



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

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

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

1. Call to Order

- **NOTICE OF MEETING RECORDINGS**

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

- *Public Participation Sign-In Request*

2. Review of Agenda / Executive Sessions

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

3. Approval of Minutes

- *January 8, 2024 Board Meeting minutes*

4. Public Comments

5. Action / Discussion Items:

FINANCE AND ADMINISTRATION

- *Resolution 1-2024-2: Allentown Water & Sewer Lease Bond Refinancing (Approval) (yellow) (digital Board packet, pages 6-15)*

WATER

- *Water Filtration Plant: Emergency Power Design (Approval) (blue) (digital Board packet, pages 16-23)*

WASTEWATER

- *Kline's Island WWTP - Septage Receiving and Vacuum Truck Unloading Modifications (Approval) (green) (digital Board packet, pages 24-31)*

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

7. Monthly Financial Review (2nd Board meeting per month) (digital Board packet, pages) – **December 2023 report will be provided at the February meeting.**

8. Monthly System Operations Overview (2nd Board meeting per month) (digital Board packet, pages 32-37) – **December 2023 report attached**
9. Staff Comments
10. Solicitor's Comments
11. Public Comments / Other Comments
12. Board Member Comments
13. Executive Sessions
14. Adjournment

UPCOMING BOARD MEETINGS		
February 12, 2024	February 26, 2024	March 11, 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

January 8, 2024

The Regular Meeting of the Lehigh County Authority Board of Directors was called to order at 12:00 p.m. on Monday, January 8, 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, Ted Lyons, Linda Rosenfeld, Norma Cusick, Kevin Baker, Jeff Morgan, 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, Chuck Volk, and Lisa Miller.

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

REVIEW OF AGENDA

Ed Klein announced that there are no changes to the agenda and no Executive Session is planned after the regular meeting.

APPROVAL OF MINUTES

December 11, 2023 Meeting Minutes

On a motion by Linda Rosenfeld, seconded by Jeff Morgan, the Board approved the minutes from the December 11, 2023 meeting as presented (6-0). Sean Ziller and Norma Cusick abstained.

PUBLIC COMMENTS

None.

Resolution No. 1-2024-1: Authorizing Redevelopment Assistance Capital Program Grant Application for the Pretreatment Plant Upgrade and Expansion

Liesel Gross provided an overview of the Resolution for the grant application under the Redevelopment Assistance Capital Program (RACP) to provide financial assistance for the Industrial Pretreatment Plant Upgrade & Expansion project. The County of Lehigh has \$30,000,000.00 in the RACP program to utilize for infrastructure projects for redevelopment. The grant application is due on January 12, 2024.

On a motion by Linda Rosenfeld, seconded by Sean Ziller, the Board approved Resolution No. 1-2024-1 (8-0).

Procore Project Management / Construction Management Software

Matt Dorner provided an overview of the project that will provide a standardized system to assist the Authority's project managers in managing the Authority's capital improvement projects. A software system will provide tools for improved project data management, communication, financial tracking and schedule management, engineering and operations collaboration, and contractor management. The Authority's current annual capital improvement budget is \$50 million and is expected to expand

over the next 10 years. Procore is highly recommended by utilities, consultants, and large construction contractors to provide the technical solutions needed.

Some Board discussion followed regarding the annual costs and how they will be based. Staff explained that costs will be calculated on project volume and capped, which is typical with this type of software.

On a motion by Ted Lyons, seconded by Marc Grammes, the Board approved the Professional Services Authorization to Procore Software for the initial installation and Year 1 contract in the amount of \$161,171.00 (8-0).

Memorial Road Emergency Water Main Replacement

Chuck Volk explained the Emergency Declaration to expedite installation of the relocated water main that was discovered at the recent site work for a proposed development on Memorial Road in Upper Macungie Township. The 12-inch water main was recently discovered to have been previously installed at a shallower depth than depicted on the as-built drawings. This creates significant risk to the pipeline as the new development will involve heavy machinery driving over the area and a future parking lot being constructed with inadequate cover to protect the water main from damage. The relocated water main would allow for the abandonment of approximately 300 feet of shallow pipe and eliminate the risk of catastrophic damage to the existing water main.

On a motion by Linda Rosenfeld, seconded by Jeff Morgan, the Board approved the Memorial Road Emergency Declaration retroactively to December 5, 2023 in the amount of \$191,291.00 (8-0).

