



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

**Agendas & Minutes Posted:**  
[www.lehighcountyauthority.org](http://www.lehighcountyauthority.org)

## LEHIGH COUNTY AUTHORITY

Published: August 5, 2024

### BOARD MEETING AGENDA – August 12, 2024 – 12:00 p.m.

**In-Person or Virtual Meeting Attendance Options Available:** Meetings of the LCA Board of Directors will be held at LCA's Main Office as well as online using the Zoom Meetings application, which includes a telephone option. Public participation is welcomed both in-person or virtually. Instructions for joining the meeting online or by phone are posted on the LCA website in the morning on the day of the meeting, prior to the start of each meeting. You may also issue comment to LCA via email to [LCABoard@lehighcountyauthority.org](mailto: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](http://lehighcountauthority.org). Recordings of LCA meetings are for public convenience and internal use only and are not considered as minutes for the meeting being recorded, nor are they part of public record. Recordings may be retained or destroyed at LCA's discretion.

- *Public Participation Sign-In Request*

#### 2. Review of Agenda / Executive Sessions

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

#### 3. Approval of Minutes

- *July 22, 2024 Board Meeting minutes*

#### 4. Public Comments

#### 5. Action / Discussion Items:

#### **FINANCE AND ADMINISTRATION**

- *2025-2029 Capital Plan – Preliminary Plan Presentation (Discussion)*

#### **WATER**

- *2024 Water Meter Replacements (Approval) (salmon) (digital Board packet, pages 6-8)*

#### **WASTEWATER**

- *Industrial Pretreatment Plant Master Plan (Discussion)*
- *Lynn Township WWTP Final Clarifier Project (Approval) (green) (digital Board packet, pages 9-16)*

#### 6. Monthly Project Updates / Information Items (1<sup>st</sup> Board meeting per month) (digital Board packet, pages 17-25) – **August 2024 report attached**

#### 7. Monthly Financial Review (2<sup>nd</sup> Board meeting per month) (digital Board packet pages)

#### 8. Monthly System Operations Overview (2<sup>nd</sup> Board meeting per month) (digital Board packet, pages)

#### 9. Staff Comments

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

<b>UPCOMING BOARD MEETINGS</b>		
August 26, 2024	September 9, 2024	September 23, 2024

**PUBLIC PARTICIPATION POLICY**

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

## **REGULAR MEETING MINUTES**

### **July 22, 2024**

The Regular Meeting of the Lehigh County Authority Board of Directors was called to order at 12:00 p.m. on Monday, July 22, 2024, Vice Chairman Amir Famili presiding. The meeting was hybrid via in-person and video and audio advanced communication technology ("ACT"), using the Zoom internet application, including telephone option. Each Board member and other attendees of the meeting were able to hear each other attendee and be heard by each other attendee. The public could also participate in the meeting in-person or via ACT, using the Zoom internet application, including telephone option. A Roll Call of Board members present was taken. Amir Famili, Jeff Morgan, Norma Cusick, Linda Rosenfeld, Sean Ziller, and Marc Grammes were present for Roll Call and remained for the duration of the meeting.

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

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

### **REVIEW OF AGENDA**

Liesel Gross announced that there are no changes to the agenda and no Executive Session is planned.

### **APPROVAL OF MINUTES**

#### **July 8, 2024 Meeting Minutes**

On a motion by Jeff Morgan, seconded by Sean Ziller, the Board approved the minutes from the July 8, 2024 meeting as written (5-0). Linda Rosenfeld abstained.

### **PUBLIC COMMENTS**

None.

#### **LCA Strategic Plan – Progress Reporting**

Liesel Gross provided a 2024 semi-annual progress report on strategic initiatives, highlighting key initiatives that are this year's focus. On the KISS Act 537 Plan, Ms. Gross commented that there is a lot of work to be completed by the end of the year, and there are a lot of opportunities for Board involvement in the public comment process. The Tyler EERP Implementation project will spill into 2025 due to the training on the new modules such as Project Accounting, Inventory, and Purchasing. The Lead Program has the most regulatory pressure due to new deadlines included in the updated Lead and Copper Rule. Ms. Gross commented that it will be important to focus on staff training for both Asset Management and Employee Engagement & Safety. Regarding the Staffing & Building Plan, headway has been made identifying near-term needs and there has been robust discussion about facility planning around new staffing requirements. The feedback provided by the Board at the last meeting regarding the office expansion has been helpful, and staff will develop a more comprehensive plan for further discussion with the Board at a later date. She concluded the report by reviewing other high-priority projects including treatment upgrades, emergency response planning, and pursuit of grant funding.

Sean Ziller asked if the team feels confident in completing the KISS Act 537 Plan this year. Liesel Gross said that the end of the year feels comfortable even though there is a lot of work to complete. Mr. Ziller also asked if grant applications require Resolutions from the Board. Ms. Gross said the

need for a Resolution for each grant is determined based on the specific requirements of each grant program.

Amir Famili acknowledged the great progress on the safety metrics, noting the number of days with no lost time and no recordable injuries.

### **KIWWTP Secondary Digester Cleaning Project Change Order**

Amy Rohrbach explained that the change order is necessary for this project in order to compensate the contractor for the additional 73.16 dry tons of solids removed from the digester cleaning process. The original contract was for 200 dry tons but when cleaning was completed, a total of 273.16 was removed. This was due to the secondary digester experiencing an upset on the stratification of the solids and liquids causing plant staff to not draw down the digester as much as in past cleanings. Operations staff is investigating the reasoning and will take any necessary corrective actions.

