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Agendas & Minutes Posted:
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LEHIGH COUNTY AUTHORITY

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BOARD MEETING AGENDA – September 8, 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

- *August 25, 2025 Board Meeting minutes*

4. Committee Reports

- *August 11, 2025 Governance Committee minutes*

5. Public Comments

6. Action / Discussion Items:

FINANCE AND ADMINISTRATION

- *2026 Budget: Preliminary Review (Discussion)*
- *LCA Board of Directors – Governance Committee Charter (Approval) (**pink**) (digital Board packet, page 10)*
- *LCA Board of Directors – Board Member Expectations (Approval) (**goldenrod**) (digital Board packet, page 11)*

WATER

WASTEWATER

- *Resolution 9-2025-1: Kline's Island Sewer System – Act 537 Plan (Approval) (**blue**) (digital Board packet, pages 12-15)*

- *Allentown Division – Kline’s Island WWTP – Plastic Media Trickling Filter Rehabilitation (Approval) (green) (digital Board packet, pages 16-23)*
- *Allentown Division – Kline’s Island WWTP – Substation No. 1 and Switchgear Replacement (Approval) (yellow) (digital Board packet, pages 24-33)*

7. Monthly Project Updates / Information Items (1st Board meeting per month) (digital Board packet, pages 34-43) – **September 2025 report attached**
8. Monthly Financial Review (2nd Board meeting per month)
9. Monthly System Operations Overview (2nd Board meeting per month)
10. Staff Comments
11. Solicitor’s Comments
12. Public Comments / Other Comments
13. Board Member Comments
14. Executive Sessions
15. Adjournment

UPCOMING BOARD MEETINGS		
September 22, 2025	October 13, 2025	October 27, 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

August 25, 2025

The Regular Meeting of the Lehigh County Authority Board of Directors was called to order at 12:00 p.m. on Monday, August 25, 2025, Chairman Amir Famili presiding. The meeting was hybrid via in-person and video and audio advanced communication technology ("ACT"), using the Zoom internet application, including telephone option. Each Board member and other attendees of the meeting were able to hear each other attendee and be heard by each other attendee. The public could also participate in the meeting in-person or via ACT, using the Zoom internet application, including telephone option. A Roll Call of Board members present was taken. Amir Famili, Jeff Morgan, Ted Lyons, Linda Rosenfeld, Norma Cusick, Sean Ziller, and Peter Dent were present for Roll Call and remained for the duration of the meeting. Kevin Baker entered the meeting at 12:02 p.m. and remained for the remainder of the meeting.

Liesel Gross announced that Marc Grammes resigned from the Board of Directors effective August 11, 2025.

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

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

REVIEW OF AGENDA

Liesel Gross stated there are no changes to the published agenda; however, there will be an Executive Session after the close of the regular meeting to discuss personnel.

APPROVAL OF MINUTES

August 11, 2025 Meeting Minutes

On a motion by Linda Rosenfeld, seconded by Ted Lyons, the Board approved the minutes from the August 11, 2025 meeting as presented (7-0).

PUBLIC COMMENTS

None.

Targeted Staffing Assessment

Liesel Gross provided an introduction to the topic, noting that the Authority has many staffing needs due to the addition of required programs such as the lead service line replacement program and comprehensive sewer system rehabilitation requirements. EMA was hired to conduct an assessment and provide recommendations for staffing approaches for selected areas within the organization. She introduced Celia Gould and Ryan Moreau from EMA. The four programs included in the study are the lead program, inflow and infiltration (I&I) source reduction program, asset management and capital works, and finance and affordability. Ms. Gould and Mr. Moreau provided an overview of EMA's approach, which includes a review of organizational, process, and technology requirements to support each program area.

Amir Famili asked what methodology was used for this project to fully review existing processes to ensure a continuous improvement approach. Liesel Gross commented that the four programs

selected for the study are brand-new programs, and so there is not a lot of data available about current practices or processes.

Ryan Moreau noted that the overarching observations discovered during the assessment were: the Authority's use of many non-integrated systems, inconsistent data accessibility and quality, lack of software purchasing governance, unstructured training and change management approaches, and limited SOPs on how systems should be used. A Technology and Data Master Plan was recommended.

The major recommendation for the asset management and capital works area is to develop project success criteria as an evolution of current Project Excellence program, with stronger focus on measuring project adherence to schedule, budget, and scope. AJ Capuzzi reported that Procure project management system is in place and currently being populated with project data. He will be working on narrowing down the available metrics and standardizing the project management process.

The recommendation for additional staffing for the lead service line replacement program is to add a Lead Program Administrator to serve as a single point of contact to address tactical questions and support community outreach for the program. In addition, an additional five Utility Technicians are recommended to be hired to support the program. The current lead program workload has impacted the Authority's ability to achieve required maintenance schedules, and large volumes of overtime has impacted both cost and employee well-being.

For the I&I Program, it was noted that the regional Act 537 Plan will be submitted to DEP in October, and feedback from DEP is expected to be received in 2026, which will provide more clarity in terms of the acceptable scope and pace of the I&I program. EMA analyzed current I&I projects and noted the Authority's contractors are using approximately 10 full-time equivalents to complete work that the Authority staff may be capable to completed more cost-effectively. The initial recommendation is to add three Utility Technicians to the Authority's roster to develop internal processes and support additional cost-analysis during an interim period while DEP is reviewing the Act 537 Plan. EMA also recommends using the current sanitary sewer evaluation study pilot to guide program strategy and consider additional in-sourcing after DEP direction is finalized and costs are updated. There was some Board discussion on the cost analysis data provided and whether the near-term staffing additions were justified.

To address the Authority's finance and affordability program concerns, EMA recommended extending capital planning to 20 years and include projections of future rates and operation increases. In addition, while converting to a monthly billing frequency may be beneficial for household budgeting, it does not actually reduce the cost burden for low-income households. Before deciding to move to monthly billing, the Authority may wish to investigate options to provide installment billing features for customers who would benefit from that approach. There was Board discussion regarding the cost of implementing monthly billing and the technology available to support it. EMA recommended adding one position to support the finance and affordability area, which would be a Business/Rate Analyst to support the pursuit of grants and other funding, consolidate rate-setting functions, and support other business analyses current under way or planned related to affordability.

Amir Famili asked for a summary of the new positions recommended by EMA. Liesel Gross noted that two positions – the Lead Program Administrator and the I&I Engineer – are new positions that would take the place of existing budgeted positions, so they are budget neutral. Nine additional positions are included in EMA's recommendations, primarily to support the near-term needs of the lead and I&I programs.

Ms. Gross concluded the presentation by noting that this assessment will be helpful in budget planning, and any Board comments or questions should be directed to her. EMA stated that a final report will be provided to the Authority in the coming weeks.

2026-2030 Suburban Division Capital Plan

Liesel Gross provided an introduction to the Authority's process for developing the Capital Plan (Plan), which is conducted annually. She noted the various Board approvals and public input process and explained that today's presentation is focused on the Suburban Division draft Plan for the 2026 to 2030 time period. She provided a timeline for future presentations and public input and noted that Plan approval will be requested in October. This year's five-year plan has decreased from the prior five-year plan. The key driver for the change in the Plan is the cost of the Pretreatment Plant Long Term Upgrades, which will be phased in over a 10-year period. She noted there are some major differences from the Allentown Division plan that are not included in the Suburban Division plan such as the Lead Service Line Replacements and the pass-through costs from Allentown, which will show in future rates via cost-sharing agreements. She also explained that the regional Act 537 Plan costs are reflected in the Suburban Division Capital Plan, but noted that most of the larger projects included in the Act 537 Plan in the next five years will occur in the Allentown Division. Future capital plans will be revised based on the final Act 537 plan reflecting updated cost-sharing approaches with customers and municipalities.

Chuck Volk then presented the Administration Capital plan highlights included in the Plan and noted there is a Security Upgrade/Disaster Recovery project included in the plan. He also noted that the new Munis Implementation project has been completed and a new project, the City Distribution and Collection Building Improvements has been added in the 5-year plan. He then presented the Suburban Division water and wastewater project details included in the Plan via a detailed PowerPoint presentation. His presentation included a review of annual projects, system improvement projects, and new projects included for the first time in this year's Capital Plan. The new projects include: Small Systems Generator Replacement, Leak Detection Program, and Lead Inventory Program. The Pretreatment Plant projects in the five-year plan include critical upgrades and replacement projects. These projects are contingent upon the current industries in the service area agreeing to participating in the project.

Ed Klein reviewed the financial analysis included in the Plan, noting water projects total \$38 million and the wastewater projects total \$39 million. He presented a cash flow statement showing the funding sources and potential revenue impacts.

