% design submittal that will contain the final drawings and specifications suitable for public bidding (i.e. Bid Documents). GHD will develop a set of Bid Documents, including technical plans and specifications. LCA will furnish the front end documents, which GHD will integrate and combine with the technical specifications. The work will be bid under two prime contracts, one for General Construction and a second for Electrical Construction.

GHD will complete the following tasks as part of the bid phase of the work:

- Obtain prevailing wage rates and incorporate them into the Bid Documents.
- Prepare an advertisement in accordance with public bidding laws, with LCA arranging and paying for advertising.
- Make Bid Documents available to prospective bidders via PennBid.
- Respond to questions from bidders and vendors concerning information in the Bid Documents.

- Schedule and conduct a mandatory pre-bid meeting. Prepare meeting notes/minutes for distribution.
- Prepare and issue Addenda as appropriate to interpret, clarify, or expand upon the Bid Documents.
- Evaluate the bids received for compliance with the bidding requirements.
- Review qualifications and experience data furnished by bidders.
- Provide a recommendation with respect to acceptance of bids and award of a construction contract.
- Contract award and construction phase engineering services will be completed as part of a separate construction phase contract.

Contract award and construction phase engineering services will be completed as part of a separate construction phase contract. At the conclusion of bidding phase services and after a contractor is selected, GHD will discuss with LCA the level of construction phase effort anticipated and/or desired for the next stage of the project.

Key assumptions include the following:

- Geotechnical work is neither included nor needed. GHD assumes the final settling tanks have been emptied in the past. If conditions have changed and floating the tanks might now be a concern, further investigation beyond the scope of this proposal might be required.
- Surveying work is neither included nor needed. GHD will rely on existing record drawings for the design. The general contractor will be required to survey the tanks during construction to confirm the exact dimensions.

Schedule

GHD can start work on this project immediately upon receipt of LCA’s authorization to proceed. The anticipated schedule for completing the design, bidding, and construction of the final settling tank rehabilitation project is summarized in Table 1.

Table 1 Anticipated Project Design, Bidding, and Construction Schedule

Milestone	Duration	Calendar Date
GHD Authorized to Proceed to Final Design	-	April 2024
90% Design Submitted to LCA	16 weeks	July 2024
City of Allentown Approves the 90% Design (30 days)	4 weeks	August 2024
100% Design Finalized and Submitted to LCA (30 days)	4 weeks	September 2024
Project is Advertised (30 days)	4 weeks	October 2024
Bids are Received, Reviewed, and Contract Awarded	8 weeks	December 2024
Notice to Proceed Issued to Contractors	-	January 2025
Equipment Submittals, Fabrication, and Shipment	52 weeks	January – December 2025
Begin Construction	-	January 2026

Milestone	Duration	Calendar Date
Substantial Completion Achieved	21 weeks	May 2026

Cost Proposal

GHD proposes to complete the work described herein for a not to exceed price of \$146,400 inclusive of all labor and expenses. LCA will only be billed for the actual time and expenses required. Table 2 provides a summary of the fee breakdown.

Table 2 Engineering Fee Summary

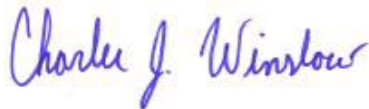
Task	Fee
Project Management, Meetings, and Design Coordination	\$22,700
Bid Documents Preparation (Drawings and Specifications)	\$114,200
Pre-Bid Meeting Attendance and Bid Phase Administration	\$8,500
Expenses (i.e. Printing and Mileage)	\$1,000
TOTAL	\$146,400

Terms and Conditions

All work will be completed in accordance with the terms and conditions outlined in the “2023-2024 Master Services Agreement for Professional Services” between Lehigh County Authority and GHD dated April 12, 2023.

Please do not hesitate to contact me with any questions you may have regarding the project and/or this proposal. We look forward to the successful and timely completion of this project.

Regards,



Charles J. Winslow
Project Manager
215.892.4134
charles.winslow@ghd.com



Joel Kostelac, PE BCEE
Business Group Leader
717 541-0622
joel.kostelac@ghd.com

CJW

CAPITAL PROJECT AUTHORIZATION

PROJECT NO.:	AD-S-22	BUDGET FUND:	Allentown Div\WW\Capital
PROJECT TITLE:	Allentown Division – KIWWTP Final Settling Tanks 1-4 Upgrades Detailed Design and Bidding Phase	PROJECT TYPE:	<input type="checkbox"/> Construction <input checked="" type="checkbox"/> Engineering Design <input type="checkbox"/> Equipment Purchase <input type="checkbox"/> Amendment No. 1
THIS AUTHORIZATION:	\$166,400		
TO DATE (W/ ABOVE)	\$205,800		

DESCRIPTION AND BENEFITS:

The purpose of this project is to upgrade the 4 smallest final clarifiers at the KIWWTP as they are at the end of their useful life. The new design will include new clarifier rake arm mechanisms, weirs, launders, launder covers, new MCC, wiring, and incidental construction. Tank #3 will remain a leachate receiving tank, but it will be feasible to return to a settling tank if necessary. GHD will provide final design and bidding phase services for the project. GHD has worked with LCA on the conceptual design memo which has been reviewed by the City of Allentown and is considered a Major Capital Improvement project.

AUTHORIZATION STATUS:

Prior Authorizations	
<i>Conceptual Design Phase – GHD</i>	\$39,400
Requested This Authorization – Detailed Design & Bidding Phase	
Detailed Design & Bidding Phase: GHD	\$146,400
Staff	\$10,000
Contingencies	\$10,000
Total This Authorization	\$166,400

Future Authorizations	
Construction Phase	

Total Estimated Project	\$5,500,000
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REVIEW AND APPROVALS:

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



Lehigh County Authority

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

PROFESSIONAL SERVICES AUTHORIZATION

Professional: GHD
1140 Welsh Road, Suite 120
North Wales, PA 19454

Date: April 22, 2024
Requested By: Amy Rohrbach
Approvals
Department Head: _____
Chief Executive Officer: _____

Allentown Division – KIWWTP Final Settling Tanks 1-4 Upgrades Design & Bid Phase Services

The purpose of this project is to upgrade the 4 smallest final clarifiers at the KIWWTP as they are at the end of their useful life. The new design will include new clarifier rake arm mechanisms, weirs, launders, launder covers, new MCC, wiring, and incidental construction. Tank #3 will remain a leachate receiving tank, but it will be feasible to return to a settling tank if necessary. GHD will provide final design and bidding phase services for the project. GHD has worked with LCA on the conceptual design memo which has been reviewed by the City of Allentown and is considered a Major Capital Improvement project. The following professional services are included:

Professional Services ⁽¹⁾
1. Attendance at Meetings
2. Pipe Routing Determination
3. Construction Sequence and Demo
4. Pipe Plans and Profiles

(1) Per attached 4/9/2024 GHD proposal letter

Design and Bidding Phase:

This Authorizations: \$146,400

Preliminary Engineering Authorizations: \$39,400

Time Table and Completion Deadline: As outlined in the proposal to satisfactorily complete the design and bidding phase services. Anticipated completion of design and bidding phase services is December 31, 2024.











































(For Authority Use Only)

Authorization Completion:

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

**LEHIGH COUNTY AUTHORITY
FINANCIAL STATEMENTS
MARCH 2024**

**LEHIGH COUNTY AUTHORITY
YTD SUMMARY SCORESHEET
MARCH 2024**

	<u>Sub W</u>	<u>Sub WW</u>	<u>City</u>
YTD Net income >0			
YTD Net income >= FC			
YTD Cash Flow >0			
YTD Cash Flow >= FC			
YTD DSCR >= FC			
YTD DSCR >= 1.20			
YTD Operating Ratio >= 1.00			
YTD Operating Ratio >= Budget Target			
YTD Days Cash on Hand >= 180.0			
YTD Operating Revenues >= FC			
YTD Operating Expenses <= FC			
FY FC Net Income >= Budget			
FY FC Cash Flows >=Budget			
FY FC DSCR >= Budget			
TOTAL GREEN	<u><u>14</u></u>	<u><u>10</u></u>	<u><u>14</u></u>

LEHIGH COUNTY AUTHORITY
 FINANCIAL STATEMENTS - SUMMARY
 For the Period Ended March 31, 2024

	Consolidated Financial Statements														
	Month					Year To Date					FULL YEAR				
	Actual	Q1 FC	Prior Year	FC Var	PY Var	Actual	Q1 FC	Prior Year	FC Var	PY Var	Q1 FC	Budget	Prior Year	Bud Var	PY Var
Income Statement															
Suburban Water	50,115	(129,919)	42,066	180,034	8,049	543,942	215,488	512,073	328,454	31,869	2,019,922	2,019,922	7,931,557	-	(5,911,635)
Suburban Wastewater	142,734	455,472	451,393	(312,737)	(308,659)	(109,501)	(519,397)	(85,297)	409,895	(24,204)	(1,632,719)	(1,632,719)	(303,737)	(0)	(1,328,982)
City Division	1,280,583	103,535	764,407	1,177,047	516,176	3,895,718	1,995,179	2,804,133	1,900,539	1,091,585	14,844,627	14,844,627	11,351,144	-	3,493,483
Total LCA	1,473,432	429,088	1,257,866	1,044,344	215,566	4,330,159	1,691,270	3,230,908	2,638,889	1,099,251	15,231,830	15,231,830	18,978,963	(0)	(3,747,133)
Cash Flow Statement															
Suburban Water	(636,784)	(572,127)	6,198,113	(64,657)	(6,834,897)	729,288	594,094	4,770,278	135,194	(4,040,990)	1,446,850	1,446,849	3,429,573	2	(1,982,723)
Suburban Wastewater	(735,550)	(404,343)	1,763,650	(331,207)	(2,499,199)	(1,270,550)	(1,907,979)	3,913,708	637,429	(5,184,258)	347,044	347,045	2,938,224	(1)	(2,591,180)
City Division	2,700,491	1,157,144	3,781,113	1,543,346	(1,080,623)	6,752,806	3,940,260	6,923,407	2,812,547	(170,601)	2,940,507	2,940,507	13,827,652	0	(10,887,145)
Total LCA	1,328,157	180,675	11,742,876	1,147,483	(10,414,719)	6,211,544	2,626,375	15,607,394	3,585,169	(9,395,850)	4,734,401	4,734,400	20,195,449	1	(15,461,048)
Debt Service Coverage Ratio															
Suburban Water	1.53	0.65	1.42	0.88	0.11	1.99	1.44	1.89	0.55	0.10	1.96	1.96	3.86	-	(1.90)
Suburban Wastewater	7.33	10.19	16.32	(2.87)	(8.99)	5.53	3.98	8.37	1.55	(2.84)	4.67	4.67	9.06	-	(4.39)
City Division	2.30	1.55	2.22	0.75	0.08	2.32	1.95	2.37	0.36	(0.05)	2.13	2.13	2.82	-	(0.69)

