



LEHIGH COUNTY AUTHORITY

LCA Main Office:
1053 Spruce Road
Wescosville, PA 18106
610-398-2503

Agendas & Minutes Posted:
www.lehighcountyauthority.org

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BOARD MEETING AGENDA – May 23, 2022 – 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

- *May 9, 2022 Board meeting minutes*

4. Public Comments

5. Action / Discussion Items:

FINANCE AND ADMINISTRATION

- *2023-2027 Suburban Division, Allentown Division, and Administration Capital Plans (Approval) (digital Board packet, pages 7-28)*
- *LCA-South Whitehall Township Emergency Water System Interconnection Agreement (Approval) (**blue**) (digital Board packet, pages 29-36)*
- *LCA-Lowhill Township Water Supply Agreement, First Amendment (Approval) (**yellow**) (digital Board packet, pages 37-53)*

WATER

- *Water Filtration Plant – 2022 Indenture Upgrades (Approval) (**green**) (digital Board packet, pages 54-57)*

WASTEWATER

- *Kline's Island WWTP – 2022 Indenture Upgrades (Approval) (**tan**) (digital Board packet, pages 58-61)*

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 62-73) – **April report attached**
8. Monthly System Operations Overview (2nd Board meeting per month) (digital Board packet, pages 74-75) – **April report attached**
9. Staff Comments
10. Solicitor's Comments
11. Public Comments / Other Comments
12. Executive Sessions
13. Adjournment

UPCOMING BOARD MEETINGS		
June 13, 2022	June 27, 2022	July 11, 2022

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

May 9, 2022

The Regular Meeting of the Lehigh County Authority Board of Directors was called to order at 12:01 p.m. on Monday, May 9, 2022. 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, Scott Bieber, Norma Cusick, Linda Rosenfeld, Jeff Morgan, and Amir Famili were present for the duration of the meeting.

Solicitor Michael Gaul of KingSpry was present along with Authority Staff, Liesel Gross, Ed Klein, Chuck Volk, Chris Moughan, Andrew Moore, Phil DePoe, Mark Bowen, Amy Kunkel and Lisa Miller.

Chairman Nagle announced that the Board received their electronic and hard copies of the Board packet in advance and 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 planned.

APPROVAL OF MINUTES

April 25, 2022 Meeting Minutes

On a motion by Amir Famili, seconded by Scott Bieber, the Board approved the minutes of the April 25, 2022 Board meeting as presented (6-0).

PUBLIC COMMENTS

None.

ACTION AND DISCUSSION ITEMS

Chief Executive Officer Salary

Chairman Nagle stated that at the conclusion of the April 25th Board meeting, the Board held an Executive Session to discuss the current year salary for the Chief Executive Officer (CEO). Prior to this Board meeting, an e-mail memorandum had been circulated to the Board regarding the proposed salary for the CEO. On a motion by Linda Rosenfeld, seconded by Amir Famili, the Board approved the salary for the CEO for 2022 as proposed. (6-0).

Suburban Water & Sewer Facilities – SCADA System Upgrade

Ted Lyons arrived at the meeting at 12:06 p.m.

Chris Moughan gave a presentation of the Supervisory Control and Data Acquisitions (SCADA) upgrade project for 42 facilities within the Suburban Division water system. He described some of

the current system challenges that could result in delayed response time, operational problems, and regulatory noncompliance.

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

The project will develop the SCADA system on a standardized platform for all 42 facilities, including well stations, pumping stations, meter stations, and reservoirs, over the course of four years. Standardizing the Suburban Division SCADA system and adding secure remote access to the system will support future system growth, improve staff development and training, and improve response time to operational issues in the system. The authorization requested includes the construction contract for the full four-year project, and professional engineering services for Phase 1 work that will be completed in 2022. Phase 2 through Phase 4 will be completed annually, with each year's projects defined based on updated facility prioritization.

Some discussion followed regarding technical aspects of the work and the future prioritization of work over the course of the four-year project.

On a motion by Jeff Morgan, seconded by Ted Lyons, the Board approved the Suburban Division SCADA upgrade the Capital Project Authorization – Construction Phase in the amount of \$3,055,421.00 which includes the Construction Contract to Optimum Controls Corporation in the amount of \$2,670,421.00 and the Professional Services Authorization to Keystone Engineering in the amount of \$235,000.00 (8-0).

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

Brian Nagle – yes
Scott Bieber – yes
Norma Cusick – yes
Ted Lyons – yes
Kevin Baker – yes
Linda Rosenfeld – yes
Jeff Morgan – yes
Amir Famili – yes

2022 Commercial Meter Replacement Project Repair

Amy Kunkel provided the details of the project that will replace approximately 145 commercial 1-1/2" and 2" meters that are 15 years or older. Core & Main was chosen to complete this project because they are an authorized dealer for Sensus meters, which are used throughout the Suburban Division, and their service contract is now on COSTARS. Core & Main has also done other projects with the Authority with satisfactory results.

There was some additional discussion regarding the contractor selection process, project scope, and the need for future meter replacement projects.

On a motion by Ted Lyons, seconded by Linda Rosenfeld, the Board approved the Capital Project Authorization for the 2022 Commercial Meter Replacement Project for the Construction Phase in the amount of \$432,207.63 which includes the Contract Award to Core & Main, LP in the amount of \$367,207.63 (8-0).

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

Brian Nagle – yes
Scott Bieber – yes
Norma Cusick – yes
Ted Lyons – yes
Kevin Baker – yes
Linda Rosenfeld – yes
Jeff Morgan – yes
Amir Famili – yes

Sanitary Sewer Collection System: Rain Derived Inflow and Infiltration (RDII) Analysis

Phil DePoe gave a brief background on the inflow and infiltration (I&I) analysis completed in April. Jim Shelton from Arcadis gave a presentation on the process and data used to complete the analysis. He reviewed the metering and flow monitoring completed in 2021 and explained how the data will be used to support the long-term regional Act 537 Plan development currently under way. For the I&I analysis, the flow data was used to calculate each meter basin's wet-weather peaking factor, baseline infiltration, and normalized RDII scores. On a regional basis, the analysis shows 11 million gallons of groundwater are going into the sewer system every day in baseline infiltration, which is utilizing a significant portion of treatment capacity at the Kline's Island Wastewater Treatment Plant. Each municipality in the system received their own data analysis, and the entire analysis was presented to the region in April. Mr. Shelton then reviewed the next steps in the system modeling effort.

Some discussion followed regarding how the modeling work will be completed, what assumptions will be used regarding future climate patterns, and materials to be used in future sewer system rehabilitation projects.

MONTHLY PROJECT UPDATES / INFORMATION ITEMS

Liesel Gross highlighted items scheduled for the next meeting in May along with project updates provided in the report.

STAFF COMMENTS

None.

SOLICITOR'S COMMENTS

None.

PUBLIC COMMENTS / OTHER COMMENTS

None.

EXECUTIVE SESSION

None.

ADJOURNMENT

There being no further business, the Chairman adjourned the meeting at 1:31 p.m.

Norma Cusick
Assistant Secretary



LEHIGH COUNTY AUTHORITY

1053 SPRUCE ROAD * P.O. BOX 3348 * ALLENTOWN, PA 18106-0348

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MEMORANDUM

TO: LCA Board of Directors
FROM: Liesel Gross, CEO
DATE: May 16, 2022
RE: Final Draft Capital Plan (2023-2027) – All Divisions

Attached: Public Comments & LCA Response
Capital Plan Financial Justification & Plan Summary Sheets – All

In March and April 2022, Lehigh County Authority staff presented the draft Capital Plan for the years 2023 to 2027 for Suburban and Allentown Divisions. The plans were also distributed to various external stakeholders including municipalities within LCA's service area, the Lehigh County Board of Commissioners, Lehigh Valley Planning Commission, and the City of Allentown. This memo provides an overview of the Final Draft Capital Plan and summarizes the comments received for Board consideration for approval at the May 23, 2022 meeting.

It is important to note that approval of the Plan by LCA's Board does not indicate authorization for Plan funding. Such authorization occurs through several other mechanisms including:

Annual Budget – The LCA Board approves the capital budget for the upcoming calendar year as part of the annual budget process that is completed in October each year. This approval provides authorization for routine/recurring capital expenses that fall within LCA's purchasing guidelines.

Project Authorizations – The LCA Board approves individual capital projects and expenditures at the time they are more concretely developed with a full project scope, project budget, cost justification and alternatives analysis if required.

Project Financing – The LCA Board approves all new debt issuances including new loans or grant applications that may be secured to fund the capital program.

At each of these approval stages, the LCA staff and Board may discuss and adjust project scope and prioritization. However, this Capital Plan should be viewed as the guiding document for moving forward on system improvements that are required for the provision of safe and reliable service to the communities we serve.

The 2023-2027 Capital Plan also includes financial analysis of the impacts to revenue requirements that will drive annual rate-making decisions. This analysis includes a review of funding sources for all projects, movement toward self-funding annual and recurring asset rehabilitation via operating revenues, expected inflation of operating expenses, and achievement of key financial metrics including debt service coverage ratio and operating cash reserve requirements.

Final Draft Capital Plan (2023-2027) – All Divisions

Board members should refer to the draft Plan documents presented previously. However, the Financial Justification sections and Summary sheets are attached to this memo as a supplement to the prior Plan distribution. Changes to the Plan since the initial Board presentations in March and April include:

- SCADA Programming, Hardware Upgrades, Software & Training Project (SD-A-1): Updated project cost estimate to reflect updated pricing received, as presented to the Board and approved in May.
- Upper System Tank Installation Project (SD-W-58): Project added to the Plan after initial presentation to the Board, with updated project details provided under separate cover in April.
- Allentown Division – Financial Justification: Information was added to this section of the Plan to provide details on the ARPA funding allocation to be provided by the City of Allentown to support selected projects in order to reduce the rate burden on City customers. This information was included in the original financial calculations, but detail added to be more explicit about the sources and uses of these funds.

Plan Summary:

While the presentation and publication of the LCA Capital Plan is divided into budgetary categories of Administrative, Suburban Water, Suburban Wastewater and Allentown Division, implementation is viewed holistically in the summary below to illustrate the categories and breadth of investment required to maintain and enhance the large regional water and sewer system that LCA operates.

<u>Project Category</u>	<u>2023-2027 Investment</u>
Annual Maintenance & Rehabilitation Projects	\$ 27,819,000
Water & Sewer System Planning & Studies	3,925,000
Technology Upgrades	4,360,000
Small Systems Upgrades	2,065,000
Water Main Replacements	31,900,000
Water Metering Upgrades	7,120,000
Major Water Facility Upgrades	15,000,000
Major Wastewater Facility Upgrades	31,450,000
TOTAL	\$ 123,639,000

Project Highlights:

Water & Sewer System Planning and Studies → The primary cost driver in this category relates to work required over the next few years to develop a regional Act 537 Plan for the Kline's Island Sewer System.

Small Systems Upgrades → Eight important projects to upgrade smaller wastewater systems that LCA has acquired over the past several decades. These are important upgrades to address environmental and regulatory compliance issues in these under-served areas of the County.

Major Water Facility Upgrades → Projects in this category are larger upgrades that will have broad system benefit to LCA water customers. Examples include complete filter system upgrade at the Allentown Water Filtration Plant, and a new water storage facility to serve northern portions of LCA’s Central Lehigh Division.

Major Wastewater Facility Upgrades → Projects in this category are larger wastewater system upgrades that will have broad system benefit to LCA, including improving our ability to maintain environmental compliance during rain events. Examples include a new pump station and force main to address the “Trexlerstown bottleneck” area of the Western Lehigh Interceptor, and several significant upgrades at the Kline’s Island Wastewater Treatment Plant to replace aging electrical and mechanical equipment to improve resiliency and pumping efficiency during wet-weather events.

Annual Projects, Metering Upgrades & Water Main Replacements → Combined, projects in these categories make up 54 percent of the LCA’s planned capital investment over the next five years. This work represents the ongoing system rehabilitation and maintenance work that is required to maintain an aging system.

Capital Financing:

Over the past several years, LCA made an important adjustment to its capital financing strategy to reflect the realities of an aging utility with significant ongoing system rehabilitation work that will be required for the foreseeable future. The updated strategy included a series of rate increases to boost LCA’s capacity to fund its ongoing capital program, and limiting borrowing for selected projects based on economic or other factors.

It is particularly noteworthy that LCA’s 2023-2027 Capital Plan excludes large-scale system upgrades that will be needed in the future, such as:

- Kline’s Island Sewer System conveyance and/or treatment upgrades that will be further outlined in the regional Act 537 Plan currently under development.
- Large scale system upgrades (treatment or infrastructure replacement) to address upcoming regulatory requirements such as the Lead & Copper Rule Revision.

While these upgrades, and their cost impact, are currently undefined, it is important to consider how they will be funded in light of the more routine system upgrades that will continue to be required as outlined in LCA’s 2023-2027 Capital Plan. In preparation for these significant future system upgrades, the rate increases implemented over the past three years have laid the groundwork for LCA’s financial sustainability. As a result, the work outlined in the 2023-2027 Capital Plan can be achieved largely through existing and future rate revenues, with some limited borrowing, and appreciated grant support

from the City of Allentown. This preserves LCA's borrowing capacity for the future large system investments described above.

Sources of funding planned to support the 2023-2027 Capital Plan are:

Operating Revenues / Reserves	\$ 111,134,000
New Borrowing	\$ 8,355,000
Grants / ARPA Funding Allocation from City of Allentown	\$ 4,150,000
TOTAL	\$ 123,639,000

To complete the projects included in the Plan in accordance with the financial strategy described above, the following annual revenue increases will be required:

LCA's Suburban Water systems → 2.0% to 5.5% per year
LCA's Suburban Wastewater systems → 1.4% per year
LCA's Allentown Division water and sewer systems → Current lease rates increase by inflation (CPI-U) plus 2.5%, with additional rate increases for capital cost recovery for selected projects.

Important Note! The annual revenue increases shown above are not the same as rate increases to our customers! LCA evaluates rate increases annually during the preparation of the following year's Budget and includes a review of factors such as customer growth, tapping fees paid in the prior year, changes in sales volume (water sales, sewer flows) and other economic factors prior to determining the actual rate increases needed in each calendar year.

Public Comments Received

Lehigh County Board of Commissioners: The Plan was presented to the County Commissioners in summary form at a meeting on May 11, 2022. No formal comments were provided, although the Commissioners were appreciative of the presentation and asked detailed questions, primarily on topics related to wastewater capacity and Act 537 Plan development.

Lehigh Valley Planning Commission: The planning commission reviews LCA's Capital Plan annually and provides comment. The Commission's letter for LCA's draft 2023-2027 Capital Plan is attached noting that the new projects included in the plan are consistent with the regional comprehensive plan.

City of Allentown: City officials review the Allentown Division Capital Plan annually and provide comments, primarily on upcoming projects that may have an impact on user rates. The City's letter for LCA's draft 2023-2027 Capital Plan is attached along with LCA's response. The primary thrust of the City's letter this year was to seek clarification on how American Rescue Plan Act (ARPA) funding would be utilized during the plan period.



Lehigh Valley Planning Commission

STEVEN GLICKMAN
Chair

CHRISTOPHER AMATO
Vice Chair

KEVIN SCHMIDT
Treasurer

BECKY A. BRADLEY, AICP
Executive Director

April 29, 2022

Mr. Charles Volk, PE
Chief Capital Works Officer
Lehigh County Authority
P.O. Box 3348
Allentown, Pennsylvania 18106-0348

Re: LCA Preliminary Capital Plans - Allentown and Suburban Divisions 2023-2027

Dear Mr. Volk:

The Lehigh Valley Planning Commission (LVPC), at its regular monthly meeting on April 28, 2022, reviewed the above-referenced plans and offer the following comments. The comments, as shown on the attached page, are provided for both water and wastewater projects appearing for the first time and significantly modified projects from previous Capital Plans. No new projects or significantly modified projects were identified in the Allentown Division Plan. The Suburban Division Plan includes three new projects for which comments are provided.

Please call me if you have any questions.

Sincerely,

Susan L. Rockwell
Senior Environmental Planner

Attachment

cc: Lehigh County Commissioners

LCA New Projects

Project	Municipality	Statement of Purpose	LVPC Comment
<p>Lehigh County Authority - Preliminary Capital Plans (2023-2027)</p>		<p>Statement of Purpose</p> <p><u>SUBURBAN DIVISION</u></p> <p>New Projects:</p> <p><u>Water</u></p> <p><i>Water Systems Master Planning (SD-W-55)</i></p> <p>Preparation of preliminary water supply study for Central Lehigh Division (Upper Macungie, Lower Macungie and small portions of Lowhill, Weisenberg and Upper Milford) and North Whitehall Division to evaluate supply capacity requirements to meet existing and future needs.</p> <p><i>Upper System Tank Installation Project (SD-W-58)</i></p> <p>Aging existing 2-million-gallon storage tank in Central Lehigh Division Upper System in Upper Macungie Township north of I-78 to undergo repairs to extend service life. Construction of 2-million-gallon water storage tank to provide redundancy and long-term storage needs in Upper System.</p> <p>New Project:</p> <p><u>Sewer</u></p> <p><i>Western Lehigh Interceptor (WLI) Major Rehabilitation and Repairs (SD-S-7)</i></p> <p>Project includes infiltration and inflow investigation and remediation of sewer manholes and interceptor main line in the WLI service area.</p>	<p>Evaluating/providing system improvements to meet existing and future needs exhibits consistency with <i>FutureLV: The Regional Plan</i> action to 'improve the utility and mobility infrastructure of the region' (under Policy 1.1). The provision of service should be provided in areas recommended for Development in the General Land Use Plan or consistent with the action to "match development intensity with sustainable infrastructure capacity" (under Policy 1.1) or meet the defined Development Criteria of FutureLV.</p>



Mark Shahda
Interim Director of Public Works
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www.AllentownPA.gov

May 3, 2022

Charles Volk, P.E.
Chief Capital Works Officer
Lehigh County Authority
P.O. Box 3348
1053 Spruce Street
Allentown, PA 18106-0348

RE: Draft 5-Year Capital Plan, Allentown Division, 2023-2027

Dear Mr. Volk,

Pursuant to Article 4 of the Concession and Lease Agreement (Lease), the City of Allentown (City) is responding to your *Draft 5-Year Capital Plan, Allentown Division, 2023-2027 (Plan)* received April 11, 2022. The City's comments are on the entirety of the five-year program.

CAPITAL PLAN SUMMARY AND FINANCIAL JUSTIFICATION
Condensed Cash Flow -City Division

Under Grants – What does the \$4,150,000 represent?

As stated to previously to LCA, City Ordinance 15764 established the 2021 American Rescue Plan Act (ARPA) Fund budget including at total of \$15,500,000 for Water and Sewer Projects. The first tranche to be distributed:

- Administrative Order/Regional Flow Management Strategy \$2,000,000
- Water Distribution Main Replacement \$4,200,000
- Water Filtration Plant Filters Upgrade \$2,550,000

All funding information should be accurately reported in the Condensed Cash Flow- City Division and other documents in the Capital Plan. In this instance, were the full grant funding shown, the recalculated critical metrics of Debt Service Ratio and Days Cash on Hand would illustrate an accurate financial condition.

WATER

AD-W-7 Water Main Replacements

As noted above, there is an absence in the financial information in both the project detail sheet and the condensed cash flow chart in the summary information, that the City is providing \$4,200,000 in funding from the 2021 ARPA grant.

AD-W-22 Filter Upgrades

The City appreciates that its concerns noted in 2021 relative to the timing of the filter upgrades and inclusion of all 8 filters to be constructed in a consecutive manner were addressed in the 2023-2027 Capital Plan.

As noted above, there is an absence in the financial information in both the project detail sheet and the condensed cash flow chart in the summary information, that the City is providing \$2,550,000 in funding from the 2021 ARPA grant.

AD-W-23 Intake Upgrades

LCA's 2021-2026 Capital Plan indicated that the 1953 Intake replacement would be designed in 2022 and constructed in 2023. The Plan now indicates design will not begin until 2025 with construction completed in 2027. Please explain the reason(s) for the delay in a project which previously was indicated in the Master Plan and prior LCA capital plans as critical.

WASTEWATER

The City agrees with and supports the need for and timing of AD-S-5 WWTP Electrical Substation Replacement Phase 2, AD-S-19 WWTP Main and Auxiliary Pump Station Improvements, and AD-S-21 WWTP IPPS Pump Station Upgrade and 480v MCC Replacement as they will be integral and critical to the Regional Act 537 Plan. Maintaining these projects' implementation years is paramount to the Regional 537 Plan implementation.

As prior practice, the City will anticipate LCA's response to these comments and after receipt of which the City may request a meeting to review the comments and positions of LCA and the City. Thank you for providing your proposed program and for your continued cooperation.