Liesel Gross concluded the presentation with a recap of the Plan noting that there is an overall decrease of \$34 million from the previous plan primarily driven by the revision of the Pretreatment Plant replacement/upgrade strategy. However, there are a lot of unknowns regarding that project. The rate impacts are modest but have not yet captured the pass-through of project costs from the Allentown Division. Also, the Act 537 plans will increase the capital plans when finalized in the future. The final review process will take place before Board approval is requested in October.

Suburban Division – 2025 Water Meter Replacements

Amy Kunkel provided an overview of the 2025 Meter Replacement project that consists of replacing approximately 1,679 residential and commercial water meters throughout the Suburban Division. The equipment and installation are being procured through COSTARS.

On a motion by Linda Rosenfeld, seconded by Ted Lyons, the Board approved the Capital Project Authorization for the Construction Phase in the amount of \$592,043.00 which includes the contract award to Core and Main, LP in the amount of \$552,043.00 (8-0).

Suburban Division – Industrial Pretreatment Plant Master Plan

Liesel Gross provided a presentation reviewing the financial and legal structures associated with the Industrial Pretreatment Plant (PTP). She noted that there are significant upgrades needed due to age and risk of failure, and the Authority is evaluating various engineering options to allow the Authority to continue serving the needs of the industries and waste haulers who use the PTP. Ms. Gross provided key highlights of the timeline of the PTP, noting that the plant is a contributed asset, which limits capital cost recovery via tapping fees. She also provided details of the drivers for the backlog of capital investments including human components, and revenue and contractual constraints.

There was some discussion regarding costs related to contract operations.

Ms. Gross noted other constraints including limited borrowing capacity and lack of tapping fee revenue. Linda Rosenfeld asked if a new facility is built, will all the current industries continue to flow to the PTP to utilize the Authority's services. Ms. Gross said that Boston Beer and Ocean Spray have already started on their own pretreatment plant facilities, which was more cost-effective for them. A new engineering evaluation is being conducted to develop options for the future of the PTP after the removal of Boston Beer's flows and loadings. There was some additional discussion about the hydraulic capacity of the plant and how eliminating Boston Beer's flows may help to reduce the plant upgrade costs.

Ms. Gross explained that in addition to the engineering evaluation, which will be reviewed with the Board in September, it will be important for the Authority to secure financing agreements with the remaining industries, as well as potential municipal partners. There was some discussion regarding the risks and cost constraints of the project. Amir Famili commented on the challenges of securing commitments from the industries to contribute financially toward the PTP upgrade.

Allentown Division – Kline's Island WWTP – Wet Weather Improvements – Phase 1

Chuck Volk provided an overview and background of the Kline's Island Wastewater Treatment Plant (KIWWTP) Wet Weather Treatment Improvements project that will increase plant pumping capacity to 100 million gallons per day during peak flow events. He noted the need for some out-of-scope value-added improvements that the Authority would like to be included in the design. Amy Rohrbach provided details about the project and explained the eight additional items to be added to the design scope. She explained the City of Allentown has reviewed the proposed changes and is in agreement to add these items to the project scope.

There was some discussion regarding the plan described by Ms. Rohrbach for a portion of the flows to bypass the rock media trickling filters during wet weather events. Andrew Moore explained the biological treatment process at the KIWWTP, which includes two different sets of trickling filters. During a peak flow event, the plastic media trickling filters and rock media trickling filters can be used in parallel to achieve full biological treatment as required by the permit.

On motion by Peter Dent, seconded by Sean Ziller, the Board approved the Professional Services Authorization Amendment to Kleinfelder, Inc. in the amount of \$253,090.00 (8-0).

MONTHLY FINANCIAL REVIEW

The July 2025 Financial Statements will be distributed separately at a later date.

MONTHLY SYSTEM OPERATIONS REVIEW

Andrew Moore reviewed the July 2025 report, noting there was one recordable injury accident where an employee injured their hand and wrist. There was also a non-recordable injury where an employee pinched a finger. There was a property damage incident where a tree fell onto a fence causing significant damage. Amir Famili asked if we have GSA certifications for all the equipment and how often the equipment is checked prior to an employee using it. Chris Moughan stated that the Authority's equipment is not certified but is on a routine inspection schedule conducted by Authority staff including the Safety Manager. Mr. Moore then reviewed other system operational data in the report, including a review of a notice of violation received from the City of Allentown related to bypasses at the Kline's Island WWTP in April and June 2025. He also noted a boil water advisory was issued in July for three customers who were affected by a water main break in Allentown.

STAFF COMMENTS

None.

SOLICITOR'S COMMENTS

None.

PUBLIC COMMENTS / OTHER COMMENTS

None.

BOARD MEMBER COMMENTS

None.

EXECUTIVE SESSION

An Executive Session will be held following the close of the regular meeting to discuss personnel.

ADJOURNMENT

There being no further business, the Chairman adjourned the meeting at 2:53 p.m.

Linda A. Rosenfeld
Secretary

Lehigh County Authority Board of Directors

Governance Committee

Meeting Minutes

Meeting Date & Time: Monday, August 11, 2025 at 10:45 a.m.

Meeting Location: Lehigh County Authority, 1053 Spruce Road, Allentown, PA 18106

Agenda:

1. Call to Order

Committee Chair Peter Dent called the meeting to order at 10:45 a.m.

2. Roll Call

Committee Chair Peter Dent

LCA Board Chair Amir Famili

LCA Staff Present: Liesel Gross, CEO

Committee members absent: Ted Lyons & Linda Rosenfeld

While there was no quorum present for the meeting, the discussion continued in accordance with the agenda. No formal actions were taken or voted upon.

3. Governance Committee Charter

The Committee members present reviewed the draft Governance Committee charter presented by Mr. Dent, with suggestions offered for refinements. A second draft will be reviewed at the next Committee meeting.

4. Executive Committee Charter

The Committee members present reviewed the draft Executive Committee charter presented by Mr. Dent, with suggestions offered for refinements. Additional review by the Authority Solicitor was requested prior to the next Committee meeting.

5. LCA Board Member Expectations

It was decided to hold this item for the next Committee meeting.

6. Committee Meeting Schedule

The next Committee meeting will be held at 10:45 a.m. on August 25, 2025.

7. New Business

None.

8. Public Comment

None.

9. Adjourn

Mr. Dent adjourned the meeting at 11:35 a.m.

Lehigh County Authority – Governance Committee Charter

This is a standing committee of the Lehigh County Authority (LCA) Board of Directors that meets quarterly or as otherwise scheduled.

COMMISSION OF THE LCA GOVERNANCE COMMITTEE:

The LCA Governance Committee is commissioned by and is responsible to the LCA Board of Directors to:

1. Define roles, responsibilities, and expectations of Board members, officers, and committees. Review and recommend updates to the Authority By-Laws as needed.
2. Provide leadership to ensure that the Board is advancing as an effective governing body by:
 - a. Providing leadership to ensure that the Board is engaged;
 - b. Providing leadership to ensure that the Board is educated;
 - c. Providing input to the County of Lehigh regarding in Board member recruitment; and
 - d. Working through the LCA staff to support these efforts.

AUTHORITY OF THE LCA GOVERNANCE COMMITTEE:

The Board Governance Committee must bring all recommendations to the Board of Directors for approval. Minutes of all meetings should be documented and presented to the LCA Board of Directors.

COMPOSITION OF THE LCA GOVERNANCE COMMITTEE:

The Chair of the LCA Governance Committee is appointed by the Chair of the LCA Board of Directors. All members of the Committee will be members of the LCA Board. The Committee shall have no more than three members; however, the LCA Board Chair may serve as a fourth voting member of the Committee. Members of the Committee are appointed by the LCA Board Chair. The LCA CEO may participate as a non-voting ex-officio member of the Committee. Committee members have no terms but must be reappointed concurrently with the annual election of officers.

COMMITTEE MEMBER EXPECTATIONS:

- Attend at least 90% of the regularly scheduled Committee meetings each year.
- Be actively engaged in the work of the Committee.
- Come prepared to Committee meetings.
- Since the LCA Governance Committee is providing leadership to advance the LCA through Board engagement, education, and effectiveness, Committee members are expected to lead by example.

Lehigh County Authority – Board Member Expectations

To help Lehigh County Authority (LCA) be successful and to be a valued member of its Board of Directors, I will keep the following as my expectations:

I am responsible for the stability and development of LCA. As a member of the Board of Directors, I pledge to help carry out the mission of LCA and represent the interests of LCA customers.

I am responsible for reviewing and approving the annual budget, capital plans, and capital projects. In addition, I am responsible for monitoring budget and financial performance and ensuring the intended results of capital projects are achieved.

I am responsible for serving as an ambassador for LCA.