LEHIGH COUNTY AUTHORITY
 CONSOLIDATED FINANCIAL STATEMENTS
 For the Period Ended March 31, 2024

	Consolidated Financial Statements															
	Month				Year To Date				Q1 FULL YEAR FORECAST				Full Year Budget			
STATEMENTS OF ACTIVITIES	Sub W	Sub WW	City	LCA	Sub W	Sub WW	City	LCA	Sub W	Sub WW	City	LCA	Sub W	Sub WW	City	LCA
Operating Revenues:																
User Charges	1,240,558	1,573,930	4,700,232	7,514,720	3,872,959	4,732,328	13,153,833	21,759,120	17,485,300	19,128,454	55,555,506	92,169,260	17,485,300	19,128,454	55,555,506	92,169,260
Connection & System Charges	135,053	295,230	246,330	676,613	226,097	400,202	582,219	1,208,518	950,850	1,695,900	3,609,600	6,256,350	950,850	1,695,900	3,609,600	6,256,350
Other Miscellaneous Revenues	9,470	45	2,325	11,840	13,085	105	24,155	37,345	177,724	2,900	89,800	270,424	177,724	2,900	89,800	270,424
Total Operating Revenues	1,385,081	1,869,205	4,948,887	8,203,173	4,112,141	5,132,635	13,760,207	23,004,983	18,613,874	20,827,254	59,254,906	98,696,034	18,613,874	20,827,254	59,254,906	98,696,034
Operating Expenses:																
Personnel	421,226	174,329	1,252,186	1,847,741	1,030,759	436,126	2,877,198	4,344,082	4,269,081	1,766,601	13,986,737	20,022,419	4,269,081	1,766,601	13,986,737	20,022,419
Shared Services - General & Administrative	84,078	35,008	231,407	350,493	178,310	75,427	472,774	726,512	1,136,102	456,840	2,545,190	4,138,132	1,136,102	456,840	2,545,190	4,138,132
Utilities	45,227	27,453	162,160	234,840	132,537	80,579	506,336	719,452	537,998	313,870	2,063,922	2,915,790	537,998	313,870	2,063,922	2,915,790
Materials and Supplies	88,539	28,670	266,748	383,957	154,828	70,726	676,045	901,599	1,197,810	518,722	3,251,300	4,967,832	1,197,810	518,722	3,251,300	4,967,832
Miscellaneous Services	350,070	555,025	67,610	982,705	1,040,466	1,665,302	302,998	3,008,766	4,806,151	7,631,090	2,397,011	14,834,252	4,806,151	7,631,090	2,397,011	14,834,252
Treatment and Transportation	-	350,000	-	350,000	-	1,291,553	-	1,291,553	-	4,529,540	11,400	4,540,940	-	4,529,540	11,400	4,540,940
Depreciation and Amortization	297,790	575,538	515,561	1,388,889	893,370	1,726,613	1,546,683	4,166,666	3,517,000	7,031,500	6,169,850	16,718,350	3,517,000	7,031,500	6,169,850	16,718,350
Major Maintenance Expenses	-	-	3,996	3,996	-	-	12,369	12,369	-	-	4,000,000	4,000,000	-	-	4,000,000	4,000,000
Other Miscellaneous	-	-	-	-	-	-	-	-	93,100	22,100	-	115,200	93,100	22,100	-	115,200
Total Operating Expenses	1,286,930	1,756,023	2,499,668	5,542,621	3,430,270	5,346,327	6,394,404	15,171,001	15,557,242	22,270,263	34,425,410	72,252,915	15,557,242	22,270,263	34,425,410	72,252,915
Net Operating Profit	98,151	113,182	2,449,219	2,660,552	681,871	(213,692)	7,365,803	7,833,982	3,056,632	(1,443,009)	24,829,496	26,443,119	3,056,632	(1,443,009)	24,829,496	26,443,119
Non-Operating Income (Expense)																
Interest Income	41,761	46,903	265,196	353,861	125,399	133,428	831,111	1,089,938	130,452	130,271	984,881	1,245,604	130,452	130,271	984,881	1,245,604
Interest (Expense)	(89,022)	(12,364)	(1,433,832)	(1,535,218)	(267,091)	(37,134)	(4,301,510)	(4,605,735)	(1,167,162)	(185,934)	(19,703,642)	(21,056,738)	(1,167,162)	(185,934)	(19,703,642)	(21,056,738)
Other Miscellaneous	(775)	(4,987)	-	(5,762)	3,763	7,896	314	11,973	(1,036,710)	(134,047)	8,733,892	8,599,845	(1,036,710)	(134,047)	8,733,892	8,599,845
Net Non-Operating Income (Expense)	(48,036)	29,552	(1,168,636)	(1,187,120)	(137,929)	104,190	(3,470,085)	(3,503,823)	(1,036,710)	(185,710)	(9,984,869)	(11,211,289)	(1,036,710)	(189,710)	(9,984,869)	(11,211,289)
Net Income (Loss)	50,115	142,734	1,280,583	1,473,432	543,942	(109,501)	3,895,718	4,330,159	2,019,922	(1,632,719)	14,844,627	15,231,830	2,019,922	(1,632,719)	14,844,627	15,231,830

CASH FLOW STATEMENT																
Cash Flows From Operating Activities																
	Month				Year To Date				Q1 FULL YEAR FORECAST				Full Year Budget			
	Sub W	Sub WW	City	LCA	Sub W	Sub WW	City	LCA	Sub W	Sub WW	City	LCA	Sub W	Sub WW	City	LCA
Operating Revenues	1,385,081	1,869,205	4,948,887	8,203,173	4,112,141	5,132,635	13,760,207	23,004,983	18,613,874	20,827,254	59,254,906	98,696,034	18,613,874	20,827,254	59,254,906	98,696,034
Operating Expenses (ex D&A)	(989,140)	(1,180,486)	(1,980,112)	(4,149,737)	(2,536,900)	(3,619,714)	(4,835,352)	(10,991,965)	(12,040,242)	(15,238,763)	(24,255,560)	(51,534,565)	(12,040,242)	(15,238,763)	(24,255,560)	(51,534,565)
Non-Cash Working Capital Changes	210,291	(973,394)	880,991	117,888	681,972	(2,216,650)	(799,630)	(2,334,309)	2	(200,001)	(135,999)	(335,998)	1	(200,000)	(135,999)	(335,998)
Net Cash Provided by (Used in) Operating Activities	606,232	(284,674)	3,849,767	4,171,325	2,257,213	(703,729)	8,125,226	9,678,710	6,573,634	5,388,490	34,863,347	46,825,471	6,573,633	5,388,491	34,863,347	46,825,470
Cash Flows From Financing Activities																
Capital Contributions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Proceeds New Borrowing	-	-	-	-	-	-	-	-	5,230,000	7,175,000	8,555,508	20,960,508	5,230,000	7,175,000	8,555,508	20,960,508
Interest Payments	(880)	(11,888)	(1,108)	(13,876)	(2,664)	(35,708)	(3,337)	(41,708)	(1,167,162)	(185,934)	(13,315,397)	(14,668,493)	(1,167,162)	(185,934)	(13,315,397)	(14,668,493)
Principal Payments	(6,363)	(48,867)	(697,395)	(752,624)	(19,064)	(146,302)	(707,777)	(873,143)	(2,254,324)	(1,010,486)	(2,945,000)	(6,209,810)	(2,254,324)	(1,010,486)	(2,945,000)	(6,209,810)
Net Cash Provided by (Used in) Financing Activities	(7,243)	(60,755)	(698,503)	(766,501)	(21,728)	(182,010)	(711,113)	(914,851)	1,808,514	5,978,580	(7,704,889)	82,205	1,808,514	5,978,580	(7,704,889)	82,205
Cash Flows From Capital and Related Activities																
Non-Operating Income (Expenses)	(775)	(4,987)	-	(5,762)	3,763	7,896	314	11,973	-	(134,047)	7,425,668	7,291,621	-	(134,047)	7,425,668	7,291,621
Capital Expenditures, net	(1,276,759)	(432,036)	(715,970)	(2,424,765)	(1,635,360)	(770,136)	(1,492,731)	(3,898,226)	(7,065,750)	(11,516,250)	(32,628,500)	(51,210,500)	(7,065,750)	(11,516,250)	(32,628,500)	(51,210,500)
Net Cash Provided by (Used in) Capital and Related Activities	(1,277,535)	(437,023)	(715,970)	(2,430,528)	(1,631,597)	(762,240)	(1,492,417)	(3,886,253)	(7,065,750)	(11,650,297)	(25,202,832)	(43,918,879)	(7,065,750)	(11,650,297)	(25,202,832)	(43,918,879)
Cash Flows From Investing Activities																
Investments Converting To Cash	-	-	-	-	-	493,000	-	493,000	-	-	500,000	500,000	-	-	500,000	500,000
Purchased Investments	-	-	-	-	-	(249,000)	-	(249,000)	-	-	-	-	-	-	-	-
Interest Income	41,761	46,903	265,196	353,861	125,399	133,428	831,111	1,089,938	130,452	130,271	984,881	1,245,604	130,452	130,271	984,881	1,245,604
Net Cash Provided by (Used in) Investing Activities	41,761	46,903	265,196	353,861	125,399	377,428	831,111	1,333,938	130,452	630,271	984,881	1,745,604	130,452	630,271	984,881	1,745,604
FUND NET CASH FLOWS	(636,784)	(735,550)	2,700,491	1,328,157	729,288	(1,270,550)	6,752,806	6,211,544	1,446,850	347,044	2,940,507	4,734,401	1,446,849	347,045	2,940,507	4,734,400