LCA Meter Stations 1 and 2 Upgrades

Phil DePoe explained that due to current metering limitations, the boroughs of Macungie and Alburtis cannot accurately measure their respective sewer flows. This project will work to expand peak flow capacity at the existing meter stations by replacing the Parshall flume and refurbishing Meter Stations 1 and 2. The secondary objective is to refurbish architectural and ventilation aspects of the sites.

On a motion by Jeff Morgan, seconded by Linda Rosenfeld, the Board approved the Capital Project Authorization: Meter Stations #1 and #2 Parshall Flume Replacements in the amount of \$59,000.00 which includes the Professional Services Authorization to Arcadis for design and bid services in the amount of \$49,000.00 (8-0).

MONTHLY PROJECT UPDATES / INFORMATION ITEMS

Ed Klein reviewed the January 2024 report highlighting items for upcoming Board meetings. He also gave an overview of the upcoming resolution to refinance a portion of the bonds issued in 2013 to fund the Allentown Water & Sewer Lease, which is being undertaken at this time due to favorable rates. Mr. Klein also informed the Board that the December Financial report will be provided at a meeting in February due to the books still being open for 2023.

STAFF COMMENTS

None.

SOLICITOR'S COMMENTS

None.

PUBLIC COMMENTS / OTHER COMMENTS

None.

BOARD MEMBER COMMENTS

Jeff Morgan asked how the Authority's water and sewer system operations have been impacted due to the amount of rain received recently. Andrew Moore said there were some issues, although nothing catastrophic, which he will report on at the next Board meeting.

Vice Chairman Amir Famili provided a report from Chairman Brian Nagle that an Executive Subcommittee of the Board will be formed with the intention of facilitating the decision-making process regarding significant upcoming projects in 2024. To start this effort, Amir Famili, Kevin Baker, and Ted Lyons have been appointed to the committee. Liesel Gross added that she appreciates the Board's willingness to provide additional support for the breadth of decision-making that must happen in the upcoming year. She will be reaching out to the committee members for scheduling and will also be adding Staff members for their input and assistance as needed.

EXECUTIVE SESSION

None.

ADJOURNMENT

There being no further business, the Vice Chairman adjourned the meeting at 12:45 p.m.

Linda A. Rosenfeld
Secretary

Lehigh County Authority
Water and Sewer Revenue Bonds, Series of 2024
(City of Allentown Concession)
Projected Composition of the Issue
January 12, 2024

	<u>Refinancing</u>	<u>Capital Projects</u>	<u>Total</u>
Sources			
Gross Bonds Sold	104,985,000.00	55,740,000.00	160,725,000.00
Premium/(Discount)	4,140,789.35	1,792,331.60	5,933,120.95
Authority Contribution (6/1/2024 debt svc pmt)	2,719,156.25		2,719,156.25
Interest During Construction	<u>0.00</u>	<u>2,195,933.54</u>	<u>2,195,933.54</u>
Total	111,844,945.60	59,728,265.14	171,573,210.74
Uses			
Construction Projects		55,000,000.00	55,000,000.00
Cost of the Call	109,147,331.00		109,147,331.00
DSRF Deposit	156,956.85	3,302,950.04	3,459,906.89
Underwriters Discount - estimated	1,574,775.00	836,100.00	2,410,875.00
Municipal Bond Insurance - estimated	511,773.74	287,296.60	799,070.34
Costs of Issuance - estimated	450,000.00	300,000.00	750,000.00
Miscellaneous	<u>4,109.01</u>	<u>1,918.50</u>	<u>6,027.51</u>
Total	111,844,945.60	59,728,265.14	171,573,210.74
Dated/Settlement Date	3/21/2024		

Lehigh County Authority
Proposed Refunding of Certain Refundable Obligations
As of January 12, 2024