I am responsible for understanding LCA's legal obligations under the Pennsylvania Municipality Authorities Act and other state and federal statutes as they pertain to LCA.

I understand that Board service will involve a commitment of my personal time, talent and energy.

I will actively participate on any committee to which I am assigned.

I understand that my attendance at Board and committee meetings is crucial to the progress of LCA and will commit to being present 80% of the time, making every effort to attend meetings in-person, and attending special in-person meetings as scheduled by the Board Chair.

I understand that the day-to-day operation of the LCA is the responsibility of the CEO.

I agree to abide by Sunshine Act, transparency laws and any confidentiality covenants as required.

As a member of the LCA Board, I pledge to carry out this agreement to the best of my ability and to trust and encourage my fellow Board members to do likewise.

LCA Staff Support to the Board:

LCA staff will provide me with appropriate financial information that allows me to make sound fiscal decisions which ensure LCA's financial health.

LCA staff will provide statistical and analytical reports on the operations, finances, safety, projects and services of the LCA to aid Board members in making informed policy decisions.

These responsibilities I accept in good faith as a member of the LCA Board of Directors.

Board Member Signature

Date

RESOLUTION No. 9-2025-1

(Duly adopted 8 September 2025)

**A RESOLUTION OF LEHIGH COUNTY AUTHORITY APPROVING ADOPTION OF THE
REGIONAL ACT 537 PLAN FOR THE KLINE’S ISLAND SEWER SYSTEM (KISS)
SERVICE AREA SERVED BY THE KLINE’S ISLAND WASTEWATER TREATMENT
PLANT (WWTP) IN THE CITY OF ALLENTOWN.**

WHEREAS, the Lehigh County Authority (the “Authority”) is a Pennsylvania municipal authority organized by the Board of County Commissioners of the County of Lehigh, Pennsylvania, under the provision of the Pennsylvania Municipality Authorities Act, 53 P.S. Sec. 5601, *et. seq.*, as amended (the “Act”); and

WHEREAS, the Authority’s authorized purposes and powers include, *inter alia*, owning, leasing (both as lessor and lessee) and operating sewer systems; and

WHEREAS, the Authority’s Board shall have full authority to manage the properties and business of the Authority, and to prescribe, amend and repeal bylaws, rules and regulations governing the manner in which the business of the Authority may be conducted, and the powers granted to it may be exercised and embodied; and

WHEREAS, the Authority leases and operates the City of Allentown (“City”) Sewer Utility System pursuant to the Allentown Water and Sewer Utility System Concessional Lease Agreement, dated as of May 1, 2013, as amended, between the City and the Authority; and

WHEREAS, the City Sewer Utility System includes the Kline’s Island Wastewater Treatment Plant (WWTP) and portions of the City sewer collection system and regional interceptors that serve other municipalities known as the Kline’s Island Sewer System (“KISS”) service area; and

WHEREAS, the KISS service area includes all or a portion of the following municipalities: the City of Allentown, the Townships of Whitehall, South Whitehall, North Whitehall, Salisbury, Hanover, Lower Macungie, Upper Macungie, Lowhill, Weisenberg, and Upper Milford, and the Boroughs of Coplay, Emmaus, Alburtis, and Macungie (the “KISS Municipalities”); and

WHEREAS, the KISS provides service to the KISS Municipalities through service agreements directly with the KISS Municipalities, or indirectly through service agreements with the Lehigh County Authority or Coplay-Whitehall Sewer Authority; and

WHEREAS, Section 5 of the Act of January 24, 1966, P.L. 1535, No. 537, known as the “Pennsylvania Sewage Facilities Act,” as amended, and the Rules and Regulations of the Department of Environmental Protection (“Department”) adopted thereunder, Chapter 71 of Title 25 of the Pennsylvania Code, requires the KISS Municipalities to adopt an Official Sewage Facilities

Plan providing for sewage services adequate to prevent contamination of waters and/or environmental health hazards with sewage wastes, and to revise said plan whenever it is necessary to meet the sewage disposal needs of the KISS Municipalities; and

WHEREAS, ARRO Consulting has prepared a Regional Act 537 Plan (the “KISS Regional Act 537 Plan” or “Plan”) which provides for sewage facilities in the KISS Municipalities; and

WHEREAS, Lehigh County Authority has acted as agent for the KISS Municipalities in the preparation of the KISS Regional Act 537 Plan; and

WHEREAS, the Plan consists of a sewage facilities plan to address corrective actions required at the Kline’s Island WWTP, all KISS Municipalities’ sewer collection systems, and portions of the Western Lehigh Interceptor, which is owned and operated by Lehigh County Authority; and

WHEREAS, the alternative of choice to be implemented includes the following seven (7) items:

1. Flow Characterization Study to be completed in approximately five years from the Plan approval date, which will be used to prepare and submit Act 537 Special Study(s) in support of future projects currently described in the Plan as “master plan” projects.
2. Negotiation and possible execution of new Intermunicipal Agreements (IMAs) that address cost-sharing for current and future projects and operations and maintenance costs, with an emphasis on flow-based billing methodologies to incentivize inflow and infiltration (I&I) removal efforts. The new IMAs may also address regional collaboration on I&I projects, and consideration of a regional surcharge program for high-strength dischargers, and other matters outlined in the term sheet included in the Plan.
3. Regular reporting of the results of the I&I program(s), which will include a report of projects completed and leakage removed, updated evaluations of the 120/275 gallons-per-capita-per-day EPA benchmark for excessive I&I, and an assessment of the cost-effectiveness of the program. It is expected that the program goals will be considered as having been met when this reporting indicates absence of excessive I&I at the KIWWTP consistent with the 120/275 gallons-per-capita-per-day EPA benchmark.
4. Continued Connection Management Plan under the Department of Environmental Protection’s direction, which recognizes the value of captured capacity via I&I source reduction to support new connections to the system. It is expected that this Connection Management Plan will be discontinued when the remaining commitments listed below have been achieved.
5. Continued I&I source reduction efforts based on the 2021 Flow Characterization Study and any future Sanitary Sewer Evaluation Studies (SSES) work described in each municipality’s I&I Source Reduction Plan, which will be used to further prioritize projects during the Plan period.
6. Sewage billing meter program implementation that includes continuous data validation and data capture in a read-only combined portal for municipal access to real-time

flow data. The focus of the metering program will be to ensure accurate flow monitoring at the municipality level.

7. Completion of the Kline's Island Wastewater Treatment Plant (KIWWTP) pump replacement and upgrade project, which is currently in design and permitting stages and will increase the plant's capacity to manage peak wet-weather flows. A post-construction evaluation of project performance will be conducted, including a review of treatment plant bypass activations and volume of discharges.

WHEREAS, the Authority Board finds that the KISS Regional Act 537 Plan described above conforms to (i) the Authority's plans and policies, (ii) applicable zoning, subdivision, other municipal ordinances and plans in the KISS Municipalities, and (iii) a comprehensive program of pollution control and water quality management; and

WHEREAS, the Board desires to signify its approval for, support of, and concurrence in the KISS Regional Act 537 Plan.

NOW THEREFORE, BE IT RESOLVED that the Lehigh County Authority Board of Directors hereby approves, adopts and supports the KISS Regional Act 537 Plan, and concurs with the action of the KISS Municipalities in regard to amending and revising their respective Act 537 Plans in regard thereto. The Authority approves the submission of the KISS Regional Act 537 Plan to the Department of Environmental Protection for its approval as the "Official Plan" of the KISS Municipalities. The Authority Board hereby assures the Department of the complete and timely implementation of Authority's responsibilities as described in the said Plan, and as required by law.

NOW THEREFORE, BE IT RESOLVED that the Lehigh County Authority Board hereby approves Resolution No. 9-2025-1.

On motion of _____, seconded by _____, this resolution was adopted the 8th day of September, 2025.

Tally of Votes: Yeas _____ Nays _____



I, Kevin C. Reid, of the law firm of King, Spry, Herman, Freund & Faul, LLC, Solicitor to the Lehigh County Authority, do hereby certify that the foregoing is a true, correct and complete copy of a resolution which was duly adopted by the Authority Board at a public meeting of the Authority Board held on 8 September 2025, after notice thereof had been duly given as required by law, at which meeting a quorum was present and voting and which resolution No. 9-2025-1 is now in full force and effect on the date of this certification.