Sincerely,



Mark Shahda
Interim Director of Public Works

CC: Brian Nagle, LCA Board of Directors
Liesel Gross, LCA
Ed Klein, LCA
Daniel Koplish, COA
Office of Compliance, COA



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email: kathymartin@lehighcountyauthority.org

May 12, 2022

Mark Shahda, Interim Director of Public Works
Department of Public Works
641 S. 10th Street, 3rd floor
Allentown, PA 18103

RE: Draft 2023-2027 Allentown Division Capital Plan

Dear Mr. Shahda:

We are in receipt of your letter dated May 3, 2022 that contains the City's review comments on the draft 2023-2027 LCA Allentown Division Capital Plan ("Plan"). Our responses to the City's comments are as follows in the order they appear in your letter:

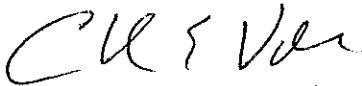
- 1) **Financial Justification:** The \$4,150,000 figure shown in the draft plan as "grants" is comprised of ARPA grant money reimbursements from the City of Allentown for two projects in the 2023-2027 Capital Plan as follows: \$1,800,000 for the Water Main Replacements (project AD-W-7) and \$2,350,000 for the Filter Upgrade (project AD-W-22). As noted in your letter, the initial tranche of funding approved by the City via Ordinance 15765 includes additional amounts not included in the current Plan. That is due to timing of the use of funds and the expectation that \$4,600,000 of the ARPA funding from the City would be expended in 2022, which falls outside of the Plan period. Therefore, all financial information reported in the Condensed Cash Flow, including critical metrics such as Debt Service Coverage Ratio and Days Cash on Hand are accurate as presented. To illustrate the use of ARPA funds more clearly, the Financial Justification section of the Plan will be revised. LCA greatly appreciates the City's support and investment in the community's water and sewer infrastructure.
- 2) **AD-W-7 Water Main Replacements:** Please see the explanation in item 1 above regarding the use of ARPA funds for this project.
- 3) **AD-W-22 Filter Upgrades:** Please see the explanation in item 1 above regarding the use of ARPA funds for this project.
- 4) **AD-W-23 Intake Upgrades:** As described in the Plan, the Water Master Plan outlined a series of upgrade phases for the water intakes. The specific project identified in the 2023-2027 Capital Plan was related to rehabilitating the 1953 Little Lehigh Intake, which involves replacement of the mechanical screen. Note that short-term asset management improvements were performed on the mechanical screen in 2021 to extend the service life of the unit and significantly reduce the risk of failure. The work consisted of the replacement of the upper and lower portions of the Little Lehigh travelling screen. With the completion of that short-term

upgrade work, the schedule for the Little Lehigh intake mechanical screen replacement was modified in the 2023-2027 Capital Plan to reflect a more realistic timeline for the long-term upgrade work. Moving forward, LCA will closely monitor the condition and performance of the rehabilitated screen and update the project schedule as necessary for the screen replacement. Other phases of upgrades to the intakes as described in the Water Master Plan fall outside of the current five-year Plan. Discussion with the City about the logistics and project approaches for those additional phases will occur at a later date.

- 5) **General Comments Wastewater – Projects AD-S-5 WWTP Electrical Substation Phase 2, AD-S-19 WWTP Main and Auxiliary Pump Station Improvements. AD-S-21 WWTP IPS Pump Station Upgrade and 480v MCC Replacement:** We acknowledge the importance of adherence to schedule for these critical projects with respect to the Regional Act 537 sewer planning. If the City has a specific question or concern about any of these projects, please contact me.

If you have any questions about this response or wish to discuss any project included in the Plan in more detail, please don't hesitate to contact me.

Sincerely,



Charles E. Volk, P.E.
Chief Capital Works Officer

Cc: Liesel Gross, CEO
Edward Klein, CFO
coalease

**ADMINISTRATION
5-YEAR CAPITAL PLAN
2023-2027**

CAPITAL FINANCING JUSTIFICATION

The Administrative projects of the Authority are funded through charge-backs to the various operating and capital budgets.

The Administrative projects are either a strictly Suburban Division (SD) project or a project which benefits both the City and Suburban Division (CON). In the case of the multi-division projects in the plan period, the total costs have been apportioned 92% to the Suburban Division and 8% to the Allentown Division.

Project SD-A-1 is an Information Technology (IT) project to upgrade the Suburban SCADA capabilities. Water fund operating reserves will be used to finance the projects with partial recovery through charge-backs to Authority wastewater funds.

Project CON-A-1 is an organization-wide project related to the annual upgrades of computer hardware and software.

Project CON-A-2 is an organizational-wide upgrade to the Geographic Information System (GIS).

Project CON-A-3 is an organization-wide update and implementation of the LCA IT Master Plan.

Project CON-A-4 is an organization-wide project to develop an electronic document management system.

Project CON-A-5 is an organization-wide project to add additional security and disaster recovery tools to the existing IT system.

Project CON-A-6 is an organization-wide project to upgrade the existing CMMS system.

Funding Sources for each project are shown below.

ADMINISTRATION	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>TOTAL</u>
Project Costs	<u>\$1,260,000</u>	<u>\$1,200,000</u>	<u>\$1,175,000</u>	<u>\$500,000</u>	<u>\$225,000</u>	<u>\$4,360,000</u>
Funding Sources:						
Operating/Capital Reserves	\$1,260,000	\$1,200,000	\$1,175,000	\$500,000	\$225,000	4,360,000
New Borrowing	-	-	-	-	-	-
Total Funding	<u>\$1,260,000</u>	<u>\$1,200,000</u>	<u>\$1,175,000</u>	<u>\$500,000</u>	<u>\$225,000</u>	<u>\$4,360,000</u>

LEHIGH COUNTY AUTHORITY
ADMINISTRATION
2023-2027 CAPITAL PROGRAM

Project #	Name or Title of Proposal	Proj. Category	Approvals Stage (1)	Plan Total Cost	This Capital Program							Prior Project Cost (2)	Future Project Cost (2)	Total Project Cost
					2022 Budget Approved	2023 Year 1	2024 Year 2	2025 Year 3	2026 Year 4	2027 Year 5	2023-2027 Total			
SD-A-1	SCADA Programming, Hardware Upgrades, Software & Training	AM - Varies	A	\$ 4,200,000	\$ 750,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 350,000	\$ 100,000	\$ 3,450,000	0	\$50,000	\$4,250,000
CON-A-1*	Computer System Hardware & Software Upgrades	AM - High	A	\$ 275,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 25,000	\$ 225,000	\$100,000		\$375,000
CON-A-2*	GIS Upgrades & Application Development	Efficiency	V	\$ 350,000	\$ 75,000	\$ 50,000	\$ 50,000	\$ 75,000	\$ 50,000	\$ 50,000	\$ 275,000	\$100,000	\$50,000	\$500,000
CON-A-3*	Information Technology Master Plan Update	Planning	A	\$ 200,000	\$ 100,000	\$ 50,000	\$ 50,000	\$ -	\$ -	\$ -	\$ 100,000	\$340,000	\$0	\$540,000
CON-A-4*	Document Management	Efficiency	V	\$ 85,000	\$ 75,000	\$ 10,000	\$ -	\$ -	\$ -	\$ -	\$ 10,000	\$25,000	\$0	\$110,000
CON-A-5*	Disaster Recovery/Security Upgrades	Efficiency	A	\$ 150,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 125,000	\$25,000	\$50,000	\$225,000
CON-A-6*	CMMS Upgrades	Efficiency	A	\$ 200,000	\$ 25,000	\$ 75,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 175,000	\$50,000	\$50,000	\$300,000
GRAND TOTAL				\$ 5,460,000	\$ 1,100,000	\$ 1,260,000	\$ 1,200,000	\$ 1,175,000	\$ 500,000	\$ 225,000	\$ 4,360,000	\$ 640,000	\$ 200,000	\$ 6,300,000

(*) CON = a Project that benefits both the Allentown and Suburban Divisions. All projects are LCA funded.
(1) Reference Glossary of Acronyms & Terms found immediately after the Table of Contents
(2) If blank project cost is not applicable (annual project) or to be determined

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION WATER
5-YEAR CAPITAL PLAN
2023–2027**

CAPITAL FINANCING JUSTIFICATION

Capital additions to the Water System are justified by using six revenue sources: user charges, assessments or distribution tapping fees, supply tapping fees, contributions-in-aid of construction, reimbursements from the wastewater funds and grants. This would comprise the amount of cash available from operations for capital projects.

Beyond the operating cash available, remaining sources are project reserves from previous debt issuance and any new borrowing required.

The table below summarizes the capital project sourcing by year and each major financial sourcing category:

CAPITAL FINANCING SOURCES						
	2023	2024	2025	2026	2027	TOTAL
Project Costs	\$4,402,000	\$7,780,000	\$7,130,000	\$3,560,000	\$3,400,000	\$26,272,000
<i>Sources of Funding:</i>						
Current Cash Flows	\$1,402,000	\$3,325,000	\$3,911,183	\$3,560,000	\$3,400,000	\$15,598,183
Cash Reserves	-	-	\$1,818,817	-	-	\$1,818,817
New Borrowing	\$3,000,000	\$4,455,000	\$1,400,000	-	-	\$8,855,000
TOTAL FUNDING	\$4,402,000	\$7,780,000	\$7,130,000	\$3,560,000	\$3,400,000	\$26,272,000

Total spending on capital projects for the five-year period totals \$26,272,000. Current cash flows and cash reserves over the period will provide \$17,417,000 for capital projects. New borrowing for plan period projects will be in the amount of \$8,855,000 over the five years for specific projects being executed each year.

The \$8,855,000 borrowing is to fund non-annual projects in years 1, 2, and 3 of the plan period. To support the additional debt service worth \$467k in year 5 on the \$8,855,000 of total borrowing and annual inflation on operating expenses, a revenue increase of 5.50% will be required in year 1, 2, and 3.

CONDENSED CASH FLOW - SUBURBAN WATER					
US DOLLARS	2023	2024	2025	2026	2027
User Charges	16,123,016	17,009,782	17,945,320	18,304,226	18,670,311
Other Operating Revenues	38,724	38,724	38,724	38,724	38,724
Non-Operating Revenues	1,016,681	1,016,681	1,016,681	1,016,681	1,016,681
Operating expenses	(10,029,130)	(10,630,343)	(10,934,412)	(11,246,513)	(11,568,829)
Debt Service - Current Debt	(3,141,025)	(3,137,124)	(3,138,325)	(2,850,924)	(3,081,325)
Debt Service - NEW Debt	(148,461)	(390,685)	(466,805)	(466,805)	(466,805)
Investments Converting to Cash	-	-	-	-	-
Proceeds From NEW Debt	3,000,000	4,455,000	1,400,000	-	-
Capex	(4,985,750)	(8,336,250)	(7,680,000)	(3,778,750)	(3,487,500)
NET FUND FLOWS	<u>1,874,055</u>	<u>25,785</u>	<u>(1,818,817)</u>	<u>1,016,639</u>	<u>1,121,257</u>
Plan Volume Increase %	2.00%	2.00%	2.00%	2.00%	2.00%
User Charge Rate Increase %	3.50%	3.50%	3.50%	0.00%	0.00%
Total User Charge Revenue Increase	5.50%	5.50%	5.50%	2.00%	2.00%
Unrestricted Cash Balance	7,204,482	7,230,267	5,411,450	6,428,088	7,549,345
Unrestricted Investments	2,975,123	2,975,123	2,975,123	2,975,123	2,975,123
Total Unrestricted Balances	10,179,605	10,205,390	8,386,573	9,403,211	10,524,468
Days on Hand	262	248	181	209	238
DEBT SERVICE COVERAGE RATIO	2.17	2.11	2.24	2.45	2.30

CAPEX Final

LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION
2023-2027 CAPITAL PROGRAM
WATER

Project #	Name or Title of Proposal	P/f. Category	(1) P/f. Funding	Approval Stage (1)	Plan Total Cost*	This Capital Program							Prior Project Cost (2)	Future Project Cost (2)	Total Project Cost
						2022 Budget Approved	2023 Year 1	2024 Year 2	2025 Year 3	2026 Year 4	2027 Year 5	2023-2027 Total			
SD-W-A	Annual Projects	AM - Varies	LCA	A	\$ 5,292,000	\$ 665,000	\$ 1,402,000	\$ 825,000	\$ 800,000	\$ 800,000	\$ 800,000	\$ 4,627,000	\$ -	\$ -	\$5,292,000
SD-W-12	Water Main Replacement Projects	AM - Varies	LCA	V	\$ 15,100,000	\$ 2,400,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,600,000	\$ 2,600,000	\$ 12,700,000	\$ -	\$ -	\$15,100,000
SD-W-50	Fixed Base Meter Reading System	Sys Imp	LCA	P	\$ 1,010,000	\$ 100,000	\$ 100,000	\$ 350,000	\$ 400,000	\$ 60,000	\$ -	\$ 910,000	\$ 45,000	\$ -	\$1,055,000
SD-W-55	Water Systems Master Planning	Sys Imp	LCA	A	\$ 275,000	\$ 100,000	\$ 100,000	\$ 75,000	\$ -	\$ -	\$ -	\$ 175,000	\$ -	\$ 100,000	\$375,000
SD-W-56	Upper System Pump Station & Water Main Extension	Sys Imp	LCA	A	\$ 250,000	\$ 200,000	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ 60,000	\$1,500,000	\$1,810,000
SD-W-57	Water Meter Replacement Program	AM-Med	LCA	P	\$ 2,660,000	450,000	50,000	30,000	2,030,000	100,000	-	2,210,000	\$ -		\$2,660,000
SD-W-58	Upper System Tank Installation Project	Sys Imp	LCA	P	\$ 5,600,000	-	200,000	4,000,000	1,400,000	-	-	5,600,000			\$5,600,000
	GRAND TOTAL				\$ 30,187,000	\$ 3,915,000	\$ 4,402,000	\$ 7,780,000	\$ 7,130,000	\$ 3,560,000	\$ 3,400,000	\$ 26,272,000	\$ 105,000	\$ 1,600,000	\$ 31,892,000

(1) Reference Glossary of Acronyms & Terms found immediately after the Table of Contents. All projects are LCA funded

(2) If blank , cost is not applicable (annual project) or to be determined

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION
WASTEWATER
5-YEAR CAPITAL PLAN
2023–2027**

CAPITAL FINANCING JUSTIFICATION

Capital additions to the Wastewater System are justified by calculating the operating cash available based upon projections of revenues over the five-year period. Beyond the operating cash available, remaining sources are project reserves from previous debt issuance and any new borrowing required.

The table below summarizes the capital project sourcing by year and each major financial sourcing category:

CAPITAL FINANCING SOURCES						
	2023	2024	2025	2026	2027	TOTAL
Project Costs	\$5,087,000	\$5,092,000	\$4,142,000	\$1,972,000	\$2,057,000	\$18,350,000
<i>Sources of Funding:</i>						
Current Cash Flows	\$5,017,953	\$4,920,155	\$4,142,000	\$1,972,000	\$2,057,000	\$18,109,108
Cash Reserves	\$69,047	\$171,845	-	-	-	\$240,892
New Borrowing	-	-	-	-	-	-
TOTAL FUNDING	\$5,087,000	\$5,092,000	\$4,142,000	\$1,972,000	\$2,057,000	\$18,350,000

Total spending on capital projects for the five-year period totals \$18,350,000. Current cash flows and cash reserves over the period will provide \$18,350,000 for capital projects. No new borrowing is required.

Revenue requirements will also be impacted by inflation for both the WLI group along with other users of the system. Signatory Revenue increases by year to support the capital plan are as follows:

Year 2022	1.3%
Year 2023	1.4%
Year 2024	1.4%
Year 2025	1.4%
Year 2026	1.4%

CONDENSED CASH FLOW - SUBURBAN WASTEWATER

Dollars	2023	2024	2025	2026	2027
User Charges	19,033,749	19,292,998	19,560,024	19,835,061	20,118,349
Other Operating Revenues	-	-	-	-	-
Non-Operating Revenues	990,769	1,016,832	1,043,676	1,071,326	1,099,805
Operating expenses	(13,687,013)	(14,097,623)	(14,520,551)	(14,956,168)	(15,404,852)
Debt Service - Current Debt	(735,802)	(735,802)	(735,802)	(735,802)	(735,802)
Debt Service - NEW Debt	-	-	-	-	-
Investments Converting to Cash	-	-	-	-	-
Proceeds From NEW Debt	-	-	-	-	-
Capex	(5,670,750)	(5,648,250)	(4,692,000)	(2,190,750)	(2,144,500)
NET FUND FLOWS	(69,047)	(171,845)	655,347	3,023,667	2,933,000
User Charge Revenue Increase %	1.3%	1.4%	1.4%	1.4%	1.4%
Unrestricted Cash Balance	9,195,238	9,023,393	9,678,739	12,702,407	15,635,407
Unrestricted Investments	7,757,276	7,757,276	7,757,276	7,757,276	7,757,276
Total Unrestricted Balances	16,952,514	16,780,669	17,436,015	20,459,683	23,392,683
Unrestricted Cash - Days on Hand	245	234	243	310	370
DEBT SERVICE COVERAGE RATIO	8.61	8.44	8.27	8.09	7.90

Sourcing of Projects and Debt Service related to various systems is as follows:

BY SYSTEM	PROJECTS	TOTAL	CURRENT FLOWS	CASH RESERVES	NEW DEBT
Annual Projects	SA	\$1,935,000	\$1,935,000	-	-
Western Lehigh Interceptor	S3, S4, S7, S9, S24, S28	\$8,650,000	\$8,650,000	-	-
LCA Wastewater Treatment Plant	S22	\$3,700,000	\$3,700,000	-	-
Common Rate Collector Systems	S6, S10, S17, S18	\$1,300,000	\$1,059,108	\$240,892	-
Arcadia West	S8	\$365,000	\$365,000	-	-
Lynn Township	S25, S26	\$400,000	\$400,000	-	-
Little Lehigh Relief Interceptor System	S15	\$2,000,000	\$2,000,000	-	-
TOTAL		\$18,350,000	\$18,109,108	\$240,892	-

LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION
2023-2027 CAPITAL PROGRAM
WASTEWATER

Project #	Name or Title of Proposal	Prj. Category	Approval Stage (1)	Plan Total Cost	This Capital Program							Prior Project Cost (2)	Future Project Cost (2)	Total Project Cost
					2022 Budget Approved	2023 Year 1	2024 Year 2	2025 Year 3	2026 Year 4	2027 Year 5	2023-2027 Total			
	<u>Operating/Capital Reserve Funds</u>													
	<u>Annual</u>													
SD-S-A	Annual Projects	AM - Varies	A	\$ 2,165,000	\$ 230,000	\$ 277,000	\$ 302,000	\$ 302,000	\$ 327,000	\$ 727,000	\$ 1,935,000	\$ -		\$2,165,000
	Subtotal			\$ 2,165,000	\$ 230,000	\$ 277,000	\$ 302,000	\$ 302,000	\$ 327,000	\$ 727,000	\$ 1,935,000	\$ -		\$2,165,000
	<u>Pretreatment Plant</u>													
SD-S-22	Pretreatment Plant Improvements	AM - Varies	A	\$ 4,400,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 800,000	\$ 800,000	\$ 3,700,000	\$ -		\$4,400,000
	Subtotal			\$ 4,400,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 800,000	\$ 800,000	\$ 3,700,000			\$4,400,000
	<u>Western Lehigh Interceptor</u>													
SD-S-3	Central Lehigh County WW Capacity Planning & Expansion	New Cust	V	\$ 1,700,000	\$ 400,000	\$ 500,000	\$ 500,000	\$ 250,000	\$ 50,000	\$ -	\$ 1,300,000	\$ 600,000		\$2,300,000
SD-S-4	Spring Creek Force Main Air/Vacuum Valve Replacements	Sys Imp	C	\$ 140,000	\$ 40,000	\$ 50,000	\$ 50,000	\$ -	\$ -	\$ -	\$ 100,000	\$ 48,000	\$0	\$188,000
SD-S-7	WLI Major Rehabilitation and Repairs	Regulatory	P	\$ 450,000	\$ -	\$ 100,000	\$ 100,000	\$ 100,000	\$ 75,000	\$ 75,000	\$ 450,000	\$ -	\$250,000	
SD-S-9	Spring Creek Force Main Condition Assessment	AM-High	S	\$ 350,000	\$ -	\$ -	\$ 50,000	\$ 250,000	\$ 50,000	\$ -	\$ 350,000	\$ -	\$0	\$350,000
SD-S-24	Signatory I & I Investigation & Remediation Program	Regulatory	V	\$ 1,800,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 1,500,000	\$ -	\$300,000	\$2,100,000
SD-S-28	Upper Western Lehigh Interceptor & Force Main	Regulatory	A	\$ 5,050,000	\$ 100,000	\$ 700,000	\$ 2,000,000	\$ 2,000,000	\$ 250,000	\$ -	\$ 4,950,000	\$ -	\$0	\$5,050,000
	Subtotal			\$ 9,490,000	\$ 840,000	\$ 1,650,000	\$ 3,000,000	\$ 2,900,000	\$ 725,000	\$ 375,000	\$ 8,650,000	\$ 648,000	\$550,000	\$9,988,000
	<u>Satellite Systems</u>													
SD-S-6	Wynnewood I & I Investigation & Remediation Program	AM - Varies	V	\$ 150,000	\$ 25,000	\$ 35,000	\$ 40,000	\$ 40,000	\$ 5,000	\$ 5,000	\$ 125,000	\$ 20,000	\$25,000	\$ 195,000
SD-S-8	Arcadia West WWTP Mechanical Screen	Efficiency	P	\$ 415,000	\$ 50,000	\$ 100,000	\$ 225,000	\$ 40,000	\$ -	\$ -	\$ 365,000	\$ -	\$0	\$ 415,000
SD-S-10	SSES (Weisenberg, UMiT, Lowhill)	Regulatory	V	\$ 100,000	25,000	25,000	25,000	25,000	-	-	\$ 75,000	\$ -	\$0	\$ 100,000
SD-S-17	Heidelberg Heights I & I Investigation & Remediation Program	AM - Varies	V	\$ 900,000	\$ 300,000	\$ 300,000	\$ 100,000	\$ 100,000	\$ 50,000	\$ 50,000	\$ 600,000	\$ 850,000	\$50,000	\$ 1,800,000
SD-S-18	Heidelberg Heights WWTP Rehabilitation	AM - High	P	\$ 550,000	\$ 200,000	\$ 250,000	\$ 50,000	\$ 10,000	\$ 40,000	\$ -	\$ 350,000	\$ 210,000		\$ 760,000
SD-S-25	Lynn Township WWTP Upgrades & Expansion Design	AM - High	P	\$ 225,000	\$ 25,000	\$ 100,000	\$ 100,000	\$ -	\$ -	\$ -	\$ 200,000	\$ 5,000		\$ 230,000
SD-S-26	Lynn Township I & I Investigation & Remediation Program	AM - High	V	\$ 225,000	\$ 25,000	\$ 75,000	\$ 50,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 200,000	\$ 170,000	\$50,000	\$ 445,000
	Subtotal			\$ 2,715,000	\$ 650,000	\$ 960,000	\$ 590,000	\$ 240,000	\$ 120,000	\$ 155,000	\$ 2,065,000	\$ 1,255,000	\$125,000	\$ 4,095,000
	<u>Little Lehigh Relief Interceptor System</u>													
SD-S-15	Park Pump Station Rehabilitation/Improvements	AM - High	C	\$ 2,400,000	\$ 400,000	\$ 1,500,000	\$ 500,000	\$ -	\$ -	\$ -	\$ 2,000,000	\$ 4,000,000	\$0	\$ 6,400,000
	Subtotal			2,400,000	400,000	1,500,000	500,000	-	-	-	2,000,000	4,000,000	-	6,400,000
	GRAND TOTAL WASTEWATER PROJECTS			\$ 21,170,000	\$ 2,820,000	\$ 5,087,000	\$ 5,092,000	\$ 4,142,000	\$ 1,972,000	\$ 2,057,000	\$ 18,350,000	\$ 5,903,000	\$ 675,000	\$ 27,048,000

(1) Reference Glossary of Acronyms & Terms found immediately after the Table of Contents. All projects are LCA funded.