On a motion by Jeff Morgan, seconded by Sean Ziller, the Board approved the Capital Project Authorization – Construction Phase Change Order No. 1 to Romesberg Trucking, Inc. dba Mobile Solids Solutions in the amount of \$57,181.95 (6-0).

### **MONTHLY FINANCIAL REVIEW**

Ed Klein gave an overview of the June 2024 financial statements, highlighting variances between actual expenses and budgeted or forecasted expenses. Mr. Klein reported that net income and cash flows for all funds were favorable for June as compared to forecast. The City Division forecast realizes the full effect of the 2024 Bond Issuance since the Authority has taken on three years of borrowing for projects rather than one year as budgeted. He noted that an in-depth forecast on capital expenses will be completed in the third quarter.

### **MONTHLY SYSTEM OPERATIONS OVERVIEW**

Andrew Moore reviewed the June 2024 report and reported that there were no recordable or non-recordable incidents; however, there were two vehicle incidents. Water production is in the normal peak season and up 1.5 million gallons per day in the Authority's Suburban Division. Wastewater flows for June were normal. There was a Tier 2 Public Notice issued for the Emmaus Consecutive Division for a PFOA and PFOS exceedance of the Pennsylvania Maximum Contaminant Level. Amir Famili asked if there were any phone calls from residents. Mr. Moore said there were numerous calls mainly regarding the specific levels they are receiving at their homes. Mr. Moore said without a hydraulic model this cannot be determined. There was discussion regarding the regulatory timeline. Mr. Moore reviewed other regulatory compliance information, noting that there was one sewer overflow in Allentown, no permit exceedances in Heidelberg, three permit exceedances in Sand Spring due to fecal coliform and ammonia, and two permit exceedances at Wynnewood also due to fecal coliform.

### **STAFF COMMENTS**

Liesel Gross updated the Board on the Pretreatment Plant Stakeholder Panel meeting held on July 17<sup>th</sup> noting it may be the final meeting since there has been robust discussion and feedback that will be synthesized into a solution that can be presented to the Board in August. Discussions focused on high level questions about regional growth regarding the industrial sector and how to plan and pay for it. A solution is being developed that addresses the needs of existing industries and allows for expansion in the future when needed. Amir Famili commented that Ms. Gross has done a great job running the meetings and working with a diverse group.

**SOLICITOR'S COMMENTS**

None.

**PUBLIC COMMENTS / OTHER COMMENTS**

None.

**BOARD MEMBER COMMENTS**

None.

**EXECUTIVE SESSION**

None.

**ADJOURNMENT**

There being no further business, the Chairman adjourned the meeting at 12:43 p.m.

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Jeffrey J. Morgan  
Secretary



**Lehigh County Authority**

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

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**MEMORANDUM**

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**Date:** August 12, 2024

**To:** Lehigh County Authority Board of Directors

**From:** Charles Volk, Chief Capital Works Officer

**Subject:** Suburban Division – 2024 Meter Replacement Project

**MOTIONS /APPROVALS REQUESTED:**

No.	Item	Amount
1	<u>Capital Project Authorization – 2024 Meter Replacement Project – Construction Phase</u>	\$532,524
2	<u>Contract Award – 2024 Meter Replacement Project: Core &amp; Main, LP Professional Service Contract</u> <i>(included in Capital Project Authorization)</i>	\$492,524

**PROJECT OVERVIEW:**

The project consists of the replacement of primarily 1530 residential water meters throughout the Suburban Division that have either reached the end of their useful life and/or are inoperable. Recommended meter life is 20 years; these meters range in age from 24 to 36 years. Lehigh County Authority (LCA) uses the iPerl model of Sensus brand water meters for residential metering. Meters will be connected to existing radio read units installed in a previous project.

**PROJECT OBJECTIVE:**

The project objective is to replace and upgrade older and non-functioning meter equipment within the Suburban Division to increase meter reading accuracy and efficiency.

**FUNDING:**

The project will be funded by the LCA Suburban Division.

**PROJECT STATUS:**

Project scope, design, and specifications were developed in-house. Equipment and installation are being procured through COSTARS. Board approval is requested for the Construction Phase.

**THIS APPROVAL – CONSTRUCTION PHASE & CONTRACT AWARD – 2024 METER REPLACEMENT PROJECT:**

Core and Main, LP, is the authorized distributor for Sensus, which is the meter manufacturer used exclusively in LCA's Suburban Division for residential and commercial meters. They have acted as the general contractor on the last four meter replacement/upgrade projects in the Suburban Division Allentown Division. They are now listed on COSTARS as an approved service provider for meter equipment installation. It is through the COSTARS program that we have received this proposal. Both the firm and its subcontractor's qualifications and experience statements indicate numerous projects of similar scope and type. The contract documents are in order and the company appears well qualified to perform the work. The proposal submitted is within the budgeted amount for this project.

**SCHEDULE:**

Based on contract award following the August 12, 2024 Board meeting, we anticipate construction to begin by September 2024, and substantial completion by the second quarter of 2025.