_____	_____
Kevin C. Reid, Esquire	Date
King, Spry, Herman, Freund & Faul, LLC	
Lehigh County Authority Solicitor	

Attest:

_____	_____
Lisa J. Miller	Date
Executive Administrative Support Specialist	

MEMORANDUM

Date: September 8, 2025

To: Lehigh County Authority Board of Directors
From: Amy B. Rohrbach, Project Manager
Subject: Allentown Division – KIWWTP Plastic Media Trickling Filter Rehabilitation – Construction Phase

MOTIONS / APPROVALS REQUESTED:

No.	Item	Amount
1	Capital Project Authorization – Construction Phase	\$2,528,955
2 ⁽¹⁾	General Construction Contract Award – Allan Myers, L.P.	\$2,190,555
3 ⁽¹⁾	Professional Services Authorization – Construction Administration – CHA Consulting, Inc.	\$188,400

(1) Included in the Capital Project Authorization

PROJECT OVERVIEW

Kline’s Island Wastewater Treatment Plant (KIWWTP) contains four 100-foot diameter, 32 feet tall, plastic media trickling filters (PMTFs) that were originally constructed in the 1970s and have been in constant operation since. The PMTFs function by taking the effluent that is pumped up from the primary clarifiers to the top of the tanks where a rotating mechanism distributes the effluent across the plastic media surface and it then trickles through the media where it receives biological treatment from the biomass that builds up on the media surface. The PMTFs have had no extended shutdowns and still contain the original media. The media has reached the end of its useful life and needs to be replaced. LCA has contracted with CHA Consulting Inc. (CHA) to perform and evaluate the PMTFs and determine the necessary repairs. This project has been identified as a near term project in the recently completed KIWWTP Master Plan.

The project received Major Capital Improvement Substantial Design approval from the City of Allentown on July 8, 2025. Board authorization for media purchase was received on June 9, 2025, and the plastic media manufacturer will soon begin fabrication of the media for delivery beginning in December 2025. The construction contract for this project will include demolition and disposal of the existing plastic media, structural concrete repairs to the existing support structure, replacement of the fiberglass reinforced plastic (FRP) panels around the exterior of the filter, coating of the existing odor control ductwork, replacement of the existing FRP enclosure panels at the base of the filter, installation of the new media, new lighting, and minor repairs to the existing access stairs and platform.

FINANCIAL

The project received substantially complete design approval from the City on July 28, 2025; therefore, it is considered a Major Capital Improvement (MCI), and costs will be recovered through Capital Cost Recovery Charges (CCRC).

THIS APPROVAL – CONSTRUCTION PHASE

BIDDING SUMMARY

The project was advertised for bid on July 25, 2025 and a pre-bid meeting was held on August 6, 2025. Bids were received and publicly opened, via PennBid, on August 22, 2025. The results of which are as follows:

Bidder	Base Bid
Allan Myers, L.P	\$2,190,555
Blooming Glen Contractors	\$2,853,459

LCA's design consultant on this project, CHA Consulting, Inc., and LCA staff have reviewed the references and qualifications, and experience statement provided by Allan Myers, L.P. and have determined that the contractor is qualified to complete this project. CHA Consulting has had extensive prior experience with Allan Myers on past projects at other wastewater treatment plants with positive results, and Allan Myers recently completed the Primary Sludge line upgrades at KIWWTW which was finished on time and under budget. Based on the above, LCA staff recommends the award of a Construction Contract to the lowest bidder, Allan Myers, L.P., subject to the receipt of the necessary Performance & Payment Bonds, Insurance and other required documentation.

PROFESSIONAL SERVICES

Construction Administration Services

CHA Consulting, Inc. has been LCA's design consultant on this project and will provide construction administration services for the construction phase of the project. Their work will include:

Professional Services
1. Facilitate completion of agreement and contract elements
2. Prepare for, attend, and facilitate pre-construction conference
3. Prepare a conformed drawing set.
4. Prepare for and attend 14 job conference bi-weekly meetings
5. Prepare for and attend additional logistics meeting (media delivery, disposal, and process protection) with media manufacturer representative.
6. Prepare for and attend site visit with the Owner to observe and document existing conditions of piping, ductwork, concrete and steel components once existing media is removed.
7. Assess extent of deterioration, prepare summary of findings and recommendations, engineering design for observed deficiencies.
8. Process and review shop drawings and RFIs
9. Process contractor applications for payment
10. Process any necessary change orders
11. Provide daily construction observation over a 28-week onsite construction period.
12. Perform project closeout activities, including punch list development and final inspection
13. Prepare record drawings

PROJECT SCHEDULE

The contract time requires substantial completion by March 15, 2026, and final completion by April 15, 2026. Assuming approval of construction phase at the September 8, 2025 Board meeting, contracts will be executed and a notice to proceed is anticipated in early October.

FUTURE AUTHORIZATIONS

Future phases of the Plastic Media Filter Rehabilitation will occur on filters 1, 2, & 3 over the next few years, cost to be determined based on pricing at the time of each bid. This work has been included in the Capital Plan.



1053 SPRUCE RD * P.O. BOX 3348 * ALLENTOWN, PA 18106-0348
610-398-2503 * email: service@lehighcountyauthority.org
www.lehighcountyauthority.org

REQUEST FOR BOARD AUTHORIZATION

Board of Directors Meeting Date: 9/8/2025
Staff Member Requesting Authorization: Amy Rohrbach
Department: Capital Works
Short Description / Title of Project / Purchase: KIWWTP Plastic Media Tricking Filter Rehabilitation – Construction Phase
Project Number (if applicable): AD-S-24 / Munis Project # 50660

Capital Expense: (check all that apply)

- ☒ Capital Project >\$250,000
☒ Construction / Other Contract(s)
☒ Professional Services Authorization
☐ Initial Authorization
☐ Amended Authorization
☐ Professional Services Authorization >\$100,000
☐ Equipment Purchase >\$250,000
☐ Upsizing / Extension >\$250,000
☐ Aggregate Change Order >10% of contract and >\$100,000
☐ Stand-Alone Change Order >\$50,000

Operations Expense:

- ☐ Construction / Other Contract >\$250,000
☐ Professional Services Authorization >\$100,000
☐ Equipment / Other Individual Item >\$250,000
☐ Emergency Authorization >\$50,000
☐ Aggregate Change Order >10% of contract and >\$100,000
☐ Stand-Alone Change Order >\$50,000

LCA Enterprise Fund: ☒ Allentown Division ☐ Suburban Water ☐ Suburban Wastewater ☐ Internal Service / Admin

Current Project Phase: ☐ N/A (skip to Description) ☐ Planning ☐ Conceptual Design ☐ Design / Bid ☒ Construction

Prior Authorization(s):

Date	Phase	Description	Amount Authorized
2/7/25	Planning	Preliminary Engineering PSA – CHA Consulting, Inc.	\$50,800
4/15/25	Design/Bid	Design & Bidding Phase PSA – CHA Consulting, Inc.	\$65,000
6/9/25	Equipment	Costars purchase of Plastic media – Brentwood Industries, Inc. c/o Geiger Pump and Equipment	\$2,251,000
Total Prior Authorizations:			\$2,366,800

Current Authorization Requested:

Description	Amount Requested
Construction contract for PMTF Rehabilitation – Allan Myers, L.P.	\$2,190,555
Construction Administration services – CHA Consulting, Inc.	\$188,400
Staff Time	\$50,000
Contingency	\$100,000
	\$
Total Amount Requested (this authorization):	\$2,528,955

Future Authorizations:

Phase	Note / Description	Estimated Cost
	Future phases for rehabilitation of Filters 1, 2 and 3	\$TBD
Estimated Total Project Cost:		\$4,895,755

Short Description: (please attach supporting documentation, cost justification, trade-in values, proposals, memos, etc.)

The scope of this project includes the rehabilitation of Plastic Media Tricking Filter #4 at KIWWTP. Work includes demolition and disposal of the existing plastic media, structural concrete repairs to the existing support structure, replacement of the fiberglass reinforced plastic (FRP) panels around the exterior of the filter, coating of the existing odor control ductwork, replacement of the existing FRP enclosure panels at the base of the filter, installation of the new media, new lighting, and minor repairs to the existing access stairs and platform.

Purchasing Procedure: ☒ Formal Bid ☒ Request for Proposal ☐ Cooperative Purchasing Group / CoStars ☐ N/A - Emergency

Motion: _____ Second: _____ Approved? _____ Certified by: _____



August 28, 2025

Amy Rohrbach
Project Manager
Lehigh County Authority
1053 Spruce Road
Wescosville, PA 18106

Subject: LCA Kline's Island Wastewater Treatment Plant (KIWWTP)
PMTF #4 Rehabilitation
Proposal for Construction Administration Services

Dear Ms. Rohrbach:

We would like to thank you for the opportunity to submit a proposal to provide construction administration services to LCA for the above-referenced project. Below is a project description and summary of our proposed services.

PROJECT DESCRIPTION

The work consists of construction administration services during the rehabilitation of the existing Plastic Media Trickling Filter (PMTF) #4 at the KIWWTP. It is anticipated that NTP will be issued in October 2025, with onsite construction starting immediately. Project completion is expected to be achieved in April 2026.