DEBT SERVICE RATIO																
Debt Service Ratio (Indenture Based)																
	Month				Year To Date				Q1 FULL YEAR FORECAST				Full Year Budget			
	Sub W	Sub WW	City	LCA	Sub W	Sub WW	City	LCA	Sub W	Sub WW	City	LCA	Sub W	Sub WW	City	LCA
Total Operating Revenues	1,240,558	1,573,930	4,700,232	7,514,720	3,872,959	4,732,328	13,153,833	21,759,120	17,485,300	19,128,454	55,555,506	92,169,260	17,485,300	19,128,454	55,555,506	92,169,260
Total Operating Expenses (Cash Based)	(989,140)	(1,180,486)	(1,984,107)	(4,153,733)	(2,536,900)	(3,619,714)	(4,847,721)	(11,004,334)	(12,040,242)	(15,238,763)	(24,255,560)	(51,534,565)	(12,040,242)	(15,238,763)	(24,255,560)	(51,534,565)
Interest Income	41,761	46,903	265,196	353,861	125,399	133,428	831,111	1,089,938	130,452	130,271	984,881	1,245,604	130,452	130,271	984,881	1,245,604
Annual Lease Payment (City)	-	-	(109,019)	(109,019)	-	-	(327,056)	(327,056)	-	-	(1,308,224)	(1,308,224)	-	-	(1,308,224)	(1,308,224)
Total Non-Operating Revenues (Expenses)	143,747	290,288	248,655	682,691	242,945	408,203	606,689	1,257,837	1,128,574	1,564,753	3,699,400	6,392,727	1,128,574	1,564,753	3,699,400	6,392,727
Cash Available For Debt Service	436,927	730,636	3,120,957	4,288,520	1,704,404	1,654,246	9,416,855	12,775,504	6,704,084	5,884,715	34,676,003	46,964,802	6,704,084	5,884,715	34,676,003	46,964,802
Interest Paid	97,264	15,495	1,109,616	1,222,374	291,791	46,484	3,328,849	3,667,123	1,167,162	185,934	13,315,397	14,668,493	1,167,162	185,934	13,315,397	14,668,493
Debt Retirement (Principal Payments)	187,860	84,207	245,417	517,484	563,											

LEHIGH COUNTY AUTHORITY
 FINANCIAL STATEMENTS - SUBURBAN WATER
 For the Period Ended March 31, 2024

STATEMENTS OF ACTIVITIES	Suburban - Water														
	Month					Year To Date					Full Year				
	Actual	Q1 FC	Prior Year	FC Var	PY Var	Actual	Q1 FC	Prior Year	FC Var	PY Var	Q1 FC	Budget	Prior Year	Bud Var	PY Var
Operating Revenues:															
User Charges	1,240,558	1,319,484	1,252,845	(78,925)	(12,287)	3,872,959	3,833,865	3,726,703	39,094	146,256	17,485,300	17,485,300	16,493,151	-	992,149
Connection & System Charges	135,053	42,750	38,059	92,303	96,994	226,097	142,791	122,642	83,306	103,455	950,850	950,850	730,402	-	220,448
Other Miscellaneous Revenues	9,470	8,215	3,400	1,255	6,070	13,085	14,534	7,150	(1,449)	5,935	177,724	177,724	207,520	-	(29,796)
Total Operating Revenues	1,385,081	1,370,449	1,294,304	14,632	90,777	4,112,141	3,991,190	3,856,495	120,951	255,646	18,613,874	18,613,874	17,431,073	-	1,182,801
Operating Expenses:															
Personnel	421,226	382,682	341,393	(38,544)	(79,833)	1,030,759	1,028,403	963,367	(2,356)	(67,392)	4,269,081	4,269,081	3,810,995	-	(458,086)
Shared Services - General & Administrative	84,078	103,796	66,249	19,718	(17,829)	178,310	247,568	171,135	69,258	(7,175)	1,136,102	1,136,102	725,136	-	(410,966)
Utilities	45,227	62,986	57,366	17,759	12,139	132,537	139,159	132,181	6,622	(356)	537,998	537,998	489,997	-	(48,001)
Materials and Supplies	88,539	138,692	80,895	50,153	(7,644)	154,828	266,014	163,781	111,186	8,953	1,197,810	1,197,810	688,942	-	(508,868)
Miscellaneous Services	350,070	505,822	384,255	155,752	34,185	1,040,466	1,139,648	931,024	99,182	(109,442)	4,806,151	4,806,151	4,077,315	-	(728,836)
Treatment and Transportation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Depreciation and Amortization	297,790	230,978	255,823	(66,812)	(41,967)	893,370	759,746	767,469	(133,624)	(125,901)	3,517,000	3,517,000	3,898,085	-	381,085
Major Maintenance Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Miscellaneous	-	-	-	-	-	-	-	-	-	-	93,100	93,100	-	-	(93,100)
Total Operating Expenses	1,286,930	1,424,955	1,185,981	138,025	(100,949)	3,430,270	3,580,538	3,128,957	150,268	(301,313)	15,557,242	15,557,242	13,690,470	-	(1,866,772)
Net Operating Profit	98,151	(54,506)	108,324	152,657	(10,172)	681,871	410,651	727,539	271,220	(45,667)	3,056,632	3,056,632	3,740,603	-	(683,971)
Non-Operating Income (Expense)															
Interest Income	41,761	8,463	23,935	33,298	17,826	125,399	57,615	61,150	67,784	64,249	130,452	130,452	339,479	-	(209,027)
Interest (Expense)	(89,022)	(85,283)	(94,977)	(3,739)	5,955	(267,091)	(259,611)	(284,956)	(7,479)	17,865	(1,167,162)	(1,167,162)	(954,076)	-	(213,086)
Other Miscellaneous	(775)	1,407	4,785	(2,182)	(5,560)	3,763	6,833	8,340	(3,070)	(4,578)	-	-	4,805,551	-	(4,805,551)
Net Non-Operating Income (Expense)	(48,036)	(75,413)	(66,258)	27,377	18,221	(137,929)	(195,164)	(215,466)	57,235	77,537	(1,036,710)	(1,036,710)	4,190,954	-	(5,227,664)
Net Income (Loss)	50,115	(129,919)	42,066	180,034	8,049	543,942	215,488	512,073	328,454	31,869	2,019,922	2,019,922	7,931,557	-	(5,911,635)
CASH FLOW STATEMENT															
Cash Flows From Operating Activities															
Operating Revenues	1,385,081	1,370,449	1,294,304	14,632	90,777	4,112,141	3,991,190	3,856,495	120,951	255,646	18,613,874	18,613,874	17,431,073	-	1,182,801
Operating Expenses (ex D&A)	(989,140)	(1,193,977)	(930,158)	204,837	(58,982)	(2,536,900)	(2,820,792)	(2,361,488)	283,892	(175,412)	(12,040,242)	(12,040,242)	(9,792,385)	-	(2,247,857)
Non-Cash Working Capital Changes	210,291	210,207	(70,027)	84	280,318	681,972	681,889	(2,608,761)	83	3,290,733	2	1	(2,029,291)	2	2,029,294
Net Cash Provided by (Used in) Operating Activities	606,232	386,679	294,119	219,553	312,113	2,257,213	1,852,286	(1,113,754)	404,927	3,370,967	6,573,634	6,573,633	5,609,397	2	964,238
Cash Flows From Financing Activities															
Capital Contributions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Proceeds New Borrowing	-	-	6,950,000	-	(6,950,000)	-	-	6,950,000	-	(6,950,000)	5,230,000	5,230,000	6,950,000	-	(1,720,000)
Interest Payments	(880)	(877)	(975)	(3)	95	(2,664)	(2,651)	(2,949)	(12)	285	(1,167,162)	(1,167,162)	(1,298,151)	-	130,989
Principal Payments	(6,363)	(7,027)	(6,267)	664	(96)	(19,064)	(21,055)	(18,778)	1,991	(286)	(2,254,324)	(2,254,324)	(2,010,541)	-	(243,783)
Net Cash Provided by (Used in) Financing Activities	(7,243)	(7,904)	6,942,758	661	(6,950,001)	(21,728)	(23,706)	6,928,273	1,979	(6,950,001)	1,808,514	1,808,514	3,641,309	-	(1,832,795)
Cash Flows From Capital and Related Activities															
Non-Operating Income (Expenses)	(775)	1,407	4,785	(2,182)	(5,560)	3,763	6,833	8,340	(3,070)	(4,578)	-	-	(84,098)	-	84,098
Capital Expenditures, net	(1,276,759)	(960,773)	(827,484)	(315,987)	(449,275)	(1,635,360)	(1,298,933)	(1,118,731)	(336,426)	(516,628)	(7,065,750)	(7,065,750)	(6,085,513)	-	(980,237)
Net Cash Provided by (Used in) Capital and Related Activities	(1,277,535)	(959,366)	(822,699)	(318,169)	(454,835)	(1,631,597)	(1,292,101)	(1,110,391)	(339,496)	(521,206)	(7,065,750)	(7,065,750)	(6,169,612)	-	(896,138)
Cash Flows From Investing Activities															
Investments Converting To Cash	-	-	249,000	-	(249,000)	-	-	494,000	-	(494,000)	-	-	988,000	-	(988,000)
Purchased Investments	-	-	(489,000)	-	489,000	-	-	(489,000)	-	489,000	-	-	(979,000)	-	979,000
Interest Income	41,761	8,463	23,935	33,298	17,826	125,399	57,615	61,150	67,784	64,249	130,452	130,452	339,479	-	(209,027)
Net Cash Provided by (Used in) Investing Activities	41,761	8,463	(216,065)	33,298	257,826	125,399	57,615	66,150	67,784	59,249	130,452	130,452	348,479	-	(218,027)
FUND NET CASH FLOWS	(636,784)	(572,127)	6,198,113	(64,657)	(6,834,897)	729,288	594,094	4,770,278	135,194	(4,040,990)	1,446,850	1,446,849	3,429,573	2	(1,982,723)
DEBT SERVICE RATIO															
Debt Service Ratio (Indenture Based)															
User Charges	1,240,558	1,319,484	1,252,845	(78,925)	(12,287)	3,872,959	3,833,865	3,726,703	39,094	146,256	17,485,300	17,485,300	16,493,151	-	992,149
Operating Expenses (Cash Based)	(989,140)	(1,193,977)	(930,158)	204,837	(58,982)	(2,536,900)	(2,820,792)	(2,361,488)	283,892	(175,412)	(12,040,242)	(12,040,242)	(9,792,385)	-	(2,247,857)
Interest Income	41,761	8,463	23,935	33,298	17,826	125,399	57,615	61,150	67,784	64,249	130,452	130,452	339,479	-	(209,027)
Annual Lease Payment (City)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Operating Revenues (Expenses)	143,747	52,372	46,244	91,375	97,504	242,945	164,157	138,132	78,787	104,812	1,128,574	1,128,574	5,743,472	-	(4,614,898)
Cash Available For Debt Service	436,927	186,342	392,866	250,585	44,061	1,704,404	1,234,845	1,564,498	469,558	139,906	6,704,084	6,704,084	12,783,718	-	(6,079,634)
Interest Paid	97,264	97,264	108,179	-	(10,916)	291,791	291,791	324,538	-	(32,747)	1,167,162	1,167,162	1,298,151	-	(130,989)
Debt Retirement (Principal Payments)	187,860	187,860	167,545	-	20,315	563,581	563,581	502,635	-	60,946	2,254,324	2,254,324	2,010,541	-	243,783
Total Debt Service	285,124	285,124	275,724	-	9,400	855,372	855,372	827,173	-	28,199	3,421,486	3,421,486	3,308,691	-	112,795
Debt Service Ratio	1.53	0.65	1.42	0.88	0.11	1.99	1.44	1.89	0.55	0.10	1.96	1.96	3.86	-	(1.90)

