

LCA Main Office:

1053 Spruce Road Wescosville, PA 18106 610-398-2503 **Agendas & Minutes Posted:**

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LEHIGH COUNTY AUTHORITY

Published: May 5, 2025

BOARD MEETING AGENDA – May 12, 2025 – 12:00 p.m.

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

- 1. Call to Order
 - NOTICE OF MEETING RECORDINGS

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

- Public Participation Sign-In Request
- 2. Review of Agenda / Executive Sessions
 - Additions to Agenda (vote required if action will be taken)
- 3. Approval of Minutes
 - April 28, 2025 Board Meeting minutes
- 4. Public Comments
- 5. Action / Discussion Items:

FINANCE AND ADMINISTRATION

WATER

WASTEWATER

- Regional Sewer Capacity & Wet-Weather Planning Regional Act 537 Plan Preparation (Discussion)
- Arcadia WWTP Screening System Project (Approval) (green) (digital Board packet, pages 9-12)
- 6. Monthly Project Updates / Information Items (1st Board meeting per month) (digital Board packet, pages 13-22) May 2025 report attached
- 7. Monthly Financial Review (2nd Board meeting per month) (2nd Board meeting per month)
- 8. Monthly System Operations Overview (2nd Board meeting per month)
- 9. Staff Comments

- 10. Solicitor's Comments
- 11. Public Comments / Other Comments
- 12. Board Member Comments
- 13. Executive Sessions
- 14. Adjournment

May 19, 2025 June 9, 2025 June 23, 2025

PUBLIC PARTICIPATION POLICY

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

REGULAR MEETING MINUTES April 28, 2025

The Regular Meeting of the Lehigh County Authority Board of Directors was called to order at 12:00 p.m. on Monday, April 28, 2025, Vice Chairman Jeff Morgan 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. Jeff Morgan, Linda Rosenfeld, Marc Grammes and Peter Dent were present for Roll Call and remained for the duration of the meeting. As the attendance at the start of the meeting did not represent a quorum, on the advice of the Authority Solicitor, the meeting was limited to discussion items until a quorum could be reached.

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

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

REVIEW OF AGENDA

Liesel Gross stated there were no changes or additions to the agenda and no executive sessions planned. She noted that the Kline's Island Wastewater Treatment Plant (WWTP) Master Plan item on the agenda was for discussion only and could be reviewed without a quorum.

PUBLIC COMMENTS

None.

Kline's Island WWTP: Master Plan

Stephen Boone provided a detailed presentation of the Kline's Island Wastewater Treatment Plant (WWTP) Master Plan, which was completed in 2024 to meet the requirements of the Allentown Water & Sewer Lease Agreement. He introduced Stephen Gitungo and Patrick Dunlap from Black & Veatch, consultants on the project.

The main objectives of the Master Plan project were to ensure reliable compliance with regulatory requirements and reduce operational risks. Mr. Boone reviewed additional drivers for the plan and the process to complete the planning work. After providing a brief overview of the treatment plant's major components, he reviewed critical focus areas within the plan: preparing for future increases in organic loading, solids handling, hydraulic capacity for wet-weather events, asset management, employee workplace conditions. In each area, Mr. Boone presented key concerns and project approaches outlined in greater detail with the plan.

A major deliverable of the Master Plan is a capital improvements plan (CIP) which was updated from the prior Master Plan that was completed in 2019. Mr. Boone reviewed the recommended projects in the two-year, five-year, 10-year, and 20-year time horizons. Within the next two years, \$48.6 million in projects were outlined. An additional \$52.1 million is recommended in the five-year time horizon, with \$79.8 million outlined for the 10-year horizon. The projects in the first 10 years are focused on preparing for the increased organic loading, improving solids handling, and addressing peak wetweather flows, along with the replacement of aging systems throughout the plant. Thereafter, he explained, the projects fall into more of a normal cycle of asset-management-based rehab and replacement to maintain the upgraded systems in good working order.

Mr. Boone then reviewed additional projects that may be needed in the future if the WWTP's permitted effluent limits change. These projects are not needed now, but the Authority should begin planning for them in case they become required projects in the future. He also reviewed additional studies that would be beneficial in helping the Authority be prepared for future regulatory or operational changes.

Ted Lyons asked about the limited space available at the WWTP location and whether there are options to acquire adjacent properties. Andrew Moore explained that the WWTP is surrounded by a flood dike and railroad tracks as well as significant elevation changes, making expansion of the plant's footprint unrealistic. Patrick Dunlap added that process changes could be reviewed in the future to reduce the size of certain facilities at the WWTP, such as the large space taken up by the rock media trickling filters. Replacing the rock media with a more compact, modern media could free up space within the existing plant footprint.

Peter Dent asked about the potential to identify industrial users who are discharging waste that contains PFAS, and whether that approach would be viable to reduce or eliminate the need to treat for PFAS in the future. Andrew Moore reviewed the Industrial Pretreatment Program and noted that a process is in place now to begin collecting data about PFAS discharges from industrial users.

Kevin Baker inquired about the workplace improvements that are needed, and whether any immediate needs have been identified to ensure a safe working environment for the Authority's employees. Amy Rohrbach responded that there are projects already under way to address the most pressing needs for workplace safety, and there are no concerns that would warrant having employees vacate any of the existing workspaces.

More general discussion about the Master Plan followed.

Jeff Morgan asked if the Authority has a scorecard of performance from the 2019 Master Plan to illustrate which projects were completed or not completed. Stephen Boone explained that this was one of the first steps in the current Master Plan's development, and the team found that most projects in the 2019 Master Plan that were slated for completion in a five-year timeline had been completed or are in the process of being completed now.

The Board thanked Mr. Boone and the consultants from Black & Veatch for the presentation and discussion.