SCOPE OF SERVICES

CHA Consulting, Inc, will provide the following construction administration services:

1. Facilitate completion of the Agreement and other contractual elements.
2. Prepare for, attend and facilitate a pre-construction conference.
3. Prepare conformed drawing set.
4. Prepare for and attend fourteen job conference biweekly meetings.
5. Prepare for and attend additional logistics meetings regarding media delivery, disposal, and process protection with Media Manufacturer Representative. Two meetings are expected throughout the entirety of the project.
6. Prepare for and attend one site investigation visit with Owner. The site visit will observe and document the condition of piping, ductwork, concrete and steel components associated with the plastic media trickling filters.
7. Assess the extent of deterioration of components associated with the plastic media trickling filter structures.
8. Prepare a written summary of findings and recommendations.
9. Additional engineering design services for any observed deficiencies from the inspection.

10. Process and review shop drawings and RFIs.
11. Process applications for payment.
12. Process any necessary change orders.
13. Provide weekly construction observation with the following assumptions:
 - a. 16 hours of observation, in total, by an engineer-in-training.
 - b. 8 hours of observation, in total, by the Project Manager.
 - c. Weekly involvement by a senior field representative averaging 3 hours per week.
 - d. Inspection by a construction manager for twenty (20) hours per week.
14. Perform project closeout activities, including punch list development and final inspection.
15. Prepare record drawings.

EXCLUSIONS & ADDITIONAL SCOPE CONSIDERATIONS

The following assumptions were made:

1. The construction duration will take place over a 28-week period.
2. Investigation will occur when the scope of demolition indicated by the Contract Drawings has been completed. One week of time is scheduled for downtime by the Contractor for investigation.
3. Additional engineering services are expected to be required after the investigation of the PMTF that will be performed in coordination with the Owner.
4. Observations of upper-level steel components at the plastic media trickling filter will require the use of a manlift.

The following scope of services is not included in the fee proposal:

1. Testing services provided by CHA.
2. Reproduction of contract documents.
3. Fees required for municipal permits.
4. Full-time project representation during construction, unless otherwise indicated above.
5. Scope of work items not previously listed.



PROPOSED FEE

As indicated in the attached fee summary, we propose to complete the described services for the base bid scope of work for the lump sum fee of \$188,400. In the event additional construction administration services are necessary, CHA will proceed only upon written agreement of LCA.

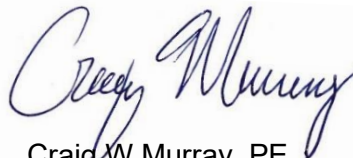
We are prepared to begin work on this project immediately upon authorization. We thank you for the opportunity to help LCA complete this important capital project. If you have any questions or require any additional information, please contact us at 610-865-3000.

Respectfully submitted,

CHA CONSULTING, INC.



David Wodyka, PE
Section Manager



Craig W Murray, PE
Business Practice Leader

C: Chuck Volk, LCA
C: Craig Murray, CHA

Enclosure



**LCA KIWWTP PMTF #4 REHABILITATION CONSTRUCTION ADMINISTRATION
ENGINEERING FEE BREAKDOWN**

TOTAL PROJECT HOURS AND FEE										
Task		Principal & QA/QC	Project Manager	Structural PEs	Engineer II	Construction Manager I	Construction Manager II	Admin	Total Labor Hours	Total Task Labor Fee
1	Project Management	4	40		40			4	88	\$ 12,216
2	Meetings (Precon + Progress)	2	32		32	32	16		114	\$ 16,322
3	Inspections & Planning Meetings		4	24	16	8	16		68	\$ 11,252
4	Additional Engineering	4	16	16	80		10		126	\$ 17,438
5	Shop Drawings		16	8	60				84	\$ 10,920
6	RFIs	4	16	8	40				68	\$ 9,716
7	Pay Applications					8			8	\$ 1,128
8	Change Orders		4		8				12	\$ 1,532
9	Construction Observation		8		16	560	88		672	\$ 96,192
10	Punch List and Closeout		8		16	16		4	44	\$ 5,620
TOTAL HOURS		14	144	56	308	624	130	8	1284	182,336
Hourly Rate		\$ 249	\$ 163	\$ 214	\$ 110	\$ 141	\$ 161	\$ 75	-	-
Total Labor Category Fee		\$ 3,486	\$ 23,472	\$ 11,984	\$ 33,880	\$ 87,984	\$ 20,930	\$ 600	-	\$ 182,336
Reimbursible Expenses										\$ 6,064
TOTAL PROJECT FEE										\$ 188,400

Notes:

The hourly rates used in this table are an average fee number based on the rate structure for CY 2025/26.

MEMORANDUM

Date: September 8, 2025

To: Lehigh County Authority Board of Directors
From: Amy B. Rohrbach, Project Manager
Subject: Allentown Division - Kline's Island WWTP Electrical Substation No. 1 & Primary Switchgear Replacement – Construction Change Order

MOTIONS / APPROVALS REQUESTED:

No.	Item	Amount
1	Electrical Construction Change Order – Philips Brothers Electrical Contractors, Inc.	\$109,481.89

PROJECT OVERVIEW

The Kline's Island Wastewater Treatment Plant's (KIWWTP) electrical service is supplied by one of two 12.4 kV power transmission line feeds from the electric utility, PPL. The transmission lines enter Substation 1 and connect to the switchgear, which distributes the power to Substation 1 and 2. The power is then distributed to various Motor Control Centers and loads throughout the KIWWTP. The replacement of Substation 2 was completed in 2019. Substation 1 has reached the end of its useful life and is not adequate to accommodate a future increase in equipment loads from planned capacity improvements projects. The switchgear is an old technology "air-magnetic circuit breaker" that was phased out in favor of "vacuum breaker" type switchgear in the early 1980s. Due to the critical function of the switchgear and the fact that it has been in service for approximately 45 years, Substation 1 and Primary Switchgear will be replaced during this project. A construction contract was issued to Philips Brothers Electrical Contractors Inc. and a Notice to Proceed was issued on February 1, 2024.

FINANCIAL

The City of Allentown has reviewed and approved this project as a Major Capital Improvement, thereby allowing the cost to be recovered via a capital cost recovery charge (CCRC).

THIS APPROVAL - CONSTRUCTION CHANGE ORDER

This request is for a construction change order to the existing Electrical Construction contract with Philips Brothers Electrical Contractors, Inc. for the KIWWTP Substation 1 and Primary Switchgear project. This change order is primarily driven by increased charges from PPL and includes charges for the net metering associated with the existing bio-gen system as it feeds back into the grid and must be metered. This change order also includes directional drilling under the existing dike due to changes in pole locations made by PPL after the start of construction. The final component of the change order is to add a new manhole due to the existing manhole being undersized for the cable being pulled. The contract originally budgeted \$125,000 for the PPL fees; however, the total fee being charged by PPL is \$199,500. The total increase to the contract with Philips Brothers Electrical Contractors, Inc. is \$109,481.89

PROFESSIONAL SERVICES

Keystone Engineering Group continues to provide construction administration services for the project and no additional services are required as part of this change order.

PROJECT SCHEDULE

The project is scheduled to be completed in the fall of 2026.

FUTURE AUTHORIZATIONS

No future authorizations are anticipated for this project.



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610-398-2503 * email: service@lehighcountyauthority.org
www.lehighcountyauthority.org

REQUEST FOR BOARD AUTHORIZATION

Board of Directors Meeting Date: 9/8/2025
Staff Member Requesting Authorization: Amy Rohrbach
Department: Capital Works
Short Description / Title of Project / Purchase: KIWWTP Electrical Substation No. 1 and Primary Switchgear Replacement – Construction Phase EC Change Order 02
Project Number (if applicable): AD-S-20 / Munis Project # 50154

Capital Expense: (check all that apply)

- ☒ Capital Project >\$250,000
☒ Construction / Other Contract(s)
☐ Professional Services Authorization
☐ Initial Authorization
☐ Amended Authorization
☐ Professional Services Authorization >\$100,000
☐ Equipment Purchase >\$250,000
☐ Upsizing / Extension >\$250,000
☐ Aggregate Change Order >10% of contract and >\$100,000
☒ Stand-Alone Change Order >\$50,000

Operations Expense:

- ☐ Construction / Other Contract >\$250,000
☐ Professional Services Authorization >\$100,000
☐ Equipment / Other Individual Item >\$250,000
☐ Emergency Authorization >\$50,000
☐ Aggregate Change Order >10% of contract and >\$100,000
☐ Stand-Alone Change Order >\$50,000