(2) If blank , cost is not applicable (annual project) or to be determined

**LEHIGH COUNTY AUTHORITY
ALLENTOWN DIVISION
CAPITAL PLAN
2023–2027**

SUMMARY

The Allentown Division Capital Plan (Plan) is a five-year plan that covers the years 2023 through 2027. The Plan includes water and wastewater projects to assure facility / infrastructure reliability and to comply with the Lease required projects. It also includes projects and studies deemed necessary by LCA, where the latter will identify and evaluate upgrades and improvements that will be incorporated in future Capital Plans. The Lease requires that LCA submit a 5-year Capital Plan to the City for review and approval.

The projects identified in the Plan fall into two primary categories, those funded by LCA and those funded by the City, with the latter further categorized as Regional Flow Management Strategy (RFMS) projects and Uncompleted Work (UW).

Regional Flow Management Strategy (RFMS) Projects: This includes projects necessary to bring the City's wastewater system into compliance with the DEP-mandated Regional Flow Management Strategy (RFMS), which replaces the US Environmental Protection Agency (USEPA) Administrative Order to eliminate Sanitary Sewer Overflows / By-passes at Outfall 003 of the wastewater treatment plant with a comprehensive program to reduce inflow and infiltration into the Kline's Island Sanitary Sewer Service Area (KISS) wastewater systems. Pursuant to the Concession Lease Agreement (Lease), the City is responsible for making all decisions related to work to be performed on the City's infrastructure and for funding said work. LCA is responsible for the execution of the work.

Uncompleted Work (UW) Projects: This category includes projects that the City expected to be completed before the Lease began, but were not completed prior to the Lease start. The City and LCA reached an agreement providing that LCA will manage these projects but be reimbursed by the City for all project costs. Of these original projects (the WWTP Bar Rack, Sanitary Sewer Evaluation Study, WWTP SCADA Upgrades, WFP Chemical Building Roof Replacements, the alternate remedy for the Schantz Spring Chlorine Booster Station, Rehabilitation of the 28th Street Elevated Tank, and the Automated Meter Reading / Meter Replacement project), all have been completed by LCA since the Lease inception.

Funding by Budget Area and category is as follows:

CAPITAL FUNDING 2023-2027					
Budget Area	LCA	CITY			TOTALS
		UW	RFMS	Sub-Total	
Water	\$40,654,000	\$0	\$0	\$0	\$40,654,000
Wastewater	\$31,853,000	\$0	\$2,150,000	\$2,150,000	\$34,003,000
Totals	\$72,507,000	\$0	\$2,150,000	\$2,150,000	\$74,657,000

Water Projects: Focus on regulatory compliance, asset management, immediate and future needs at the Water Filtration Plant (WFP) and addressing the Lease operating standards. The recently completed WFP Master Plan identified capital improvements to address future regulatory requirements and/or operational needs. Amended lease requirements include the annual replacement of 1 mile of aged and/or failing spun and pit cast water main through 2024, with an increase to 2 miles annually thereafter, subject to LCA and City discussion and agreement.

Wastewater Projects: The Projects focus on regulatory compliance, asset management, immediate and future needs at the Wastewater Treatment Plant (WWTP) and addressing the Lease operating standards. Projects of note include the replacement of the solids process boiler and HVAC upgrade project and replacement of electrical substation no. 1. In addition, annual funding is available for the replacement and/or rehabilitation of defective sewer mains when warranted.

Additional information regarding these and other projects can be found in the Plan's individual Project Detail Sheets.

Supplemental Revenues: Under the Concession Agreement, LCA is able to charge Capital Cost Recovery Fees and Capital Recovery Fees to City customers. These charges will be applied to all Major Capital Improvements (MCI), which are defined as projects exceeding \$1 million (indexed for inflation in the future) within the proposed Plan. The capital plan includes five (5) potential wastewater MCI project and five (5) potential water MCI projects (not including the annual water main replacement).

FINANCIAL JUSTIFICATION

In 2023 and beyond, LCA anticipates that Capital Projects will be funded through operating revenues, American Rescue Plan Act (ARPA) funding from the City of Allentown, and cash reserves.

2023-2027 Capital Plan Allentown Division Funding Sources						
	LCA SOURCES			CITY SOURCES		
Budget Area	ARPA Funding From COA	Operating/Capital Reserves	New Borrowing	RFMS	UW	Total Sources
Water	\$10,900,000	\$29,754,000	\$0	\$0	\$0	\$40,654,000
Wastewater	\$0	\$31,853,000	\$0	\$2,150,000	\$0	\$34,003,000
Totals	\$10,900,000	\$61,607,000	\$0	\$2,150,000	\$0	\$74,657,000

City of Allentown Ordinance 15764 established the 2021 American Rescue Plan Act (ARPA) budget in the amount of \$28,574,240. This amount represents the first of two planned distributions of ARPA funds to the City. From this first distribution, the City has earmarked \$8,750,000 towards LCA water and sewer projects, with expense reimbursements expected to begin in 2022. The impact of this funding on LCA's Capital Plan is illustrated below:

FIRST TRANCHE ARPA FUNDING FROM CITY OF ALLENTOWN

		2023-2027	
	2022 Expenses	Capital Plan	TOTAL
Water Main Replacements (AD-W-7)	\$ 2,400,000	\$ 1,800,000	\$ 4,200,000
Water Filter Upgrades (AD-W-22)	\$ 200,000	\$ 2,350,000	\$ 2,550,000
Regional Flow Management Strategy (Sewer Lining) (AD-S-11)	\$ 2,000,000	\$ -	\$ 2,000,000
TOTALS	\$ 4,600,000	\$ 4,150,000	\$ 8,750,000

A second tranche of funding will be released at a later date, of which the City has earmarked an additional \$6,750,000 for LCA water and sewer projects, bringing the total allocation to LCA to \$15,500,000. Future Capital Plans will include updated information about the uses of these additional ARPA funds provided by the City. All ARPA funding received from the City will be used for water and sewer projects in the City to offset capital cost recovery charges that would otherwise be necessary be included in LCA's rates.

CONDENSED CASH FLOW - CITY DIVISION

US DOLLARS	2023	2024	2025	2026	2027
User Charges	48,249,218	53,109,689	56,442,812	60,454,513	63,542,442
Other Operating Revenues	-	-	-	-	-
Non-Operating Revenues	2,099,343	1,349,343	949,343	749,343	749,343
Operating expenses	(21,698,486)	(22,349,440)	(23,019,924)	(23,710,522)	(24,421,837)
Annual Lease & Other Payments	(1,316,070)	(1,313,128)	(1,006,147)	(1,005,166)	(1,004,186)
Debt Service - Current Debt	(15,130,921)	(15,664,816)	(16,217,696)	(16,786,111)	(17,374,611)
Debt Service - NEW Debt	(63,218)	(63,218)	(63,218)	(63,218)	(63,218)
Investments Converting to Cash	-	-	-	-	-
Grants	4,150,000	-	-	-	-
Proceeds From NEW Debt	-	-	-	-	-
Capex	(12,889,500)	(14,049,500)	(16,466,000)	(20,838,000)	(10,781,500)
NET FUND FLOWS	3,400,367	1,018,930	619,171	(1,199,161)	10,646,433
Plan Volume Increase	0.00%	0.00%	0.00%	0.00%	0.00%
User Charge Revenue Increase %	5.50%	5.20%	5.10%	5.00%	4.90%
Total User Charge Revenue Increase	5.50%	5.20%	5.10%	5.00%	4.90%
Unrestricted Cash Balance	17,557,929	17,745,781	18,024,110	16,474,050	26,759,225
Unrestricted Investments	-	-	-	-	-
Total Unrestricted Balances	17,557,929	17,745,781	18,024,110	16,474,050	26,759,225
Days Cash on Hand	295	290	286	254	400
DEBT SERVICE COVERAGE RATIO	1.71	1.92	2.04	2.17	2.23

LEHIGH COUNTY AUTHORITY
ALLENTOWN DIVISION
2023-2027 CAPITAL PROGRAM
WATER

Project #	Name or Title of Proposal	Pri. Category	Funding (1)	Approval Stage (1)	Plan Total Cost	This Capital Program							Prior Project Cost (4)	Future Project Cost (4)	Total Project Cost
						2022 Budget Approved	2023 Year 1	2024 Year 2	2025 Year 3	2026 Year 4	2027 Year 5	2023-2027 Total			
	OPERATING/CAPITAL RESERVE FUNDS														
	ANNUAL PROJECTS														
AD-W-A	Annual Projects	AM - Varies	LCA	A	\$ 7,639,000	1,135,000	1,149,000	1,340,000	1,326,000	1,467,500	1,221,500	\$ 6,504,000	\$0		\$7,639,000
	Sub-total Annual				\$ 7,639,000	\$ 1,135,000	\$ 1,149,000	\$ 1,340,000	\$ 1,326,000	\$ 1,467,500	\$ 1,221,500	\$ 6,504,000	\$ -	\$ -	\$ 7,639,000
	NON-CCRC PROJECTS														
AD-W-1	Indenture Improvements	AM-high	LCA	C	\$ 1,000,000	\$ 300,000	\$ 200,000	\$ 200,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 700,000	\$200,000		\$1,200,000
AD-W-25	Tank and Reservoir Rehabilitation	AM-high	LCA	V	\$ 1,050,000	\$ 300,000	\$ 250,000	\$ 200,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 750,000	\$0		\$1,050,000
AD-W-26	Large Diameter Valve Replacement Project	AM-high	LCA	V	\$ 2,550,000	\$ 100,000	\$ 750,000	\$ 700,000	\$ 500,000	\$ 250,000	\$ 250,000	\$ 2,450,000	\$0	\$500,000	\$3,050,000
AD-W-9	Various Water System Related Studies	CA/OS	LCA	S	\$ 150,000	\$ 150,000	\$ -	\$ -	\$ -	\$ -	\$ 150,000	\$ 150,000	\$300,000		\$450,000
	TOTAL NON-CCRC PROJECTS				\$ 4,750,000	\$ 850,000	\$ 1,200,000	\$ 1,100,000	\$ 700,000	\$ 450,000	\$ 600,000	\$ 4,050,000	\$ 500,000	\$500,000	\$ 5,750,000
	Large Projects and CCRC Projects (3)														
AD-W-7	Annual Water Main Replacements	CA/OS	CCRC	C	\$ 21,600,000	2,400,000	2,400,000	2,400,000	4,800,000	4,800,000	4,800,000	\$ 19,200,000	\$12,900,000		\$34,500,000
AD-W-16	Water Meter Replacement Program	AM-High	CCRC (2)	P	\$ 2,300,000	\$ -	\$ -	\$ -	\$ 800,000	\$ 1,500,000	\$ -	\$ 2,300,000	\$0		\$2,300,000
AD-W-21	Fixed-Base Meter Reading System	Efficiency	CCRC (2)	P	\$ 1,700,000	\$ -	\$ -	\$ -	\$ 850,000	\$ 850,000	\$ -	\$ 1,700,000	\$0	\$0	\$1,700,000
AD-W-22	Filter Upgrades	Master Plan	CCRC (2)	P	\$ 5,700,000	\$ 200,000	\$ 2,350,000	\$ 2,850,000	\$ 300,000	\$ -	\$ -	\$ 5,500,000	\$50,000	\$0	\$5,750,000
AD-W-23	Intake Upgrades	Master Plan	CCRC (2)	P	\$ 1,400,000	\$ -	\$ -	\$ -	\$ 100,000	\$ 500,000	\$ 800,000	\$ 1,400,000	\$0	\$13,000,000	\$14,400,000
	TOTAL CCRC PROJECTS				\$ 32,700,000	\$ 2,600,000	\$ 4,750,000	\$ 5,250,000	\$ 6,850,000	\$ 7,650,000	\$ 5,600,000	\$ 30,100,000	\$ 12,950,000	\$13,000,000	\$ 58,650,000
	GRAND TOTAL				\$ 45,089,000	\$ 4,585,000	\$ 7,099,000	\$ 7,690,000	\$ 8,876,000	\$ 9,567,500	\$ 7,421,500	\$ 40,654,000	\$ 13,450,000	\$13,500,000	\$ 72,039,000

(1) "Administrative Order" Projects as per the Agreement are to be Funded by the City and executed by LCA.
(2) Project to be reviewed by the City for Major Capital Improvement/CCRC approval
(3) Includes projects that have not been reviewed by the City for MCI/CCRC approval
(4) If blank future cost not applicable (annual/recurring cost) or to be determined

LEHIGH COUNTY AUTHORITY
ALLENTOWN DIVISION
2023-2027 CAPITAL PROGRAM
WASTEWATER

Project #	Name or Title of Proposal	Prj. Category	(1) Funding	Approval Stage (1)	Plan Total Cost	This Capital Program							Prior Project Cost (4)	Future Project Cost (4)	Total Project Cost
						2022 Budget Approved	2023 Year 1	2024 Year 2	2025 Year 3	2026 Year 4	2027 Year 5	2023-2027 Total			
	Operating/Capital Reserve Funds														
	<u>ANNUAL PROJECTS</u>														
AD-S-A	Annual Projects	AM - Varies	LCA	A	\$ 9,963,000	\$ 1,460,000	\$ 1,998,000	\$ 1,622,000	\$ 1,665,000	\$ 1,858,000	\$ 1,360,000	\$ 8,503,000	\$0		\$9,963,000
	Sub-total Annual				\$ 9,963,000	\$ 1,460,000	\$ 1,998,000	\$ 1,622,000	\$ 1,665,000	\$ 1,858,000	\$ 1,360,000	\$ 8,503,000	\$ -	\$ -	\$ 9,963,000
	<u>Non-CCRC Projects</u>														
AD-S-I	Indenture Report Improvements	AM - Varies	LCA	C	\$ 1,400,000	\$ 300,000	\$ 400,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 100,000	\$ 1,100,000	\$200,000		\$1,600,000
AD-S-9	Various Wastewater System Related Studies (Master Plan)	CA/OS	LCA	S	\$ 150,000	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -	\$ 150,000	\$150,000		\$300,000
AD-S-26	Flow Characterization Study I&I Projects	Regulatory	LCA	V	\$ 3,000,000	\$ -	\$ -	\$ 750,000	\$ 750,000	\$ 750,000	\$ 750,000	\$ 3,000,000	\$0	\$0	\$3,000,000
	Sub-total Allentown Division Wastewater Capital Funded by LCA				\$ 4,550,000	\$ 300,000	\$ 550,000	\$ 950,000	\$ 950,000	\$ 950,000	\$ 850,000	\$ 4,250,000	\$ 350,000	\$ -	\$ 4,900,000
	<u>Large Projects and CCRC Projects</u>														
AD-S-5	WWTP Electrical Substation Replacement Phase 2	AM - High	CCRC (3)	D	\$ 3,750,000	\$ -	\$ 400,000	\$ 2,000,000	\$ 1,200,000	\$ 150,000	\$ -	\$ 3,750,000	\$2,450,000	\$0	\$6,200,000
AD-S-19	WWTP Main & Auxiliary Pump Station Improvements	AM - Varies	CCRC (3)	P	\$ 6,650,000	\$ 150,000	\$ 100,000	\$ 200,000	\$ 2,000,000	\$ 4,000,000	\$ 200,000	\$ 6,500,000	\$0	\$0	\$6,650,000
AD-S-20	Boiler Replacement & Solids Process HVAC Upgrade Project	AM - Varies	CCRC	D	\$ 2,800,000	\$ 800,000	\$ 1,200,000	\$ 800,000	\$ -	\$ -	\$ -	\$ 2,000,000	\$40,000	\$0	\$2,840,000
AD-S-21	WWTP IPS Pump Station Upgrade & 480v MCC Replacement	AM - Varies	CCRC (3)	P	\$ 6,000,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 1,500,000	\$ 4,000,000	\$ 200,000	\$ 5,900,000	\$0	\$0	\$6,000,000
AD-S-22	WWTP Final Clarifier 1-4 Rehabilitation	AM - Varies	CCRC (3)	P	\$ 950,000	\$ -	\$ -	\$ -	\$ -	\$ 100,000	\$ 850,000	\$ 950,000	\$0	\$1,000,000	\$1,950,000
	Sub-total Allentown Division Wastewater				\$ 39,213,000	\$ 3,110,000	\$ 4,898,000	\$ 6,622,000	\$ 8,265,000	\$ 12,008,000	\$ 4,310,000	\$ 19,100,000	\$ 3,190,000	\$ 1,000,000	\$ 43,403,000
	<u>City Funded Projects</u>														
AD-S-11	Regional Flow Management Strategy (2)	Regulatory	Allentown	S	\$ 2,250,000	\$ 1,500,000	\$ 750,000	\$ -	\$ -	\$ -	\$ -	\$ 750,000	\$1,540,000	\$0	\$3,790,000
AD-S-12	Flow Characterization Study (2)	Regulatory	Allentown	S	\$ 1,720,000	\$ 920,000	\$ 350,000	\$ 350,000	\$ 100,000	\$ -	\$ -	\$ 800,000	\$1,360,000	\$0	\$3,080,000
AD-S-27	Miscellaneous Act 537 Planning	Regulatory	Allentown	V	\$ 850,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 100,000	\$ -	\$ -	\$ 600,000	\$0		\$850,000
	Sub-total Allentown Division Wastewater Capital Funded by the City				\$ 4,820,000	\$ 2,670,000	\$ 1,350,000	\$ 600,000	\$ 200,000	\$ -	\$ -	\$ 2,150,000	\$2,900,000	\$0	\$ 7,720,000
	GRAND TOTAL				\$ 58,546,000	\$ 7,540,000	\$ 8,796,000	\$ 9,794,000	\$ 11,080,000	\$ 14,816,000	\$ 6,520,000	\$ 34,003,000	\$ 6,440,000	\$ 1,000,000	\$ 65,986,000

(1) Reference Glossary of Acronyms and Terms found after the Table of Contents"Administrative Order" .
(2) "Administrative Order" Projects as per the Agreement are to be Funded by the City and executed by LCA.
(3) Project to be reviewed by the City for Major Capital Improvement/CCRC approval
(4) If blank future cost not applicable (annual/recurring cost) or to be determined

LEHIGH COUNTY AUTHORITY and

SOUTH WHITEHALL TOWNSHIP

EMERGENCY INTERCONNECTION PURCHASING AGREEMENT

[Applewood Drive]

THIS AGREEMENT, made as of the ____ day of _____, 2022, by and between

LEHIGH COUNTY AUTHORITY, a municipal authority organized and existing under the Pennsylvania Municipality Authorities Act with offices located at 1053 Spruce Road, Wescosville, Lehigh County, Pennsylvania (hereinafter referred to as "LCA" or "Purchaser"), party of the first part

AND

TOWNSHIP OF SOUTH WHITEHALL, a municipal corporation and Township of the First Class, with offices located at 444 Walbert Avenue, Allentown, Lehigh County, Pennsylvania (hereinafter referred to as "Township" or "Seller"), party of the second part.

WITNESSETH:

WHEREAS, LCA and the Township each operate a system to provide water to the public in adjoining areas of Lehigh County; and

WHEREAS, LCA desires to create redundancy for emergency operation of its Upper System portion of its Central Lehigh Division (PWSID 3390073) (the "Upper System"), which is currently limited in terms of backup supply and storage; and

WHEREAS, the proximity of the two systems in the vicinity of Applewood Drive in the Township presents an opportunity to have an additional interconnection between the systems; and

WHEREAS, LCA desires to construct and operate the necessary facilities to implement the interconnection of the two systems at LCA's Well Station #17 property, located at the intersection of Township roads Applewood Drive and Clauser Road (the "Applewood Interconnection"), with the interconnection facilities being connected to the Township's water main located in the Clauser Road right of way; and

WHEREAS, the Township is willing to permit LCA's construction and operation of the interconnection for emergency water supply, subject to the terms and conditions of this Agreement; and

WHEREAS, LCA filed, with the Township's approval and cooperation, an Application (the "Application") for Public Water Supply Permit Modification with the Pennsylvania Department of Environmental Protection ("DEP") for permission to construct and operate the Applewood Interconnection, and DEP has issued permit #_____ (the "Permit"), approving the Application (the Application and Permit are collectively referred to as the "Applewood Interconnection Plan")

WHEREAS, the Public Water Supply Identification Number (PWSID No.) of the Township (i.e., the Seller) is 3390065, and

WHEREAS, the Township's source type is surface water via interconnection from LCA's Allentown Division System and groundwater; and

WHEREAS, the Township's distribution system residual disinfectant type is chlorine; and

WHEREAS, in reliance upon the Township's agreement to permit the Applewood Interconnection, LCA intends to incur the costs of constructing the Applewood Interconnection facilities; and

NOW THEREFORE, the parties hereto in consideration of the promises and mutual covenants herein contained, and intending to be legally bound, agree as follows:

1. The recital paragraphs of this Agreement are incorporated herein, and made a part hereof, as though set forth at length.
2. The Township agrees that LCA may, at its own costs, construct and operate the Applewood Interconnection water facilities as shown on the Interconnection Process Plan and Section drawing attached as Exhibit "A", together with their connection to the Township water main in Clauser Road (collectively, the "Interconnection Facilities"), subject to the other terms and conditions of this Agreement. "Operate" shall include, without limitation, operate, maintain, repair, replace, and/or remove.
3. LCA shall construct and operate the Interconnection Facilities in accordance with the Applewood Interconnection Plan.
4. The name of the interconnection shall be the Applewood Interconnection. The latitude and longitude of the interconnection is 40.3621, 75.3519. The Applewood Interconnection is intended for emergency use.