Liesel Gross noted that Kevin Baker entered the meeting at 12:07 p.m., at which time a quorum was established. Ted Lyons entered the meeting at 12:09 p.m.

APPROVAL OF MINUTES

April 14, 2025 Meeting Minutes

On a motion by Linda Rosenfeld, seconded by Peter Dent, the Board approved the minutes from the April 14, 2025 meeting as presented (6-0).

Resolution 4-2025-2: Omnibus Resolution Update – Delegation of Authority Responsibilities

Liesel Gross reviewed Resolution 4-2025-2, noting that the Board had approved a similar Resolution in January. The intent of the Omnibus Resolution is to comprehensively detail all duties and responsibilities that have been delegated to the staff over time, consolidating all prior Resolutions

into a single document. She explained that since its passage in January 2025, the Omnibus Resolution has been under review by staff, and a recommended modification has been presented for Board consideration. The recommended change clarifies that staff may administratively approve professional service authorizations with a value of less than \$100,000 for larger projects, only through the design phase of the project. The prior Resolution included the term "Preliminary Design," and the recommended change would eliminate the word "Preliminary" to provide clarity to the staff regarding which professional service authorizations require Board approval.

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Authority Solicitor, Kevin Reid, read the title Resolution 4-2025-2 for the record.

On a motion by Linda Rosenfeld, seconded by Marc Grammes, the Board approved Resolution 4-2025-2 (6-0).

Allentown Water & Sewer Lease Bonds: Bondholder Consent

Ed Klein provided an overview of the challenges the Authority faces when attempting to secure funding through the Pennsylvania Infrastructure Investment Authority (Pennvest), especially when federal pass-through funding is the primary source of the financing. The Authority had to decline a prior funding offer from Pennvest, including both grant and loan funds, due to the inability to bring the financing to a successful closing. The primary barrier is related to the City of Allentown Water & Sewer Lease Bonds (City Bonds) and the associated Bond Indenture, which does not allow for adequate security for subordinate financing. Mr. Klein noted that about a dozen options to solve the problem had been reviewed with Pennvest, but an amendment to the Bond Indenture appears to be the only viable alternative. He introduced several team members who were present for the Authority meeting, including Chris Gibbons of Concord Public Financial Advisors, Tim Horstmann of McNees, Wallace and Nurick, and Ken Ukaigwe and Bruno Zuccolo of Goldman Sachs.

Chris Gibbons explained that the amendment to the Bond Indenture could be achieved in one of two ways: refinancing at least 51 percent of the bonds or seeking consent for the change from at least 51 percent of the bondholders. In the current financial environment, the refinancing option would cost the Authority an estimated \$76 million, which is not considered to be a viable alternative.

Tim Horstmann reviewed the Pennvest concerns in more detail, explaining that one driver is the requirements that pass through from the federal funding source, so that Pennvest has less flexibility in determining what that can accept as security. He noted that other utilities in Pennsylvania are having similar problems securing financing due to this issue, and other states' programs are similarly challenged. However, he has been in frequent contact with Pennvest's general counsel and believes the Bondholder Consent process will satisfy the concerns that have been raised.

Ed Klein explained the Bondholder Consent process and costs, noting the estimated consent fee to be paid of 0.25 percent for all bonds agreeing to the consent. Chris Gibbons explained that the range of consent fees for similar transactions have ranged from 0.1 to 0.25 percent, so the consent fee for the Authority is unlikely to be higher than that.

There was significant Board discussion about the process and risks associated with seeking Bondholder Consent. Tim Horstmann explained that the amended Bond Indenture would not eliminate any protections for primary bondholders. Instead, it would be adding some additional protections that don't currently exist for secondary bondholders such as Pennvest.

Ted Lyons asked about the current state of federal funding and whether additional grant funding would continue to be available. Liesel Gross explained that the large volume of federal grant funding for programs such as lead service line replacements and water treatment for PFAS does not appear to be at risk. However, even after those programs end, the state revolving funds will continue to

receive federal funding for the foreseeable future. The state revolving fund program is a popular and necessary program, and the Authority should continue to leverage this low-cost source of infrastructure funding.

There was some additional discussion about the risk of not achieving Bondholder Consent. Ken Ukaigwe explained that Goldman Sachs has completed many of these transactions and feels confident in their process. They will be conducting outreach with bondholders in advance to make sure they understand the request for consent, which will provide the opportunity to modify the language to address any concerns expressed by the bondholders. He explained that if Bondholder Consent is not achieved in the first attempt, additional outreach can be conducted prior to making additional attempts. More discussion followed regarding the fees and risks.

Ed Klein provided an overview of the benefits of pursuing Bondholder Consent, including creating opportunities for additional grant funding and low-interest financing for the Authority's projects.

On a motion by Marc Grammes, seconded by Linda Rosenfeld, the Board authorized the staff to pursue Bondholder Consent, retaining services from various legal and financial advisors, and incurring costs up to \$2 million for the Bondholder Consent process (6-0).

<u>Lead Service Line Replacement Project Cycle 1, Plumbing Contract</u>

Liesel Gross reviewed the project background, noting that the Board approved a construction phase project amendment for the Lead Service Line Replacement Project, Cycle 1, following the withdrawal of project funding via the Pennvest program. The project amendment included an alternative project approach whereby the Authority would self-fund and self-perform the lead service line replacements. At the time, it was noted that a private plumber would be required to perform certain portions of the project that will occur on private property, but a plumber had not yet been identified at that time.

Reni Keane-Dengel reviewed the process of interviewing and field-testing work by multiple plumbing companies. Upon staff review, the recommended service provider was identified as Agentis Plumbing (Agentis) due to high workmanship and readiness to perform the work in partnership with the Authority. He noted that Agentis has a dedicated crew ready for this project, and they are taking steps to build a second dedicated crew if needed. The project team recommends contracting with Agentis for the Cycle 1 project.