# CAPITAL PROJECT AUTHORIZATION

<b>PROJECT NO.:</b>	SD-W-24-1	<b>BUDGET FUND:</b>	Suburban Div\Water\Capital
<b>PROJECT TITLE:</b>	Suburban Division 2024 Meter Replacement Project – Construction Phase -	<b>PROJECT TYPE:</b>	<input checked="" type="checkbox"/> Construction <input type="checkbox"/> Engineering Study <input type="checkbox"/> Equipment Purchase <input type="checkbox"/> Amendment
<b>THIS AUTHORIZATION:</b>	\$532,524		
<b>TO DATE (W/ ABOVE)</b>	\$532,524		

**DESCRIPTION AND BENEFITS:**

This Authorization is for the replacement of approximately 1530 5/8” through 1” water meters and miscellaneous incidental equipment. This authorization takes the project through construction phase.

Previous Authorizations	
None	

REQUESTED THIS AUTHORIZATION	
Construction Phase	
<b>Contract 1-General Construction – Core &amp; Main</b>	<b>\$492,524</b>
<b>Staff</b>	<b>\$20,000</b>
<b>Contingency</b>	<b>\$20,000</b>
<b>Total This Authorization</b>	<b>\$532,524</b>

Future Authorization	
None	

<i>Total Estimated Project</i>	<i>\$532,524.00</i>
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**REVIEW AND APPROVALS:**

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



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## MEMORANDUM

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**Date:** August 12, 2024

**To:** Lehigh County Authority Board of Directors  
**From:** Matthew Dorner, Project Manager  
**Subject:** Suburban Division – Lynn Township Wastewater Treatment Plant  
New Final Clarifier Project – Construction Phase

**MOTIONS / APPROVALS REQUESTED:**

No.	Item	Amount
1	Capital Project Authorization – Construction Phase	\$1,425,136
2	General Construction Contract*: JEV Construction, LLC.	\$1,241,000
3	Electrical Contract*: Ace Electric Inc.	\$47,936
4	Professional Services Authorization*: Construction Phase Engineering Services – CHA Consulting Inc.	\$76,200

*\*Included in the Capital Project Authorization.*

**BACKGROUND**

Lehigh County Authority (LCA) operates the Lynn Township Wastewater Treatment Plant (LTWWTP), located in New Tripoli, Pennsylvania. The LTWWTP is an activated sludge wastewater treatment facility with a current average daily flow of 67,000 gallons per day and permitted capacity of 80,000 gallons per day. The facility’s treatment unit processes include an influent chamber, two aeration tanks, one final clarifier and effluent chlorination. The facility currently utilizes one 20-ft diameter final clarifier. There are two sludge pumps dedicated to the clarifier

The goal for this project is to provide redundancy, improve process control, and improve wet weather treatment for the final clarification process. To address this objective, LCA retained CHA Consulting Inc. for design of an additional 20-ft diameter clarifier and new return sludge pumping system. These improvements will provide improved settling during high flow events and provide better control of return activated sludge to the aeration tanks. This project does not entail any changes to plant capacity, other treatment unit processes, influent conditions or effluent criteria.

## **PROJECT OVERVIEW**

The former Lynn Township Sewer Authority performed upgrades to the LTWWTP in 2001. The improvements included a new clarifier, two new RAS pumps, associated yard piping and site design. In recent years, influent flows and loads to the LTWWTP have trended upward and the existing final clarifier appears to be undersized during high loading periods. While the plant continues to perform well, the final clarifier has not been taken out of service since there is no other clarifier to utilize. Installing a second clarifier will provide LCA with the ability to inspect and maintain the existing clarifier. To confirm the clarifier operating conditions, plant data from December 2022 to November 2023 was reviewed.

In addition to the lack of redundancy for the final clarifier, the existing return activated sludge (RAS) pumps are approaching the end of their useful life. The RAS pumps operate in a lead-standby arrangement. While the pumps have variable frequency drives (VFDs), there is no means of automatically adjusting the speed based on real-time flow data. The plant currently sets a constant RAS flow from the clarifier to Aeration Tanks 1 and 2. The RAS flow to the two aeration tanks is split based on pipe hydraulics and there are no flow meters in the RAS piping. Consequently, the actual RAS rate to each aeration tank is not known.

As part of this project, the two existing RAS pumps and associated discharge piping will be demolished and replaced with three upgraded RAS pumps equipped with VFD's. There will be a dedicated RAS pump and piping to each Aeration Tank with a flow meter to record and display the flow rate. An installed standby pump would be provided in the event one of the two lead pumps was out of service. The existing pumps will be replaced with dry pit submersible pumps. Dry pit submersible pumps are being used more frequently for RAS applications.

## **FINANCIAL**

The Project will be funded by the LCA Suburban Division

## **PROJECT STATUS**

Board approval is requested for the Construction Phase.