5. Upon completion of construction of the Interconnection Facilities, LCA shall provide the Township with as-built drawings of the improvements. LCA may not operate the Interconnection Facilities for emergency water flow until the Township has inspected and approved that the Interconnection Facilities have been constructed in accordance with the Applewood Interconnection Plan.

6. LCA agrees to pay, or reimburse the Township, as the case may be, for the Township's engineering and other consultant expenses in connection with review of the design of the Interconnection Facilities, and inspection of the improvements.

7. The Township agrees that this Agreement shall constitute the necessary approval for LCA to construct, connect and operate a waterline between the Interconnection Facilities and the Township water main in Clauser Drive, and that no other road occupancy permit, road opening permit is required for the work, subject to the Township's approval that the work has been completed in accordance with the Applewood Interconnection Plan.

8. The meter pit shown in Exhibit "A" will contain a meter to register water flow from the Township to LCA. The meter pit will include a control valve that will be closed under normal operating conditions. The valve will open upon low pressure conditions in the LCA system and be set to throttle flow when open to maintain a mutually agreed upon pressure in the Township System, which is originally established at 40 psi. As shown in the meter pit detail attached hereto as Exhibit "A", a by-pass around the meter pit is also included with gate valves that will be normally closed.

9. Except for the length of pipe to be installed in the Township right of way of Clauser Road, LCA shall own the Interconnection Facilities and be responsible for their operation, control, maintenance, and repair, which shall include meter calibrations. LCA shall dedicate to the Township the length of pipe installed in the Clauser Road right of way, but shall be responsible for its maintenance. Meters shall be tested annually with certification provided to both parties. Any costs incurred in the care of the pit, which shall include meter calibrations, shall be LCA's responsibility. Despite LCA owning the Interconnection Facilities, the Township shall have all necessary access rights to read the Interconnection Facilities meter. LCA shall provide and install a lock on the meter pit. LCA shall provide the Township with a key. Prior to accessing the metering pit of the Interconnection Facilities, and the meter, the Township shall provide LCA at least 48 hours notice in advance of such access. LCA shall be entitled to attend all inspections. Further, if requested by the Township, LCA agrees to grant and convey the Township a formal easement, equal in length to the term of this Agreement, for access to read the Interconnection Facilities meter.

10. The Township agrees to assist LCA by permitting LCA to use the Interconnection Facilities to transfer water from the Township water system to the LCA

water system for any short-term emergency, which shall be limited in duration to fourteen (14) days per year, provided such usage will not negatively impact service to the Township's own customers. In the event that usage restrictions are required in order to permit the Township's system to enjoy service or to comply with regulatory requirements such as drought restrictions, such restrictions shall be equally applied to LCA and the Township. A longer-term emergency shall require the written approval of LCA and the Township.

11. The maximum rate of water through the Interconnection Facilities shall be 1,000 gallons per minute (gpm).

12. The maximum volume of water that can be purchased on a daily and monthly basis shall be 1.44 million gallons per day (mgd) and 20.16 million gallons per month.

13. The parties agree to establish a protocol between them for notification and operation of the interconnection. Each party agrees to use its "best efforts" to assist and cooperate with the other party, and shall comply with generally accepted standards and procedures for the operation of public water systems.

14. The cost of water provided pursuant to this Agreement shall be determined by multiplying the quantity of water transferred, as determined by meter readings, by the higher of LCA's or the Township's lowest priced rate.

15. The Township's billing for water delivered to LCA under this Agreement, and LCA's payment, shall be in accordance with the Township's regular billing rules and regulations for Township water customers.

16. The initial term of this Agreement shall be for ten (10) years, and shall automatically renew for continuing additional ten (10) year terms, unless one party provides the other party with written notice of intent to terminate at least one hundred and eighty (180) days prior to the end date for the then term. Prior to sending a notice of termination, a party shall first meet and discuss with the other party the reason for termination. The parties agree to use their efforts to resolve any controversy causing the desire to terminate the Agreement, so as to allow the continuation of the Agreement.

17. This Agreement may be amended only by written agreement of the parties.

18. This Agreement shall be binding on, and inure to the benefit of, the successors and assigns of the parties.

19. If any provision hereof shall be held to be invalid, such invalidity shall not affect any other provision hereof, and the remaining provisions hereof shall be

construed and enforced as if such invalid provision had not been contained herein. The laws of the Commonwealth of Pennsylvania shall govern the interpretation hereof.

20. This Agreement may be executed in multiple counterparts, each of which shall be regarded for all purposes as an original, which such counterpart shall constitute one and the same instrument.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

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

ATTEST:

LEHIGH COUNTY AUTHORITY

Michael A. Gaul, Solicitor

Liesel M. Gross, Chief Executive Officer

ATTEST:

SOUTH WHITEHALL TOWNSHIP

Scott Boehret, Secretary

Randy Cope,
Township Manager (Interim)

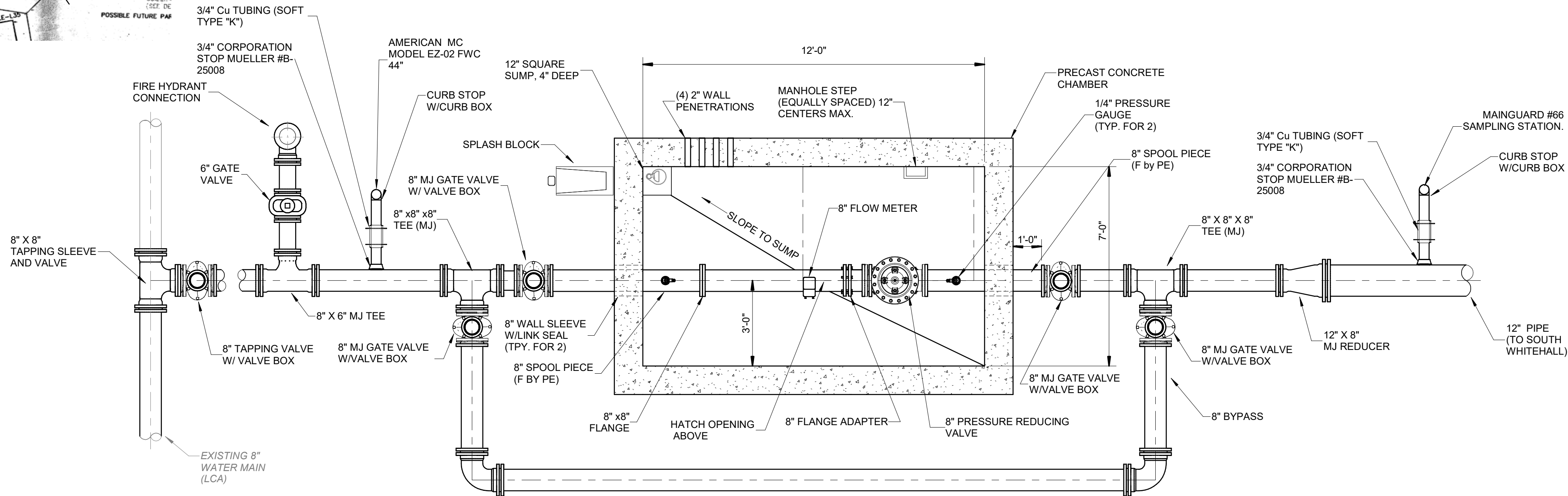
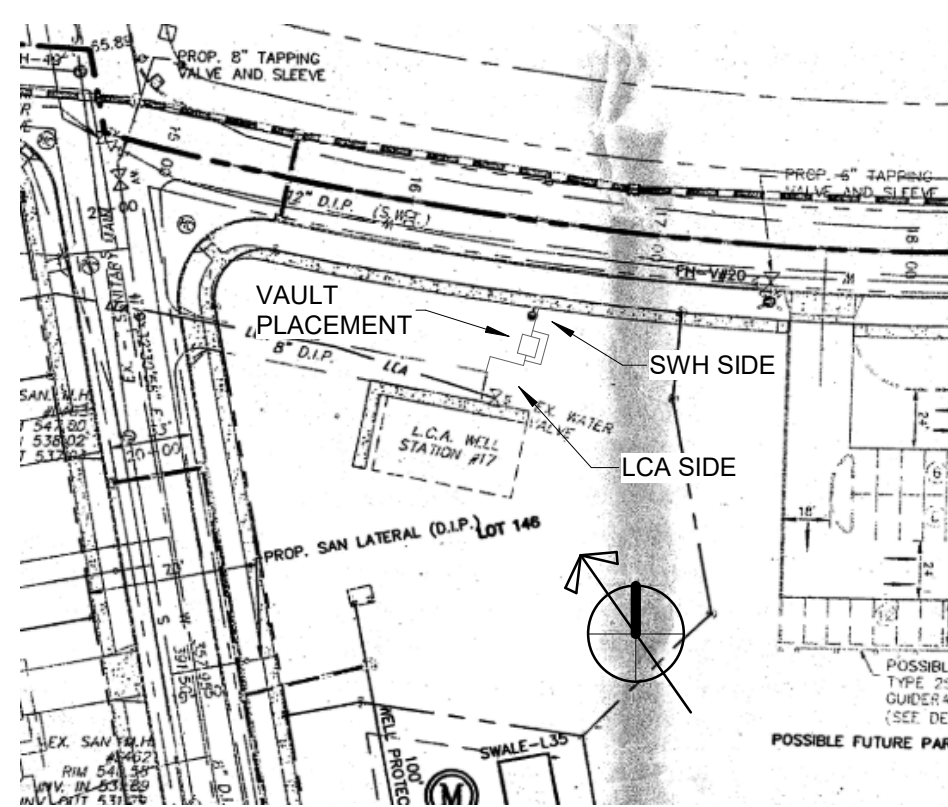
Exhibits –

EXHIBIT “A”

to

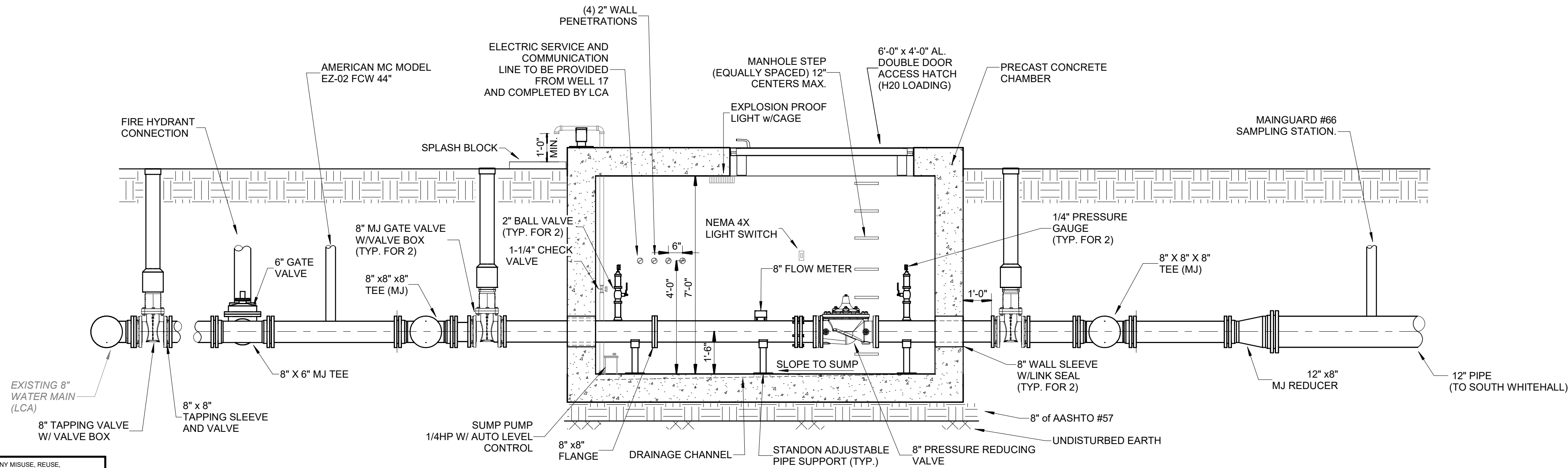
EMERGENCY INTERCONNECTION PURCHASING AGREEMENT

(attached hereto)



BOTTOM OF VAULT

SCALE: 3/8" = 1'-0"



SECTION
SCALE: 3/8" = 1'-0"

MATERIAL	DESCRIPTION
Flow Meter	Flexim Fluxus F721 (JIM PLETCHER)
Control Valve	Bernad Combination Pressure Reducing/Sustaining Valve & Check Valve, Model 723EN, 8", W/2 Pressure Reducing Pilots, Solenoid Switch, and Upstream and Downstream Pressure Gauges. Average Upstream Pressure Approx. 72 PSI, Normal Valve Settings Approx. 51 PSI and 60 PSI, Sustaining Pilot Approx. 40 PSI. (ERIC JOOS)
Gate Valves	AWWA C515, MJ W/Wedge Action Retainer Glands
Tapping Sleeve and Valve	Ductile Iron, Full Length Gasket, Fully Coated Inside and Outside
Flanged Adapter	Ductile Iron, Restrained, Fully Coated Inside and Outside
Pipe	AWWA C150/C151, Buried - Min. Thk Class 52
Sampling Station	American MC Model EZ-02 FCW 44 Inch (Owner Supplied)
Vault	Monarch
Hydrant	5 - 1/4 " American Darling B-62-B-5
Hatch	Bilco, Floor Access Double Leaf, JD-3AL
Sump Pump	Liberty Pumps Model 250
Pressure Gauges	D821 LIQUID FILLED GAUGE, 0-300 PSI, 1/4IN NPT. SS CASE, 5 PSI MARKING, LEAD FREE

GENERAL NOTES

- ELECTRICAL SERVICE MATERIALS ARE TO BE PER LOCAL ELECTRIC PROVIDER. COORDINATE ALL MATERIAL WITH OWNER(S) AND PROVIDE AND INSTALL MATERIALS TO MEET NEC AND LOCAL STANDARDS.
- PROVIDE GFI RECEPTACLE NEAR SUMP PUMP.
- COMMUNICATION WIRES TO INCLUDE: (1) CAT 5, (4) STP, AND (2) #14A.
- COMMUNICATION OUTPUT TO INCLUDE: UPSTREAM PRESSURE, DOWNSTREAM PRESSURE, AND FLOW.
- ENSURE CONNECTION TO LCA IS MADE TO 688 FT. PRESSURE ZONE PIPING.
- NOTE THE LAYOUT OF VAULT, EXTERNAL PIPING, CONNECTIONS (AND ASSOCIATED DIMENSIONS) AND SITE UTILITIES ARE APPROXIMATE AND ARE TO BE FIELD ESTABLISHED.

THIS DRAWING IS AND SHALL REMAIN THE PROPERTY OF GANNETT FLEMING, INC. AND ANY MISUSE, REUSE, ALTERATIONS, ADDITIONS, AND/OR DELETIONS OF THESE DRAWINGS ON PROJECT EXTENSIONS OR OTHER PROJECTS SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO GANNETT FLEMING, INC. IN THE EVENT THAT A CONFLICT ARISES BETWEEN THE SEALED DRAWINGS AND THE ELECTRONIC FILES, THE SEALED DRAWINGS WILL GOVERN.

NO.	DESCRIPTION	DATE	BY
REVISIONS			

DESIGNED:	CADD:	SCALE:
Designer	RZ	AS NOTED
CHECKED:	APPROVED:	APPROVED:
Checker	Approver	

**GANNETT FLEMING**

HARRISBURG, PENNSYLVANIA

LEHIGH COUNTY AUTHORITY
SOUTH WHITEHALL, PENNSYLVANIA

**SOUTH WHITEHALL EMERGENCY
INTERCONNECTION**

PROCESS
PLAN AND SECTION

JOB No.	SHEET No.
57002	P-01
DATE:	
MAY 2022	

**FIRST ADDENDUM TO
WATER SERVICE AGREEMENT**

THIS FIRST ADDENDUM TO WATER SERVICE AGREEMENT (the "Addendum"), dated the 7th day of April, 2022, by and between **LEHIGH COUNTY AUTHORITY** ("Authority"), a Pennsylvania Municipal Authority organized and existing under the Pennsylvania Municipality Authorities Act of 1945, as amended, located at 1053 Spruce Road, Wescosville, Pennsylvania and the **TOWNSHIP OF LOWHILL** ("Township"), a Second Class Township organized and existing under the laws of the Commonwealth of Pennsylvania with its principal office located at 2175 Seipstown Road, Fogelsville, Lehigh County, Pennsylvania.

WITNESSETH:

WHEREAS, the Authority and the Township (each a "Party", and together, the "Parties") entered into a Water Service Agreement dated April 9, 1990 (the "Water Service Agreement"), whereby the Township requested the Authority to provide water service to Section A of the Pointe West subdivision ("Pointe West") in the Township, and the Authority covenanted and agreed to furnish water service where feasible to Pointe West, subject to the terms and conditions of the Water Service Agreement; and

WHEREAS, a copy of the Water Services Agreement is attached hereto as Exhibit "A", and incorporated by reference; and

WHEREAS, the Township desires that the Authority extend its water service area beyond Pointe West to include portions of the State Route 100 and Kernsville Road corridors in the Township, as depicted on the map attached as Exhibit "B" hereto, and incorporated by reference (hereinafter the "Route 100-Kernsville Road Water Service Area"); and

WHEREAS, the Authority is willing to extend its water service to the Route 100-Kernsville Road Water Service Area, subject to the terms and conditions set forth in this Addendum; and

WHEREAS, the necessary infrastructure for delivery of water services to the Route 100-Kernsville Road Water Service Area does not currently exist, and will need to be constructed; and

WHEREAS, the Parties' expectation is that private developers will bear the cost of installation of the necessary water service infrastructure to allow for the delivery of service, which will be dedicated to the Authority; and

WHEREAS, the Parties' general intent is for the Authority to provide water service in the Route 100-Kernsville Road Water Service Area on the same basis that the Authority was

originally authorized, and agreed to, and now provides, potable water service to the Pointe West subdivision in Lowhill Township.

NOW, THEREFORE, the Authority and the Township for and in consideration of covenants, promises and agreements herein contained to be kept and observed, each intending to be legally bound hereby, covenants and agrees as follows:

1. The Township approves, and requests, the Authority provide potable water service to the Route 100-Kernsville Road Water Service Area. The Authority shall be the exclusive provider of water service to the Route 100-Kernsville Road Water Service Area, unless the Authority notifies the Township that the Authority cannot provide additional service due to capacity limitations.

2. The Authority covenants and agrees to furnish potable water service where feasible, in perpetuity, to the Route 100-Kernsville Road Water Service Area.

3. The Parties' rights and obligations in regards to the Authority's furnishment of water service to the Route 100-Kernsville Road Water Service Area shall be on the basis of the same terms and conditions contained in the original Water Service Agreement between the Parties in regards to the Pointe West subdivision, unless expressly altered by this Agreement.

4. The Authority's obligation to provide water service to the Route 100-Kernsville Road Water Service Area shall be contingent upon the Authority receiving all necessary permits from governmental authorities having jurisdiction over the provision of such service, and the installation, maintenance, repair, and replacement, of infrastructure needed to deliver such water service. The Township agrees to cooperate with the Authority in making an application for any necessary governmental approvals necessary for the provision of water service in the Route 100-Kernsville Road Water Service Area.

5. The Authority's obligation to provide water service to the Route 100-Kernsville Road Water Service Area is conditioned upon private developers paying the cost necessary to install the water service infrastructure determined by the Authority as necessary to service the Route 100-Kernsville Road Water Service Area, and making dedication of that infrastructure to the Authority. The Authority is not required to outlay monies for capital improvements to create the water service system in the Route 100-Kernsville Road Water Service Area, but may, at its own election, decide to do so. Any such capital expenditures shall be recoverable by the Authority through fees permitted by its rules and regulations.

6. Route 100 and Kernsville Road are both state roads. The installation of infrastructure, and delivery of water

service, shall be conditioned upon the Commonwealth of Pennsylvania granting highway occupancy permits and any other necessary approvals for use of the State roads.

7. Emergency failures of pressure or supply due to main supply line breaks, power failure, flood, fire and use of water to fight fire, earthquake, drought, or other catastrophes shall excuse the Authority from the provision of water service in the Route 100-Kernsville Road Water Service Area for such reasonable period of time as may be necessary to restore service.

8. The Authority's covenant and agreement to provide water service to the Route 100-Kernsville Road Water Service Area is based upon current development in the Route 100-Kernsville Road Water Service Area, and the proposed development of warehouses on tax map parcel numbers PIN 545702330003 (2766 PA Route 100), PIN 545714601391 (7503 Kernsville Road), and PIN 545725755429 (2951 Betz Court). The Authority reserves the right to decline, in its sole discretion, water service to future development in the Route 100-Kernsville Road Water Service Area, based on water supply capacity limitations.

9. The Authority shall not be required to provide any higher fire flows than are currently available in Applewood Pump Station Service Area (also known as the 846 Zone - the system Hydraulic Grade Line). The Township is aware and understands

that fire flows are function of the system's current infrastructure, and that higher fire flows are not possible under the current infrastructure.

10. Except to the extent inconsistent with this Addendum, the original Water Service Agreement continues in place, and is incorporated by reference as though set forth at large.

11. If any part of this Addendum shall be declared by a Court of competent jurisdiction to be invalid, such judgment shall not affect the validity of the Addendum as a whole or any part or provision thereof, other than the part so declared to be invalid.

12. This Addendum may be amended only in writing, signed by all the Parties to be bound.

13. All terms, conditions, provisions and understandings between the Parties concerning the provision of water services to the Route 100-Kernsville Road Water Service Area are contained in this Addendum. There are no other understandings, oral or otherwise, between the Parties with respect to water service to the Route 100-Kernsville Road Water Service Area, except those contained herein.

14. This Addendum is for the sole benefit of the Parties hereto and their permitted assigns, and nothing herein expressed or implied shall give or be construed to give to any

person or entity, other than the Parties hereto and such assigns, any legal or equitable rights hereunder.