Chris Moughan explained that in addition to completing the approximately 150 private-side lead service line replacements in the Cycle 1 project, the Authority staff routinely encounter the need to replace lead service lines along the normal course of conducting maintenance activities or emergency repairs throughout the system. An operational contract for on-call services to replace private-side lead service lines will streamline the process and help ensure the Authority meets the compliance timelines set out by the new U.S. Environmental Protection Agency regulations. Agentis is recommended for this work.

Liesel Gross noted that Agentis is registered with CoStars, which eases the contracting process. She also explained that the Board previously authorized the funds for this work, when the project amendment was approved in January. Therefore, the authorization requested today is focused solely on the contract award to the selected plumbing contractor.

On a motion by Peter Dent, seconded by Ted Lyons, the Board authorized staff to execute a contract with Agentis Plumbing to perform the private plumbing work required within the Lead Service Line Replacement Program, Cycle 1 project, as well as a separate contract with Agentis Plumbing to perform the private plumbing work required on an as-needed, operational basis (6-0).

MONTHLY FINANCIAL REPORT

Ed Klein gave an overview of the March 2025 financial statements, highlighting variances between actual expenses and budgeted or forecasted expenses. Mr. Klein reported that a \$4.1 million variance exists in the Suburban Wastewater fund due to the timing of borrowing and capital spending. He noted that the next steps in financial reporting for 2025 will include developing a new forecast for the second quarter, which will include a deeper review of financial performance of the Suburban Wastewater fund and capital spending across all funds.

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There was some discussion about interest earnings, which have exceeded budget projections. Ed Klein explained the budget used conservative estimates and he has been converting more idle cash into investments, so earnings are higher than expected. He explained that "idle cash" is a term used to describe cash that is sitting in a bank account not earning interest and not earmarked for any specific operational use or reserve requirement.

MONTHLY SYSTEM OPERATIONS OVERVIEW

Andrew Moore reviewed the March 2025 report, noting there were no safety incidents during the month. He noted that sewage flows continue to be lower than normal due to lower groundwater levels and less precipitation. Lehigh County remains in a Drought Watch despite some good rainfall in March. He then reviewed compliance performance for the month, highlighting permit exceedances and a boil advisory issued in the Madison Park North water system.

Kevin Baker asked if the Authority has a position on water fluoridation considering recent news articles on this topic. Andrew Moore noted that the City of Allentown had enacted an ordinance requiring the addition of fluoride to the City's water supply at a minimum level of 0.5 milligrams per liter, which the Authority must comply with. In addition to Allentown, fluoridated water is also delivered to customers in the Authority's Central Lehigh and North Whitehall divisions as a result of purchasing water that contains fluoride from neighboring systems.

STAFF COMMENTS

None.

SOLICITOR'S COMMENTS

None.

PUBLIC COMMENTS / OTHER COMMENTS

Jennifer McKenna, City of Allentown (City) Office of Compliance, commented that the City appreciates the Authority's efforts to pursue the changes necessary to be able to take advantage of low-cost project financing via the Pennvest program.

BOARD MEMBER COMMENTS

None.

EXECUTIVE SESSION

None.

<u>ADJOURNMENT</u>

There being no further business, the Vice Chairman adjourned the meeting at 1:54 p.m.

Linda A. Rosenfeld Secretary

MEMORANDUM

Date: May 12, 2025

To: Lehigh County Authority Board of Directors From: Charles Volk, P.E., Chief Capital Works Officer

Subject: Suburban Division – Arcadia Wastewater Treatment Plant Influent Screening

System Project: Construction Phase

MOTIONS / APPROVALS REQUESTED:

No.	Item	Amount
1	Capital Project Authorization – Construction Phase	\$578,787
2	Construction Contract – Blooming Glen Contractors, Inc.	\$478,187
2	Professional Services Authorization Construction Phase Services – CHA Engineering	\$58,100

PROJECT OVERVIEW AND OBJECTIVE

The Lehigh County Authority (LCA) operates the Arcadia Wastewater Treatment Plant (WWTP) located in Weisenberg Township, Lehigh County. The WWTP facility serves the Arcada West Industrial Park, nearby businesses, and a school. The WWTP facility consists of the following processes:

- Influent pumping station with submersible pumps and sewage grinder
- Sequencing Batch Reactors (SBRs) 2 parallel covered tanks
- Post SBR equalization
- Disk filtration
- Ultraviolet (UV) disinfection
- Effluent metering and effluent discharge

The influent pumping station wet well utilizes a sewage grinder for shredding bulky debris, however the WWTP has no screening system for the raw wastewater. Consequently, rags and other bulky debris re-knit together downstream of the grinder and accumulate in the SBR tanks, which creates operational and maintenance issues, including instrumentation fouling and process pump clogging.

This project consists of the installation of two automatic mechanical screening units (one per SBR), to be installed at the head of each SBR tank. Each screen will be connected to a dedicated force main from the influent pump station and mounted on a platform at the top of each SBR tank, along with associated piping, electrical components and controls. The mechanical screens will remove all bulky inorganic debris and rags from the waste stream, dewater the screenings, and discharge the waste material into a waste container.

FINANCIAL

This Project will be funded by the LCA Suburban Division.

PROJECT STATUS

Board approval is requested for Construction Phase.