## **THIS APPROVAL – CONSTRUCTION PHASE**

### **BIDDING SUMMARY**

This project consists of two contracts. One General Construction Contract and one Electrical Contract. The project was advertised for bid in early February, a pre-bid meeting was held July 10, and bids were opened on July 30, 2024 via PennBid. Bid results are as follows:

<b>General Construction</b>	
<b>Bidder</b>	<b>Bid Amount</b>
<b>JEV Construction, LLC</b>	<b>\$1,241,000</b>
<b>Blooming Glen Contractors</b>	<b>\$1,243,476</b>
<b>LB Industries</b>	<b>\$1,394,238</b>
<b>Allan Myers</b>	<b>\$1,442,055</b>
<b>PSI Pumping Solutions</b>	<b>\$1,530,554</b>
<b>Mohawk</b>	<b>\$1,666,695</b>

Six bids were received for the General Construction Contract, and the bidding was competitive. JEV Construction, LLC from Clinton, NJ (JEV) is the low bidder and has extensive experience in water and wastewater treatment plant construction. JEV has successfully completed several projects for LCA in recent years, including Thickeners Tank No. 3 Rehabilitation at KIWWTP and Equalization Tank Rehabilitation and Mechanical Screen Installation at the Heidelberg Heights WWTP. The firm's qualifications and experience statement indicate numerous projects of similar type. The bid documents are in order and the firm appears well qualified to perform the work. The Engineer's construction cost opinion was \$1,233,000. We recommend award of the General Construction Contract to JEV Construction, upon receipt of the required bonds and insurance.

<b>Electrical</b>	
<b>Bidder</b>	<b>Bid Amount</b>
<b>Ace Electric Inc.</b>	<b>\$47,936</b>

One bid was received for the Electrical Contract. Ace Electric Inc., from Coplay, PA, is the bidder and has extensive experience in electrical contracting. Ace Electric Inc. is currently working on the Upper Western Lehigh Pump Station for LCA, and they recently completed a pump station project with Keystone Engineering Group, which is the engineering firm that performs integration services for LCA as well as other pump stations in Lehigh County. The firm's qualifications and experience statement indicate numerous projects of similar type. The bid documents are in order and the firm appears well qualified to perform the work. The Engineer's electrical cost opinion was \$216,000. We recommend award of the Electrical Contract to Ace Electric Inc., upon receipt of the required bonds and insurance.

**PROFESSIONAL SERVICES**

Construction management and part-time field inspection is to be performed by CHA Consulting Inc. CHA Consulting Inc. is the design engineer, and the firm has provided design and construction phase services on several prior upgrade projects. The quality of their work is excellent.

**PROJECT SCHEDULE**

Based on construction phase authorization at the August 12, 2024 LCA Board meeting, it is anticipated that the project will be completed by the Summer of 2025.

**FUTURE AUTHORIZATIONS**

None



August 2, 2024

Matt Dörner  
Project Manager  
Lehigh County Authority  
1053 Spruce Road  
Wescosville, PA 18106

Subject: LCA Lynn Township Wastewater Treatment Facility (LTWWTF)  
Clarifier No. 2 Addition  
Proposal for Construction Administration Services

Dear Mr. Dörner:

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 construction of Clarifier No. 2 and modification of the RAS pumping and chemical systems at the LTWWTF. This work is expected to be ready for final payment within 330 days (11 months) from Notice to Proceed (NTP). It is anticipated that NTP will be issued in September 2024, with onsite construction starting in the same month and continuing through August 2025 (47 weeks).

### **SCOPE OF SERVICES**

CHA Consulting, Inc, (CHA, formerly D'Huy Engineering Inc.) will provide the following construction administration services:

1. Facilitate completion of the Agreement and other contractual elements (8 hours).
2. Prepare for, attend and facilitate a pre-construction conference (12 hours).
3. Prepare for and attend eight job conference biweekly meetings (48 hours).
4. Process and review and shop drawings and RFIs. (120 hours).
5. Process applications for payment (16 hours).
6. Process any necessary change orders (28 hours).
7. Provide weekly construction observation. Our estimate is an average of 11 hours per week for 30 weeks of onsite construction activity. (330 hours).
8. Perform project closeout activities, including punch list development and final inspection (16 hours).

**EXCLUSIONS & ADDITIONAL SCOPE CONSIDERATIONS**

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

1. Testing services.
2. Additional field investigations or studies.
3. Reproduction of contract documents.
4. Fees required for municipal permits.
5. Full-time project representation during construction.
6. Scope of work items not previously listed.

**PROPOSED FEE**

We propose to complete the described services for the lump sum fee of \$76,200. In the event additional construction administration services are necessary, CHA will proceed only upon written agreement of LCA.

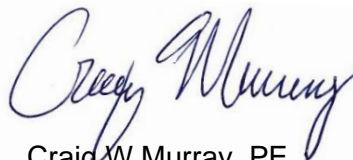
We are prepared to begin work on this project immediately upon authorization. We thank you for the opportunity to help LCA complete this important capital project. If you have any questions or require any additional information, please contact us at 610-865-3000.

Respectfully submitted,

CHA CONSULTING, INC.



David Wodyka, PE  
Section Manager



Craig W Murray, PE  
Project Team Leader

C: Chuck Volk, LCA



## CAPITAL PROJECT AUTHORIZATION

<b>PROJECT NO.:</b>	SD-S-26	<b>BUDGET FUND:</b>	Suburban Div\Wastewater\Capital
<b>PROJECT TITLE:</b>	Suburban Division – Lynn Township Wastewater Treatment Plant New Final Clarifier Project – Construction Phase	<b>PROJECT TYPE:</b>	
<b>THIS AUTHORIZATION:</b>	\$1,425,136	<input checked="" type="checkbox"/>	Construction
<b>TO DATE (W/ ABOVE)</b>	\$1,518,436	<input type="checkbox"/>	Engineering Study
		<input type="checkbox"/>	Equipment Purchase
		<input type="checkbox"/>	Amendment

**DESCRIPTION AND BENEFITS:**

**New Final Clarifier Project:**

This upgrade project consists of adding a second clarifier at the Lynn Township WWTP (LTTWWTP) as well as upgrade the return activated sludge (RAS) pumping system. The scope of the project will include installation of a new final clarifier of the same diameter and general configuration as the existing final clarifier but with current drive and mechanism technology, an access platform for new clarifier, yard piping to connect influent and effluent, sludge piping to existing infrastructure, and installation of new RAS pumps in the main control building.