15. The Parties acknowledge and agree that (a) each Party and its counsel have reviewed the terms and provisions of this Addendum and have contributed to its drafting, (b) the normal rule of construction, to the effect that any ambiguities are resolved against the drafting Party, shall not be employed in the interpretation of it, and (c) the terms and provisions of this Addendum shall be constructed fairly as to all Parties hereto and not in favor of or against any Party, regardless of which Party was generally responsible for preparation of this Addendum.

16. Waiver of any term or condition of this Addendum by a Party shall only be effective if in writing and shall not be construed as a waiver of any subsequent breach or failure of the same term or condition, or a waiver of any other term or condition of this Addendum. No failure or delay by a Party in exercising any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any other right, power or privilege.

IN WITNESS WHEREOF, Lehigh County Authority and the Township of Lowhill each has caused this Addendum to be duly executed and attested by its proper officers, pursuant to proper

action of its governing body, all as of the day and year first
above written.

ATTEST:

LEHIGH COUNTY AUTHORITY

By: _____

ATTEST:

TOWNSHIP OF LOWHILL



By: 

EXHIBIT "A"

to

FIRST ADDENDUM TO
WATER SERVICE AGREEMENT

(attached hereto)

FINAL
DRAFT

WATER SERVICE AGREEMENT
LOWHILL TOWNSHIP

THIS AGREEMENT, dated the 9th day of April, 1990, by and between LEHIGH COUNTY AUTHORITY ("Authority"), a Pennsylvania Municipal Authority organized and existing under the Pennsylvania Municipality Authorities Act of 1945, as amended, located at 1053 Spruce Road, Wescosville, Pennsylvania and the TOWNSHIP OF LOWHILL ("Township"), a Second Class Township organized and existing under the laws of the Commonwealth of Pennsylvania with its principal office located at R.D.#2, New Tripoli, Lehigh County, Pennsylvania.

WITNESSETH:

WHEREAS, the County of Lehigh has caused to be incorporated the Lehigh County Authority, a Pennsylvania municipal authority; and

WHEREAS, the Authority, pursuant to the authority vested in it by law, and pursuant to the request of the County of Lehigh, has developed water resources and is in the process of developing additional water resources in the County, is treating such water as needed and is providing for the transmission and distribution of such water to the general areas of need in the County; and

WHEREAS, the Board of Supervisors of Lowhill Township has acted in its official capacity to request the Authority to provide water service to SA of the Pointe West subdivision ("Pointe West"), pursuant to the terms of this Agreement; and

WHEREAS, the parties hereto desire to set forth the terms and conditions which shall be applicable to the sale and delivery of water by the Authority to Pointe West customers in the Township.

NOW, THEREFORE, the Authority and the Township for and in consideration of covenants, promises and agreements herein contained to be kept and observed, each intending to be legally bound hereby, covenants and agrees as follows:

1. The Authority covenants and agrees to furnish potable water service where feasible, in perpetuity, to that area of the Township known as Pointe West, \$A. Service shall be in accordance with the Authority's Rules and Regulations and at rates which the Authority may adopt from time to time. Water system customers shall be customers of only the Authority; therefore, the Township shall have no responsibilities for billing or debt collection. The Township, however, shall be supplied with copies of the Authority's rate schedules for water service which shall be kept current and shall also be notified by the Authority in advance of any proposed rate changes to such schedules.

2. The Authority covenants to require construction of all water transmission and distribution systems in compliance with engineering reports prepared by the Authority and in compliance with the Authority's General Specifications

for Water System Construction, which specifications are made a part hereof by reference, including any future revisions thereof.

3. The Township agrees to grant and convey to the Authority at no cost any and all easements in public roads and other properties owned by the Township which are necessary for the construction of water mains and appurtenances for Pointe West, provided that the Authority shall after construction return the surface of such easements as nearly as possible to their preconstruction condition. The Township agrees to permit the Authority without further authorization, payment of fees or security to excavate in such easements for the purpose of maintaining, improving and repairing said water mains and appurtenances provided that the Authority shall promptly notify the Township of such excavation and, after such work is completed, restore the surface of said easement as nearly possible to its preconstruction condition. The Township further agrees to cooperate with the Authority in obtaining other easements necessary for the Authority to provide the services described herein, including but not limited to the exercise of Eminent Domain.

4. The Township covenants that it will require the developer of Pointe West or building permit applicant (collectively the "Developer") to apply to the Authority for water service and enter into water service agreements with the

Authority. The Township further agrees that the Developer, through a developer's water system agreement directly with the Authority, shall be responsible for all costs of providing water service to such subdivision or development, as determined by the Authority, and that the Township shall inform the Developer that:

(A) any future commitment on the part of the Authority to supply water is expressly conditioned upon Developer's payment of water service costs and furnishing and installing all pipes, mains, fittings, valves, laterals, fire hydrants, and other materials and facilities, as well as all labor require to provide water service.

(B) any such extensions shall be made by Developers in strict accordance with the prevailing specifications and requirements of the Authority for installing and extending water mains and appurtenances;

(C) such extensions shall be made subject to the inspection and approval of the Authority's engineers;

(D) upon any such extension or attachment to said water system being completed by Developers and approved by the Authority, all pipes, mains, fittings, valves, laterals, meters, fire hydrants, and other appurtenances constituting parts of the water system and all customers connected thereto, shall automatically and without further action by the Authority become the absolute property of the Authority without cost or charge to the Authority provided, however, that Developer shall

deliver to the Authority deeds of dedication, bills of sale or other documents required by the Solicitor of the Authority to complete the transfer of ownership;

(E) Developers shall remain responsible for all repairs to any facilities installed by them for a period of eighteen (18) months and further indemnify the Authority for any costs or expenses incurred by the Authority in making such repairs within eighteen (18) months, regardless of said transfer of ownership of the water system to the Authority; and

(F) Developer shall provide security to the Authority to assure performance of the water service agreement and maintenance of the facilities as provided in Section 4(E) above.

5. The Authority covenants and agrees to maintain its water system in good repair and operating condition, to operate the same continuously in an economical and efficient manner, and to make all repairs, renewals, replacements and improvements thereto as required to maintain adequate water service in the Township.

6. Fire hydrants shall be installed at such locations as the Authority deems necessary, subject to approval by the Township and availability of sufficient water supply. Fire hydrants shall be used by the Township, or Township-approved users, only for the purpose of fighting fires, fire practice or drills, or street flushing and cleaning. The Township agrees to pay the current annual hydrant rental which the Authority may from time to time adopt.

7. The Authority hereby agrees to indemnify and hold the Township harmless from any and all liability arising out of its (Authority's) performance and obligations under the terms of this Agreement, including but not limited to that liability defined in Sections 409 through 429 of the Restatement of Torts 2d which has been adopted as the law of the Commonwealth of Pennsylvania.

8. If any successor of the Authority or any trustee, receiver, officer, board, commission, agency, instrumentality or other person to whom or which any right, power or duty of the Authority may be transferred, voluntarily or involuntarily, shall come into possession of the Authority's Water System then all covenants herein by, in behalf of or for the benefit of the Authority, to the extent permitted by law, shall bind or inure to the benefit of such successor in possession of the Authority's water system.

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

ATTEST:

Lucille C. Hahn

TOWNSHIP OF LOWHILL

By:

Eugene A. Werni

ATTEST:

Carl C. Hahn

LEHIGH COUNTY AUTHORITY

By:

Richard H. Bohrer

EXHIBIT “B”

to

FIRST ADDENDUM TO
WATER SERVICE AGREEMENT

(attached hereto)

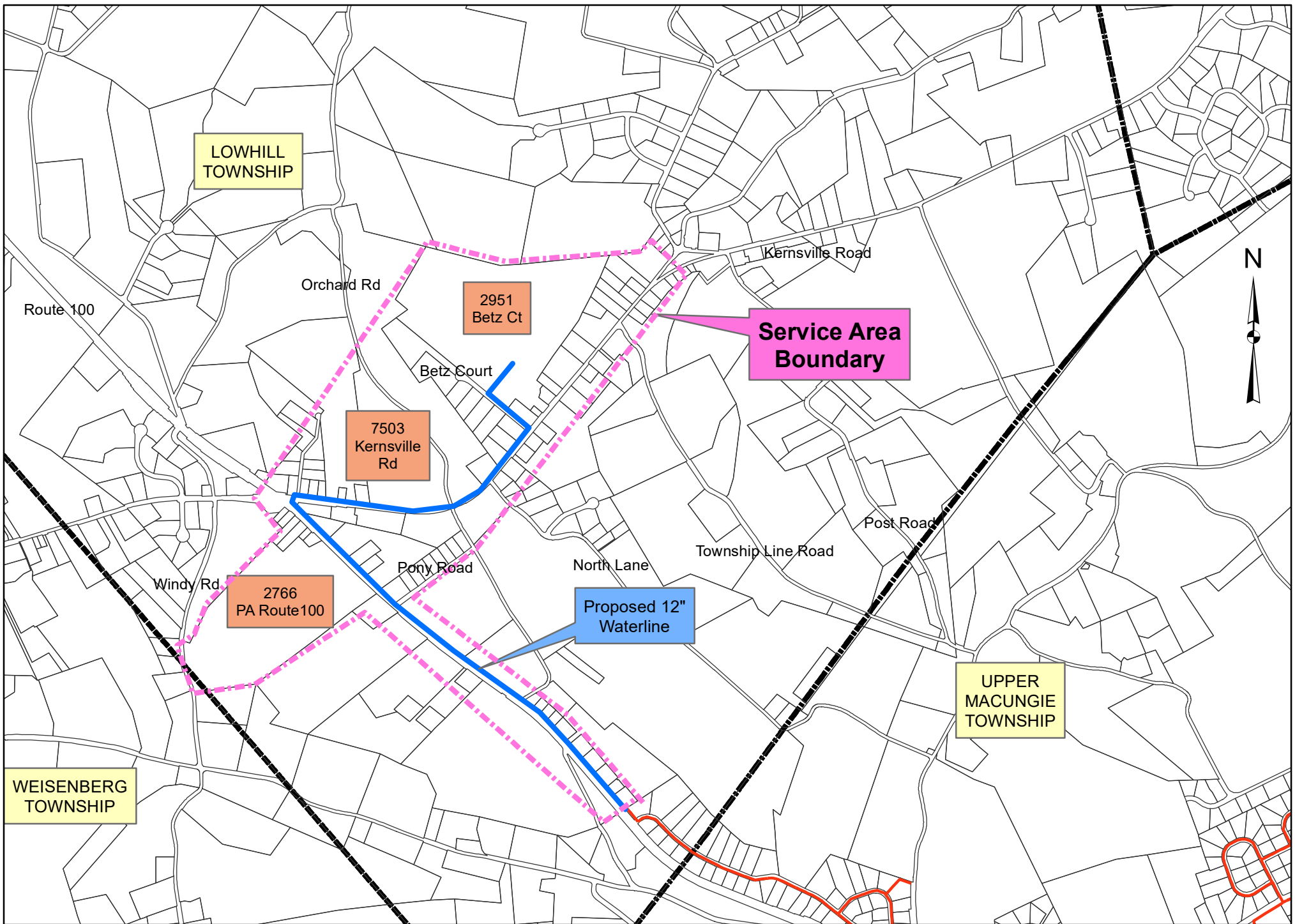
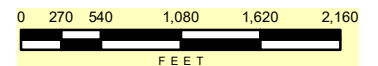


EXHIBIT B: ROUTE 100 - KERNSVILLE ROAD WATER SERVICE AREA



MEMORANDUM

Date: May 23, 2022

To: Lehigh County Authority Board of Directors
From: Bryan Geissel, Capital Works Project Engineer & Charles Volk, P.E.
Subject: Allentown Division – WFP 2022 Indenture Upgrades Project - Construction Phase

MOTIONS / APPROVALS REQUESTED:

No.	Item	Amount
1	Capital Project Authorization – Construction Phase	\$527,604
2 ⁽¹⁾	Professional Services Authorization – D’Huy Engineering, Inc.	\$21,000
3 ⁽¹⁾	General Construction Contract Award – Mar-Allen Concrete Products, Inc.	\$476,604

(1) Included in the Capital Project Authorization.

PROJECT BACKGROUND:

As a condition of the financing of LCA’s up-front concession payment to the City, LCA entered into a Trust Indenture with the Manufacturers and Traders Trust Company that requires the preparation of an annual Consulting Engineer’s Report (Report). The Report, which is prepared each year by Arcadis, documents the condition of the water and wastewater facilities (KIWWTP and WFP) based on physical inspections by the engineer, identifies repairs and upgrades required, and reflects progress made in addressing deficiencies. Plant staff have worked to address minor deficiencies at the Water Filtration Plant and various remote station and reservoir locations within the tight budget constraints since the inception of the annual Report, and this represents the second round of a capital project to address deficiencies identified at the WFP in the annual Indenture Report.

PROJECT SCOPE

This project consists of addressing concrete and steel structural deficiencies at the Water Filtration Plant, with continued repair work including concrete repairs (cracks, spalls, delamination and deterioration), ferrous metal coating, brick and masonry repointing, helical brick repair, access hatch replacement, and railing post anchoring system repairs.

FINANCIAL:

This Project will be funded by the LCA Allentown Division.

PROJECT STATUS:

D’Huy Engineering completed design in March 2022, the project was advertised for bid in April 2022, a pre-bid meeting at the plant site was held on 4/21/22, and bids were opened on 5/5/22.

THIS APPROVAL – CONSTRUCTION PHASE:

The contract time for construction phase of the 2022-year phase is 90 days from Notice to Proceed to substantial completion. Assuming construction phase authorization of the 5/23/22 board meeting, construction is anticipated to conclude in fall 2022.

BIDDING SUMMARY:

The project consists of one General Construction Contract. Two bids were received. Bid results are summarized below:

Bidder	Year #1 Base Bid	Year #2 Base Bid	Total Bid (Year #1 + Year #2)
Mar-Allen Concrete Products, Inc.	\$257,302	\$219,302	\$476,604
Quinn Construction	\$331,326	\$281,776	\$613,102
Bill Anskis Co., Inc.	\$417,265	\$323,715	\$740,980

The 2022 budget for this project is \$300,000. Due to the similar nature of the work for the next two years, the bid form was structured to allow LCA to consider award of a one-year or a two-year contract, depending on bid results and budget. The low bidder for both the one-year contract and two-year contract is Mar-Allen Concrete Products, Inc. (Mar-Allen) based in Ephrata, PA. Although the contractor has not previously completed work for LCA, Mar-Allen has significant experience in concrete repair work and has completed numerous similar projects at the DELCORA Wastewater Treatment Plant in Chester, PA. We have reviewed their references and experience and the firm appears qualified for this work. Based upon the review of the bids, and the apparent economy in awarding a two-year contract, we recommend award of a 2-year contract to Mar-Allen, subject to the receipt of the necessary Performance Bonds, Insurance and other required documentation.

PROFESSIONAL SERVICES:

D'Huy Engineering has been our design consultant on this project and will provide construction engineering services for the project. Their work will include:

1. Conduct pre-construction conference; issue meeting minutes.
2. Prepare for and conduct two job conference meetings.
3. Review and approve contractor's submittals.
4. Respond to Contractor requests for information (RFIs).
5. Review applications for payment and draft any necessary change orders.
6. Conduct site visits to review progress and issues raised during construction.
7. Conduct substantial and final completion inspections.
8. Prepare punch list, final project close-out and certify final payment to contractors.

PROJECT SCHEDULE:

Based on construction phase authorization following the 5/23/22 board meeting, the year no. 1 phase of the project should be completed in fall 2022.

FUTURE AUTHORIZATIONS: 2024 WFP Indenture Upgrade Project

CAPITAL PROJECT AUTHORIZATION

PROJECT NO.:	AD-S-A	BUDGET FUND:	Allentown Div\Water\Capital
PROJECT TITLE:	Allentown Division – WTP 2022 Indenture Upgrades Construction Phase		PROJECT TYPE:
		<input checked="" type="checkbox"/>	Construction
		<input type="checkbox"/>	Engineering Study
THIS AUTHORIZATION:	\$527,604	<input type="checkbox"/>	Equipment Purchase
TO DATE (W/ ABOVE)	\$536,104	<input type="checkbox"/>	Amendment No. 1

DESCRIPTION AND BENEFITS:

This project consists of addressing deficiencies identified in the annual Indenture Report and generally consists of concrete and ferrous metal repairs at various locations throughout the Water Filtration Plant. Construction phase authorization represents a two-year contract for similar nature work.

AUTHORIZATION STATUS:

Prior Authorizations	
<i>Design Phase – D’Huy Engineering</i>	<i>\$8,500</i>
Requested This Authorization – Construction Phase	
Construction Contract:	
Mar-Allen Concrete Products, Inc.	\$476,604
Construction Phase Engineering Services:	
D’ Huy Engineering	\$21,000
Staff	\$10,000
Contingencies	\$20,000
Total This Authorization	\$527,604

Future Authorizations	
2024 WFP Indenture Upgrades	TBD

REVIEW AND APPROVALS:

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



Lehigh County Authority

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

PROFESSIONAL SERVICES AUTHORIZATION

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

Date: May 23, 2022

Requested By: Charles Volk, P.E.

Approvals

Department Head: _____

Chief Executive

Officer: _____

Allentown Division – Water Filtration Plant 2022-2023 Indenture Upgrades - Construction Phase

D'Huy Engineering, Inc. will perform construction administration and engineering support for the two-year WFP Indenture Upgrade Project. Professional services will include the following:

Professional Services ⁽¹⁾
1. Pre-construction meeting coordination, attendance and follow-up
2. Prepare for and attend job conferences
3. Review and approve contractor submittals
4. Respond to Requests for Information (RFI) from contractor
5. Process payment applications
6. Process change orders as required
7. Provide site visits and part-time construction observation
8. Substantial completion inspection & punchlist preparation
9. Contract closeout administration

(1) Reference the cover Memo for additional information.

Cost Estimate (not to be exceeded without further authorization): \$21,000

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

(For Authority Use Only)

Authorization Completion:

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

MEMORANDUM

Date: May 23, 2022

To: Lehigh County Authority Board of Directors
From: Bryan Geissel, Capital Works Project Engineer & Charles Volk
Subject: Allentown Division – KIWWTP: 2022 Indenture Upgrades Project - Construction Phase

MOTIONS / APPROVALS REQUESTED:

No.	Item	Amount
1	Capital Project Authorization – Construction Phase	\$309,341
2 ⁽¹⁾	Professional Services Authorization – D’Huy Engineering, Inc.	\$14,500
3 ⁽¹⁾	General Contract Award – Blooming Glen Contractors.	\$274,841

(1) Included in the Capital Project Authorization.

PROJECT BACKGROUND:

As a condition of the financing of LCA’s up-front concession payment to the City, LCA entered into a Trust Indenture with the Manufacturers and Traders Trust Company that requires the preparation of an annual Consulting Engineer’s Report (Report). The Report, which is prepared each year by Arcadis, documents the condition of the water and wastewater facilities (KIWWTP and WFP) based on physical inspections by the engineer, identifies repairs and upgrades required, and reflects progress made in addressing deficiencies. Plant staff have worked to address minor deficiencies within the tight budget constraints since the inception of the annual Report, and this represents the second round of a capital project to address deficiencies identified at KIWWTP in the annual Indenture Report.

PROJECT SCOPE

This project consists of addressing primarily structural deficiencies at KIWWTP, with most of the work located at the Plastic Media Trickling Filters. Work includes concrete crack repair and structural repairs related to vertical steel support anchors, and related concrete repairs on other structures.

FINANCIAL:

This Project will be funded by the LCA Allentown Division.

PROJECT STATUS:

D’Huy Engineering completed design in March 2022, the project was advertised for bid in April 2022, a pre-bid meeting was held at the plant site on 4/21/22, and bids were opened on 5/5/22.

THIS APPROVAL – CONSTRUCTION PHASE:

The contract time for construction phase is 90 days from Notice to Proceed to substantial completion. Assuming construction phase authorization at the 5/23/22 Board meeting, construction is anticipated to conclude in fall 2022.

BIDDING SUMMARY:

Bids were opened on 5/5/22. The project consists of a single General Construction Contract. The bid results are summarized below:

Bidder	Base Bid Results	Subtotal Alternates	Base Bid + Alternates
Blooming Glen Contractors	\$166,647	\$108,194	\$274,841
Mar-Allen Concrete Products, Inc.	\$299,172	\$74,450	\$373,622
Quinn Construction	\$359,423	\$98,796	\$458,219

The 2022 budget for this project is \$300,000. The Base Bid reflects work at the Plastic Media Trickling Filter Towers. The Alternates include allowance items for repairs located throughout the plant, including railing post anchoring repairs, formed concrete at damaged structures, hydrophobic grout injection for tank structures, epoxy injection for non-structural concrete cracks, concrete spalling and delamination repairs, and miscellaneous concrete resurfacing.

The low bidder for the General Contract is Blooming Glen Contractors (Blooming Glen) based in Skippack, PA. The contractor completed the 2021 Indenture Upgrade Project at KIWWTP and has significant experience in water and wastewater facility construction projects in eastern PA. Blooming Glen was the General Contractor for the Park Pump Station Upgrade, the Kohler Pump Station, and the Buss Acres Well Station Upgrade. The contractor is well qualified for this work. The documents submitted with the bid are complete and in accordance with the bidding requirements. Based upon the review of the bids, we recommend award of the Base Bid + Alternates Contract to Blooming Glen, subject to the receipt of the necessary Performance Bonds, Insurance, and other required documentation.

PROFESSIONAL SERVICES:

D'Huy Engineering has been our design consultant on this project and will provide construction engineering services for the project. Their work will include:

1. Conduct pre-construction conference; issue meeting minutes.
2. Prepare for and conduct job conference meetings.
3. Review and approve contractor's submittals.
4. Respond to Contractor requests for information (RFIs).
5. Review applications for payment and draft any necessary change orders.
6. Conduct site visits to review progress and issues raised during construction.
7. Conduct substantial and final completion inspections.
8. Prepare punch list, final project close-out and certify final payment to contractors.