THIS APPROVAL – CONSTRUCTION PHASE

BID SUMMARY

This project consists of one contract. The project was advertised for bid in late March, a pre-bid meeting was held April 9, and bids were opened on April 25, 2025 via PennBid. Bid results are as follows:

General Construction			
Bidder	Bid Amount		
Blooming Glen Contractors, Inc	\$478,187		
DESCCO Design & Construction, Inc.	\$517,868		
JEV Construction, LLC	\$726,300		

Three bids were received for the Construction Contract, and Blooming Glen Contractors, Inc. (Blooming Glen) is the lowest responsible bid. Blooming Glen, based in Skippack PA, has successfully completed numerous projects for LCA, including the Mechanical Upgrade of Park Pump Station, Buss Acres Well Station Upgrade, Wynnewood WWTP Replacement (Electrical Contract), Kohler Pump Station, KIWWTP 2021 & 2022 Indenture Upgrades, and emergency support services for both City and Suburban Divisions. 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 review of the bids, we recommend award of the Bid to Blooming Glen, subject to the receipt of the necessary Performance Bonds, Insurance, and other required documentation.

PROFESSIONAL SERVICES

Design phase services were provided by CHA Engineering (CHA, formerly D'Huy Engineering) and we recommend that we use CHA for construction phase services. CHA is familiar with Arcadia WWTP and has a qualified team assembled for construction phase. The scope of the consultant's services includes the following:

- 1) Attend pre-construction and project meetings; provide follow-up minutes to each meeting.
- 2) Review and process RFIs and shop drawings.
- 3) Review and process payment applications and change orders.
- 4) Provide permitting services, including pre-application meeting with DEP, DEP Water
- 5) Provide part-time construction observation.
- 6) Perform contract closeout activities, including substantial and final completion inspections, issue punchlists, prepare record drawings.

PROJECT SCHEDULE

Based on construction phase approval at the May 12, 2025 LCA Board meeting, construction is anticipated to be completed by early 2026.

FUTURE AUTHORIZATIONS - none

ROJECT NO.: SD-S-8 BUDGET FUND		UND: Sub	Suburban Div\Wastewater\Capita		
PROJECT TITLE:	Suburban Division – Arcadia Wastewater Treatment Plant Screening System Project: Construction Phase		=	PROJECT TYPE:	
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Cina Auguaria	0570 707			Engineering De	C
THIS AUTHORIZATION: ΓΟ DATE (W/ ABOVE)	\$578,787 \$663,087		—— H	_	
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DESCRIPTION AND BENE	FITS:				
This authorization Suburban Division of two new mech	is for the general construction Arcadia WWTP Screen anical screening units, ng systems, and associa	ruction contract an ning System Projec above grade platfo	t. The scope in orms and encl	osures to suppo	llation
	Previous A	Authorizations			
Influent screening	feasibility study, final des	ign and bid phase		\$84,300	
	REQUESTED THI	IS AUTHORIZATI	ON		
		& Bid Phase			
Construction Contr	ract – Blooming Glen Con	ntractors, Inc.		\$478,187	
Construction Conti					
Professional Service	ces:				
Professional Service Construction Eng	ces: gineering Services – CHA	Engineering		\$58,100	
Professional Service		Engineering		\$7,500	
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Professional Service Construction Eng Staff Contingency Total This Authori None	zation Future A	authorization	Chief Executive C	\$7,500 \$35,000 \$578,787	Date



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:	CHA ENGINEERING, INC. One East Broad Street, Suite 310 Bethlehem, PA 18018	Date: Requested By: Approvals Department Head: Chief Executive Officer:	Mary 12, 2025 Charles Volk, P.E.
Project: Const CHA Enginee services for the	ision – Arcadia Wastewater Traction Phase ring will perform construction ne Arcadia WWTP Influent Screen dated 3/26/25. CHA will perf	n phase administratio ning System Project in a	n and engineering
	Professional Se		
2 3 4 5 6	 Pre-construction meeting coordination Minutes distribute Attend up to eight (8) progress in Review and process shop drawing Review and process payment appear changes and change orders Provide part-time construction of week on-site construction period Perform contract closeout activity and final completion inspections Prepare record drawings 	nation, attendance, and meetings at the site ngs and RFIs plications, work directive observation, based on 15-1. ties, including substantia	-
·	not to be exceeded without further a Completion Deadline: Anticipated c	,	end of 2025.
Authorization Co	(For Authority	y Use Only)	
Approval:	Actual Cost:	Da	ate:

Lehigh County Authority – Monthly Report to Board of Directors

Upcoming Board Agenda Items & Project Updates – May 2025

Published: May 5, 2025

PART 1 – Upcoming Agenda Items – Action & Discussion Items

FINANCE & ADMINISTRATION

<u>Project Title</u>: Monthly Financial Review

<u>Division / Funding</u>: n/a <u>Board Action Date</u>: May 19, 2025

<u>Status or Action Desired</u>: Information <u>Project Phase</u>: n/a

Project Notes: The April 2025 monthly finanical report will be presented. Staff Responsibility: Ed Klein

SYSTEM OPERATIONS

Project Title: Monthly Operations Report

<u>Division / Funding</u>: n/a <u>Board Action Date</u>: May 19, 2025

<u>Status or Action Desired</u>: Information <u>Project Phase</u>: n/a

Project Notes: The April 2025 monthly operations report will be presented. Staff Responsibility: Andrew Moore &

Chris Moughan

WASTEWATER PROJECTS – KISS ACT 537

<u>Project Title</u>: Regional Sewer Capacity & Wet-Weather Planning - Regional Act 537 Plan Preparation

<u>Division / Funding</u>: City of Allentown (AO) <u>Board Action Date</u>: May 12, 2025 <u>Status or Action Desired</u>: Discussion <u>Project Phase</u>: Planning Phase