Previous Authorizations	
<i>Design and bid phase</i>	\$93,300

REQUESTED THIS AUTHORIZATION	
Construction Phase	
General Construction Contract - JEV Construction, LLC	\$1,241,000
Electrical Contract – Ace Electric Inc.	\$47,936
Construction Inspection Services – CHA Consulting Inc.	\$76,200
Staff	\$10,000
Contingency	\$50,000
<b>Total This Authorization</b>	<b>\$1,425,136</b>

Future Authorization	
none	

**REVIEW AND APPROVALS:**

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



**Lehigh County Authority**

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

**PROFESSIONAL SERVICES AUTHORIZATION**

**Professional:** CHA CONSULTING, INC.  
One East Broad Street, Suite 310  
Bethlehem, PA 18018

**Date:** August 12, 2024

**Requested By:** Matt Dorner

**Approvals**

**Department Head:** \_\_\_\_\_

**Chief Executive**

**Officer:** \_\_\_\_\_

**Suburban Division Lynn Township Wastewater Treatment Plant New Final Clarifier Project**

CHA Consulting Inc. will provide the following construction phase services for the Lynn Township New Final Clarifier Project per CHA Consulting Inc. proposal letter dated 8/02/24:

<b>Professional Services <sup>(1)</sup></b>
1. Facilitate completion of Agreement and other contractual elements
2. Attend pre-construction conference
3. Attend biweekly progress meetings
4. Respond to RFIs and review shop drawings
5. Perform part-time field inspection services
6. Contractor payment application review and process
7. Provide weekly construction inspection and inspection during critical operations and start up activities (330 hours)
8. Perform Substantial Completion inspection and issue punchlist to Contractor

**Cost Estimate (not to be exceeded without further authorization): \$76,200**

**Time Table and Completion Deadline:** It is anticipated that the project will be completed by the Summer of 2025.

**(For Authority Use Only)**

**Authorization Completion:**

**Approval:** \_\_\_\_\_ **Actual Cost:** \_\_\_\_\_ **Date:** \_\_\_\_\_



# Lehigh County Authority – Monthly Report to Board of Directors

## Upcoming Board Agenda Items & Project Updates – August 2024

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Published: August 5, 2024

### ***PART 1 – Upcoming Agenda Items – Action & Discussion Items***

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#### **FINANCE & ADMINISTRATION**

**Project Title: 2025-2029 Capital Plan - Preliminary Plan Presentations**

Division / Funding: All Divisions

Board Action Date: 8/12/2024 & 8/26/2024

Status or Action Desired: Discussion

Project Phase: n/a

Project Notes: The preliminary 2025-2029 Allentown Division Capital Plan will be presented to the Board for review and comment at the August 12, 2024 meeting. The preliminary 2025-2029 Suburban Division and Administration Capital Plans will be presented at the August 26, 2024 meeting. Following these Board presentations, the Capital Plans will be distributed for public comment until mid-September, and Board approval will be requested in October 2024.

Staff Responsibility: Chuck Volk & Ed Klein

**Project Title: Draft Omnibus Resolution: Delegation of Board Duties**

Division / Funding: NEW

Board Action Date: 8/26/2024

Status or Action Desired: Discussion

Project Phase: n/a

Project Notes: Over the course of several decades, the LCA Board of Directors has passed various Resolutions to delegate certain duties to staff, such as the signing of contracts, maintaining or creating certain policies, and approving expenses within established thresholds. These Resolutions are difficult to manage as individual documents that have been created and updated over a long period of time, leading to frequent discussion and research required to understand when Board action is required. Therefore, the Solicitor has been working with LCA staff to develop a new Omnibus Resolution to restate the various historical Resolutions. This presents an opportunity to modernize the approval process and review approval thresholds for potential updates. A preliminary draft of the Omnibus Resolution will be reviewed with the Board at the August 26, 2024 meeting, with feedback sought prior to proposing a final Resolution for Board adoption. Staff Responsibility: Liesel Gross

**Project Title: Monthly Financial Review**

Division / Funding: n/a

Board Action Date: 8/26/2024

Status or Action Desired: Information

Project Phase: n/a

Project Notes: The July 2024 monthly financial report will be presented. Staff Responsibility: Ed Klein

## SYSTEM OPERATIONS

**Project Title: Monthly Operations Report**

Division / Funding: n/a

Status or Action Desired: Information

Board Action Date: 8/26/2024

Project Phase: n/a

Project Notes: The July 2024 monthly operations report will be presented. Staff Responsibility: Andrew Moore & Chris Moughan