LCA Enterprise Fund: ☒ Allentown Division ☐ Suburban Water ☐ Suburban Wastewater ☐ Internal Service / Admin

Current Project Phase: ☐ N/A (skip to Description) ☐ Planning ☐ Conceptual Design ☐ Design / Bid ☒ Construction

Prior Authorization(s):

Date	Phase	Description	Amount Authorized
4/4/22	Prelim. Engineering	Preliminary Engineering PSA – Keystone Engineering Group	\$10,000
4/15/25	Design/Bid	Design & Bidding Phase PSA – Keystone Engineering Group	\$151,275
12/11/23	Construction	Construction Admin. PSA – Keystone Engineering Group	\$136,858
12/11/23	Construction	Construction Inspection PSA – Verdantas (Borton Lawson)	\$102,300
12/11/23	Construction	General Construction – Philips Brothers Electrical Contractors, Inc.	\$892,777
12/11/23	Construction	Electrical Construction – Philips Brothers Electrical Contractors, Inc.	\$4,974,999
12/19/24	Construction	Electrical Construction CO 1 – Philips Brothers Electrical Contractors, Inc. (PPL required Intertie Protection Relay cabinet)	\$4,479.26
Total Prior Authorizations:			\$6,272,688.26

Current Authorization Requested:

Description	Amount Requested
Electrical Construction CO 2 – Philips Brothers Electrical Contractors, Inc.	\$109,481.89
Total Amount Requested (this authorization):	\$109,481.89

Future Authorizations:

Phase	Note / Description	Estimated Cost
	none	\$
Estimated Total Project Cost:		\$6,382,170.15

Short Description: (please attach supporting documentation, cost justification, trade-in values, proposals, memos, etc.)

This request is for a construction change order to the existing Electrical Construction contract with Philips Brothers Electrical Contractors, Inc. for the KIWWTP Substation 1 and Primary Switchgear project. This change order is primarily driven by charges from PPL and includes charges for the net metering required associated with the existing bio-gen system as it feeds back into the grid and must be metered, this change order also includes directional drilling under the existing dike due to changes in pole locations made by PPL after the start of construction. The final component of the change order is to add a new manhole due to the existing being undersized for the cable being pulled.

Purchasing Procedure: ☒ Formal Bid ☐ Request for Proposal ☐ Cooperative Purchasing Group / CoStars ☐ N/A - Emergency

Motion: _____ Second: _____ Approved? _____ Certified by: _____

CHANGE ORDER NO.: EC-02

Owner:	Lehigh County Authority	Owner's Project No.:	50154
Engineer:	Keystone Engineering Group, Inc.	Engineer's Project No.:	2023.00265
Contractor:	Philips Brothers Electrical Contractors, Inc.	Contractor's Project No.:	2860
Project:	LCA KIWWTP Switchgear 50154		
Contract Name:	Contract 01 – Electrical Construction		
Date Issued:	5/23/25	Effective Date of Change Order:	8/11/25

The Contract is modified as follows upon execution of this Change Order:

Description:

PBEC discovered an issue on site with the existing medium voltage manhole being too small to safely and effectively remove the medium voltage cables for replacement. They propose to add a new manhole outside of the substation and switchgear fence to accommodate the new wiring changes. The manhole will be modified to intercept the existing duct bank and provide adequate room to modify the existing circuits.

Additionally, the new manhole is proposed to serve as a termination point for the spare conduits out of the medium voltage switchgear for future use by LCA.

Due to PPL pole relocations, the service duct banks needed to be directionally drilled through the dike to limit impact to the structure. The removal of the concrete encased duct bank was replaced by directional drilled conduits. One additional 4" duct bank was added for communication.

PPL completed their Interconnection Impact Review for the installation of the new switchgear and provided their invoice to be paid by July 21, 2025 (paid on 7/3/25). This invoice is included in the attachments to this change order request and is itemized below to be billed against the remainder of Allowance Item #4.

There is no timeline adjustment to the contract at this time.

Attachments:

PBEC Document, "Spare Conduit and Manhole for Substation 2 Feeder - EC Items, Revised 8/11/25

PBEC Document "Directional Drilling", 5/7/25

PPL Invoice "Lehigh County Authority DER58716144 Invoice for Total Reinforcement Costs",
6/5/25

Cost Summary:

Change Order EC-02 Totals	Cost
Manhole and Spare Conduits	\$25,470.52
Directional Drilling	\$5,215.49
PPL Invoice	\$199,500.00
Allowance Item #4 (PPL Service Fee remaining allowance)	(\$120,704.12)
Total Cost	\$109,481.89

Contract Adjustment:

Change in Contract Price	Change in Contract Times
Original Contract Price: \$ <u>4,974,999.00</u>	Original Contract Times: Substantial Completion: <u>January 20th, 2026</u> Ready for final payment: <u>March 22nd, 2026</u>
Increase from previously approved Change Orders No. 1 \$ <u>4,479.26</u>	Increase from previously approved Change Orders No.1: Substantial Completion: <u>0 days</u> Ready for final payment: <u>0 days</u>
Contract Price prior to this Change Order: \$ <u>4,979,478.26</u>	Contract Times prior to this Change Order: Substantial Completion: <u>January 20th, 2026</u> Ready for final payment: <u>March 22nd, 2026</u>
Increase this Change Order: \$ <u>109,481.89</u>	Increase this Change Order: Substantial Completion: <u>0 days</u> Ready for final payment: <u>0 days</u>
Contract Price incorporating this Change Order: \$ <u>5,088,960.15</u>	Contract Times with all approved Change Orders: Substantial Completion: <u>January 20th, 2026</u> Ready for final payment: <u>March 22nd, 2026</u>

Recommended by Engineer (if required)	Authorized by Owner
By: <u>Kerstin M. Hezek, P.E.</u>	_____
Title: <u>Senior Project Manager / Associate</u>	_____
Date: <u>8/11/25</u>	_____
<u>Accepted by Contractor</u>	<u>Approved by Funding Agency (if applicable)</u>
By: _____	_____
Title: _____	_____
Date: _____	_____



PPL
645 Hamilton St Suite 601
Allentown, PA 18101

LEHIGH COUNTY AUTHORITY
112 Union ST
Allentown, PA 18102
United States

Invoice Details	
Invoice Number	20000244
Invoice Date	Jun 05, 2025
Customer Number	30015490
Invoice Due Date	Jul 21, 2025
Amount Due	USD 199,500.00
Amount Paid	

Please cut here and remit stub and payment in the envelope provided

Invoice associated with Full invoice per IIR for DER project - Lehigh County Authority

Remit To
PPL PO Box 419054 St. Louis, MO 63141 United States

Bill To
LEHIGH COUNTY AUTHORITY 112 Union ST Allentown, PA 18102 United States

Invoice Details	
Work Order	13921888

Total Amount Due	
Total	199,500.00

Lines					
Line	Description	Quantity	UOM	Unit Amount	Net Amount
10	Total Reinforcement	1	EA	199,500.00	199,500.00
Sub Total :					199,500.00
Total Taxes :					0.00
TOTAL AMOUNT DUE:					USD 199,500.00

Terms Message: Prices are subject to change after 60 days.
Make Checks payable to PPL. Writing your invoice number on your check will help to ensure your payment is properly applied.
If you have any questions or concerns, please contact Krista Schmoyer at KTSCHMOYER@PPLWEB.COM.
If you would like to pay electronically through your banking institution, please contact FINARLeaders@pplweb.com for an ACH Enrollment Form.

May 7, 2025
Job #2861

Keystone Engineering
590 Lancaster Avenue
Suite 200
Frazer, PA 19355

Attn: Adam Menko

Re: Kline's Island Switchgear & Substation #1

~~General Contract #2~~

Contract #1

Sub: Directional Drilling

Electrical Construction

Dear Sir,

See below our cost to change from (2) 4" communications ducts and (2) 4" PPL to (3) 4" communications ducts and directional drill to the other side of the hill. The added distance from the new pole location and drilling for the (4) 4" are a near wash since this is easier than digging up the hill and no concrete encasement is needed for a large portion of the ductbank. Below is our added cost only for the added 4" for communication, both drilling and regular duct bank.