Project Notes: All municipalities flowing into the Kline's Island Wastewater Treatment Plant completed an Interim Act 537 Plan ("Interim Plan") in September 2020. This Interim Plan primarily consisted of projecting new connections to the regional sewer system from 2021 through 2025 and outlining steps to be taken during this timeframe to prepare a full Regional (Long-Term) Act 537 Plan ("Regional Plan"). This two-step planning process has been developed to allow all municipalities to work cooperatively toward a regional plan to meet future sewer capacity needs of the region, and to provide proper regulatory oversight and control of new connections to the system while the Interim Plan is in force from 2021 to 2025. To begin the process of compiling the Regional Act 537 Plan to be submitted in 2025, a Professional Service Authorization for ARRO to complete this work was approved at the February 28, 2022 Board meeting. Costs associated with the development of this Regional Act 537 Plan have been paid by the City of Allentown and reimbursed through existing intermunicipal agreements and by City customers through the use of the Administrative Order Fee. Final completion of the Final Act 537 occurred in mid-April, with the 16 Planning Commissions receiving their copies on April 16, 2025. At the May 12, 2025 LCA Board meeting, a brief review of the plan and approval process wil be provided to illustrate the steps necessary to deliver the plan to DEP in October 2025. Staff Responsibility: Phil DePoe

WASTEWATER PROJECT – SUBURBAN DIVISION

Project Title: Arcadia WWTP Screening System Project

<u>Division / Funding</u>: Suburban Division <u>Board Action Date</u>: May 12, 2025 <u>Status or Action Desired</u>: Approval <u>Project Phase</u>: Construction Phase

Project Notes: The Arcadia WWTP serves eleven industrial and commercial customers in the Arcadia West Industrial Park in Weisenberg Township. There is a sewage grinder located in the influent wet well; however, the WWTP has no screening system. Consequently, rags and other debris continue to accumulate in the SBRs, which create operational and maintenance issues, particularly with instrumentation fouling and process pump clogging. This project is for the design & installation of two automatice screening units (one per SBR), to be mounted above grade on platforms and enclosures at the head of each tank, along with associated piping, electrical, and controls. The design was substantially completed in 2024 and the WQM Permit was approved by PADEP on 9/17/24. The project was advertised for bid in late March 2025 and bids were opened on 4/25/25. Authorization of construction phase is to be requested at the 5/12/25 LCA Board meeting. Staff Responsibility: Chuck Volk

WATER PROJECTS – SUBURBAN DIVISION

Project Title: North Whitehall Division - Second Water System Interconnection

<u>Division / Funding</u>: Suburban Division <u>Board Action Date</u>: n/a <u>Status or Action Desired</u>: Updated <u>Project Phase</u>: Design Phase

Project Notes: The North Whitehall Division relies exclusively on one interconnection with Northampton Borough Municipal Authority (NBMA) for its water source. The Source Water Assessment Study that was recently completed by Gannett Fleming identified this single interconnection as the system's primary vulnerability of supply reliability. The report recommends that a second interconnection be established with NBMA. In addition to providing redundancy of supply, the second interconnection will improve fire flow throughout the North Whitehall Division which will alleviate the need for additional water storage in the system. Design phase authorization was granted at the 1/27/2025 Board meeting. A kickoff meeting was held on 2/18/25 and design is underway. LCA has submitted a PA Department of Community and Economic Development grant application in the amount of \$500,000 for the construction portion of the project. Staff Responsibility: Amy Kunkel

Project Title: Buss Acres Water System Interconnection & PFAS Remediation

<u>Division / Funding</u>: Suburban Division <u>Board Action Date</u>: n/a <u>Status or Action Desired</u>: NEW <u>Project Phase</u>: Design Phase

<u>Project Notes</u>: In 2024 a study was completed to evaluate options to bring the Buss Acres water system into compliance with the new PFAS regulations. Options included various PFAS removal systems for the existing wells and an option to eliminate the wells and interconnect the Buss Acres system to the Kohler pressure zone of the Central Lehigh Division. While the interconnection option has an initial higher capital cost, the present worth value (over 20 years) shows this alternative to be almost as cost effective as onsite treatment alternatives. The water main extension alternative will be simpler to implement and has a significant annual operating cost savings. Most of the infrastructure installed during the 2019 Buss Acres Pump Station Replacement will continue to be used with this alternative. A request for design phase engineering services will be presented at a June Board meeting. <u>Staff Responsibility</u>: Amy Kunkel

WATER PROJECTS – ALLENTOWN DIVISION

Project Title: Water Filtration Plant: Redundant Raw Water Line

<u>Division / Funding</u>: Allentown Division <u>Board Action Date</u>: n/a <u>Status or Action Desired</u>: NEW <u>Project Phase</u>: Design Phase

<u>Project Notes</u>: The Water Filtration Plant currently has a single raw water line that brings water from the Little Lehigh Creek to the raw water pumps, and up to the sedimentation basins. In recent years, discharge pressures on the pumps have risen indicating a potential obstruction in the line. Flushing attempts have not improved the issue and attempts to televise the line to identify the issue have been unsuccessful due to limited access. This line presents a single point of failure at the plant and redundancy is being recommended. A preliminary design was completed in January 2025 and identified proposed routing for a new redundant raw water line. A Conceptual Design submission was made to the City for Major Capital Improvement consideration on 1/27/25. The City issued Conceptual Design approval on 3/26/25. LCA plans to request Capital Project Authorization for Final Design and Bidding Phase services at the 6/9/2025 Board meeting in order to advance the preliminary design. <u>Staff Responsibility</u>: Amy Rohrbach

Project Title: 30" & 36" East Side Transmission Main Repair Project

<u>Division / Funding</u>: Allentown Division <u>Board Action Date</u>: n/a

<u>Status or Action Desired</u>: Updated <u>Project Phase</u>: Construction Phase

<u>Project Notes</u>: The LCA Board authorized the 30" and 36" East Side Transmission Main leak detection study phase on 6/13/2022 to identify the condition of this critical asset and determine the need for repairs and or spot replacements. Six leak sites were identified in the study, and repair work must be planned carefully to ensure customers remain in service during the project construction. Design phase authorization was granted at the 10/9/2023 LCA Board meeting. As of April 28, 2025 the project has been placed out to bid via Pennbid. LCA will be requesting Construction phase approval at the June 9, 2025 Board meeting. <u>Staff Responsibility</u>: Jason Peters