## WATER PROJECTS – SUBURBAN DIVISION

**Project Title: 2024 Meter Replacements**

Division / Funding: Suburban Division

Status or Action Desired: Approval

Board Action Date: 8/12/2024

Project Phase: Construction Phase

Project Notes: This project involves the replacement of approximately 1,630 residential meters within the Suburban Division that have reached the end of their useful life and is part on an ongoing annual meter replacement program. Authorization for purchasing of the meters and an installation contract through the COSTARS program will be requested at the 8/12/2024 Board meeting. Staff Responsibility: Amy Kunkel

## WATER PROJECTS – ALLENTOWN DIVISION

**Project Title: Lead Service Line Replacement Project Cycle 2**

Division / Funding: Allentown Division

Status or Action Desired: Approval

Board Action Date: 8/26/2024

Project Phase: Design Phase

Project Notes: This project focuses on Cycle 2 of the lead service line (LSL) replacement program in the City of Allentown. The scope of the project consists of the replacement of approximately 1,000 lead service lines within a prioritized project area. LCA will be seeking grants and low interest loans from PennVest for each cycle of this program. The LCA Board authorized the Design and Bid phases at the February 26, 2024 meeting. LCA anticipates seeking authorization for an amended professional services proposal to CDM Smith at the August 26, 2024 LCA Board meeting. Staff Responsibility: Albert Capuzzi

**Project Title: Badger Meter Replacements**

Division / Funding: Allentown Division

Status or Action Desired: Approval

Board Action Date: 8/26/2024

Project Phase: Construction Phase

Project Notes: This project involves the replacement of approximately 4,465 Badger meters ranging in size from 5/8" to 2" that were not replaced as part of the City of Allentown meter replacement project in 2012-2013. The Badger meters have an outdated style radio that is incorporated into the meter and cannot be replaced separately. These radios are at the end of their useful life and have started to fail. The project will be spread over a two-year period. Authorization for purchasing the meters and radios and an installation contract through the COSTARS program will be requested at the 8/26/2024 Board meeting. Staff Responsibility: Amy Kunkel

**Project Title: Lead Service Line Replacement Project Cycle 1**

Division / Funding: Allentown Division

Status or Action Desired: Approval

Board Action Date: 8/26/2024

Project Phase: Construction Phase

Project Notes: This project consists of Cycle 1 of the lead service line (LSL) replacement program in the City of Allentown. This project, which is being funded by a PennVEST grant and loan, consists of the replacement of approximately 150 lead service lines within a prioritized project area. Design and bid phase services were authorized at the 11/13/2023 LCA Board meeting. Design phase was completed in June 2024, followed by bid phase, with construction phase authorization to be requested in August 2024. Staff Responsibility: Jason Peters

**Project Title: Water Filtration Plant: Fluoride System Upgrades**

Division / Funding: Allentown Division

Status or Action Desired: Approval

Board Action Date: 8/26/2024

Project Phase: Design Phase

Project Notes: This project is to prepare detailed design and bidding documents for upgrades to the existing fluoride system at the Water Filtration Plant. The existing system is past its useful life and in need of replacement. The intent is for the design and bidding phases to be completed by the end of 2024 with construction beginning in 2025. Professional Services Authorization for final design and bid phase services will be requested at the 8/26/2024 Board meeting. Staff Responsibility: Amy Rohrbach

**WASTEWATER PROJECTS – KISS ACT 537**

**Project Title: Industrial Pretreatment Plant Master Plan**

Division / Funding: Suburban Division

Status or Action Desired: Discussion

Board Action Date: 8/12/2024

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. The Master Plan results are expected to be incorporated into the ongoing regional Act 537 Plan that is due to DEP in 2025. Board authorization for the Master Plan was approved on December 13, 2021. A preliminary draft report was submitted in December of 2022, presented to the LCA Board in March 2023, 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 has been 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 will be presented at the August 12, 2024 Board meeting. Staff Responsibility: Liesel Gross & Albert Capuzzi

## WASTEWATER PROJECTS – SUBURBAN DIVISION

**Project Title: Lynn Township WWTP Final Clarifier Project**

Division / Funding: Suburban Division

Board Action Date: 8/12/2024

Status or Action Desired: Approval

Project Phase: Construction Phase

Project Notes: The Lynn Township wastewater treatment plant was constructed in the mid-1970s and acquired by LCA in 2012. The existing activated sludge plant has a single 20-foot diameter final clarifier, which was constructed in 2001 with provisions to add a future second clarifier. The existing clarifier has been in continuous service since 2001 and is in need of rehabilitation. The unit was undersized with respect to current plant flows, and redundancy is needed to facilitate maintenance and improve effluent quality. Design phase authorization was granted at the 11/13/2023 LCA Board meeting. Design phase was completed in spring 2024 and bids were opened on 7/30/2024. Construction phase authorization is to be requested at the 8/12/2024 LCA Board meeting. Staff Responsibility: Matt Dorner

## WASTEWATER PROJECTS – ALLENTOWN DIVISION

**Project Title: Sanitary Sewer Collection System: I&I Source Reduction Program (LCA Year 2)**

Division / Funding: Allentown Division

Board Action Date: 8/26/2024

Status or Action Desired: Approval

Project Phase: Planning Phase

Project Notes: In 2023, LCA and the City of Allentown collaborated to prepare a 10 Year inflow & infiltration (I&I) source reduction plan, and the first year of construction was authorized in 2024. The plan, along with the I&I reduction plans developed by the other municipalities in the Kline's Island Sewer System, is required for the regional Act 537 Plan currently under development. LCA Board authorized the year 2 design and bid phases at the May 20, 2024 meeting. LCA anticipates seeking Board authorization of the source identification, reduction and performance monitoring at the August 26, 2024 meeting. LCA anticipates seeking Board authorization of the Construction phase of this project in 4th quarter 2024. Staff Responsibility: Jason Peters