Bonds Outstanding		
Water and Sewer Revenue Bonds,		
1	(City of Allentown Concession), Series of 2013 A	
2	Principal Amount of Bonds to be Refunded	107,615,000
	Interest Rate Ranges	5.00% to 5.125%
3	Proposed Amount of Bond Issue	104,985,000
4	Interest Rate/Yield Ranges	3.35% - 4.40%
5	Estimated Issuance Costs	2,024,775.00
6	Estimated Municipal Bond Insurance Costs	511,773.74
7	Total Cost	2,536,548.74
8	Debt Service Reserve Fund Deposit	156,956.85
9	Escrow Cost of Series of 2013A Bonds	109,147,331.00
Annual Debt Service Savings		
10	2024	-530,006.11
11	2025	759,518.70
12	2026	759,518.70
13	2027	759,518.70
14	2028	759,518.70
15	2029	759,518.70
16	2030	759,518.70
17	2031	759,518.70
18	2032	759,518.70
19	2033	759,518.70
20	2034	759,518.70
21	2035	759,518.70
22	2036	759,518.70
23	2037	759,518.70
24	2038	759,518.70
25	2039	2,709,518.70
26	2040	3,252,018.70
27	2041	3,797,518.70
28	2042	4,374,268.70
29	2043	4,959,018.70
30	2044	209,518.70
31	2045	208,337.45
32	2046	205,824.95
33	2047	206,243.70
34	2048	-1,716,343.80
35	2049	-1,719,343.80
36	2050	-1,714,175.04
37	2051	-1,717,356.28
38	2052	-1,718,475.02
39	2053	-1,717,531.26
40	2054	-1,719,525.00
41	2055	-1,712,575.00
42	2056	-1,718,500.00
43	2057	-1,716,662.50
44	2058	-1,722,275.00
45	2059	-1,714,912.50
46	Total	9,417,848.79
47	Present Value of Savings	10,657,115.51
48	Present Value of Savings as a percent of Refundable Principal	9.90%

RESOLUTION No. 1-2024-2

(Duly adopted 22 January, 2024)

AUTHORIZING AND DIRECTING THE ISSUANCE OF ONE OR MORE SERIES OF THE AUTHORITY'S WATER AND SEWER REVENUE BONDS (CITY OF ALLENTOWN CONCESSION) (THE "2024 BONDS") IN THE MAXIMUM AGGREGATE PRINCIPAL AMOUNT OF \$201,500,000; AUTHORIZING AND DIRECTING THE USE OF THE BOND PROCEEDS TO FINANCE (1) THE CURRENT REFUNDING OF ALL OR A PORTION OF THE LEHIGH COUNTY AUTHORITY WATER AND SEWER REVENUE BONDS (CITY OF ALLENTOWN CONCESSION), SERIES 2013A (THE "REFUNDED 2013A BONDS"), (2) CAPITAL EXPENDITURES TO IMPROVE THE ALLENTOWN SEWER UTILITY SYSTEM AND THE ALLENTOWN WATER UTILITY SYSTEM, (3) THE FUNDING OF A DEBT SERVICE RESERVE FUND WITH RESPECT TO THE 2024 BONDS, AND (4) THE PAYMENT OF TRANSACTION COSTS AND EXPENSES IN CONNECTION WITH THE ISSUANCE OF THE 2024 BONDS; SETTING FORTH THE SECURITY FOR THE 2024 BONDS; APPROVING THE TERMS OF, AND AUTHORIZING AND DIRECTING THE EXECUTION, AUTHENTICATION AND DELIVERY OF, THE 2024 BONDS SECURED BY THE TRUST INDENTURE DESCRIBED HEREIN; APPROVING THE FORM OF AND AUTHORIZING AND DIRECTING THE EXECUTION AND DELIVERY OF A 2020-1 SUPPLEMENTAL TRUST INDENTURE AND A THIRD AMENDED AND RESTATED CONSENT AGREEMENT; AUTHORIZING THE SALE OF THE 2024 BONDS PURSUANT TO ONE OR MORE BOND PURCHASE AGREEMENTS TO BE SUBMITTED BY ONE OR MORE UNDERWRITERS OF THE 2024 BONDS AND AUTHORIZING AND DIRECTING UPON CERTAIN CONDITIONS THE EXECUTION AND DELIVERY OF SUCH BOND PURCHASE AGREEMENTS AND THE AWARD OF THE 2024 BONDS TO SUCH UNDERWRITERS; APPROVING THE FORM OF AND AUTHORIZING THE USE AND DISTRIBUTION OF A PRELIMINARY OFFICIAL STATEMENT AND THE PREPARATION AND EXECUTION OF A FINAL OFFICIAL STATEMENT; AUTHORIZING THE EXECUTION AND DELIVERY OF A CONTINUING DISCLOSURE AGREEMENT BY THE AUTHORITY IN CONNECTION WITH THE FOREGOING; AUTHORIZING THE EXECUTION AND DELIVERY OF AN ESCROW DEPOSIT AGREEMENT IN CONNECTION WITH THE CURRENT REFUNDING OF THE REFUNDED 2013A BONDS; AUTHORIZING THE DISPOSITION OF THE BOND PROCEEDS; AUTHORIZING AND DIRECTING THE PAYMENT OF FEES AND EXPENSES; AUTHORIZING AND DIRECTING THE PROPER OFFICERS OF THE AUTHORITY TO DO ALL THINGS NECESSARY TO CARRY OUT THIS RESOLUTION; AND RESCINDING ALL INCONSISTENT RESOLUTIONS.