LEHIGH COUNTY AUTHORITY
 VARIANCE ANALYSIS - YTD
 For the Period Ended March 31, 2024

Suburban - Water				
STATEMENTS OF ACTIVITIES	Actual	Q1 FC	FC Var	Comments
Operating Revenues:				
User Charges	3,872,959	3,833,865	39,094	
Connection & System Charges	226,097	142,791	83,306	Higher developer reimbursement
Other Miscellaneous Revenues	13,085	14,534	(1,449)	
Total Operating Revenues	4,112,141	3,991,190	120,951	Higher user charges and higher developer reimbursement
Operating Expenses:				
Personnel	1,030,759	1,028,403	(2,356)	
Shared Services - General & Administrative	178,310	247,568	69,258	
Utilities	132,537	139,159	6,622	
Materials and Supplies	154,828	266,014	111,186	
Miscellaneous Services	1,040,466	1,139,648	99,182	
Treatment and Transportation	-	-	-	
Depreciation and Amortization	893,370	759,746	(133,624)	
Major Maintenance Expenses	-	-	-	
Other Miscellaneous	-	-	-	
Total Operating Expenses	3,430,270	3,580,538	150,268	Lower G&A along with lower materials, supplie, and services offset partly by Higher D&A
Net Operating Profit	681,871	410,651	271,220	Higher operating revenues and lower operating expenses
Non-Operating Income (Expense)				
Interest Income	125,399	57,615	67,784	
Interest (Expense)	(267,091)	(259,611)	(7,479)	
Other Miscellaneous	3,763	6,833	(3,070)	
Net Non-Operating Income (Expense)	(137,929)	(195,164)	57,235	Higher interest income
Net Income (Loss)	543,942	215,488	328,454	Higher net operating income along with higher interest income
CASH FLOW STATEMENT				
Cash Flows From Operating Activities				
Operating Revenues	4,112,141	3,991,190	120,951	
Operating Expenses (ex D&A)	(2,536,900)	(2,820,792)	283,892	
Non-Cash Working Capital Changes	681,972	681,889	83	
Net Cash Provided by (Used in) Operating Activities	2,257,213	1,852,286	404,927	Higher net operating income
Cash Flows From Financing Activities				
Capital Contributions	-	-	-	
Proceeds New Borrowing	-	-	-	
Interest Payments	(2,664)	(2,651)	(12)	
Principal Payments	(19,064)	(21,055)	1,991	
Net Cash Provided by (Used in) Financing Activities	(21,728)	(23,706)	1,979	
Cash Flows from Capital and Related Activities				
Non-Operating Income (Expenses)	3,763	6,833	(3,070)	
Capital Expenditures, net	(1,635,360)	(1,298,933)	(336,426)	
Net Cash Provided by (Used In) Capital and Related Activities	(1,631,597)	(1,292,101)	(339,496)	Higher capex
Cash Flows From Investing Activities				
Investments Converting To Cash	-	-	-	
Purchased Investments	-	-	-	
Interest Income	125,399	57,615	67,784	
Net Cash Provided By (Used In) Investing Activities	125,399	57,615	67,784	Higher interest income
FUND NET CASH FLOWS	729,288	594,094	135,194	Higher cash from operations and higher interest income partially eroded by higher capex

LEHIGH COUNTY AUTHORITY
 FINANCIAL STATEMENTS - SUBURBAN WASTEWATER
 For the Period Ended March 31, 2024