PROJECT SCHEDULE:

Based on construction phase authorization following the 5/23/22 Board meeting, the project should be completed in fall 2022.

FUTURE AUTHORIZATIONS: 2023 Indenture Upgrade Project

CAPITAL PROJECT AUTHORIZATION

PROJECT NO.:	AD-S-A	BUDGET FUND:	Allentown Div\WW\Capital
PROJECT TITLE:	Allentown Division – KIWWTP Indenture Upgrades Construction Phase		PROJECT TYPE:
		<input checked="" type="checkbox"/>	Construction
		<input type="checkbox"/>	Engineering Study
THIS AUTHORIZATION:	\$309,341	<input type="checkbox"/>	Equipment Purchase
TO DATE (W/ ABOVE)	\$317,841	<input type="checkbox"/>	Amendment No. 1

DESCRIPTION AND BENEFITS:

This project consists of addressing deficiencies identified in the annual Indenture Report, and consists primarily of structural repairs at KIWWTP, with the majority of the work located at the Plastic Media Trickling Filters. Work includes structural anchoring rehabilitation, injection grouting, concrete crack repair and resurfacing, and some painting. The project consists of a single General Contract.

AUTHORIZATION STATUS:

Prior Authorizations	
<i>Design Phase – D’Huy Engineering</i>	<i>\$8,500</i>
Requested This Authorization – Construction Phase	
General Contract: Blooming Glen Contractors	\$274,841
Construction Phase Engineering Services: D’ Huy Engineering	\$14,500
Staff	\$10,000
Contingencies	\$10,000
Total This Authorization	\$309,341

REVIEW AND APPROVALS:

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



Lehigh County Authority

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PROFESSIONAL SERVICES AUTHORIZATION

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

Date: May 23, 2022

Requested By: Charles Volk, P.E.

Approvals

Department Head: _____

Chief Executive

Officer: _____

Allentown Division – KIWWTP 2022 Indenture Upgrades - Construction Phase

D'Huy Engineering, Inc. will perform construction administration and engineering support for the KIWWTP Indenture Upgrade Project. Professional services will include the following:

Professional Services ⁽¹⁾
1. Pre-construction meeting coordination, attendance and follow-up
2. Prepare for and attend job progress meetings
3. Review and approve contractor submittals
4. Respond to Requests for Information (RFI) from contractor
5. Process payment applications
6. Process change orders as required
7. Provide part time construction inspection
8. Perform substantial completion inspection & punchlist preparation
9. Contract closeout administration

(1) Reference the cover Memo for additional information.

Cost Estimate (not to be exceeded without further authorization): \$14,500

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

(For Authority Use Only)

Authorization Completion:

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

**LEHIGH COUNTY AUTHORITY
FINANCIAL STATEMENTS
APRIL 2022**

LEHIGH COUNTY AUTHORITY
 FINANCIAL STATEMENTS - SUMMARY
 For the Period Ended April 30, 2022

	Consolidated Financial Statements														
	Month					Year To Date					FULL YEAR				
	Actual	Q2 FC	Prior Year	FC Var	PY Var	Actual	Q2 FC	Prior Year	FC Var	PY Var	Q2 FC	Budget	Prior Year	Bud Var	PY Var
Income Statement															
Suburban Water	369,273	353,154	307,923	16,119	61,349	620,224	604,106	304,396	16,119	315,828	2,276,836	2,094,223	4,780,026	182,613	(2,503,190)
Suburban Wastewater	304,377	270,719	596,082	33,658	(291,705)	(83,897)	(117,555)	1,369,681	33,658	(1,453,578)	910,370	1,788,879	(2,252,986)	(878,509)	3,163,357
City Division	(376,953)	(536,983)	175,678	160,030	(552,632)	2,697,373	2,537,342	1,086,722	160,030	1,610,651	3,010,119	2,194,319	4,431,771	815,799	(1,421,653)
Total LCA	296,697	86,890	1,079,684	209,807	(782,987)	3,233,700	3,023,893	2,760,799	209,807	472,901	6,197,325	6,077,421	6,958,811	119,903	(761,486)
Cash Flow Statement															
Suburban Water	764,327	760,338	(77,015)	3,989	841,342	781,469	777,479	(133,672)	3,990	915,140	1,140,073	402,292	(2,785,206)	737,781	3,925,279
Suburban Wastewater	(2,258,469)	(2,205,345)	246,207	(53,124)	(2,504,677)	(1,467,530)	(1,776,414)	106,550	308,884	(1,574,080)	4,268,151	4,353,353	(1,148,660)	(85,203)	5,416,811
City Division	1,920,167	1,833,703	1,127,861	86,465	792,306	5,708,877	5,622,713	6,592,082	86,165	(883,205)	5,758,400	5,439,552	9,094,925	318,848	(3,336,525)
Total LCA	426,024	388,695	1,297,053	37,330	(871,029)	5,022,816	4,623,778	6,564,961	399,038	(1,542,144)	11,166,623	10,195,198	5,161,059	971,426	6,005,564
Debt Service Coverage Ratio															
Suburban Water	2.74	2.74	4.79	0.00	(2.05)	1.93	1.92	3.03	0.00	(1.10)	2.10	2.03	5.84	0.06	(3.75)
Suburban Wastewater	13.43	12.95	16.86	0.48	(3.43)	8.31	8.23	12.56	0.08	(4.25)	9.96	10.82	6.56	(0.85)	3.40
City Division	1.29	1.22	1.74	0.07	(0.45)	2.18	2.17	1.82	0.02	0.36	1.87	1.67	1.79	0.20	0.08

LEHIGH COUNTY AUTHORITY
CONSOLIDATED FINANCIAL STATEMENTS
For the Period Ended April 30, 2022

Consolidated Financial Statements																
STATEMENTS OF ACTIVITIES	Month				Year To Date				Q2 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:																
User Charges	1,438,565	1,693,326	2,878,252	6,010,144	4,715,524	5,311,401	14,481,991	24,508,915	15,246,755	19,621,148	46,257,548	81,125,450	15,321,204	20,282,051	46,388,630	81,991,885
Connection & System Charges	(35,919)	60,068	212,720	236,869	84,748	399,075	1,670,823	2,154,646	938,533	962,706	4,574,143	6,475,382	933,476	875,254	4,488,054	6,296,784
Other Miscellaneous Revenues	2,160	-	5,455	7,615	7,905	60	16,750	24,715	30,553	1,745	61,901	94,200	33,078	2,247	67,475	102,800
Total Operating Revenues	1,404,807	1,753,394	3,096,427	6,254,628	4,808,177	5,710,536	16,169,564	26,688,277	16,215,841	20,585,599	50,893,592	87,695,032	16,287,758	21,159,552	50,944,159	88,391,469
Operating Expenses:																
Personnel	267,549	120,670	935,386	1,323,605	1,065,300	457,679	3,732,339	5,255,318	3,170,535	1,514,143	12,483,574	17,168,252	3,135,717	1,557,088	12,623,714	17,316,519
Shared Services - General & Administrative	44,877	20,078	137,318	202,273	157,090	67,459	468,002	692,550	695,641	219,897	1,734,961	2,650,499	777,905	230,022	1,872,369	2,880,296
Utilities	35,796	17,643	149,403	202,842	228,623	114,026	578,364	921,013	563,513	343,336	1,857,268	2,764,116	520,914	355,937	2,037,742	2,914,594
Materials and Supplies	69,590	27,138	224,360	321,087	298,107	99,012	621,474	1,018,935	815,518	494,287	2,188,454	3,498,529	816,837	496,550	2,334,092	3,647,479
Miscellaneous Services	267,699	491,293	99,207	858,200	1,028,582	1,944,954	339,150	3,312,686	4,411,338	6,656,930	1,932,710	13,000,978	4,728,534	6,804,359	2,184,774	13,717,667
Treatment and Transportation	-	238,553	-	238,553	-	928,553	-	928,553	-	4,072,170	13,800	4,085,970	-	3,844,405	13,800	3,858,205
Depreciation and Amortization	248,204	499,712	514,881	1,262,797	998,123	2,048,456	2,079,440	5,126,019	3,111,258	6,195,099	6,294,299	15,600,657	3,063,453	5,996,555	6,178,570	15,238,577
Major Maintenance Expenses	358	3,504	14,103	17,965	2,802	6,774	72,287	81,863	2,444	3,271	4,264,384	4,270,098	-	-	4,206,200	4,206,200
Other Miscellaneous	-	-	5,200	5,200	-	-	5,200	5,200	-	-	-	-	-	-	-	-
Total Operating Expenses	934,073	1,418,591	2,079,859	4,432,523	3,778,627	5,666,912	7,896,256	17,341,795	12,770,246	19,499,134	30,769,449	63,038,829	13,043,359	19,284,917	31,451,261	63,779,537
Net Operating Profit	470,734	334,803	1,016,569	1,822,105	1,029,550	43,624	8,273,308	9,346,482	3,445,595	1,086,465	20,124,143	24,656,203	3,244,399	1,874,636	19,492,897	24,611,931
Non-Operating Income (Expense)																
Interest Income	3,767	4,642	326	8,735	14,503	16,722	1,221	32,446	48,286	70,081	175,531	293,898	50,125	87,943	176,419	314,487
Interest (Expense)	(100,061)	(14,713)	(1,393,848)	(1,508,622)	(401,105)	(62,167)	(5,577,156)	(6,040,428)	(1,199,550)	(184,454)	(17,289,555)	(18,673,559)	(1,200,301)	(173,721)	(17,474,997)	(18,849,019)
Other Miscellaneous	(5,168)	(20,354)	-	(25,522)	(22,724)	(82,076)	-	(104,800)	(17,495)	(61,722)	-	(79,217)	-	22	-	22
Net Non-Operating Income (Expense)	(101,461)	(30,426)	(1,393,522)	(1,525,409)	(409,326)	(127,521)	(5,575,935)	(6,112,782)	(1,168,759)	(176,095)	(17,114,024)	(18,458,878)	(1,150,176)	(85,756)	(17,298,578)	(18,534,510)
Net Income (Loss)	369,273	304,377	(376,953)	296,697	620,224	(83,897)	2,697,373	3,233,700	2,276,836	910,370	3,010,119	6,197,325	2,094,223	1,788,879	2,194,319	6,077,421
CASH FLOW STATEMENT																
Cash Flows From Operating Activities																
Operating Revenues	1,404,807	1,753,394	3,096,427	6,254,628	4,808,177	5,710,536	16,169,564	26,688,277	16,215,841	20,585,599	50,893,592	87,695,032	16,287,758	21,159,552	50,944,159	88,391,469
Operating Expenses (ex D&A)	(685,869)	(918,879)	(1,564,978)	(3,169,726)	(2,780,504)	(3,618,457)	(5,816,816)	(12,215,776)	(9,658,988)	(13,304,034)	(24,475,150)	(47,438,172)	(9,979,907)	(13,288,362)	(25,272,691)	(48,540,960)
Non-Cash Working Capital Changes	328,982	(567,155)	1,469,771	1,231,597	(313,805)	(1,104,622)	(2,197,846)	(3,616,272)	555,297	148,110	80,110	783,517	(417,694)	(0)	2,197,478	1,779,783
Net Cash Provided by (Used in) Operating Activities	1,047,919	267,360	3,001,221	4,316,500	1,713,868	987,458	8,154,902	10,856,228	7,112,150	7,429,674	26,498,552	41,040,376	5,890,157	7,871,190	27,868,945	41,630,292
Cash Flows From Financing Activities																
Capital Contributions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Proceeds New Borrowing	-	-	-	-	-	-	-	-	3,075,000	-	1,200,000	4,275,000	3,075,000	-	1,200,000	4,275,000
Interest Payments	(1,135)	(11,800)	-	(12,935)	(4,738)	(47,753)	-	(52,491)	(1,201,467)	(179,353)	(11,565,086)	(12,945,906)	(1,200,301)	(173,721)	(12,799,531)	(14,173,553)
Principal Payments	(16,870)	(46,630)	-	(63,500)	(67,280)	(185,954)	-	(253,234)	(1,942,027)	(552,300)	(2,660,831)	(5,155,158)	(1,925,189)	(562,081)	(2,660,831)	(5,148,101)
Net Cash Provided by (Used in) Financing Activities	(18,005)	(58,431)	-	(76,435)	(72,019)	(233,707)	-	(305,726)	(68,495)	(731,653)	(13,025,917)	(13,826,064)	(50,490)	(735,802)	(14,260,362)	(15,046,654)
Cash Flows from Capital and Related Activities																
Non-Operating Income (Expenses)	(5,168)	(20,354)	-	(25,522)	(22,724)	(82,076)	(643,325)	(748,125)	(17,495)	(61,722)	(1,286,650)	(1,365,867)	-	22	(1,286,650)	(1,286,628)
Capital Expenditures, net	(264,188)	(251,686)	(1,081,380)	(1,597,253)	(852,160)	(894,927)	(1,803,921)	(3,551,007)	(5,934,056)	(3,759,230)	(6,603,116)	(16,296,402)	(5,487,500)	(2,870,000)	(7,058,800)	(15,416,300)
Net Cash Provided By (Used In) Capital and Related Activities	(269,356)	(272,040)	(1,081,380)	(1,622,775)	(874,884)	(977,003)	(2,447,246)	(4,299,132)	(5,951,551)	(3,820,952)	(7,889,766)	(17,662,269)	(5,487,500)	(2,869,978)	(8,345,450)	(16,702,928)
Cash Flows From Investing Activities																
Investments Converting To Cash	-	-	-	-	249,000	1,922,000	-	2,171,000	742,682	5,585,000	-	6,327,682	-	-	-	-
Purchased Investments	-	(2,200,000)	-	(2,200,000)	(249,000)	(3,183,000)	-	(3,432,000)	(743,000)	(4,264,000)	-	(5,007,000)	-	-	-	-
Interest Income	3,767	4,642	326	8,735	14,503	16,722	1,221	32,446	48,286	70,081	175,531	293,898	50,125	87,943	176,419	314,487
Net Cash Provided By (Used In) Investing Activities	3,767	(2,195,358)	326	(2,191,265)	14,503	(1,244,278)	1,221	(1,228,554)	47,968	1,391,081	175,531	1,614,581	50,125	87,943	176,419	314,487
FUND NET CASH FLOWS	764,327	(2,258,469)	1,920,167	426,024	781,469	(1,467,530)	5,708,877	5,022,816	1,140,073	4,268,151	5,758,400	11,166,623	402,292	4,353,353	5,439,552	10,195,198
DEBT SERVICE RATIO																
Debt Service Ratio (Indenture Based)																
Total Operating Revenues	1,438,565	1,693,326	2,878,252	6,010,144	4,715,524	5,311,401	14,481,991	24,508,915	15,246,755	19,621,148	46,257,548	81,125,450	15,321,204	20,282,051	46,388,630	81,991,885
Total Operating Expenses (Cash Based)	(685,869)	(918,879)	(1,564,978)	(3,169,726)	(2,780,504)	(3,618,457)	(5,816,816)	(12,215,776)	(9,658,988)	(13,304,034)	(24,475,150)	(47,438,172)	(9,979,907)	(13,288,362)	(25,272,691)	(48,540,960)
Interest Income	3,767	4,642	326	8,735	14,503	16,722	1,221	32,446	48,286	70,081	175,531	293,898	50,125	87,943	176,419	314,487
Annual Lease Payment (City)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-Operating Revenues (Expenses)	(38,926)	39,714	218,175	218,962	69,929	317,059	1,687,573	2,074,562	951,591	902,729	4,636,045	6,490,365	966,554	877,523	4,555,529	6,399,606
Cash Available For Debt Service	717,537	818,802	1,531,776	3,068,116	2,019,452	2,026,726	10,353,969	14,400,147	6,587,644	7,289,924	26,593,973	40,471,541	6,357,976	7,959,156	25,847,886	40,165,018
Interest Paid	100,122	14,946	963,757	1,078,826	400,489	59,784	3,855,029	4,315,302	1,201,467	179,353	11,565,086	12,945,906	1,200,301	173,721	12,799,531	14,173,553
Debt Retirement (Principal Payments)	161,836	46,025	221,736	429,597	647,342	184,100	886,944	1,718,386	1,942,027	552,300	2,660,831	5,155,158	1,925,189	562,081	2,660,831	5,148,101
Total Debt Service	261,958	60,971	1,185,493	1,508,422	1,047,832	243,884	4,741,972	6,033,688	3,143,495	731,653	14,225,917	18,101,064	3,125,490	735,802	15,460,362	19,321,654
Debt Service Ratio	2.74	13.43	1.29	2.03	1.93	8.31	2.18	2.39	2.10	9.96	1.87	2.24	2.03	10.82	1.67	2.08

LEHIGH COUNTY AUTHORITY
FINANCIAL STATEMENTS - SUBURBAN WATER
For the Period Ended April 30, 2022

STATEMENTS OF ACTIVITIES	Suburban - Water														
	Month					Year To Date					Full Year				
	Actual	Q2 FC	Prior Year	FC Var	PY Var	Actual	Q2 FC	Prior Year	FC Var	PY Var	Q2 FC	Budget	Prior Year	Bud Var	PY Var
Operating Revenues:															
User Charges	1,438,565	1,422,779	1,161,727	15,786	276,839	4,715,524	4,699,738	3,857,059	15,786	858,465	15,246,755	15,321,204	12,433,466	(74,449)	2,813,289
Connection & System Charges	(35,919)	92,951	91,572	(128,869)	(127,491)	84,748	213,617	204,663	(128,869)	(119,915)	938,533	933,476	1,559,023	5,056	(620,491)
Other Miscellaneous Revenues	2,160	2,756	5,215	(596)	(3,055)	7,905	8,501	12,110	(596)	(4,205)	30,553	33,078	131,831	(2,524)	(101,278)
Total Operating Revenues	1,404,807	1,518,486	1,258,514	(113,680)	146,293	4,808,177	4,921,857	4,073,832	(113,680)	734,345	16,215,841	16,287,758	14,124,320	(71,917)	2,091,521
Operating Expenses:															
Personnel	267,549	260,999	236,160	(6,550)	(31,390)	1,065,300	1,058,750	1,011,102	(6,550)	(54,198)	3,170,535	3,135,717	3,168,152	(34,817)	(2,383)
Shared Services - General & Administrative	44,877	64,825	36,353	19,948	(8,524)	157,090	177,038	153,070	19,948	(4,019)	695,641	777,905	506,957	82,264	(188,684)
Utilities	35,796	43,410	33,164	7,614	(2,632)	228,623	236,237	149,911	7,614	(78,712)	563,513	520,914	423,326	(42,599)	(140,186)
Materials and Supplies	69,590	55,000	29,610	(14,590)	(39,980)	298,107	283,518	108,404	(14,590)	(189,704)	815,518	816,837	475,374	1,319	(340,144)
Miscellaneous Services	267,699	384,860	299,830	117,161	32,130	1,028,582	1,145,743	1,074,624	117,161	46,401	4,411,338	4,728,534	3,433,851	317,196	(977,487)
Treatment and Transportation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Depreciation and Amortization	248,204	262,371	217,141	14,167	(31,063)	998,123	1,012,290	868,564	14,167	(129,559)	3,111,258	3,063,453	3,350,988	(47,805)	239,730
Major Maintenance Expenses	358	-	242	(358)	(116)	2,802	2,444	2,335	(358)	(467)	2,444	-	-	(2,444)	(2,444)
Other Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	80,020	-	80,020
Total Operating Expenses	934,073	1,071,465	852,500	137,392	(81,573)	3,778,627	3,916,019	3,368,010	137,392	(410,617)	12,770,246	13,043,359	11,438,668	273,113	(1,331,578)
Net Operating Profit	470,734	447,021	406,014	23,712	64,720	1,029,550	1,005,838	705,823	23,712	323,728	3,445,595	3,244,399	2,685,652	201,196	759,942
Non-Operating Income (Expense)															
Interest Income	3,767	4,041	3,962	(274)	(195)	14,503	14,777	16,198	(274)	(1,695)	48,286	50,125	47,412	(1,839)	874
Interest (Expense)	(100,061)	(97,917)	(100,573)	(2,144)	512	(401,105)	(398,961)	(410,519)	(2,144)	9,414	(1,199,550)	(1,200,301)	(1,026,223)	751	(173,327)
Other Miscellaneous	(5,168)	8	(1,480)	(5,176)	(3,687)	(22,724)	(17,548)	(7,105)	(5,176)	(15,618)	(17,495)	-	3,073,185	(17,495)	(3,090,680)
Net Non-Operating Income (Expense)	(101,461)	(93,867)	(98,091)	(7,594)	(3,370)	(409,326)	(401,732)	(401,426)	(7,594)	(7,900)	(1,168,759)	(1,150,176)	2,094,374	(18,583)	(3,263,133)
Net Income (Loss)	369,273	353,154	307,923	16,119	61,349	620,224	604,106	304,396	16,119	315,828	2,276,836	2,094,223	4,780,026	182,613	(2,503,190)
CASH FLOW STATEMENT															
Cash Flows From Operating Activities															
Operating Revenues	1,404,807	1,518,486	1,258,514	(113,680)	146,293	4,808,177	4,921,857	4,073,832	(113,680)	734,345	16,215,841	16,287,758	14,124,320	(71,917)	2,091,521
Operating Expenses (ex D&A)	(685,869)	(809,094)	(635,359)	123,225	(50,510)	(2,780,504)	(2,903,729)	(2,499,446)	123,225	(281,059)	(9,658,988)	(9,979,907)	(8,087,680)	320,919	(1,571,308)
Non-Cash Working Capital Changes	328,982	328,900	(373,613)	81	702,595	(313,805)	(313,887)	(780,739)	82	466,934	555,297	(417,694)	(2,445,283)	972,992	3,000,581
Net Cash Provided by (Used in) Operating Activities	1,047,919	1,038,293	249,542	9,627	798,378	1,713,868	1,704,241	793,648	9,627	920,221	7,112,150	5,890,157	3,591,356	1,221,993	3,520,794
Cash Flows From Financing Activities															
Capital Contributions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Proceeds New Borrowing	-	-	-	-	-	-	-	-	-	-	3,075,000	3,075,000	21,679,902	-	(18,604,902)
Interest Payments	(1,135)	(1,166)	(14,235)	31	13,100	(4,738)	(4,770)	(25,428)	31	20,690	(1,201,467)	(1,200,301)	(1,344,261)	(1,166)	142,793
Principal Payments	(16,870)	(16,838)	(31,398)	(31)	14,528	(67,280)	(67,249)	(125,256)	(31)	57,976	(1,942,027)	(1,925,189)	(21,902,961)	(16,838)	19,960,933
Net Cash Provided by (Used in) Financing Activities	(18,005)	(18,005)	(45,632)	-	27,628	(72,019)	(72,019)	(150,684)	-	78,666	(68,495)	(50,490)	(1,567,319)	(18,005)	1,498,825
Cash Flows from Capital and Related Activities															
Non-Operating Income (Expenses)	(5,168)	8	(1,480)	(5,176)	(3,687)	(22,724)	(17,548)	(7,105)	(5,176)	(15,618)	(17,495)	-	(188,450)	(17,495)	170,955
Capital Expenditures, net	(264,188)	(264,000)	(283,406)	(188)	19,218	(852,160)	(851,972)	(785,727)	(188)	(66,433)	(5,934,056)	(5,487,500)	(4,667,888)	(446,556)	(1,266,169)
Net Cash Provided By (Used In) Capital and Related Activities	(269,356)	(263,992)	(284,886)	(5,364)	15,531	(874,884)	(869,520)	(792,833)	(5,364)	(82,051)	(5,951,551)	(5,487,500)	(4,856,338)	(464,051)	(1,095,213)
Cash Flows From Investing Activities															
Investments Converting To Cash	-	-	-	-	-	249,000	249,000	-	-	249,000	742,682	-	493,682	742,682	249,000
Purchased Investments	-	-	-	-	-	(249,000)	(249,000)	-	-	(249,000)	(743,000)	-	(494,000)	(743,000)	(249,000)
Interest Income	3,767	4,041	3,962	(274)	(195)	14,503	14,777	16,198	(274)	(1,695)	48,286	50,125	47,412	(1,839)	874
Net Cash Provided By (Used In) Investing Activities	3,767	4,041	3,962	(274)	(195)	14,503	14,777	16,198	(274)	(1,695)	47,968	50,125	47,095	(2,157)	874
FUND NET CASH FLOWS	764,327	760,338	(77,015)	3,989	841,342	781,469	777,479	(133,672)	3,990	915,140	1,140,073	402,292	(2,785,206)	737,781	3,925,279
DEBT SERVICE RATIO															
Debt Service Ratio (Indenture Based)															
User Charges	1,438,565	1,422,779	1,161,727	15,786	276,839	4,715,524	4,699,738	3,857,059	15,786	858,465	15,246,755	15,321,204	12,433,466	(74,449)	2,813,289
Operating Expenses (Cash Based)	(685,869)	(809,094)	(635,359)	123,225	(50,510)	(2,780,504)	(2,903,729)	(2,499,446)	123,225	(281,059)	(9,658,988)	(9,979,907)	(8,087,680)	320,919	(1,571,308)
Interest Income	3,767	4,041	3,962	(274)	(195)	14,503	14,777	16,198	(274)	(1,695)	48,286	50,125	47,412	(1,839)	874
Annual Lease Payment (City)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Operating Revenues (Expenses)	(38,926)	95,715	95,307	(134,642)	(134,233)	69,929	204,571	209,668	(134,642)	(139,738)	951,591	966,554	4,764,039	(14,963)	(3,812,448)
Cash Available For Debt Service	717,537	713,442	625,637	4,096	91,900	2,019,452	2,015,357	1,583,479	4,096	435,973	6,587,644	6,357,976	9,157,236	229,667	(2,569,593)
Interest Paid	100,122	100,122	112,022	-	(11,899)	400,489	400,489	448,087	-	(47,598)	1,201,467	1,200,301	1,344,261	1,166	(142,793)
Debt Retirement (Principal Payments)	161,836	160,432	18,588	1,403	143,247	647,342	647,342	74,353	-	572,990	1,942,027	1,925,189	223,059	16,838	1,718,969
Total Debt Service	261,958	260,555	130,610	1,403	131,348	1,047,832	1,047,832	522,440	-	525,392	3,143,495	3,125,490	1,567,319	18,005	1,576,175
Debt Service Ratio	2.74	2.74	4.79	0.00	(2.05)	1.93	1.92	3.03	0.00	(1.10)	2.10	2.03	5.84	0.06	(3.75)