## **PART 2 – Project Updates – Information Items**

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### **FINANCE & ADMINISTRATION**

**Project Title: LCA Operations Center Expansion**

Division / Funding: Suburban Division

Status or Action Desired: Updated

Board Action Date: n/a

Project Phase: Planning Phase

Project Notes: LCA's Main Office complex is currently operating beyond its original planned capacity, with several modifications completed over the years to create additional smaller work spaces for employees and consolidate meeting space and storage space. Even without the addition of new positions required to handle increasing project workloads, additional office space is needed. Authorization for design and bid phase of a new two-story building addition to the LCA main office was tabled at the July 8, 2024 LCA Board meeting pending a more complete evaluation of future staffing needs and full investigation of other facility expansion options and requirements. Board review of these investigations will be scheduled for a date later in 2024. Staff Responsibility: Matt Dorner

### **WASTEWATER PROJECTS – KISS ACT 537**

**Project Title: Sanitary Sewer Collection System: City of Allentown Manhole Inspection/Rehabilitation**

Division / Funding: Allentown Division

Status or Action Desired: Updated

Board Action Date: n/a

Project Phase: Planning Phase

Project Notes: As part of the Act 537 planning process, a rainfall derived inflow and infiltration (RDII) analysis was performed in the first quarter of 2022 for the City of Allentown system. This analysis shows the overall system suffers from inflow problems. Some of the existing manholes in the City system have inflow dishes and some have been previously inspected. However, due to the critical nature of Act 537 planning, all the manholes need to be inspected. The inspections and subsequent rehabilitation work will be phased over the next 10 years. The Phase 1 inspection commenced in the second quarter of 2023 and the Phase 2 inspections (and Phase 1 rehab work) will be completed in 2024. The Program will continue until all manholes in the City system have been inspected and rehabilitated as necessary. Board authorization for the Phase 1 inspection work was granted at the December 12, 2022 meeting. As Act 537 planning progressed in the first half of 2023, the City's Trout Creek Interceptor Basin was identified as being undersized for future peak flow events. In order to expedite the elimination of inflow in this area, an amendment to the December 2022 manhole inspection authorization was granted at the August 14, 2023 Board meeting. The design for the 2024 manhole rehabilitations are currently underway (approximately 1500 manholes out of the 2700 authorized have been inspected to date). This first rehab package is scheduled to bid in late July with a Board authorization request at the first meeting in September. Staff Responsibility: Phil DePoe

### **WASTEWATER PROJECTS – ALLENTOWN DIVISION**

**Project Title: Kline's Island WWTP: Chemically Enhanced Primary Treatment Study**

Division / Funding: Allentown Division

Status or Action Desired: NEW

Board Action Date: 9/9/2024

Project Phase: Planning Phase

Project Notes: This project is for a primary settling optimization study to investigate Chemically Enhanced Primary Treatment (CEPT) to increase solids settling at the primary settling tanks. The plan is to evaluate various polymers with full-scale testing to best identify the appropriate chemical for the KIWWTP. Planning phase approval is anticipated to be requested at the 9/9/2024 LCA Board meeting. Staff Responsibility: Stephen Boone

**PART 3 – Open Project List – No Updates**

<b>Project Category</b>	<b>Project Title</b>	<b>Division / Funding</b>	<b>Project Phase</b>	<b>Staff Responsibility</b>
Finance & Administration	LCA Strategic Plan - Progress Reporting	All Divisions	n/a	Liesel Gross
Finance & Administration	Project Management / Construction Management Software Installation & Setup	All Divisions	Planning Phase	Jason Peters
Finance & Administration	Capital Works Planning Room Organizing, Secure Storage and Digitizing - Phase 2	All Divisions	Planning Phase	Matt Dorner
Finance & Administration	LCA Munis ERP System Planning & Re-Implementation	All Divisions	Planning Phase	Chris Moughan & Brooke Neve
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	Central Lehigh and North Whitehall Systems – Water Supply Study	Suburban Division	Planning Phase	Phil DePoe
Water - Suburban	Water Main Replacement Program Cycle 7	Suburban Division	Construction Phase	Jason Peters
Water - Suburban	Fixed Base Meter Reading Stations	Suburban Division	Planning Phase	Amy Kunkel
Water - Suburban	Upper System Pump Station and Main Extension	Suburban Division	Design Phase	Amy Kunkel
Water - Suburban	Suburban Division Lead Service Line Inventory Program & Compliance Planning	Suburban Division	Planning Phase	Matt Dorner
Water - Suburban	Water Main Replacement Program Cycle 7 & 8	Suburban Division	Design Phase	Jason Peters
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	Allentown Division Lead Service Line Inventory Program & Compliance Planning	Allentown Division	Planning Phase	Matt Dorner