Material

Qty	Unit	Description	Amt. Per Unit	Total
1	lot	directional drill cost for 1-4"	2750.00	2,750.00
2	ea	4" PVC 90°	42.30	84.60
2	ea	4" RGS 90°	265.00	530.00
2	cyd	concrete encasement	152.00	304.00
40	ft	4" PVC	3.10	124.00
150	ft	pull string	0.15	22.50
Subtotal				\$3,815.10
15% overhead & profit				\$572.27
Total				\$4,387.37

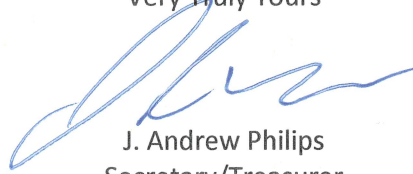
Labor

Description	Men	Hours	Total Hours
added time for (1) additional conduit	1	6	6
Total Hours			6
PBECI Rate			\$138.02
Total Labor			\$828.12

Summary

Material	\$4,387.37
Labor	<u>\$828.12</u>
Total	\$5,215.49

Very Truly Yours



J. Andrew Philips
Secretary/Treasurer

April 15, 2025 Revised 8/11/25
Job #2861

Keystone Engineering
590 Lancaster Avenue
Suite 200
Frazer, PA 19355

Attn: Adam Menko

Re: Kline's Island Switchgear & Substation #1
Electrical Contract #1

Sub: Spare Conduits and Manhole for Substation 2 Feeder- EC Items

Dear Sir,

Per our onsite discussion on Friday 4/11, below is our cost proposal to install a manhole to the south of the new 15kV in the grass. This manhole will serve as a point to intercept the 15kV duct bank going to substation 2 since the existing manhole is too small to pull MV wire out of. It will also be the location that we extend the (4) sets of spare conduits currently shown ending in a pull box below the 15kV switchboards. Due to the large number of existing duct banks below/around the new gear and the PPL changes/additions of viper poles etc. there will be no way a future contractor could dig to those spares if just left below the platform. **EC Items Only**

Material

Qty	Unit	Description	Amt. Per Unit	Total
480	ft	4" PVC	2.90	1,392.00
8	ea	4" PVC coated 90°	185.00	1,480.00
16	ea	4" PVC fitting	42.00	672.00
50	ea	PVC spacer	1.85	92.50
24	cyd	concrete	161.70	3,880.80
1	ea	manhole	6250.00	6,250.00
1	ea	manhole F&C	1250.00	1,250.00
1	ea	manhole racks	410.00	410.00
Subtotal				\$15,427.30
15% overhead & profit				\$2,314.10
Total				\$17,741.40

Labor

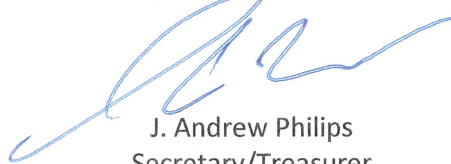
Description	Men	Hours	Total Hours
Re-route 480v into/out of MH (same DB as 15kv)	2	6	12
set MH	2	6	12

pipe spare duct banks	2	12	24
pour spare duct banks	2	4	8
Total Hours			56
PBECI Rate			\$138.02
Total Labor			\$7,729.12

Summary

Material	\$17,741.40
Labor	<u>\$7,729.12</u>
Total	\$25,470.52

Very Truly Yours

J. Andrew Philips
Secretary/Treasurer

Lehigh County Authority – Monthly Report to Board of Directors

Upcoming Board Agenda Items & Project Updates – September 2025

Published: September 2, 2025

PART 1 – Upcoming Agenda Items – Action & Discussion Items

FINANCE & ADMINISTRATION

Project Title: 2026 Budget: Preliminary Review

Division / Funding: All Divisions

Status or Action Desired: Discussion

Board Action Date: 9/8/2025 & 9/22/2025

Project Phase: n/a

Project Notes: Staff will present the budget timeline, key assumptions, strategic initiatives, and economic factors that will be included in the 2026 Budget on September 8. At the meeting on September 22, a preliminary budget will be presented for Board review. Additional details will be presented and discussed in October, with Board adoption expected by the end of October 2025. Staff Responsibility: Liesel Gross & Ed Klein

Project Title: LCA Board of Directors - Governance Committee Charter

Division / Funding: n/a

Status or Action Desired: Approval

Board Action Date: 9/8/2025

Project Phase: n/a

Project Notes: The LCA Governance Committee proposes Board approval of charter to outline the roles and responsibilities of the Committee. Staff Responsibility: Liesel Gross

Project Title: LCA Board of Directors - Board Member Expectations

Division / Funding: n/a

Status or Action Desired: Approval

Board Action Date: 9/8/2025

Project Phase: n/a

Project Notes: The LCA Governance Committee proposes Board approval of a Board Member Expectations agreement to establish the commitments made by each LCA Board member. Staff Responsibility: Liesel Gross

Project Title: Monthly Financial Review

Division / Funding: n/a

Status or Action Desired: Information

Board Action Date: 9/22/2025

Project Phase: n/a

Project Notes: The August 2025 monthly financial reports will be presented. Staff Responsibility: Ed Klein

SYSTEM OPERATIONS

Project Title: Monthly Operations Report

Division / Funding: n/a

Board Action Date: 9/22/2025

Status or Action Desired: Information

Project Phase: n/a

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

WASTEWATER PROJECTS – KISS ACT 537

Project Title: Resolution 9-2025-1: Kline's Island Sewer System - Act 537 Plan Approval

Division / Funding: City of Allentown (AO)

Board Action Date: 9/8/2025

Status or Action Desired: Approval

Project Phase: Planning Phase

Project Notes: Following a hydraulic overload at the Kline's Island Wastewater Treatment Plant in 2018 and 2019, a Chapter 94 violation was triggered, requiring corrective action to address the overload condition and resolve other operational challenges associated with excessive inflow and infiltration into the system. All 15 municipalities flowing into the Kline's Island Sewer System (KISS) approved an Interim Act 537 Plan ("Interim Plan") in September 2020. This Interim Plan outlined steps to be taken from 2021 to 2025 to prepare a long-term Regional Act 537 Plan. The Interim Plan also provided regulatory oversight and control of new connections to the system during the five-year planning period as part of the corrective action plan. Since 2021, the LCA Board has authorized numerous studies, engineering evaluations, and financial analyses to develop the Regional Act 537 Plan. Planning costs have been paid by the City of Allentown using the Administrative Order fund and reimbursed through ongoing billing to signatories and City customers. In April 2025, the Regional Act 537 Plan was finalized, and the formal public review process started, including planning commission review and a formal public comment period. The 15 KISS municipalities are currently reviewing the final plan for approval by Resolution prior to submission to the Pa. DEP in October 2025. At the September 8, 2025 meeting, a Resolution to approve the Regional Act 537 Plan will be on the agenda for Board consideration. Staff Responsibility: Phil DePoe

WASTEWATER PROJECTS – SUBURBAN DIVISION

Project Title: Industrial Pretreatment Plant Master Plan

Division / Funding: Suburban Division

Board Action Date: 9/22/2025

Status or Action Desired: Discussion

Project Phase: Planning Phase

Project Notes: This project involves the preparation of a Master Plan for the LCA Industrial Pretreatment Plant, the first of its kind for this facility. The Master Plan process included full-scale condition assessments, review of treatment process optimization, and development of short-term and long-term capital plans. Board authorization for the Master Plan was approved on December 13, 2021. A preliminary draft report was submitted in December of 2022, with a final report delivered in April 2023. Due to the high cost of facility rehab and expansion outlined in the initial Master Plan, additional value engineering work was completed and presented to the LCA Board in March 2024. An external stakeholder engagement process was then initiated to develop additional recommendations for LCA consideration. A review of the stakeholder process and final recommendation for inclusion in the Act 537 Plan was presented at the August 12, 2024 Board meeting. Since that time, significant additional stakeholder engagement has occurred to identify funding sources for a full upgrade to the facility. Additional engineering work has continued as well. An update to the PTP evaluation was provided to the LCA Board in August 2025, with a review of the engineering evaluation to be provided in September 2025. Staff Responsibility: Liesel Gross & Albert Capuzzi

Project Title: Pretreatment Plant - Critical UpgradesDivision / Funding: Suburban DivisionStatus or Action Desired: ApprovalBoard Action Date: 9/22/2025Project Phase: Construction Phase

Project Notes: This project is to prepare detailed design documents for critical upgrades to the Pretreatment Plant, with the objective of prolonging the life of the facility. The basis of design was taken from a risk assessment study that determined which assets required replacement/rehabilitation in order to maintain the level of service at the plant for another 5 to 10 years. The work includes upgrades to the high purity oxygen system, aeration system mixers, final clarifiers, return activated sludge piping, and influent metering. A Professional Services Authorization for final design and bid phase services was authorized at the 5/20/2024 Board meeting. In the interest of expediting construction of the high risk/high consequence of failure final clarifier rehabilitation work, a decision was made to pursue equipment procurement and installation of the final clarifier project through the Costars program. The final clarifier rehabilitation project construction phase was authorized at the 9/23/24 LCA Board meeting, and construction is anticipated for completion in Q1 of 2026. Authorization will be requested at the 9/22/25 Board meeting of a professional services amendment for construction phase inspection services for the final clarifier rehabilitation project. Staff Responsibility: Chuck Volk