STATEMENTS OF ACTIVITIES	Suburban - Wastewater														
	Month					Year To Date					Full Year				
	Actual	Q1 FC	Prior Year	FC Var	PY Var	Actual	Q1 FC	Prior Year	FC Var	PY Var	Q1 FC	Budget	Prior Year	Bud Var	PY Var
Operating Revenues:															
User Charges	1,573,930	1,292,679	1,223,714	281,250	350,216	4,732,328	4,159,555	3,742,039	572,773	990,289	19,128,454	19,128,454	18,488,050	-	640,404
Connection & System Charges	295,230	82,135	66,053	213,095	229,177	400,202	443,220	761,164	(43,018)	(360,962)	1,695,900	1,695,900	1,371,193	-	324,707
Other Miscellaneous Revenues	45	149	30	(104)	15	105	387	205	(282)	(100)	2,900	2,900	585	-	2,315
Total Operating Revenues	1,869,205	1,374,963	1,289,797	494,242	579,408	5,132,635	4,603,162	4,503,408	529,473	629,227	20,827,254	20,827,254	19,859,828	-	967,426
Operating Expenses:															
Personnel	174,329	140,948	141,740	(33,381)	(32,589)	436,126	462,608	423,624	26,483	(12,501)	1,766,601	1,766,601	1,781,328	-	14,727
Shared Services - General & Administrative	35,008	37,442	27,652	2,434	(7,355)	75,427	103,445	75,233	28,018	(194)	456,840	456,840	337,395	-	(119,445)
Utilities	27,453	22,952	17,423	(4,502)	(10,030)	80,579	74,403	60,029	(6,175)	(20,550)	313,870	313,870	238,267	-	(75,603)
Materials and Supplies	28,670	49,527	37,009	20,857	8,339	70,726	116,582	89,090	45,855	18,363	518,722	518,722	391,409	-	(127,313)
Miscellaneous Services	565,025	731,318	676,560	166,293	111,535	1,665,302	1,803,968	1,683,579	138,666	18,277	7,631,090	7,631,090	7,678,739	-	47,649
Treatment and Transportation	350,000	(632,096)	(544,755)	(982,096)	(894,755)	1,291,553	931,607	750,000	(359,946)	(541,553)	4,529,540	4,529,540	3,903,664	-	(625,876)
Depreciation and Amortization	575,538	544,917	519,616	(30,621)	(55,921)	1,726,613	1,665,372	1,559,417	(61,241)	(167,196)	7,031,500	7,031,500	6,705,023	-	(326,477)
Major Maintenance Expenses	-	-	525	-	525	-	-	2,578	-	2,578	-	-	-	-	-
Other Miscellaneous	-	-	-	-	-	-	-	-	-	-	22,100	22,100	133,968	-	111,868
Total Operating Expenses	1,756,023	895,008	875,770	(861,015)	(880,253)	5,346,327	5,157,987	4,643,550	(188,340)	(702,777)	22,270,263	22,270,263	21,169,793	-	(1,100,470)
Net Operating Profit	113,182	479,955	414,027	(366,773)	(300,845)	(213,692)	(554,825)	(140,141)	341,133	(73,551)	(1,443,009)	(1,443,009)	(1,309,965)	-	(133,044)
Non-Operating Income (Expense)															
Interest Income	46,903	9,799	34,176	37,105	12,728	133,428	61,511	80,047	71,917	53,381	130,271	130,271	454,362	-	(324,091)
Interest (Expense)	(12,364)	(16,062)	(13,463)	3,698	1,099	(37,134)	(44,304)	(40,347)	7,170	3,213	(185,934)	(185,934)	(155,847)	-	(30,087)
Other Miscellaneous	(4,987)	(18,221)	16,654	13,234	(21,641)	7,896	18,221	15,144	(10,325)	(7,247)	(134,047)	(134,047)	707,714	-	(841,761)
Net Non-Operating Income (Expense)	29,552	(24,484)	37,367	54,036	(7,814)	104,190	35,428	54,844	68,762	49,347	(189,710)	(189,710)	1,006,228	-	(1,195,938)
Net Income (Loss)	142,734	455,472	451,393	(312,737)	(308,659)	(109,501)	(519,397)	(85,297)	409,895	(24,204)	(1,632,719)	(1,632,719)	(303,737)	-	(1,328,982)
CASH FLOW STATEMENT															
Cash Flows From Operating Activities															
Operating Revenues	1,869,205	1,374,963	1,289,797	494,242	579,408	5,132,635	4,603,162	4,503,408	529,473	629,227	20,827,254	20,827,254	19,859,828	-	967,426
Operating Expenses (ex D&A)	(1,180,486)	(350,091)	(355,629)	(830,395)	(824,856)	(3,619,714)	(3,492,615)	(3,081,555)	(127,099)	(538,159)	(15,238,763)	(15,238,763)	(14,464,770)	-	(773,993)
Non-Cash Working Capital Changes	(973,394)	(973,408)	(1,072,736)	14	99,342	(2,216,650)	(2,217,665)	779,996	1,014	(2,996,647)	(200,001)	(200,000)	(448,691)	(1)	248,690
Net Cash Provided by (Used in) Operating Activities	(284,674)	51,465	(138,568)	(336,139)	(146,106)	(703,729)	(1,107,117)	2,201,850	403,388	(2,905,579)	5,388,490	5,388,491	4,946,367	(1)	442,123
Cash Flows From Financing Activities															
Capital Contributions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Proceeds New Borrowing	-	-	-	-	-	-	-	-	-	-	7,175,000	7,175,000	-	-	7,175,000
Interest Payments	(11,888)	(16,013)	(12,708)	4,125	820	(35,708)	(47,885)	(38,001)	12,177	2,293	(185,934)	(185,934)	(147,555)	-	(38,379)
Principal Payments	(48,867)	(83,607)	(47,686)	34,740	(1,181)	(146,302)	(250,310)	(142,767)	104,008	(3,535)	(1,010,486)	(1,010,486)	(576,341)	-	(434,145)
Net Cash Provided by (Used in) Financing Activities	(60,755)	(99,620)	(60,394)	38,865	(361)	(182,010)	(298,195)	(180,768)	116,186	(1,242)	5,978,580	5,978,580	(723,896)	-	6,702,476
Cash Flows From Capital and Related Activities															
Non-Operating Income (Expenses)	(4,987)	(18,221)	16,654	13,234	(21,641)	7,896	18,221	15,144	(10,325)	(7,247)	(134,047)	(134,047)	707,714	-	(841,761)
Capital Expenditures, net	(432,036)	(347,765)	(135,392)	(84,271)	(296,645)	(770,136)	(582,399)	(226,739)	(187,737)	(543,397)	(11,516,250)	(11,516,250)	(4,483,497)	-	(7,032,753)
Net Cash Provided by (Used in) Capital and Related Activities	(437,023)	(365,986)	(118,738)	(71,038)	(318,285)	(762,240)	(564,177)	(211,595)	(198,062)	(550,644)	(11,650,297)	(11,650,297)	(3,775,783)	-	(7,874,514)
Cash Flows From Investing Activities															
Investments Converting To Cash	-	-	2,290,174	-	(2,290,174)	493,000	-	3,901,174	493,000	(3,408,174)	500,000	500,000	6,129,174	-	(5,629,174)
Purchased Investments	-	-	(243,000)	-	243,000	(249,000)	-	(1,877,000)	(249,000)	1,628,000	-	-	(4,092,000)	-	4,092,000
Interest Income	46,903	9,799	34,176	37,105	12,728	133,428	61,511	80,047	71,917	53,381	130,271	130,271	454,362	-	(324,091)
Net Cash Provided By (Used In) Investing Activities	46,903	9,799	2,081,350	37,105	(2,034,446)	377,428	61,511	2,104,221	315,917	(1,726,793)	630,271	630,271	2,491,536	-	(1,861,265)
FUND NET CASH FLOWS	(735,550)	(404,343)	1,763,650	(331,207)	(2,499,199)	(1,270,550)	(1,907,979)	3,913,708	637,429	(5,184,258)	347,044	347,045	2,938,224	(1)	(2,591,180)
DEBT SERVICE RATIO															
Debt Service Ratio (Indenture Based)															
User Charges	1,573,930	1,292,679	1,223,714	281,250	350,216	4,732,328	4,159,555	3,742,039	572,773	990,289	19,128,454	19,128,454	18,488,050	-	640,404
Operating Expenses (Cash Based)	(1,180,486)	(350,091)	(356,154)	(830,395)	(824,332)	(3,619,714)	(3,492,615)	(3,084,133)	(127,099)	(535,581)	(15,238,763)	(15,238,763)	(14,464,770)	-	(773,993)
Interest Income	46,903	9,799	34,176	37,105	12,728	133,428	61,511	80,047	71,917	53,381	130,271	130,271	454,362	-	(324,091)
Annual Lease Payment (City)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Operating Revenues (Expenses)	290,288	64,063	82,737	226,225	207,552	408,203	461,828	776,513	(53,625)	(368,309)	1,564,753	1,564,753	2,079,492	-	(514,739)
Cash Available For Debt Service	730,636	1,016,450	984,472	(285,815)	(253,837)	1,654,246	1,190,280	1,514,467	463,966	139,779	5,584,715	5,584,715	6,557,134	-	(972,419)
Interest Paid	15,495	15,495	12,296	-	3,198	46,484	46,484	36,889	-	9,595	185,934	185,934	147,555	-	38,379
Debt Retirement (Principal Payments)	84,207	84,207	48,028	-	36,179	252,622	252,622	144,085	-	108,536	1,010,486	1,010,486	576,341	-	434,145
Total Debt Service	99,702	99,702	60,325	-	39,377	299,105	299,105	180,974	-	118,131	1,196,420	1,196,420	723,896	-	472,524
Debt Service Ratio	7.33	10.19	16.32	(2.87)	(8.99)	5.53	3.98	8.37	1.55	(2.84)	4.67	4.67	9.06	-	(4.39)

LEHIGH COUNTY AUTHORITY
VARIANCE ANALYSIS - YTD
For the Period Ended March 31, 2024

STATEMENTS OF ACTIVITIES

Operating Revenues:

User Charges
Connection & System Charges
Other Miscellaneous Revenues

Total Operating Revenues

Operating Expenses:

Personnel
Shared Services - General & Administrative
Utilities
Materials and Supplies
Miscellaneous Services
Treatment and Transportation
Depreciation and Amortization
Major Maintenance Expenses
Other Miscellaneous

Total Operating Expenses

Net Operating Profit

Non-Operating Income (Expense)

Interest Income
Interest (Expense)
Other Miscellaneous

Net Non-Operating Income (Expense)

Net Income (Loss)

CASH FLOW STATEMENT

Cash Flows From Operating Activities

Operating Revenues
Operating Expenses (ex D&A)
Non-Cash Working Capital Changes

Net Cash Provided by (Used in) Operating Activities

Cash Flows From Financing Activities

Capital Contributions
Proceeds New Borrowing
Interest Payments
Principal Payments

Net Cash Provided by (Used in) Financing Activities

Cash Flows from Capital and Related Activities

Non-Operating Income (Expenses)
Capital Expenditures, net

Net Cash Provided By (Used In) Capital and Related Activities

Cash Flows From Investing Activities

Investments Converting To Cash
Purchased Investments
Interest Income

Net Cash Provided By (Used In) Investing Activities

FUND NET CASH FLOWS

Suburban - Wastewater			
Actual	Q1 FC	FC Var	Comments
4,732,328	4,159,555	572,773	
400,202	443,220	(43,018)	
105	387	(282)	
5,132,635	4,603,162	529,473	Higher user charges
436,126	462,608	26,483	
75,427	103,445	28,018	
80,579	74,403	(6,175)	
70,726	116,582	45,855	
1,665,302	1,803,968	138,666	
1,291,553	931,607	(359,946)	
1,726,613	1,665,372	(61,241)	
-	-	-	
-	-	-	
5,346,327	5,157,987	(188,340)	Higher Treatment & Transportation volumes
(213,692)	(554,825)	341,133	Higher operating revenues partly offset by higher operating expenses
133,428	61,511	71,917	
(37,134)	(44,304)	7,170	
7,896	18,221	(10,325)	
104,190	35,428	68,762	Favorable financial activity
(109,501)	(519,397)	409,895	Higher net operating income along with favorable financial activity
5,132,635	4,603,162	529,473	
(3,619,714)	(3,492,615)	(127,099)	
(2,216,650)	(2,217,665)	1,014	
(703,729)	(1,107,117)	403,388	Higher net operating income
-	-	-	
-	-	-	
(35,708)	(47,885)	12,177	
(146,302)	(250,310)	104,008	
(182,010)	(298,195)	116,186	Lower debt service
7,896	18,221	(10,325)	
(770,136)	(582,399)	(187,737)	
(762,240)	(564,177)	(198,062)	Higher capex
493,000	-	493,000	
(249,000)	-	(249,000)	
133,428	61,511	71,917	
377,428	61,511	315,917	Favorable investing activity from timing difference
(1,270,550)	(1,907,979)	637,429	Higher cash from operations, lower debt service and favorable financial activity partially offset by higher capex

LEHIGH COUNTY AUTHORITY
 FINANCIAL STATEMENTS - CITY DIVISION
 For the Period Ended March 31, 2024