LEHIGH COUNTY AUTHORITY
VARIANCE ANALYSIS - MONTH
For the Period Ended April 30, 2022

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 - Water			
Actual	Q2 FC	FC Var	Comments
1,438,565	1,422,779	15,786	Lower inspection and review fees along with lower developer reimbursement
(35,919)	92,951	(128,869)	
2,160	2,756	(596)	
1,404,807	1,518,486	(113,680)	Lower system charges offset partly by higher user charges
267,549	260,999	(6,550)	Lower water purchase costs
44,877	64,825	19,948	
35,796	43,410	7,614	
69,590	55,000	(14,590)	
267,699	384,860	117,161	
-	-	-	
248,204	262,371	14,167	
358	-	(358)	
-	-	-	
934,073	1,071,465	137,392	Lower due to lower water purchases
470,734	447,021	23,712	
3,767	4,041	(274)	
(100,061)	(97,917)	(2,144)	
(5,168)	8	(5,176)	
(101,461)	(93,867)	(7,594)	
369,273	353,154	16,119	Lower operating expenses mostly offset by lower operating revenues

Cash Flows From Operating Activities	1,404,807	1,518,486	(113,680)	
Operating Revenues	1,438,565	1,422,779	15,786	
Operating Expenses (ex D&A)	(685,869)	(809,094)	123,225	
Non-Cash Working Capital Changes	328,982	328,900	81	
Net Cash Provided by (Used in) Operating Activities	1,047,919	1,038,293	9,627	Lower operating revenues mostly offset by lower operating revenues
Cash Flows From Financing Activities				
Capital Contributions	-	-	-	
Proceeds New Borrowing	-	-	-	
Interest Payments	(1,135)	(1,166)	31	
Principal Payments	(16,870)	(16,838)	(31)	
Net Cash Provided by (Used in) Financing Activities	(18,005)	(18,005)	-	
Cash Flows from Capital and Related Activities				
Non-Operating Income (Expenses)	(5,168)	8	(5,176)	
Capital Expenditures, net	(264,188)	(264,000)	(188)	
Net Cash Provided By (Used In) Capital and Related Activities	(269,356)	(263,992)	(5,364)	
Cash Flows From Investing Activities				
Investments Converting To Cash	-	-	-	
Purchased Investments	-	-	-	
Interest Income	3,767	4,041	(274)	
Net Cash Provided By (Used In) Investing Activities	3,767	4,041	(274)	
FUND NET CASH FLOWS	764,327	760,338	3,989	Higher cash from operations

LEHIGH COUNTY AUTHORITY
FINANCIAL STATEMENTS - SUBURBAN WASTEWATER
For the Period Ended April 30, 2022

STATEMENTS OF ACTIVITIES	Suburban - Wastewater														
	Month					Year To Date					Full Year				
	Actual	Q2 FC	Prior Year	FC Var	PY Var	Actual	Q2 FC	Prior Year	FC Var	PY Var	Q2 FC	Budget	Prior Year	Bud Var	PY Var
Operating Revenues:															
User Charges	1,693,326	1,667,960	1,886,619	25,366	(193,293)	5,311,401	5,286,034	6,195,767	25,366	(884,367)	19,621,148	20,282,051	15,823,055	(660,903)	3,798,093
Connection & System Charges	60,068	104,237	103,205	(44,169)	(43,137)	399,075	443,245	352,270	(44,169)	46,805	962,706	875,254	757,041	87,452	205,665
Other Miscellaneous Revenues	-	187	15	(187)	(15)	60	247	1,745	(187)	(1,685)	1,745	2,247	45,691	(502)	(43,945)
Total Operating Revenues	1,753,394	1,772,384	1,989,839	(18,990)	(236,445)	5,710,536	5,729,526	6,549,782	(18,990)	(839,246)	20,585,599	21,159,552	16,625,786	(573,953)	3,959,813
Operating Expenses:															
Personnel	120,670	129,625	102,166	8,955	(18,504)	457,679	466,634	435,826	8,955	(21,853)	1,514,143	1,557,088	1,341,997	42,945	(172,147)
Shared Services - General & Administrative	20,078	19,169	19,428	(910)	(650)	67,459	66,549	69,796	(910)	2,337	219,897	230,022	211,387	10,125	(8,510)
Utilities	17,643	29,661	24,629	12,019	6,987	114,026	126,044	99,928	12,019	(14,098)	343,336	355,937	269,553	12,601	(73,782)
Materials and Supplies	27,138	41,379	15,202	14,242	(11,936)	99,012	113,254	50,325	14,242	(48,687)	494,287	496,550	233,440	2,263	(260,847)
Miscellaneous Services	491,293	502,030	570,069	10,737	78,776	1,944,954	1,955,691	1,967,580	10,737	22,626	6,656,930	6,804,359	6,407,539	147,429	(249,391)
Treatment and Transportation	238,553	237,540	230,001	(1,014)	(8,552)	928,553	927,540	920,001	(1,014)	(8,552)	4,072,170	3,844,405	3,899,503	(227,765)	(172,668)
Depreciation and Amortization	499,712	516,262	384,727	16,550	(114,985)	2,048,456	2,065,005	1,538,908	16,550	(509,548)	6,195,099	5,996,555	6,694,237	(198,545)	499,137
Major Maintenance Expenses	3,504	-	35,555	(3,504)	32,051	6,774	3,271	47,865	(3,504)	41,090	3,271	-	-	(3,271)	(3,271)
Other Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	55,412	-	55,412
Total Operating Expenses	1,418,591	1,475,665	1,381,777	57,075	(36,814)	5,666,912	5,723,987	5,130,228	57,075	(536,684)	19,499,134	19,284,917	19,113,067	(214,217)	(386,066)
Net Operating Profit	334,803	296,719	608,062	38,084	(273,259)	43,624	5,539	1,419,554	38,084	(1,375,930)	1,086,465	1,874,636	(2,487,282)	(788,170)	3,573,747
Non-Operating Income (Expense)															
Interest Income	4,642	7,000	6,366	(2,358)	(1,725)	16,722	19,081	33,726	(2,358)	(17,003)	70,081	87,943	80,219	(17,862)	(10,138)
Interest (Expense)	(14,713)	(13,000)	(15,717)	(1,713)	1,004	(62,167)	(60,454)	(62,262)	(1,713)	95	(184,454)	(173,721)	(213,026)	(10,733)	28,572
Other Miscellaneous	(20,354)	(20,000)	(2,629)	(354)	(17,725)	(82,076)	(81,722)	(21,337)	(354)	(60,740)	(61,722)	22	367,102	(61,744)	(428,824)
Net Non-Operating Income (Expense)	(30,426)	(26,000)	(11,980)	(4,426)	(18,446)	(127,521)	(123,095)	(49,873)	(4,426)	(77,648)	(176,095)	(85,756)	234,295	(90,339)	(410,390)
Net Income (Loss)	304,377	270,719	596,082	33,658	(291,705)	(83,897)	(117,555)	1,369,681	33,658	(1,453,578)	910,370	1,788,879	(2,252,986)	(878,509)	3,163,357
CASH FLOW STATEMENT															
Cash Flows From Operating Activities															
Operating Revenues	1,753,394	1,772,384	1,989,839	(18,990)	(236,445)	5,710,536	5,729,526	6,549,782	(18,990)	(839,246)	20,585,599	21,159,552	16,625,786	(573,953)	3,959,813
Operating Expenses (ex D&A)	(918,879)	(959,404)	(997,050)	40,525	78,171	(3,618,457)	(3,658,981)	(3,591,320)	40,525	(27,136)	(13,304,034)	(13,288,362)	(12,418,831)	(15,672)	(885,203)
Non-Cash Working Capital Changes	(567,155)	(566,165)	10,007	(990)	(577,163)	(1,104,622)	(1,460,350)	(417,854)	355,729	(686,768)	148,110	(0)	442,056	148,110	(293,947)
Net Cash Provided by (Used in) Operating Activities	267,360	246,815	1,002,796	20,544	(735,437)	987,458	610,195	2,540,608	377,263	(1,553,150)	7,429,674	7,871,190	4,649,011	(441,516)	2,780,663
Cash Flows From Financing Activities															
Capital Contributions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Proceeds New Borrowing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest Payments	(11,800)	(12,873)	(12,873)	1,073	1,073	(47,753)	(58,075)	(59,425)	10,322	11,672	(179,353)	(173,721)	(160,037)	(5,632)	(19,316)
Principal Payments	(46,630)	(45,508)	(45,508)	(1,123)	(1,123)	(185,954)	(183,871)	(181,964)	(2,083)	(3,990)	(552,300)	(562,081)	(549,370)	9,781	(2,930)
Net Cash Provided by (Used in) Financing Activities	(58,431)	(58,380)	(58,380)	(50)	(50)	(233,707)	(241,947)	(241,389)	8,239	7,682	(731,653)	(735,802)	(709,407)	4,149	(22,246)
Cash Flows from Capital and Related Activities															
Non-Operating Income (Expenses)	(20,354)	(20,000)	(2,629)	(354)	(17,725)	(82,076)	(81,722)	(21,337)	(354)	(60,740)	(61,722)	22	(55,198)	(61,744)	(6,524)
Capital Expenditures, net	(251,686)	(335,780)	(456,945)	84,094	205,260	(894,927)	(979,021)	(1,217,058)	84,094	322,132	(3,759,230)	(2,870,000)	(4,250,286)	(889,230)	491,056
Net Cash Provided By (Used In) Capital and Related Activities	(272,040)	(355,780)	(459,574)	83,740	187,534	(977,003)	(1,060,743)	(1,238,395)	83,740	261,392	(3,820,952)	(2,869,978)	(4,305,484)	(950,974)	484,532
Cash Flows From Investing Activities															
Investments Converting To Cash	-	248,000	248,000	(248,000)	(248,000)	1,922,000	1,925,000	991,000	(3,000)	931,000	5,585,000	-	2,851,000	5,585,000	2,734,000
Purchased Investments	(2,200,000)	(2,293,000)	(493,000)	93,000	(1,707,000)	(3,183,000)	(3,028,000)	(1,979,000)	(155,000)	(1,204,000)	(4,264,000)	-	(3,714,000)	(4,264,000)	(550,000)
Interest Income	4,642	7,000	6,366	(2,358)	(1,725)	16,722	19,081	33,726	(2,358)	(17,003)	70,081	87,943	80,219	(17,862)	(10,138)
Net Cash Provided By (Used In) Investing Activities	(2,195,358)	(2,038,000)	(238,634)	(157,358)	(1,956,725)	(1,244,278)	(1,083,919)	(954,274)	(160,358)	(290,003)	1,391,081	87,943	(782,781)	1,303,138	2,173,862
FUND NET CASH FLOWS	(2,258,469)	(2,205,345)	246,207	(53,124)	(2,504,677)	(1,467,530)	(1,776,414)	106,550	308,884	(1,574,080)	4,268,151	4,353,353	(1,148,660)	(85,203)	5,416,811
DEBT SERVICE RATIO															
Debt Service Ratio (Indenture Based)															
User Charges	1,693,326	1,667,960	1,886,619	25,366	(193,293)	5,311,401	5,286,034	6,195,767	25,366	(884,367)	19,621,148	20,282,051	15,823,055	(660,903)	3,798,093
Operating Expenses (Cash Based)	(918,879)	(959,404)	(997,050)	40,525	78,171	(3,618,457)	(3,658,981)	(3,591,320)	40,525	(27,136)	(13,304,034)	(13,288,362)	(12,418,831)	(15,672)	(885,203)
Interest Income	4,642	7,000	6,366	(2,358)	(1,725)	16,722	19,081	33,726	(2,358)	(17,003)	70,081	87,943	80,219	(17,862)	(10,138)
Annual Lease Payment (City)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Operating Revenues (Expenses)	39,714	84,424	100,591	(44,711)	(60,878)	317,059	361,770	332,678	(44,711)	(15,619)	902,729	877,523	1,169,833	25,206	(267,104)
Cash Available For Debt Service	818,802	799,981	996,526	18,822	(177,724)	2,026,726	2,007,904	2,970,851	18,822	(944,125)	7,289,924	7,959,156	4,654,276	(669,232)	2,635,648
Interest Paid	14,946	14,946	13,336	-	1,610	59,784	59,784	53,346	-	6,439	179,353	173,721	160,037	5,632	19,316
Debt Retirement (Principal Payments)	46,025	46,840	45,781	(815)	244	184,100	184,100	183,123	-	977	552,300	562,081	549,370	(9,781)	2,930
Total Debt Service	60,971	61,786	59,117	(815)	1,854	243,884	243,884	236,469	-	7,415	731,653	735,802	709,407	(4,149)	22,246
Debt Service Ratio	13.43	12.95	16.86	0.48	(3.43)	8.31	8.23	12.56	0.08	(4.25)	9.96	10.82	6.56	(0.85)	3.40

LEHIGH COUNTY AUTHORITY
VARIANCE ANALYSIS - MONTH
For the Period Ended April 30, 2022

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	Q2 FC	FC Var	Comments
1,693,326	1,667,960	25,366	Lower tapping fees
60,068	104,237	(44,169)	
-	187	(187)	
1,753,394	1,772,384	(18,990)	Higher user charges more than offset by lower system charges
120,670	129,625	8,955	
20,078	19,169	(910)	
17,643	29,661	12,019	
27,138	41,379	14,242	
491,293	502,030	10,737	
238,553	237,540	(1,014)	
499,712	516,262	16,550	
3,504	-	(3,504)	
-	-	-	
1,418,591	1,475,665	57,075	Favorable variances across personnel, utilities, materials & supplies, and services
334,803	296,719	38,084	Lower operating expenses
4,642	7,000	(2,358)	
(14,713)	(13,000)	(1,713)	
(20,354)	(20,000)	(354)	
(30,426)	(26,000)	(4,426)	
304,377	270,719	33,658	Higher net operating income with a small offset from lower financial activity
1,753,394	1,772,384	(18,990)	
(918,879)	(959,404)	40,525	
(567,155)	(566,165)	(990)	
267,360	246,815	20,544	Lower operating expenses
-	-	-	
-	-	-	
(11,800)	(12,873)	1,073	
(46,630)	(45,508)	(1,123)	
(58,431)	(58,380)	(50)	
(20,354)	(20,000)	(354)	
(251,686)	(335,780)	84,094	
(272,040)	(355,780)	83,740	Lower capex
-	248,000	(248,000)	Maturities lower than FC
(2,200,000)	(2,293,000)	93,000	
4,642	7,000	(2,358)	
(2,195,358)	(2,038,000)	(157,358)	Lower investments converting to cash
(2,258,469)	(2,205,345)	(53,124)	Unfavorable due to investment activity

LEHIGH COUNTY AUTHORITY
FINANCIAL STATEMENTS - CITY DIVISION
For the Period Ended April 30, 2022