WASTEWATER PROJECTS – ALLENTOWN DIVISION**Project Title: Kline's Island WWTP - Plastic Media Trickling Filter Rehabilitation**Division / Funding: Allentown DivisionStatus or Action Desired: ApprovalBoard Action Date: 9/8/2025Project Phase: Construction 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. Due to the long lead time on plastic media procurement (6-8 months), the media will be prepurchased 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. Capital Project Authorization for media procurement from Brentwood Industries via the Costars Purchasing Cooperative was authorized at the 6/9/2025 meeting. The construction bid for this project was advertised and posted to PennBID on 7/25/25 and bids were received 8/22/25. Construction authorization will be requested at the 9/8/25 Board meeting. Construction Notice to Proceed is anticipated on or before 11/1/25 with construction completion by 3/31/26. Staff Responsibility: Amy Rohrbach

Project Title: Kline's Island WWTP: Substation No. 1 and Switchgear ReplacementDivision / Funding: Allentown DivisionBoard Action Date: 9/8/2025Status or Action Desired: ApprovalProject Phase: Construction Phase

Project Notes: The KIWWTP electrical service is supplied by two 12.4 kV power feeds from PPL, which enter Substation No. 1 and connect to the 12.4 kV switchgear, which distributes the 12.4 kV power to 480v Substation No. 1 and Substation No. 2. The substations distribute power to the various MCCs and loads throughout the plant. Per prior electrical condition assessments performed by consultants, the substations and primary switchgear (which are from the 1970s) are at the end of their useful life and in need of replacement. Substation No. 2 was replaced in 2019. This project will replace Substation No. 1 with a new 480v, 3,000 KVA walk-in type enclosure and replace the switchgear with new vacuum breaker technology equipment with automatic transfer capability designed to accommodate future plant upgrade loads. The preliminary basis of design was submitted to the City of Allentown as part of Major Capital Improvement approval process, with approval received in October 2022. Design phase approval was authorized at the 11/14/2022 Board meeting, and the project will be bid in Q3 of 2023. The Substantially Complete Design package was submitted to the City of Allentown, with approval received on 8/1/2023. Bids were opened on 11/8/2023. Construction Phase Authorization was granted at the 12/11/2023 LCA Board meeting, with Electrical construction and General construction both awarded to Philips Brothers Electrical Contractors, Inc. , along with a PSA for Keystone Engineering Group for Construction Phase Engineering services and for Borton Lawson for Resident Project Representative Services. A construction change order of \$109,481.89 was submitted by the electrical contractor. This work includes the addition of a new electrical manhole, directional drilling to install conduits under the existing dike due to changes made by PPL, and additional fees from PPL Electric Utilities for the Interconnection Impact Review required for the net metering associated with the existing bio-generator system. Authorization is being requested at the 9/8/2025 Board meeting. Staff Responsibility: Amy Rohrbach

PART 2 – Project Updates – Information Items

None for September

PART 3 – Open Project List – No Updates

Project Category	Project Title	Division / Funding	Project Phase	Staff Responsibility
Finance & Administration	LCA Munis ERP System Planning & Re-Implementation	All Divisions	Planning Phase	Chris Moughan & Brooke Neve
Finance & Administration	Project Management / Construction Management Software Installation & Setup	All Divisions	Planning Phase	Jason Peters
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	LCA Strategic Plan - Progress Reporting	All Divisions	n/a	Liesel Gross
Finance & Administration	2026-2030 Capital Plan - Preliminary Plan Presentations	All Divisions	n/a	Chuck Volk & Ed Klein
Finance & Administration	Allentown Water & Sewer Lease Bonds: Bondholder Consent	Allentown Division	n/a	Ed Klein
System Operations	Suburban Water & Wastewater Facilities - SCADA System Upgrade	Suburban Division	Construction Phase	Chris Moughan
System Operations	Watershed Monitoring Program	Suburban Division	Planning Phase	Andrew Moore
Water - Suburban	2025 Water Meter Replacements	Suburban Division	Construction Phase	Amy Kunkel
Water - Suburban	North Whitehall Division - Second Water System Interconnection	Suburban Division	Design Phase	Amy Kunkel
Water - Suburban	Suburban Division Lead Service Line Inventory Program & Compliance Planning	Suburban Division	Planning Phase	Albert Capuzzi
Water - Suburban	2024 Meter Replacements	Suburban Division	Project Closeout	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

Project Category	Project Title	Division / Funding	Project Phase	Staff Responsibility
Water - Suburban	Water Main Replacement Program Cycle 8	Suburban Division	Design Phase	Jason Peters
Water - Suburban	Buss Acres Water System Interconnection & PFAS Remediation	Suburban Division	Design Phase	Amy Kunkel
Water - Allentown	Water Filtration Plant: Redundant Raw Water Line	Allentown Division	Design Phase	Amy Rohrbach
Water - Allentown	30" & 36" East Side Transmission Main Repair Project	Allentown Division	Construction Phase	Jason Peters
Water - Allentown	Lehigh River Pump Station Upgrades	Allentown Division	Design Phase	Amy Rohrbach
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	Reni Keane-Dengel
Water - Allentown	Badger Meter Replacements	Allentown Division	Construction Phase	Amy Kunkel
Water - Allentown	Lead Service Line Replacement Project Cycle 2	Allentown Division	Design Phase	Reni Keane-Dengel
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	Project Closeout	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

Project Category	Project Title	Division / Funding	Project Phase	Staff Responsibility
Sewer - Act 537	Sanitary Sewer Collection System: City of Allentown Manhole Rehabilitation	Allentown Division	Construction Phase	Jason Peters
Sewer - Act 537	Sanitary Sewer Collection System: City of Allentown Manhole Inspections	Allentown Division	Planning Phase	Phil DePoe
Sewer - Act 537	KISS System Modeling - Sewage Billing Meter QA/QC Data Analytics and 2021 Flow Metering Preparation	City of Allentown (AO)	Planning Phase	Phil DePoe
Sewer - Act 537	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	KISS Relief Interceptor Pre-Design Study	Suburban Division	Planning Phase	Phil DePoe
Sewer - Act 537	Regional Sewer Capacity & Wet-Weather Planning: Engineering & Program Support	Suburban Division	Planning Phase	Phil DePoe
Sewer - Act 537	Western Lehigh Interceptor Municipalities Test & Seal Lateral Grouting Project, Year 2 (2025)	Suburban Division	Construction Phase	Jason Peters
Sewer - Act 537	Western Lehigh Service Area - Engineering & Program Support	Suburban Division	Planning Phase	Phil DePoe
Sewer - Act 537	Upper Western Lehigh Pump Station & Force Main	Suburban Division	Construction Phase	Amy Kunkel
Sewer - Act 537	Western Lehigh Interceptor Municipalities Test & Seal Lateral Grouting Project	Suburban Division	Construction Phase	Jason Peters
Sewer - Suburban	Park Pump Station Phase 2 Upgrade	Suburban Division	Construction Phase	Amy Kunkel
Sewer - Suburban	Spring Creek Force Main Relocation - PA Turnpike Commission	Suburban Division	Project Closeout	Amy Kunkel
Sewer - Suburban	North Whitehall Township Act 537 Plan	Suburban Division	Planning Phase	Phil DePoe
Sewer - Suburban	Arcadia WWTP Screening System Project	Suburban Division	Construction Phase	Anton Siekmann
Sewer - Suburban	LCA Meter Stations 1 and 2 Upgrades	Suburban Division	Construction Phase	Chuck Volk

Project Category	Project Title	Division / Funding	Project Phase	Staff Responsibility
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	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	Project Closeout	Chuck Volk
Sewer- Allentown	Kline's Island WWTP - Wet Weather Improvements - Phase 1	Allentown Division	Design Phase	Amy Rohrbach
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 - Septage Receiving and Vacuum Truck Unloading Modifications	Allentown Division	Project Closeout	Amy Rohrbach
Sewer - Allentown	Kline's Island WWTP: Solids Process Boiler and HVAC System Upgrade Project	Allentown Division	Project Closeout	Amy Rohrbach
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	Anton Siekmann
Sewer- Allentown	Kline's Island WWTP - Primary Sludge System Upgrades	Allentown Division	Project Closeout	Amy Rohrbach
Sewer - Allentown	Kline's Island WWTP - Final Settling Tanks 1-4 Upgrades	Allentown Division	Construction Phase	Amy Rohrbach

Project Category	Project Title	Division / Funding	Project Phase	Staff Responsibility
Sewer - Allentown	Sanitary Sewer Collection System: I&I Source Reduction Program (LCA Year 1)	Allentown Division	Construction Phase	Jason Peters