STATEMENTS OF ACTIVITIES	City Division														
	Month					Year To Date					Full Year				
	Actual	Q1 FC	Prior Year	FC Var	PY Var	Actual	Q1 FC	Prior Year	FC Var	PY Var	Q1 FC	Budget	Prior Year	Bud Var	PY Var
Operating Revenues:															
User Charges	4,700,232	4,295,553	4,034,363	404,679	665,869	13,153,833	12,691,268	11,932,712	462,564	1,221,121	55,555,506	55,555,506	52,162,410	-	3,393,096
Connection & System Charges	246,330	378,680	577,925	(132,350)	(331,595)	582,219	662,704	855,644	(80,485)	(273,425)	3,609,600	3,609,600	5,487,746	-	(1,878,146)
Other Miscellaneous Revenues	2,325	2,506	5,095	(181)	(2,770)	24,155	27,507	21,783	(3,351)	2,372	89,800	89,800	182,595	-	(92,795)
Total Operating Revenues	4,948,887	4,676,739	4,617,384	272,148	331,503	13,760,207	13,381,479	12,810,139	378,728	950,068	59,254,906	59,254,906	57,832,751	-	1,422,155
Operating Expenses:															
Personnel	1,252,186	1,389,049	1,107,051	136,863	(145,135)	2,877,198	3,196,498	2,717,164	319,300	(160,034)	13,986,737	13,986,737	11,285,617	-	(2,701,120)
Shared Services - General & Administrative	231,407	215,762	172,975	(15,645)	(58,432)	472,774	571,138	485,280	98,363	(12,506)	2,545,190	2,545,190	2,040,469	-	(504,721)
Utilities	162,160	468,263	430,728	306,103	268,568	506,336	751,328	706,209	244,991	199,873	2,063,922	2,063,922	1,898,483	-	(165,439)
Materials and Supplies	266,748	282,236	289,627	15,489	22,880	676,045	646,520	651,524	(29,526)	(24,521)	3,251,300	3,251,300	3,218,805	-	(32,495)
Miscellaneous Services	67,610	177,014	154,475	109,404	86,864	302,998	367,322	306,338	64,325	3,340	2,397,011	2,397,011	2,247,835	-	(149,176)
Treatment and Transportation	-	-	-	-	-	-	-	-	-	-	11,400	11,400	11,307	-	(93)
Depreciation and Amortization	515,561	470,941	515,817	(44,620)	256	1,546,683	1,457,444	1,546,192	(89,239)	(491)	6,169,850	6,169,850	6,757,774	-	587,924
Major Maintenance Expenses	3,996	-	17,178	(3,996)	13,182	12,369	-	30,996	(12,369)	18,627	4,000,000	4,000,000	5,549,429	-	1,549,429
Other Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Operating Expenses	2,499,668	3,003,266	2,687,852	503,598	188,184	6,394,404	6,990,248	6,443,705	595,844	49,301	34,425,410	34,425,410	33,009,719	-	(1,415,691)
Net Operating Profit	2,449,219	1,673,473	1,929,531	775,746	519,687	7,365,803	6,391,231	6,366,434	974,573	999,369	24,829,496	24,829,496	24,823,032	-	6,464
Non-Operating Income (Expense)															
Interest Income	265,196	69,353	244,104	195,843	21,092	831,111	418,303	665,158	412,808	165,953	984,881	984,881	3,466,498	-	(2,481,617)
Interest (Expense)	(1,433,832)	(1,639,291)	(1,409,229)	205,458	(24,604)	(4,301,510)	(4,814,669)	(4,227,459)	513,159	(74,050)	(19,703,642)	(19,703,642)	(16,938,387)	-	(2,765,255)
Other Miscellaneous	-	-	-	-	-	314	314	-	-	314	8,733,892	8,733,892	-	-	8,733,892
Net Non-Operating Income (Expense)	(1,168,636)	(1,569,937)	(1,165,125)	401,301	(3,511)	(3,470,085)	(4,396,052)	(3,562,301)	925,967	92,216)	(9,984,869)	(9,984,869)	(13,471,888)	-	3,487,019
Net Income (Loss)	1,280,583	103,535	764,407	1,177,047	516,176	3,895,718	1,995,179	2,804,133	1,900,539	1,091,585	14,844,627	14,844,627	11,351,144	-	3,493,483
CASH FLOW STATEMENT															
Cash Flows From Operating Activities															
Operating Revenues	4,948,887	4,676,739	4,617,384	272,148	331,503	13,760,207	13,381,479	12,810,139	378,728	950,068	59,254,906	59,254,906	57,832,751	-	1,422,155
Operating Expenses (ex D&A)	(1,980,112)	(2,532,325)	(2,154,857)	552,213	174,745	(4,835,352)	(5,532,805)	(4,866,516)	697,453	31,165	(24,255,560)	(24,255,560)	(26,251,945)	-	1,996,385
Non-Cash Working Capital Changes	880,991	880,914	1,791,530	78	(910,539)	(799,630)	(799,708)	(382,466)	78	(417,164)	(135,999)	(135,999)	3,057,367	0	(3,193,367)
Net Cash Provided by (Used in) Operating Activities	3,849,767	3,025,327	4,254,057	824,439	(404,290)	8,125,226	7,048,966	7,561,157	1,076,259	564,069	34,863,347	34,863,347	34,638,173	-	225,174
Cash Flows From Financing Activities															
Capital Contributions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Proceeds New Borrowing	-	-	-	-	-	-	-	-	-	-	8,555,508	8,555,508	1,371,118	-	7,184,390
Interest Payments	(1,108)	-	-	(1,108)	(1,108)	(3,337)	-	-	(3,337)	(3,337)	(13,315,397)	(13,315,397)	(11,695,732)	-	(1,619,665)
Principal Payments	(697,395)	(5,185)	-	(692,210)	(697,395)	(707,777)	(15,554)	-	(692,223)	(707,777)	(2,945,000)	(2,945,000)	(2,222,407)	-	(722,593)
Net Cash Provided by (Used in) Financing Activities	(698,503)	(5,185)	-	(693,318)	(698,503)	(711,113)	(15,554)	-	(695,559)	(711,113)	(7,704,889)	(7,704,889)	(12,547,021)	-	4,842,132
Cash Flows from Capital and Related Activities															
Non-Operating Income (Expenses)	-	-	-	-	-	314	314	-	-	314	7,425,668	7,425,668	(1,361,180)	-	8,786,848
Capital Expenditures, net	(715,970)	(1,932,352)	(717,047)	1,216,382	1,078	(1,492,731)	(3,511,770)	(1,302,907)	2,019,039	(189,823)	(32,628,500)	(32,628,500)	(10,368,819)	-	(22,259,681)
Net Cash Provided by (Used in) Capital and Related Activities	(715,970)	(1,932,352)	(717,047)	1,216,382	1,078	(1,492,417)	(3,511,455)	(1,302,907)	2,019,039	(189,509)	(25,202,832)	(25,202,832)	(11,729,999)	-	(13,472,833)
Cash Flows From Investing Activities															
Investments Converting To Cash	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Purchased Investments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest Income	265,196	69,353	244,104	195,843	21,092	831,111	418,303	665,158	412,808	165,953	984,881	984,881	3,466,498	-	(2,481,617)
Net Cash Provided By (Used In) Investing Activities	265,196	69,353	244,104	195,843	21,092	831,111	418,303	665,158	412,808	165,953	984,881	984,881	3,466,498	-	(2,481,617)
FUND NET CASH FLOWS	2,700,491	1,157,144	3,781,113	1,543,346	(1,080,623)	6,752,806	3,940,260	6,923,407	2,812,547	(170,601)	2,940,507	2,940,507	13,827,652	0	(10,887,145)
DEBT SERVICE RATIO															
Debt Service Ratio (Indenture Based)															
User Charges	4,700,232	4,295,553	4,034,363	404,679	665,869	13,153,833	12,691,268	11,932,712	462,564	1,221,121	55,555,506	55,555,506	52,162,410	-	3,393,096
Operating Expenses (Cash Based)	(1,984,107)	(2,532,325)	(2,172,035)	548,218	187,928	(4,847,721)	(5,532,805)	(4,897,513)	685,084	49,792	(24,255,560)	(24,255,560)	(20,702,516)	-	(3,553,044)
Interest Income	265,196	69,353	244,104	195,843	21,092	831,111	418,303	665,158	412,808	165,953	984,881	984,881	3,466,498	-	(2,481,617)
Annual Lease Payment (City)	(109,019)	(109,019)	(113,432)	-	4,413	(327,056)	(327,056)	(340,295)	-	13,239	(1,308,224)	(1,308,224)	(1,361,180)	-	52,956
Non-Operating Revenues (Expenses)	248,655	381,186	583,020	(132,531)	(334,365)	606,689	690,524	877,427	(83,836)	(270,739)	3,699,400	3,699,400	5,670,340	-	(1,970,940)
Cash Available For Debt Service	3,120,957	2,104,749	2,576,021	1,016,209	544,936	9,416,855	7,940,235	8,237,489	1,476,620	1,179,366	34,676,003	34,676,003	39,235,553	-	(4,559,550)
Interest Paid	1,109,616	1,109,616	974,644	-	134,972	3,328,849	3,328,849	2,923,933	-	404,916	13,315,397	13,315,397	11,695,732	-	1,619,665
Debt Retirement (Principal Payments)	245,417	245,417	185,201	-	60,216	736,250	736,250	555,602	-	180,648	2,945,000	2,945,000	2,222,407	-	722,593
Total Debt Service	1,355,033	1,355,033	1,159,845	-	195,188	4,065,099	4,065,099	3,479,535	-	585,565	16,260,397	16,260,397	13,918,139	-	2,342,258
Debt Service Ratio	2.30	1.55	2.22	0.75	0.08	2.32	1.95	2.37	0.36	(0.05)	2.13	2.13	2.82	-	(0.69)

LEHIGH COUNTY AUTHORITY
 VARIANCE ANALYSIS - YTD
 For the Period Ended March 31, 2024

STATEMENTS OF ACTIVITIES

Operating Revenues:

	Actual	Q1 FC	FC Var	Comments
User Charges				
Connection & System Charges	13,153,833	12,691,268	462,564	Higher water and wastewater volumes from residential/commercial/industrial segments
Other Miscellaneous Revenues	24,155	27,507	(3,351)	Lower tapping fees
Total Operating Revenues	13,760,207	13,381,479	378,728	Higher user charges

Operating Expenses:

Personnel	2,877,198	3,196,498	319,300	
Shared Services - General & Administrative	472,774	571,138	98,363	
Utilities	506,336	751,328	244,991	
Materials and Supplies	676,045	646,520	(29,526)	
Miscellaneous Services	302,998	367,322	64,325	
Treatment and Transportation	-	-	-	
Depreciation and Amortization	1,546,683	1,457,444	(89,239)	
Major Maintenance Expenses	12,369	-	(12,369)	
Other Miscellaneous	-	-	-	
Total Operating Expenses	6,394,404	6,990,248	595,844	Lower personnel and utilities

Net Operating Profit

7,365,803 6,391,231 974,573 Higher operating revenues and lower operating expenses

Non-Operating Income (Expense)