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

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

WHEREAS, pursuant to the terms and conditions of the Allentown Water and Sewer Utility System Concession and Lease Agreement dated as of May 1, 2013, as amended, including by that Allentown Water and Sewer Utility System Amended and Restated Concession and Lease Agreement dated as of September 1, 2020, and effective as of September 17, 2020 (the “Concession Agreement”), by and between the City and the Authority, the City leased the System (as defined in the Concession Agreement) to the Authority, as concessionaire, and granted to the Authority the right to operate the System in order to provide utility services and collect revenues therefrom and in connection therewith, all in accordance with the provisions of the Concession Agreement; and

WHEREAS, the Authority, in connection with the lease and operation of the System pursuant to the Concession Agreement, has from time to time issued bonds under and pursuant to a Trust Indenture dated as of August 1, 2013, as supplemented by a First Supplemental Trust Indenture dated as of August 1, 2015, a Second Supplemental Trust Indenture dated as of October 1, 2018, a 2020-1 Supplemental Trust Indenture dated as of September 1, 2020, a 2020-2 Supplemental Trust Indenture dated as of September 1, 2020, and a 2023-1 Supplemental Trust Indenture dated as of February 1, 2023, and as amended and restated by that Amended and Restated Trust Indenture between the Authority and Manufacturers and Traders Trust Company (the “Trustee”), dated as of September 1, 2020, and effective as of September 17, 2020 (collectively, the “Existing Indenture”); and

WHEREAS, the Authority has issued its Water and Sewer Revenue Bonds (City of Allentown Concession), Series 2013A (the “2013A Bonds”), pursuant to the Existing Indenture; and

WHEREAS, the 2013A Bonds maturing on or after December 1, 2024 are subject to redemption prior to maturity, at the option of the Authority, in whole or, from time to time, in part, on December 1, 2023, or on any date thereafter, upon payment of 100% of the principal amount thereof, together with accrued interest to the date fixed for redemption; and

WHEREAS, the Authority desires to undertake as a project (the “Project”) under and in accordance with the Act the: (i) current refunding of all or a portion of the Authority’s remaining outstanding 2013A Bonds (the “Refunded 2013A Bonds”); (ii) financing of Capital Expenditures in accordance with the Concession Agreement to improve the System; (ii) funding of a Debt Service Reserve Fund with respect to the 2024 Bonds (as hereinafter defined); and (iii) payment of transaction costs and expenses in connection with the issuance of the 2024 Bonds; and

WHEREAS, in order to finance the Project, the Authority desires to duly authorize the issuance and sale, as Additional Bonds under the Existing Indenture, of one or more series of its

fixed rate, tax-exempt Water and Sewer Revenue Bonds (City of Allentown Concession) in the maximum aggregate principal amount of \$201,500,000 (the “2024 Bonds”), in and

WHEREAS, the Authority has engaged Concord Public Financial Advisors, Inc. as municipal advisor (the “Municipal Advisor”) to develop and present one or more plans of finance comprising the financing plan for the Project and the 2024 Bonds, and the 2024 Bonds may be offered for sale through a negotiated or competitive underwriting structure as shall be determined by the Authority Officials (hereafter defined), with the advice of the Municipal Advisor, the Authority’s counsel, Disclosure Counsel (hereafter defined) and Bond Counsel (hereafter defined), and sold to one or more underwriters (collectively, the “Underwriter”) pursuant to one or more bond purchase proposals or agreements (collectively, the “Purchase Proposal”); and