WASTEWATER PROJECTS – KISS ACT 537

<u>Project Title</u>: KISS System Modeling - Sewage Billing Meter QA/QC Data Analytics and 2021 Flow Metering

Preparation

<u>Division / Funding</u>: City of Allentown (AO) <u>Board Action Date</u>: n/a

<u>Status or Action Desired</u>: Updated <u>Project Phase</u>: Planning Phase

Project Notes: As part of the Interim Act 537 Plan, the municipalities served by the Kline's Island Sewer System committed to completing a flow metering and modeling project beginning in 2021. The flow metering data will be used to prepare modeling and identify the capital improvements needed to meet the future sewage capacity needs of the region through 2050. The flow metering will include a mix of temporary meters and the existing sewage billing meters. Data delivery and storage procedures, quality assurance, and flow analytics were implemented in 2020 for these sewage billing meters. Without this meter development program, the data cannot be used from these billing meters. A consulting engineer's professional service proposal was granted at the April 27, 2020 Board meeting. Costs associated with the development of the QA/QC data analytics and the 2021 flow metering preparation was by the City of Allentown and reimbursed through existing intermunicipal agreements and by City customers through the use of the Administrative Order Fee. The main flow metering program concluded in late October 2021. In 2022 and beyond, a focus will shift onto the long-term goals of the existing sewer billing meters. Addressing the long-term goals of the existing meters is a requirement of the Interim Act 537, and this commitment has been re-affirmed within the Final Act 537 Plan. Preliminary plans call for a total data delivery overhaul by 2027. Staff Responsibility: Phil DePoe

Project Title: KISS Act 537 Planning - Selection of Solution (SOS) Phase

Division / Funding: City of Allentown (AO)

Board Action Date: n/a

<u>Status or Action Desired</u>: Updated <u>Project Phase</u>: Project Closeout

<u>Project Notes</u>: As Arcadis concluded work on the Final Alternatives Analysis (FAA) in the second half of 2023, the final phase of Act 537 planning includes the "Selection of Solution" (SOS) activity. This final phase of major planning covered work from completion of the FAA through final selection of the solution to be implemented. Some of the planned SOS work was accomplished under the prior FAA authorization. Board authorization was granted at the December 11, 2023 Meeting. With the hand delivery of the Act 537 to the 16 Planning Commissions occurring on April 16, 2025, the SOS phase of the planning process has concluded. <u>Staff Responsibility</u>: Phil DePoe

Project Title: KISS Relief Interceptor Pre-Design Study

<u>Division / Funding</u>: Suburban Division <u>Board Action Date</u>: n/a

<u>Status or Action Desired</u>: Updated <u>Project Phase</u>: Planning Phase

Project Notes: During the Preliminary Screening of Alternatives (PSOA) and Final Alternatives Analysis (FAA) phase of Act 537 planning work, the need for a new conveyance asset from the Water Filtration Plant (WFP) to KIWWTP became more and more clear. The core engineering team looked at various alternatives and finally settled on the following recommendation: install a parallal gravity interceptor in this general area. Several potential viable alignments have been identified but signficant uknowns exist that will influence the final selection of alignment. In order to eliminate these unknowns while maintaining the Program's implementation schedule, detailed alignment planning for this new interceptor needs to occur now. Board authorization was granted at the February 12, 2024 Meeting. All major geotechnical work has been completed and a final alignment study report will be submitted to LCA in Q2 of 2025. This project is included in the Final Act 537 as a project beyond the year 2030. Staff Responsibility: Phil DePoe

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

<u>Division / Funding</u>: Suburban Division <u>Board Action Date</u>: n/a

<u>Status or Action Desired</u>: Updated <u>Project Phase</u>: Planning Phase

Project Notes: As defined at the November 8, 2021 Board meeting, consultants were assigned various roles for the region's Act 537 planning process. As program manager, AECOM is assisting LCA in numerous engineering and coordination tasks to help achieve the region's current DEP deadline for submission. These periodic authorization requests are an extension of ongoing engineering and program support that AECOM provided in 2013-2016 and 2019-2021. In addition to coordinating and evaluating the efforts of other consultants, AECOM will also focus on continued analysis of the Pretreatment Plant, regulatory review of the alternatives, and continued financial analysis through the cost-revenue benefit tool. Authorization approval of Professional Services Authorization for Act 537 Plan Program Management support in 2022 and 2023 was granted at the 2/14/22, 6/27/22, and 5/8/23 Board meeting. An additional Program Management authorization was granted at the 3/25/24 Board meeting. Since the Act 537 Plan has been hand delivered to the 16 Planning Commissions, this phase of planning is on pause (pending the Act 537 municipal review process and subsequent DEP submission). Staff Responsibility: Phil DePoe

WASTEWATER PROJECTS – SUBURBAN DIVISION

Project Title: Park Pump Station Phase 2 Upgrade

<u>Division / Funding</u>: Suburban Division <u>Board Action Date</u>: n/a

<u>Status or Action Desired</u>: Updated <u>Project Phase</u>: Construction Phase

Project Notes: The Park Pump Station Phase 1 Upgrade was completed in early 2020, and consisted of new pumps, new pump control center with variable frequency drives, new automatic transfer switch, new wet well level control system, upgraded HVAC system, roof replacement, and related mechanical improvements. The existing 40-year-old generator does not have the capacity to handle the full loads of the upgraded station at 100% design flow and is at the end of its useful life. The Phase 2 Upgrade project consists of replacement of the original station backup generator system. Authorization for Phase 2 design phase was granted at the 3/22/2021 Board meeting. Design was completed in early 2022 and the project was advertised for bid in May 2022 and bids were opened in June. No bid was received for the General Contract. Construction phase authorization for the Electrical Contract was granted at the 6/27/2022 LCA Board meeting. The General Contract was re-advertised for bid in September 2023. Construction phase authorization for the GC contract was granted at the 10/23/2023 Board meeting. The generator was delivered to the Contractor's facility. Construction is approximately 80% complete. The generator was installed in April. Testing of the generator is ongoing and transfer of the station to the new generator is scheduled for early June. Staff Responsibility: Amy Kunkel