STATEMENTS OF ACTIVITIES	City Division														
	Month					Year To Date					Full Year				
	Actual	Q2 FC	Prior Year	FC Var	PY Var	Actual	Q2 FC	Prior Year	FC Var	PY Var	Q2 FC	Budget	Prior Year	Bud Var	PY Var
Operating Revenues:															
User Charges	2,878,252	2,896,835	3,310,196	(18,582)	(431,944)	14,481,991	14,500,573	13,088,147	(18,582)	1,393,844	46,257,548	46,388,630	42,276,435	(131,082)	3,981,113
Connection & System Charges	212,720	193,004	132,797	19,716	79,923	1,670,823	1,651,107	861,828	19,716	808,995	4,574,143	4,488,054	3,511,291	86,089	1,062,852
Other Miscellaneous Revenues	5,455	5,623	8,600	(168)	(3,145)	16,750	16,918	20,000	(168)	(3,250)	61,901	67,475	113,357	(5,574)	(51,456)
Total Operating Revenues	3,096,427	3,095,462	3,451,593	966	(355,166)	16,169,564	16,168,598	13,969,975	966	2,199,588	50,893,592	50,944,159	45,901,083	(50,566)	4,992,509
Operating Expenses:															
Personnel	935,386	1,000,600	913,479	65,214	(21,907)	3,732,339	3,797,553	3,458,222	65,214	(274,118)	12,483,574	12,623,714	10,681,433	140,140	(1,802,140)
Shared Services - General & Administrative	137,318	156,031	125,649	18,713	(11,669)	468,002	486,714	482,904	18,713	14,902	1,734,961	1,872,369	1,529,986	137,409	(204,974)
Utilities	149,403	169,812	147,798	20,408	(1,605)	578,364	598,773	672,757	20,408	94,393	1,857,268	2,037,742	1,705,824	180,475	(151,444)
Materials and Supplies	224,360	193,482	112,363	(30,877)	(111,997)	621,474	590,596	384,518	(30,877)	(236,955)	2,188,454	2,334,092	1,486,676	145,638	(701,778)
Miscellaneous Services	99,207	131,419	92,725	32,211	(6,482)	339,150	371,361	355,278	32,211	16,129	1,932,710	2,184,774	1,513,870	252,064	(418,841)
Treatment and Transportation	-	-	-	-	-	-	-	-	-	-	13,800	13,800	12,480	-	(1,320)
Depreciation and Amortization	514,881	525,527	491,154	10,646	(23,727)	2,079,440	2,090,086	1,964,616	10,646	(114,824)	6,294,299	6,178,570	4,348,808	(115,729)	(1,945,491)
Major Maintenance Expenses	14,103	-	10,672	(14,103)	(3,431)	72,287	58,184	36,428	(14,103)	(35,859)	4,264,384	4,206,200	3,679,342	(58,184)	(585,042)
Other Miscellaneous	5,200	-	-	(5,200)	(5,200)	5,200	-	-	(5,200)	(5,200)	-	-	7,540	-	7,540
Total Operating Expenses	2,079,859	2,176,870	1,893,841	97,012	(186,018)	7,896,256	7,993,268	7,354,722	97,012	(541,534)	30,769,449	31,451,261	24,965,960	681,812	(5,803,489)
Net Operating Profit	1,016,569	918,592	1,557,752	97,977	(541,183)	8,273,308	8,175,331	6,615,253	97,977	1,658,055	20,124,143	19,492,897	20,935,123	631,246	(810,980)
Non-Operating Income (Expense)															
Interest Income	326	675	661	(349)	(335)	1,221	1,569	2,409	(349)	(1,188)	175,531	176,419	5,374	(888)	170,158
Interest (Expense)	(1,393,848)	(1,456,250)	(1,382,735)	62,402	(11,113)	(5,577,156)	(5,639,557)	(5,530,940)	62,402	(46,216)	(17,289,555)	(17,474,997)	(16,508,725)	185,442	(780,830)
Other Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Non-Operating Income (Expense)	(1,393,522)	(1,455,575)	(1,382,074)	62,053	(11,448)	(5,575,935)	(5,637,988)	(5,528,531)	62,053	(47,404)	(17,114,024)	(17,298,578)	(16,503,352)	184,554	(610,672)
Net Income (Loss)	(376,953)	(536,983)	175,678	160,030	(552,632)	2,697,373	2,537,342	1,086,722	160,030	1,610,651	3,010,119	2,194,319	4,431,771	815,799	(1,421,653)
CASH FLOW STATEMENT															
Cash Flows From Operating Activities															
Operating Revenues	3,096,427	3,095,462	3,451,593	966	(355,166)	16,169,564	16,168,598	13,969,975	966	2,199,588	50,893,592	50,944,159	45,901,083	(50,566)	4,992,509
Operating Expenses (ex D&A)	(1,564,978)	(1,651,344)	(1,402,687)	86,366	(162,291)	(5,816,816)	(5,903,181)	(5,390,106)	86,366	(426,709)	(24,475,150)	(25,272,691)	(20,617,152)	797,541	(3,857,998)
Non-Cash Working Capital Changes	1,469,771	1,469,700	(396,207)	70	1,865,978	(2,197,846)	(2,197,616)	111,685	(230)	(2,309,531)	80,110	2,197,478	2,989,796	(2,117,368)	(2,909,686)
Net Cash Provided by (Used in) Operating Activities	3,001,221	2,913,819	1,652,699	87,402	1,348,522	8,154,902	8,067,800	8,691,554	87,102	(536,651)	26,498,552	27,868,945	28,273,727	(1,370,393)	(1,775,175)
Cash Flows From Financing Activities															
Capital Contributions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Proceeds New Borrowing	-	-	-	-	-	-	-	-	-	-	1,200,000	1,200,000	-	-	1,200,000
Interest Payments	-	-	-	-	-	-	-	-	-	-	(11,565,086)	(12,799,531)	(11,600,444)	1,234,445	35,358
Principal Payments	-	-	-	-	-	-	-	-	-	-	(2,660,831)	(2,660,831)	(2,514,642)	-	(146,189)
Net Cash Provided by (Used in) Financing Activities	-	-	-	-	-	-	-	-	-	-	(13,025,917)	(14,260,362)	(14,115,086)	1,234,445	1,089,169
Cash Flows from Capital and Related Activities															
Non-Operating Income (Expenses)	-	-	-	-	-	(643,325)	(643,325)	(621,762)	-	(21,563)	(1,286,650)	(1,286,650)	(1,243,524)	-	(43,126)
Capital Expenditures, net	(1,081,380)	(1,080,791)	(525,500)	(589)	(555,880)	(1,803,921)	(1,803,332)	(1,480,118)	(589)	(323,802)	(6,603,116)	(7,058,800)	(3,825,566)	455,684	(2,777,551)
Net Cash Provided By (Used In) Capital and Related Activities	(1,081,380)	(1,080,791)	(525,500)	(589)	(555,880)	(2,447,246)	(2,446,657)	(2,101,880)	(589)	(345,365)	(7,889,766)	(8,345,450)	(5,069,090)	455,684	(2,820,677)
Cash Flows From Investing Activities															
Investments Converting To Cash	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Purchased Investments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest Income	326	675	661	(349)	(335)	1,221	1,569	2,409	(349)	(1,188)	175,531	176,419	5,374	(888)	170,158
Net Cash Provided By (Used In) Investing Activities	326	675	661	(349)	(335)	1,221	1,569	2,409	(349)	(1,188)	175,531	176,419	5,374	(888)	170,158
FUND NET CASH FLOWS	1,920,167	1,833,703	1,127,861	86,465	792,306	5,708,877	5,622,713	6,592,082	86,165	(883,205)	5,758,400	5,439,552	9,094,925	318,848	(3,336,525)
DEBT SERVICE RATIO															
Debt Service Ratio (Indenture Based)															
User Charges	2,878,252	2,896,835	3,310,196	(18,582)	(431,944)	14,481,991	14,500,573	13,088,147	(18,582)	1,393,844	46,257,548	46,388,630	42,276,435	(131,082)	3,981,113
Operating Expenses (Cash Based)	(1,564,978)	(1,651,344)	(1,402,687)	86,366	(162,291)	(5,816,816)	(5,903,181)	(5,390,106)	86,366	(426,709)	(24,475,150)	(25,272,691)	(20,617,152)	797,541	(3,857,998)
Interest Income	326	675	661	(349)	(335)	1,221	1,569	2,409	(349)	(1,188)	175,531	176,419	5,374	(888)	170,158
Annual Lease Payment (City)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Operating Revenues (Expenses)	218,175	198,627	141,397	19,548	76,778	1,687,573	1,668,025	881,828	19,548	805,745	4,636,045	4,555,529	3,624,648	80,516	1,011,396
Cash Available For Debt Service	1,531,776	1,444,793	2,049,567	86,983	(517,791)	10,353,969	10,266,986	8,582,278	86,983	1,771,691	26,593,973	25,847,886	25,289,305	746,087	1,304,669
Interest Paid	963,757	963,757	966,704	-	(2,947)	3,855,029	3,855,029	3,866,815	-	(11,786)	11,565,086	12,799,531	11,600,444	(1,234,445)	(35,358)
Debt Retirement (Principal Payments)	221,736	221,736	209,554	-	12,182	886,944	886,944	838,214	-	48,730	2,660,831	2,660,831	2,514,642	-	146,189
Total Debt Service	1,185,493	1,185,493	1,176,257	-	9,236	4,741,972	4,741,972	4,705,029	-	36,944	14,225,917	15,460,362	14,115,086	(1,234,445)	110,831
Debt Service Ratio	1.29	1.22	1.74	0.07	(0.45)	2.18	2.17	1.82	0.02	0.36	1.87	1.67	1.79	0.20	0.08

LEHIGH COUNTY AUTHORITY
VARIANCE ANALYSIS - MONTH
For the Period Ended April 30, 2022

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

City Division			
Actual	Q2 FC	FC Var	Comments
2,878,252	2,896,835	(18,582)	
212,720	193,004	19,716	
5,455	5,623	(168)	
3,096,427	3,095,462	966	Lower user charges offset by higher system charges
935,386	1,000,600	65,214	
137,318	156,031	18,713	
149,403	169,812	20,408	
224,360	193,482	(30,877)	
99,207	131,419	32,211	
-	-	-	
514,881	525,527	10,646	
14,103	-	(14,103)	
5,200	-	(5,200)	
2,079,859	2,176,870	97,012	Lower personnel, G&A, and utilities
1,016,569	918,592	97,977	Lower operating expenses
326	675	(349)	
(1,393,848)	(1,456,250)	62,402	
-	-	-	
(1,393,522)	(1,455,575)	62,053	
(376,953)	(536,983)	160,030	Higher net operating income

3,096,427	3,095,462	966	
(1,564,978)	(1,651,344)	86,366	
1,469,771	1,469,700	70	
3,001,221	2,913,819	87,402	Lower operating expenses
-	-	-	
-	-	-	
-	-	-	
-	-	-	
-	-	-	
-	-	-	
-	-	-	
(1,081,380)	(1,080,791)	(589)	
(1,081,380)	(1,080,791)	(589)	
-	-	-	
-	-	-	
326	675	(349)	
326	675	(349)	
1,920,167	1,833,703	86,465	Higher cash from operations

LEHIGH COUNTY AUTHORITY
CASH & INVESTMENT SUMMARY
For the Period Ended April 30, 2022

	Suburban Internal Service	Suburban Water				Suburban Wastewater				City Division				Global	Total			
	4/30/2022 Actual	4/30/2022 Actual	2022 Forecast	2022 Budget	2021 Actual	4/30/2022 Actual	2022 Forecast	2022 Budget	2021 Actual	4/30/2022 Actual	2022 Forecast	2022 Budget	2021 Actual	4/30/2022 Actual	4/30/2022 Actual	2022 Forecast	2022 Budget	2021 Actual
Cash																		
Operating																		
Unrestricted	(425,234)	4,536,081	5,488,509	4,277,520	4,348,472	(223,365)	4,372,768	8,147,829	442,983	7,633,989	9,607,263	14,389,739	6,779,585	(30,400)	11,491,071	19,468,540	26,815,088	11,571,041
Restricted	-	-	-	-	-	-	-	272	-	17,501,937	33,294,883	18,916,191	25,794,847	-	17,501,937	33,294,883	18,916,463	25,794,847
Total Operating	(425,234)	4,536,081	5,488,509	4,277,520	4,348,472	(223,365)	4,372,768	8,148,101	442,983	25,135,926	42,902,146	33,305,930	32,574,433	(30,400)	28,993,008	52,763,423	45,731,551	37,365,888
Capital																		
Unrestricted	-	319,981	319,727	2,042,457	319,718	5,154,192	6,293,745	7,672,019	5,955,385	11,022,771	11,022,717	169,980	3,022,601	-	16,496,944	17,636,189	9,884,456	9,297,704
Restricted	-	-	-	-	-	338,371	338,366	337,932	338,360	7,500,037	7,500,037	7,500,000	7,500,035	-	7,838,408	7,838,403	7,837,932	7,838,396
Total Capital	-	319,981	319,727	2,042,457	319,718	5,492,564	6,632,111	8,009,951	6,293,745	18,522,808	18,522,754	7,669,980	10,522,636	-	24,335,352	25,474,592	17,722,388	17,136,099
Other Restricted																		
Debt Reserves	-	2,242,166	1,648,596	1,858,493	1,648,569	-	-	-	-	32,640,609	14,923,965	28,976,677	27,493,396	-	34,882,775	16,572,561	30,835,170	29,141,965
Escrow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Other Restricted	-	2,242,166	1,648,596	1,858,493	1,648,569	-	-	-	-	32,640,609	14,923,965	28,976,677	27,493,396	-	34,882,775	16,572,561	30,835,170	29,141,965
Total Cash	(425,234)	7,098,228	7,456,832	8,178,470	6,316,759	5,269,198	11,004,879	16,158,052	6,736,728	76,299,343	76,348,865	69,952,587	70,590,465	(30,400)	88,211,135	94,810,576	94,289,109	83,643,953
Investments																		
Operating																		
Unrestricted	-	1,954,966	1,474,940	1,497,825	1,974,940	-	-	(589,802)	-	-	-	-	-	-	1,954,966	1,474,940	908,023	1,974,940
Restricted	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Operating	-	1,954,966	1,474,940	1,497,825	1,974,940	-	-	(589,802)	-	-	-	-	-	-	1,954,966	1,474,940	908,023	1,974,940
Capital																		
Unrestricted	-	1,000,117	1,000,184	1,000,000	1,000,184	8,156,746	6,977,548	6,977,548	6,977,548	-	-	-	-	-	9,156,863	7,977,731	7,977,548	7,977,731
Restricted	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Capital	-	1,000,117	1,000,184	1,000,000	1,000,184	8,156,746	6,977,548	6,977,548	6,977,548	-	-	-	-	-	9,156,863	7,977,731	7,977,548	7,977,731
Other Restricted																		
Debt Reserves	-	-	-	244,924	-	-	-	-	-	-	-	-	-	-	-	-	244,924	-
Escrow	-	163,575	295,372	4,210,252	295,372	-	-	-	-	-	-	-	-	-	163,575	295,372	4,210,252	295,372
Total Other Restricted	-	163,575	295,372	4,455,676	295,372	-	-	-	-	-	-	-	-	-	163,575	295,372	4,455,676	295,372
Total Investments	-	3,118,659	2,770,496	6,953,501	3,270,496	8,156,746	6,977,548	6,387,746	6,977,548	-	-	-	-	-	11,275,404	9,748,043	13,341,247	10,248,043
Total Cash and Investments	(425,234)	10,216,887	10,227,328	15,131,971	9,587,255	13,425,944	17,982,426	22,545,798	13,714,276	76,299,343	76,348,865	69,952,587	70,590,465	(30,400)	99,486,540	104,558,619	107,630,356	93,891,996
Summary																		
Cash																		
Unrestricted	(425,234)	4,856,062	5,808,236	6,319,977	4,668,190	4,930,827	10,666,513	15,819,848	6,398,368	18,656,760	20,629,980	14,559,719	9,802,186	(30,400)	27,988,015	37,104,729	36,699,544	20,868,744
Restricted	-	2,242,166	1,648,596	1,858,493	1,648,569	338,371	338,366	338,204	338,360	57,642,582	55,718,885	55,392,868	60,788,279	-	60,223,120	57,705,847	57,589,565	62,775,208
Total Cash	(425,234)	7,098,228	7,456,832	8,178,470	6,316,759	5,269,198	11,004,879	16,158,052	6,736,728	76,299,343	76,348,865	69,952,587	70,590,465	(30,400)	88,211,135	94,810,576	94,289,109	83,643,953
Investments																		
Unrestricted	-	2,955,084	2,475,123	2,497,825	2,975,123	8,156,746	6,977,548	6,387,746	6,977,548	-	-	-	-	-	11,111,829	9,452,671	8,885,571	9,952,671
Restricted	-	163,575	295,372	4,455,676	295,372	-	-	-	-	-	-	-	-	-	163,575	295,372	4,455,676	295,372
Total Investments	-	3,118,659	2,770,496	6,953,501	3,270,496	8,156,746	6,977,548	6,387,746	6,977,548	-	-	-	-	-	11,275,404	9,748,043	13,341,247	10,248,043
Total Cash and Investments	(425,234)	10,216,887	10,227,328	15,131,971	9,587,255	13,425,944	17,982,426	22,545,798	13,714,276	76,299,343	76,348,865	69,952,587	70,590,465	(30,400)	99,486,540	104,558,619	107,630,356	93,891,996

DEVELOPMENT ACTIVITY

Water system construction is occurring in the following developments:

5420 Crackersport Road, 1 commercial lot, UMT
8323/8449 Congdon Hill Drive, 2 industrial lots with warehouses, LMT
Fields at Indian Creek, Phases 4 & 5, 86 residential units (sfd), water and sewer, UMiLT & Emmaus
Kohler Tract, 123 residential lots (sfa), water and sewer, UMiLT
Lehigh Hills, Lot 5 Phase 2, 240 residential units (sfd.), UMT
Lehigh Hills Townhouses, 24 townhouse units (sfa), UMT
Mountain View Estates, 27 residential units (sfd), LMT
Sauerkraut Lane Extension, Roadway & water line extension, LMT
West Hills Business Center Lot H, 1 commercial lot, Weisenberg T

Water system plans are being reviewed for the following developments:

749 Route 100, 1 industrial lot with warehouse, UMT
3369 Rt 100 Neighborhood Hospital & Medical Offices, 1 commercial lot, LMT
5329-5347-5357 Hamilton Blvd., 1 commercial lot, LMT
ABE Doors & Windows Redevelopment, 1 commercial lot, LMT
Advanced Health Care of Allentown, 1 commercial lot, LMT
Air Products & Chemicals-Cetronia Road, 1 commercial lot, UMT - New
ATAS International, 1 industrial lot, UMT
Carriage East Residential Development, 11 residential units, (sfd), UMT
Estates at Maple Ridge, 30 residential units (sfd), UMiLT
Fallbrooke Residential Subdivision, 90 sf residential units, UMT
Fields at Brookside, water main relocation, LMT
Green Hills Commerce Center III, 1 commercial lot, UMT
Guardian Self-Storage, 1 commercial lot, LMT
Hidden Meadows - Phase 3, 20 townhouse units, UMT
Laurel Field, Phase 5, 25 townhouses, UMT
Madison Village at Penn's View, 66 manufactured homes, 1 lot, water and sewer, LynnT
Mertztown Residential Subdivision, 264 sf units & 136 townhouse units, LMT
Mosser Road Subdivision, 10 sf units, UMT
Parkland Crossing (formerly 1224 Weilers Rd Twins), 144 townhouse units, UMT
Ridings at Parkland, Phase 2, 38 residential units (sfd), NWT
Schoeneck Road, Lot 1, 1 lot, warehouse, LMT
Self-Storage Facility, Cedarbrook Road – 1 Commercial Lot, LMT
Sheetz, Cetronia Road, 1 commercial lot, UMT
Spring Creek Properties, Lot 12, 1 lot, warehouse, LMT
The Annex at Fields at Indian Creek, 22 sf residential units, Emmaus Borough
Towneplace Suites by Marriott, 91-room hotel, UMT
Towns At Schaefer Run, 128 townhouse unit (sfa), UMT

Sewage Facilities Planning Modules Reviewed in Prior Month:

2955 Ithaca Street Land Development, Allentown, 800 gpd.
The Fields at Brookside, Macungie, 14,718 gpd.
Hadian Garage, LMT, 223 gpd.

CERTIFICATES OF DEPOSIT

April 2022

Fund	Bank	Location	Gross Amount	Date of Purchase	Date Due	Net Rate %
LLRI CR	PSDLAF Full Flex Pool		1,000,000.00	4/6/22	At Will	0.200
WW Capac	PSDLAF Full Flex Pool		1,000,000.00	4/6/22	At Will	0.200
LLRI CR	Comenity Bank	Wilmington, DE	200,000.00	4/5/22	4/5/24	1.950

Presented: May 23, 2022

Critical Activities	System	Description	Apr-22	2022 Totals	2021 Totals	Permit
			Daily Avg (MGD)	Daily Avg (MGD)	Daily Avg (MGD)	Daily Max (MGD)
Water Production	Allentown	Total	21.43	21.69	22.00	39.0
		Schantz Spring	7.72	6.95	7.29	9.0
		Crystal Spring	3.88	3.86	3.75	4.0
		Little Lehigh Creek	9.78	10.83	10.84	30.0
		Lehigh River	0.05	0.05	0.11	28.0
	Central Lehigh	Total	11.20	10.65	10.98	19.04 MGD Avg
		Feed from Allentown	6.92	6.96	7.29	7.0 MGD Avg 10.5 MGD Max
		Well Production (CLD)	4.28	3.69	3.69	8.54 MGD Avg
		Sum of all (12) other Suburban Water Systems	0.13	0.12	0.13	1.71 Sum of all wells
Wastewater Treatment		Kline's Island	39.77	33.73	32.27	40.0
		Pretreatment Plant	6.02	5.14	5.17	5.75 (design capacity)
		Sum of all (5) other Suburban WW Systems	0.25	0.20	0.21	0.36
			Apr-22	2022 Totals	2021 Totals	2020 Totals
Precipitation Totals (inches)			5.66	16.3	44.67	60.66
Compliance Reports Submitted to Allentown			30	117	280	278
Notices of Violation (NOVs)	(Allentown + Suburban)		0	1	3	1
Sanitary Sewer Overflows (SSOs)/Bypasses	(Allentown + Suburban)		3	8	26	37
Main Breaks Repaired	Allentown		0	12	20	20
	Suburban		3	5	14	12
Customer Service Phone Inquiries	(Allentown + Suburban)		815	3,467	15,857	22,992
Water Shutoffs for Non-Payment	(Allentown + Suburban)		134	582	1,773	1,956
Injury Accidents	(Allentown + Suburban)		0	2	8	10
Emergency Declarations	Allentown		0	1 @ \$213,593	0	(2)@ \$152,053
	Suburban		1 @ \$800,000	0	(1) @ \$48,000	(1) @ \$19,335
Significant Repairs/Upgrades:						
Description of NOVs and/or SSOs:						
A heavy rain event in early April produced over 3.3" of rain and resulted in a bypass at the Heidelberg Heights and Lynn Township WWTP. The Heidelberg bypass lasted from 4/8 to 4/11 and discharged 0.214 MG. The Lynn Township bypass lasted from 4/8 to 4/10 and discharged 0.232 MG. On 4/8 a SSO occurred at a manhole on Martin Luther King Jr. Drive. The manhole was overflowing at 100 gpm due to I&I from heavy rain.						
Other Highlights: As a follow up to our Feb 7, 2022 Board submission of public input received regarding LCA's 2022 rate increases, we've continued to receive some customer contacts related to the increase in cost. One formal letter was received recently and is attached.						

Liesel Gross
CEO, Lehigh County Authority
1053 Spruce Road, P.O. Box 3210
Allentown, PA 18106

Dear Ms. Gross:

I want to express my disappointment upon receiving my most recent water bill from the Authority in today's mail. Based on what I had been paying at the start of 2021, my current bill of \$41.05 represents a 120% increase.

Being a senior citizen living on a fixed income, enormous increases such as this play havoc with my budget. Of course, this is coming on top of the most significant inflation we have experienced in 40 years, so the price of virtually everything has gone up – 8.5%, but this is a far cry from 120%.

Living alone, I am sure that with just 3,000 gallons of usage per quarter – sometimes 2,000 – I am paying significantly less than those with families with growing children. I can only imagine how they are reacting to this shock in the mails, and I truly sympathize with them.

I feel that the members of the board of directors who authorized these increases are unsympathetic to the plight of homeowners such as me or have planned poorly that these steep increases have become necessary to levy on the Authority's customers.

I've been around enough to know that my insignificant words will not change minds or hearts, but I wanted it noted for the record that I am beyond annoyed at these outrageous increases.

Sincerely,



Bruce Frassinelli

[REDACTED]
Schnecksville, PA 18078
(North Whitehall Township)

[REDACTED]