<b>Project Category</b>	<b>Project Title</b>	<b>Division / Funding</b>	<b>Project Phase</b>	<b>Staff Responsibility</b>
Water - Allentown	Water Main Replacement Program Cycles 7 & 8	Allentown Division	Construction	Jason Peters
Water - Allentown	Lehigh River Pump Station Upgrades	Allentown Division	Planning 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	30" & 36" East Side Transmission Main Repair Project	Allentown Division	Design Phase	Jason Peters
Water - Allentown	Water Filtration Plant: PFAS Compliance Study	Allentown Division	Planning Phase	Albert Capuzzi
Water - Allentown	Large Diameter Valve Rehabilitation & Replacement Program	Allentown Division	Design Phase	Matt Dorner
Water - Allentown	Lead Service Line Replacement Program Planning	Allentown Division	Planning Phase	Andrew Moore
Water - Allentown	Water Filtration Plant: 2022-2023 Indenture Upgrades	Allentown Division	Construction Phase	Chuck Volk
Sewer - Act 537	Sanitary Sewer Collection System: City of Allentown Interceptor Inspections	Allentown Division	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	Regional Sewer Capacity & Wet-Weather Planning - Regional Act 537 Plan Preparation	City of Allentown (AO)	Planning Phase	Phil DePoe
Sewer - Act 537	Legal Services: Development of New Intermunicipal Agreement(s)	City of Allentown (AO)	Planning Phase	Liesel Gross
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 - Selection of Solution (SOS) Phase	City of Allentown (AO)	Planning Phase	Phil DePoe
Sewer - Act 537	Spring Creek Force Main Condition Assessment	Suburban Division	Planning Phase	Amy Kunkel

<b>Project Category</b>	<b>Project Title</b>	<b>Division / Funding</b>	<b>Project Phase</b>	<b>Staff Responsibility</b>
Sewer - Act 537	Upper Western Lehigh Pump Station & Force Main	Suburban Division	Construction Phase	Amy Kunkel
Sewer - Act 537	Regional Sewer Capacity & Wet-Weather Planning: Engineering & Program Support	Suburban Division	Planning Phase	Phil DePoe
Sewer - Act 537	KISS Relief Interceptor Pre-Design Study	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	Western Lehigh Service Area - Engineering & Program Support	Suburban Division	Planning Phase	Phil DePoe
Sewer - Suburban	Spring Creek Force Main Relocation - PA Turnpike Commission	Suburban Division	Design Phase	Amy Kunkel
Sewer - Suburban	Spring Creek Pump Station Upgrades	Suburban Division	Construction Phase	Amy Kunkel
Sewer-Suburban	Pretreatment Plant - Critical Upgrades	Suburban Division	Design Phase	Chuck Volk
Sewer - Suburban	Park Pump Station Phase 2 Upgrade	Suburban Division	Construction Phase	Amy Kunkel
Sewer - Suburban	Heidelberg Heights Sanitary Sewer Consent Order & Agreement	Suburban Division	Construction Phase	Matt Dorner
Sewer - Suburban	Arcadia WWTP Screening System Project	Suburban Division	Design Phase	Matt Dorner
Sewer - Suburban	Western Lehigh Manhole Rehabilitation Project - Phase 4	Suburban Division	Construction Phase	Jason Peters
Sewer - Suburban	North Whitehall Township Act 537 Plan	Suburban Division	Planning Phase	Phil DePoe
Sewer - Suburban	Pretreatment Plant (PTP) Electrical Study	Suburban Division	Planning Phase	Albert Capuzzi
Sewer - Suburban	Lynn Township Corrective Action Plan	Suburban Division	Planning Phase	Jason Peters
Sewer - Suburban	Sand Spring WWTP: Treatment Process Modification	Suburban Division	Design Phase	Chuck Volk



<b>Project Category</b>	<b>Project Title</b>	<b>Division / Funding</b>	<b>Project Phase</b>	<b>Staff Responsibility</b>
Sewer - Suburban	LCA Meter Stations 1 and 2 Upgrades	Suburban Division	Design Phase	Phil DePoe
Sewer- Allentown	Kline's Island WWTP - Wet Weather Improvements - Phase 1	Allentown Division	Design Phase	Amy Rohrbach
Sewer - Allentown	Kline's Island WWTP - Final Settling Tanks 1-4 Upgrades	Allentown Division	Design Phase	Amy Rohrbach
Sewer - Allentown	Kline's Island WWTP: Master Plan	Allentown Division	Planning Phase	Amy Rohrbach
Sewer- Allentown	Kline's Island WWTP - Primary Sludge System Upgrades	Allentown Division	Design Phase	Amy Rohrbach
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 - Allentown	Kline's Island WWTP: 2023-2024 Architectural and Structural Upgrades	Allentown Division	Construction Phase	Amy Rohrbach
Sewer - Allentown	Kline's Island WWTP: Solids Process Boiler and HVAC System Upgrade Project	Allentown Division	Construction Phase	Chuck Volk
Sewer - Allentown	Lehigh Street (Rte. 145) Water and Sewer Main Relocation Project	Allentown Division	Construction Phase	Jason Peters
Sewer - Allentown	Kline's Island WWTP: Secondary Digester Cleaning	Allentown Division	Construction Phase	Amy Rohrbach
Sewer - Allentown	Sanitary Sewer Collection System: I&I Source Reduction Program (LCA Year 1)	Allentown Division	Construction Phase	Jason Peters