Project Title: Spring Creek Force Main Relocation - PA Turnpike Commission

<u>Division / Funding</u>: Suburban Division <u>Board Action Date</u>: n/a

<u>Status or Action Desired</u>: Updated <u>Project Phase</u>: Construction Phase

<u>Project Notes</u>: As part of an ongoing Turnpike widening project, the PA Turnpike Commission and PennDOT will be relocating and replacing the Lower Macungie Road bridge that crosses over the turnpike. The Spring Creek Force Main will be impacted by this work and approximately 1700 LF of force main will be relocated. The force main work will be included as part of the overall construction project designed by Gannett Fleming with an expected 50/50 cost share between LCA and the PTC. The PTC construction contract has been awarded and the force main relocation portion of the project began in December 2024. Construction of the new boring under the Turnpike has been completed. The force main is installed and tested, and final connection is scheduled for mid-May. Staff Responsibility: Amy Kunkel

Project Title: North Whitehall Township Act 537 Plan

<u>Division / Funding</u>: Suburban Division <u>Board Action Date</u>: n/a

<u>Status or Action Desired</u>: Updated <u>Project Phase</u>: Planning Phase

<u>Project Notes</u>: North Whitehall Township and LCA officials have been discussing the need for an updated Act 537 Plan to address long-term sewer service needs in the Township. Sewer service is currently provided via several small developer-built systems, many of which are aging and facing significant performance challenges. LCA owns and operates two of these facilities (Sand Spring and Wynnewood Terrace). The Township and LCA would like to pursue a partnership approach to completing the Act 537 Plan. At the June 12, 2023 meeting, a cost-sharing agreement to initiate and pay for the Act 537 Plan development work was approved by the Board. At the September 11, 2023 Township Board of Supervisors meeting, Barry Isett & Associates was granted approval to complete this work. Planning is under way with an expected submission date to DEP in early 2026. Staff Responsibility: Phil DePoe

WASTEWATER PROJECTS – ALLENTOWN DIVISION

Project Title: Kline's Island WWTP - Plastic Media Trickling Filter Rehabilitation

<u>Division / Funding</u>: Allentown Division <u>Board Action Date</u>: n/a
<u>Status or Action Desired</u>: Updated <u>Project Phase</u>: Design Phase

Project Notes: The Plastic Media Trickling Filter (PMTF) towers are approximately fifty years old and the media has reached the end of its service life. This project includes a condition assessment of the existing PMTFs and a multi-year rehabilitation effort. Improvements will include concrete structural repairs, removal of existing media and installation of new media, replacement of the exterior panels and all necessary structural and piping improvements. Preliminary engineering for PMTF #4 began February 2025 and a Conceptual Design submission was made to the City of Allentown on 4/23/25. Construction bidding is anticipated for late July with a Notice to Proceed expected by early November. Due to the long lead time on plastic media procurement (6-8 months), it is LCA's desire to prepurchase the media so that the tight construction window can be maintained, and the plant can continue to meet permit limits which are more stringent in the warmer months. LCA plans to request Capital Project Authorization for media procurement via the Costars Purchasing Cooperative at the 6/9/2025 Board meeting. Staff Responsibility: Amy Rohrbach

Project Category	Project Title	Division / Funding	Project Phase	Staff Responsibility
Finance & Administration	LCA Strategic Plan - Progress Reporting	All Divisions	n/a	Liesel Gross
Finance & Administration	LCA Main Office Parking Lot Expansion	All Divisions	Project Closeout	Chuck Volk
Finance & Administration	Project Management / Construction Management Software Installation & Setup	All Divisions	Planning Phase	Jason Peters
Finance & Administration	LCA Munis ERP System Planning & Re- Implementation	All Divisions	Planning Phase	Chris Moughan & Brooke Neve
Finance & Administration	Capital Program Management Services	All Divisions	Planning Phase	Chuck Volk
Finance & Administration	LCA Building Optimization Study & Master Plan	All Divisions	Planning Phase	Stephen Boone
Finance & Administration	Allentown Water & Sewer Lease Bonds: Bondholder Consent	Allentown Division	n/a	Ed Klein
System Operations	Suburban Water Facilities - SCADA System Upgrade	Suburban Division	Construction Phase	Chris Moughan
System Operations	Watershed Monitoring Program	Suburban Division	Planning Phase	Andrew Moore
Water - Suburban	Suburban Division Lead Service Line Inventory Program & Compliance Planning	Suburban Division	Planning Phase	Albert Capuzzi
Water - Suburban	2024 Meter Replacements	Suburban Division	Construction Phase	Amy Kunkel
Water - Suburban	Central Lehigh and North Whitehall Systems – Water Supply Study	Suburban Division	Planning Phase	Phil DePoe
Water - Suburban	Upper System Pump Station and Main Extension	Suburban Division	Design Phase	Amy Kunkel
Water - Suburban	Water Main Replacement Program Cycle 8	Suburban Division	Design Phase	Jason Peters
Water - Allentown	Lehigh River Pump Station Upgrades	Allentown Division	Design Phase	Amy Rohrbach