Interest Income	831,111	418,303	412,808	
Interest (Expense)	(4,301,510)	(4,814,669)	513,159	
Other Miscellaneous	314	314	-	
Net Non-Operating Income (Expense)	(3,470,085)	(4,396,052)	925,967	

Net Income (Loss)

3,895,718 1,995,179 1,900,539 Higher net operating income and favorable financial activity

CASH FLOW STATEMENT

Cash Flows From Operating Activities

Operating Revenues	13,760,207	13,381,479	378,728	
Operating Expenses (ex D&A)	(4,835,352)	(5,532,805)	697,453	
Non-Cash Working Capital Changes	(799,630)	(799,708)	78	
Net Cash Provided by (Used in) Operating Activities	8,125,226	7,048,966	1,076,259	Higher net operating income

Cash Flows From Financing Activities

Capital Contributions	-	-	-	
Proceeds New Borrowing	-	-	-	
Interest Payments	(3,337)	-	(3,337)	
Principal Payments	(707,777)	(15,554)	(692,223)	
Net Cash Provided by (Used in) Financing Activities	(711,113)	(15,554)	(695,559)	Higher principal payments

Cash Flows from Capital and Related Activities

Non-Operating Income (Expenses)	314	314	-	
Capital Expenditures, net	(1,492,731)	(3,511,770)	2,019,039	
Net Cash Provided By (Used In) Capital and Related Activities	(1,492,417)	(3,511,455)	2,019,039	Lower capex

Cash Flows From Investing Activities

Investments Converting To Cash	-	-	-	
Purchased Investments	-	-	-	
Interest Income	831,111	418,303	412,808	Higher interest income
Net Cash Provided By (Used In) Investing Activities	831,111	418,303	412,808	

FUND NET CASH FLOWS

6,752,806 3,940,260 2,812,547 Higher cash from operations, lower capex, and higher interest income offset partly by higher debt service payments

City Division

	Actual	Q1 FC	FC Var	Comments
STATEMENTS OF ACTIVITIES				
Operating Revenues:				
User Charges				
Connection & System Charges	13,153,833	12,691,268	462,564	Higher water and wastewater volumes from residential/commercial/industrial segments
Other Miscellaneous Revenues	24,155	27,507	(3,351)	Lower tapping fees
Total Operating Revenues	13,760,207	13,381,479	378,728	Higher user charges
Operating Expenses:				
Personnel	2,877,198	3,196,498	319,300	
Shared Services - General & Administrative	472,774	571,138	98,363	
Utilities	506,336	751,328	244,991	
Materials and Supplies	676,045	646,520	(29,526)	
Miscellaneous Services	302,998	367,322	64,325	
Treatment and Transportation	-	-	-	
Depreciation and Amortization	1,546,683	1,457,444	(89,239)	
Major Maintenance Expenses	12,369	-	(12,369)	
Other Miscellaneous	-	-	-	
Total Operating Expenses	6,394,404	6,990,248	595,844	Lower personnel and utilities
Net Operating Profit	7,365,803	6,391,231	974,573	Higher operating revenues and lower operating expenses
Non-Operating Income (Expense)				
Interest Income	831,111	418,303	412,808	
Interest (Expense)	(4,301,510)	(4,814,669)	513,159	
Other Miscellaneous	314	314	-	
Net Non-Operating Income (Expense)	(3,470,085)	(4,396,052)	925,967	
Net Income (Loss)	3,895,718	1,995,179	1,900,539	Higher net operating income and favorable financial activity
CASH FLOW STATEMENT				
Cash Flows From Operating Activities				
Operating Revenues	13,760,207	13,381,479	378,728	
Operating Expenses (ex D&A)	(4,835,352)	(5,532,805)	697,453	
Non-Cash Working Capital Changes	(799,630)	(799,708)	78	
Net Cash Provided by (Used in) Operating Activities	8,125,226	7,048,966	1,076,259	Higher net operating income
Cash Flows From Financing Activities				
Capital Contributions	-	-	-	
Proceeds New Borrowing	-	-	-	
Interest Payments	(3,337)	-	(3,337)	
Principal Payments	(707,777)	(15,554)	(692,223)	
Net Cash Provided by (Used in) Financing Activities	(711,113)	(15,554)	(695,559)	Higher principal payments
Cash Flows from Capital and Related Activities				
Non-Operating Income (Expenses)	314	314	-	
Capital Expenditures, net	(1,492,731)	(3,511,770)	2,019,039	
Net Cash Provided By (Used In) Capital and Related Activities	(1,492,417)	(3,511,455)	2,019,039	Lower capex
Cash Flows From Investing Activities				
Investments Converting To Cash	-	-	-	
Purchased Investments	-	-	-	
Interest Income	831,111	418,303	412,808	Higher interest income
Net Cash Provided By (Used In) Investing Activities	831,111	418,303	412,808	
FUND NET CASH FLOWS	6,752,806	3,940,260	2,812,547	Higher cash from operations, lower capex, and higher interest income offset partly by higher debt service payments

LEHIGH COUNTY AUTHORITY
 CASH & INVESTMENT SUMMARY
 For the Period Ended March 31, 2024

	Suburban Water				Suburban Wastewater				City Division				Total			
	3/31/2024 Actual	2024 Forecast	2024 Budget	2023 Actual	3/31/2024 Actual	2024 Forecast	2024 Budget	2023 Actual	3/31/2024 Actual	2024 Forecast	2024 Budget	2023 Actual	3/31/2024 Actual	2024 Forecast	2024 Budget	2023 Actual
Cash																
Operating																
Unrestricted	2,022,808	9,832,375	13,136,985	8,385,525	(46,227)	10,989,059	3,976,076	3,779,293	16,409,571	5,245,095	15,263,906	13,483,582	17,593,686	26,066,530	32,376,967	25,648,400
Restricted	-	-	-	-	-	2,708	317	2,708	19,746,785	33,092,030	25,438,613	33,121,646	19,746,785	33,094,738	25,438,930	33,124,354
Total Operating	2,022,808	9,832,375	13,136,985	8,385,525	(46,227)	10,991,767	3,976,393	3,782,000	36,156,356	38,337,125	40,702,519	46,605,229	37,340,471	59,161,267	57,815,897	58,772,754
Capital																
Unrestricted	7,355,061	321,054	319,718	321,054	9,416,963	-	5,955,385	6,862,722	14,201,595	14,201,595	3,022,601	3,022,601	30,973,618	14,522,649	9,297,704	10,206,378
Restricted	-	-	-	-	342,107	338,677	338,360	338,677	7,529,652	7,529,652	7,500,035	7,500,035	7,871,758	7,868,329	7,838,396	7,838,712
Total Capital	7,355,061	321,054	319,718	321,054	9,759,070	338,677	6,293,745	7,201,399	21,731,246	21,731,246	10,522,636	10,522,636	38,845,377	22,390,977	17,136,099	18,045,090
Other Restricted																
Debt Reserves	1,679,978	1,660,215	1,656,568	1,660,215	-	-	-	-	36,003,050	30,004,516	28,335,482	30,004,516	37,683,028	31,664,731	29,992,050	31,664,731
Escrow - Developer Deposits	504,621	466,386	218,888	466,386	56,685	56,678	252,969	56,678	26,641	32,106	32,090	32,106	587,947	555,169	503,947	555,169
Total Other Restricted	2,184,599	2,126,600	1,875,456	2,126,600	56,685	56,678	252,969	56,678	36,029,691	30,036,622	28,367,571	30,036,622	38,270,975	32,219,900	30,495,996	32,219,900
Total Cash	11,562,467	12,280,030	15,332,159	10,833,179	9,769,527	11,387,121	10,523,107	11,040,077	93,917,294	90,104,994	79,592,726	87,164,487	114,456,822	113,772,145	105,447,992	109,037,744
Investments																
Operating																
Unrestricted	1,956,068	2,022,946	1,945,069	2,022,946	7,225,363	6,965,467	6,584,624	6,965,467	-	-	-	-	9,181,432	8,988,412	8,529,693	8,988,412
Restricted	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Operating	1,956,068	2,022,946	1,945,069	2,022,946	7,225,363	6,965,467	6,584,624	6,965,467	-	-	-	-	9,181,432	8,988,412	8,529,693	8,988,412
Capital																
Unrestricted	1,080,890	1,000,184	1,000,000	1,000,184	-	-	-	-	-	-	-	-	1,080,890	1,000,184	1,000,000	1,000,184
Restricted	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Capital	1,080,890	1,000,184	1,000,000	1,000,184	-	-	-	-	-	-	-	-	1,080,890	1,000,184	1,000,000	1,000,184
Other Restricted																
Debt Reserves	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Escrow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Other Restricted	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Investments	3,036,959	3,023,129	2,945,069	3,023,129	7,225,363	6,965,467	6,584,624	6,965,467	-	-	-	-	10,262,322	9,988,596	9,529,693	9,988,596
Total Cash and Investments	14,599,426	15,303,159	18,277,228	13,856,308	16,994,890	18,352,588	17,107,731	18,005,544	93,917,294	90,104,994	79,592,726	87,164,487	124,719,144	123,760,741	114,977,685	119,026,340
Summary																
Cash																
Unrestricted	9,377,869	10,153,429	13,456,703	8,706,579	9,370,736	10,989,059	9,931,461	10,642,015	30,611,166	19,446,690	18,286,506	16,506,183	48,567,305	40,589,179	41,674,670	35,854,778
Restricted	2,184,599	2,126,600	1,875,456	2,126,600	398,791	398,062	591,646	398,062	63,306,128	70,658,304	61,306,220	70,658,304	65,889,518	73,182,966	63,773,322	73,182,966
Total Cash	11,562,467	12,280,030	15,332,159	10,833,179	9,769,527	11,387,121	10,523,107	11,040,077	93,917,294	90,104,994	79,592,726	87,164,487	114,456,822	113,772,145	105,447,992	109,037,744
Investments																
Unrestricted	3,036,959	3,023,129	2,945,069	3,023,129	7,225,363	6,965,467	6,584,624	6,965,467	-	-	-	-	10,262,322	9,988,596	9,529,693	9,988,596
Restricted	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Investments	3,036,959	3,023,129	2,945,069	3,023,129	7,225,363	6,965,467	6,584,624	6,965,467	-	-	-	-	10,262,322	9,988,596	9,529,693	9,988,596
Total Cash and Investments	14,599,426	15,303,159	18,277,228	13,856,308	16,994,890	18,352,588	17,107,731	18,005,544	93,917,294	90,104,994	79,592,726	87,164,487	124,719,144	123,760,741	114,977,685	119,026,340