Project Category	Project Title	Division / Funding	Project Phase	Staff Responsibility
Water - Allentown	Water Filtration Plant: PFAS Treatment	Allentown Division	Design Phase	Amy Rohrbach
Water - Allentown	Allentown Division Lead Service Line Inventory Program & Compliance Planning	Allentown Division	Planning Phase	Albert Capuzzi
Water - Allentown	Badger Meter Replacements	Allentown Division	Construction Phase	Amy Kunkel
Water - Allentown	Lead Service Line Replacement Project Cycle 2	Allentown Division	Design Phase	Albert Capuzzi
Water - Allentown	Water Filtration Plant: Fluoride System Upgrades	Allentown Division	Design Phase	Amy Rohrbach
Water - Allentown	Water Filtration Plant: HVAC Upgrades - Phase 1	Allentown Division	Construction Phase	Amy Rohrbach
Water - Allentown	Water Filtration Plant: Emergency Power Design	Allentown Division	Design Phase	Amy Rohrbach
Water - Allentown	Water Main Replacement Program Cycles 9 - 11	Allentown Division	Design Phase	Jason Peters
Water - Allentown	Water Filtration Plant: Filter Upgrade Project	Allentown Division	Construction Phase	Amy Rohrbach
Water - Allentown	Lead Service Line Replacement Project Cycle 1	Allentown Division	Construction Phase	Reni Keane- Dengel
Water - Allentown	Large Diameter Valve Rehabilitation & Replacement Program	Allentown Division	Construction Phase	Chuck Volk
Sewer - Act 537	Sanitary Sewer Collection System: City of Allentown Manhole Inspections	Allentown Division	Planning Phase	Phil DePoe
Sewer - Act 537	Sanitary Sewer Collection System: City of Allentown Manhole Rehabilitation	Allentown Division	Construction Phase	Jason Peters
Sewer - Act 537	KISS Act 537 Planning - Financial & Institutional Evaluation, Phase 3	City of Allentown (AO)	Planning Phase	Liesel Gross
Sewer - Act 537	Legal Services: Development of New Intermunicipal Agreement(s)	City of Allentown (AO)	Planning Phase	Liesel Gross
Sewer - Act 537	Western Lehigh Interceptor Municipalities Test & Seal Lateral Grouting Project, Year 2 (2025)	Suburban Division	Construction Phase	Jason Peters

Project Category	Project Title	Division / Funding	Project Phase	Staff Responsibility
Sewer - Act 537	Industrial Pretreatment Plant Master Plan	Suburban Division	Planning Phase	Liesel Gross & Albert Capuzzi
Sewer - Act 537	Western Lehigh Service Area - Engineering & Program Support	Suburban Division	Planning Phase	Phil DePoe
Sewer - Act 537	Western Lehigh Interceptor Municipalities Test & Seal Lateral Grouting Project	Suburban Division	Construction Phase	Jason Peters
Sewer - Act 537	Upper Western Lehigh Pump Station & Force Main	Suburban Division	Construction Phase	Amy Kunkel
Sewer - Suburban	LCA Meter Stations 1 and 2 Upgrades	Suburban Division	Construction Phase	Chuck Volk
Sewer - Suburban	Wynnewood Terrace WWTP Expansion - Developer Cost-Sharing Agreement	Suburban Division	Design Phase	Chuck Volk
Sewer - Suburban	Heidelberg Heights Sanitary Sewer Consent Order & Agreement	Suburban Division	Planning Phase	Chuck Volk
Sewer- Suburban	Pretreatment Plant - Critical Upgrades	Suburban Division	Construction Phase	Chuck Volk
Sewer - Suburban	Lynn Township WWTP Final Clarifier Project	Suburban Division	Construction Phase	Chuck Volk
Sewer - Suburban	Spring Creek Pump Station Upgrades	Suburban Division	Construction Phase	Amy Kunkel
Sewer - Suburban	Pretreatment Plant (PTP) Electrical Study	Suburban Division	Planning Phase	Chuck Volk
Sewer - Suburban	Lynn Township Corrective Action Plan	Suburban Division	Planning Phase	Jason Peters
Sewer - Suburban	Sand Spring WWTP: Treatment Process Modification	Suburban Division	Construction Phase	Chuck Volk
Sewer - Allentown	Sanitary Sewer Collection System: I&I Source Reduction Program (LCA Year 2)	Allentown Division	Planning Phase	Jason Peters
Sewer - Allentown	Kline's Island WWTP: Chemically Enhanced Primary Treatment Study	Allentown Division	Planning Phase	Stephen Boone
Sewer- Allentown	Kline's Island WWTP - Wet Weather Improvements - Phase 1	Allentown Division	Design Phase	Amy Rohrbach

Project	Project Title	Division /	Project	Staff
Category		Funding	Phase	Responsibility
Sewer - Allentown	Kline's Island WWTP - Septage Receiving and Vacuum Truck Unloading Modifications	Allentown Division	Construction Phase	Amy Rohrbach
Sewer - Allentown	Kline's Island WWTP: Substation No. 1 and Switchgear Replacement	Allentown Division	Construction Phase	Amy Rohrbach
Sewer -	Kline's Island WWTP: Solids Process Boiler and	Allentown	Construction	Amy Rohrbach
Allentown	HVAC System Upgrade Project	Division	Phase	
Sewer - Allentown	Allentown Division I&I Program – Programmatic Support, Trout Creek & Eastside Basins	Allentown Division	Planning Phase	Stephen Boone
Sewer - Allentown	Kline's Island WWTP: 2025 Architectural and Structural Upgrades	Allentown Division	Construction Phase	Amy Rohrbach
Sewer-	Kline's Island WWTP - Primary Sludge System	Allentown	Construction	Amy Rohrbach
Allentown	Upgrades	Division	Phase	
Sewer -	Kline's Island WWTP - Final Settling Tanks 1-4	Allentown	Construction	Amy Rohrbach
Allentown	Upgrades	Division	Phase	
Sewer -	Sanitary Sewer Collection System: I&I Source	Allentown	Construction	Jason Peters
Allentown	Reduction Program (LCA Year 1)	Division	Phase	