CERTIFICATES OF DEPOSIT

MARCH 2024

Fund	Bank	Location	Gross Amount	Date of Purchase	Date Due	Net Rate %
WW Capac	General Electric CU	Cincinnati, OH	249,000.00	3/28/24	3/30/26	4.950

DEVELOPMENT ACTIVITY

Water system construction is occurring in the following developments:

4002 Chestnut Street water main extension,Umilford
 8323/8449 Congdon Hill Drive, 2 industrial lots with warehouses, LMT
 Chick-Fil-A Building redesign existing water line staying
 Estates at Maple Ridge, Water main extension-UMiIT
 Fields at Indian Creek, Phases 4 & 5, 86 residential units (sfd), water and sewer, UMiIT & Emmaus
 Kohler Tract, 123 residential lots (sfa), water and sewer, UMiIT
 Laurel Fields Phase 5 25 townhouses (sfd) UMT
 Lehigh Hills, Lot 5 Phase 2, 240 residential units (sfd.), UMT
 Lehigh Hills Townhouses, 24 townhouse units (sfa), UMT
 Madison Village at Penn's View, 66 manufactured homes, 1 lot, water and sewer, LynnT
 Mosser Road 10 Townhouses,UMT
 Mountain View Estates, 27 residential units (sfd), LMT
 Parkland Crossings Main Extension 144 Town homes UMT
 Raising Canes 1 commercial lot LMT water
 Sauerkraut Lane Extension, Roadway & water line extension, LMT
 Spring Creek Properties, Lot 12, 1 lot, warehouse, LMT
 Towneplace Suites by Marriott, 91-room hotel, UMT
 Trexler Point (Towns at Schaefer Run) 128 Townhouses UMT
 Trexler Center Unit 5-Wawa water,-LMT
 Wrenfield Townhouses 98 Townhomes UMT
 7991 Quarry Road 1 lot, Warehouse,LMT

Water system plans are being reviewed for the following developments:

1321 Rising Sun Road, 110 Single family homes, Sewer NWT
 7649 Penn Drive, Warehouse expansion, water, UMT
 2024 Elbow lane single home,LMT
 2619 Grove Street Sewer Main Extension,Washington Township
 3400 Brookside Road, Indian Creek- 26 Single family homes-Main extension, LMT
 3952 Independence Drive,NW
 4054 Chestnut Street Single connection,Umilford
 6045 Reppert Lane 24 Town Homes, UMT
 Valley at Indian Creek 3510 Macungie Road 22 Single family homes-LMT
 5329-5347-5357 Hamilton Blvd., 1 commercial lot, LMT
 Advanced Health Care of Allentown, 1 commercial lot, LMT
 Air Products & Chemicals-Cetronia Road, 1 commercial lot, UMT
 ATAS International, 1 industrial lot, UMT
 Bandit Truck Stop Sewer Main Extension, WT
 Carriage East Residential Development, 11 residential units, (sfd), UMT
 Fallbrooke Residential Subdivision, 90 sf residential units, UMT
 Fields at Emmaus 78 Town Homes, UMT
 Glenlivet Drive West Main extension and subdivision
 Grant Street Townes, 18 Townhouse, WT
 Grant Way Building Expansion,UMT
 Heidelberg Heights 10 Townhouses water ext on lot septic, HH
 Hidden Meadows - Phase 3, 20 townhouse units, UMT
 Krocks Road Mixed use development
 Lehigh Valley Town Center, Mixed use development, UMT
 Madison Village at Penn's View, 66 manufactured homes, 1 lot, water and sewer, LynnT
 Mertzown Residential Subdivision, 264 sf units & 136 townhouse units, LMT
 Ridings at Parkland Phase 2, 44 Single Homes. NWT
 Schoeneck Road, Lot 1, 1 lot, warehouse, LMT
 Spring Creek Estates 2022 LMT 2 lots, 2 6 unit Apt, 8 single family homes, water
 Spring Creek Lot 12 1 Commercial Lot,LMT
 The Annex at Fields at Indian Creek, 22 sf residential units, Emmaus Borough
 Towns At Schaefer Run, 128 townhouse unit (sfa), UMT
 Trexlertown Retail Center-UMT gas station, carwash
 Twin Ponds 8739 Hamilton Blvd 22 Apts and 1 Daycare UMT
 Upper Macungie Community Center UMT commercial lot, water and Main Extension
 Woodmont Valley 2, 129 apartment units (former Allen Organ Co.) LMT-New
 V Parkland 9230 Long Lane, 16 Single family homes, UMT.

Sewage Facilities Planning Modules Reviewed in Prior Month:

			GPD
3229 N Front St	3229 N Front St	CWSA	2,150
Mosser Rd Subdivision		U Mac	0
Dog Groomer Tenant Fit-out	3100 W Tilghman St	SWT	375
Single Family Home	4154 W Chew St	SWT	223
XPO Logistics Allentown	7649 Penn Drive	U Mac	446
The Cove at Milbrook	3109 Macungie Rd	L Mac	3,568
302 E Hamilton St	302 E Hamilton St	Allentown	250

Lehigh County Authority
System Operations Review - March 2024
Presented: April 22, 2024

		<u>Mar-24</u>	<u>2024 Totals</u>	<u>2023 Totals</u>	<u>2022 Totals</u>
Recordable Safety Incidents*	Total LCA	0	0	33	7
Non-Recordable Safety Incidents	Total LCA	0	6		
Incident Types **	Injuries	0	1		
	Property Damage	0	6		
	Near Miss	0	0		

* 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>
	4	3	3

<u>Current Month Incidents</u>				
<u>Description</u>	<u>Date</u>	<u>Type</u>	<u>Root Cause(s)</u>	<u>Corrective Action(s)</u>

Lehigh County Authority

System Operations Review - March 2024

Presented: April 22, 2024

<u>Critical Activities</u>	<u>System</u>	<u>Description</u>	<u>Mar-24</u>	<u>2024 Totals</u>	<u>2023 Totals</u>	<u>Permit</u>
			<u>Daily Avg (MGD)</u>	<u>Daily Avg (MGD)</u>	<u>Daily Avg (MGD)</u>	<u>Daily Max (MGD)</u>
Water Production	Allentown	Total	22.40	21.60	22.52	39.0
		Schantz Spring	7.29	6.76	6.93	9.0
		Crystal Spring	3.90	3.86	3.89	4.0
		Little Lehigh Creek	10.43	10.35	11.66	30.0
		Lehigh River	0.78	0.63	0.04	28.0
	Central Lehigh	Total	10.75	10.45	11.27	19.04 MGD Avg
		Feed from Allentown	6.55	6.13	7.28	7.0 MGD Avg 10.5 MGD Max
		Well Production (CLD)	4.11	4.30	3.98	8.54 MGD Avg
		Sum of all (12) other Suburban Water Systems	0.14	0.14	0.13	1.71 Sum of all wells
Wastewater Treatment	Kline's Island		39.10	38.34	32.24	40.0
	Pretreatment Plant		5.36	5.17	4.78	5.75 (design capacity)
	Sum of all (5) other Suburban WW Systems		0.26	0.25	0.19	0.36
			<u>Mar-24</u>	<u>2024 Totals</u>	<u>2023 Totals</u>	<u>2022 Totals</u>
Precipitation Totals (inches)			5.14	13.79	46.38	46.47
Compliance Reports Submitted to Allentown			39	87	280	277
Notices of Violation (NOVs)	(Allentown + Suburban)		0	1	3	4
Sanitary Sewer Overflows (SSOs)/Bypasses	(Allentown + Suburban)		2	12	24	18
Main Breaks Repaired	Allentown		0	12	8	34
	Suburban		0	3	12	15
Customer Service Phone Inquiries	(Allentown + Suburban)		1402	4200	11,221	10,539
Water Shutoffs for Non-Payment	(Allentown + Suburban)		163	489	1,995	1,975
Injury Accidents	(Allentown + Suburban)		0	1	19	7
Emergency Declarations	Allentown		0	0	2	(3) @ \$386,225.43
	Suburban		0	1	0	(4) @ \$933,077.1
<u>Significant Repairs/Upgrades:</u>						
Digester #3 at Kline's Island was taken out of service for cleaning.						
<u>Description of Non-Compliance Events:</u>						
The Lehigh Valley recorded ~5.14" of rain in March. On March 23rd, Kline's Island experienced a short bypass of ~ 2,134 gallons due to a pump gate malfunction during a wet weather event.						
<u>Other:</u>						
N/A						

Lehigh County Authority
System Operations Review - March 2024

Presented: April 22, 2024

<u>Critical Activities</u>	<u>System</u>	<u>Description</u>	<u>Mar-24</u>	<u>2024 Totals</u>	<u>2023 Totals</u>
Wastewater Compliance	Allentown	Bypass	1	2	4
		Bypass Volume	2,134	1,587,414	1,589,466
		Permit Exceedances	0	0	0
		Sanitary Sewer Overflows	1	3	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	0	0	3
		Sanitary Sewer Overflows	0	0	0
		NOVs	0	1	0
	Heidelberg Heights	Bypass	0	3	8
		Bypass Volume	0	1,583,595	1,872,796
		Permit Exceedances	2	6	14
		Sanitary Sewer Overflows	0	0	0
		NOVs	0	0	0
	Lynn	Bypass	0	1	1
		Bypass Volume	0	695,000	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	3	9	39
		Sanitary Sewer Overflows	0	0	1
NOVs		0	0	0	
Wynnewood	Bypass	0	0	0	
	Bypass Volume	0	0	0	
	Permit Exceedances	1	4	5	
	Sanitary Sewer Overflows	0	3	3	
	NOVs	0	0	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