WHEREAS, the Board of this Authority desires to approve the preparation of a Preliminary Official Statement and Official Statement in connection with the public offering and sale of the 2024 Bonds, in such form and content as shall be determined by the Authority Officials, with the advice of the Municipal Advisor, the Authority’s counsel and Bond Counsel; and

WHEREAS, the Board of this Authority, after due deliberation and investigation, desires to authorize and approve the issuance of the 2024 Bonds and the undertaking of the Project, and to direct the Authority Officials, with the advice of the Municipal Advisor, the Authority’s counsel and Bond Counsel, to accept and approve the Purchase Proposal and to award the 2024 Bonds to the Underwriter at the price and pursuant to the terms set forth therein; and

WHEREAS, the Existing Indenture provides that the Authority, under certain conditions, may issue, from time to time, one of more Series of Additional Bonds for the purposes set forth in Article III thereof, which purposes encompass the financing of the Project; and

WHEREAS, the Existing Indenture provides that the Authority, prior to issuance of Additional Bonds for such purposes, shall enter into a supplement to the Existing Indenture, which supplement shall comply with certain requirements set forth in the Existing Indenture; and

WHEREAS, the 2024 Bonds will be issued under and secured by the Existing Indenture, as amended and supplemented by a 2024-1 Supplemental Trust Indenture (the “2024-1 Supplemental Indenture,” and together with the Existing Indenture, the “Indenture”) from the Authority to the Trustee; and

WHEREAS, in connection with the issuance and sale of the 2024 Bonds, the Authority, the Trustee and the City will enter into a Third Amended and Restated Consent Agreement to be dated and effective as of the date of delivery of the 2024 Bonds (the “Amended and Restated Consent Agreement”), amending and restating in its entirety the Second Amended and Restated Consent Agreement, dated as of September 1, 2020, whereby, *inter alia*, the City shall consent to the Authority’s grant of a first lien on and security interest in the Concessionaire Interest to the Trustee; and

WHEREAS, the Authority, in connection with the current refunding of the Refunded 2013A Bonds, with the advice of the Municipal Advisor, the Authority’s counsel and Bond Counsel, may

enter into an Escrow Deposit Agreement (the “Escrow Agreement”) with a financial institution to be selected by the Authority Officials (the “Escrow Agent”); and

WHEREAS, certain action is required to be taken by the Authority as a prerequisite to the public offering of the 2024 Bonds, the execution and delivery of the Purchase Proposal in connection therewith and the issuance of the 2024 Bonds.

NOW, THEREFORE, the Board of the Lehigh County Authority resolves as follows:

Section 1. Authorizing the Project. The Project as heretofore described is hereby authorized and directed to be undertaken.

Section 2. Authorizing Issuance of 2024 Bonds; Terms of 2024 Bonds; Execution, Authentication and Delivery Thereof. For the purpose of providing funds to finance the Project, the Authority hereby authorizes and directs (i) the issuance of the 2024 Bonds; (ii) the execution of the 2024-1 Supplemental Indenture; and (iii) the execution of the Amended and Restated Consent Agreement, all pursuant to the provisions of the Act and subject to the conditions hereinafter set forth.

The 2024 Bonds initially shall be dated as of such date, shall bear interest, mature and be subject to redemption, all as set forth in the Purchase Proposal and the Indenture, subject to the conditions herein set forth. The 2024 Bonds may be in the form of a single, fully registered bond for each maturity of the 2024 Bonds, in denominations equal to the principal amount of the 2024 Bonds maturing on each maturity date (unless and until replacement certificates are issued in accordance with the terms of the Indenture), and shall be registered in the name of The Depository Trust Company, or its nominee, Cede & Co. Payment of the principal or redemption price of, and interest on, the 2024 Bonds shall be made to the registered owner of each Bond in the manner and at the times set forth in the 2024 Bonds and in the Indenture.

The 2024 Bonds shall be executed by the manual or facsimile signature of the Chair, Vice Chair of the Board, or the Chief Executive Officer or Chief Financial Officer of the Authority (collectively and individually, the “Authority Officials”) and shall have the corporate seal or a facsimile thereof impressed thereon, duly attested by the manual or facsimile signature of the Secretary or Assistant Secretary, Solicitor of the Authority, or Human Resources Manager of the Authority (collectively and individually, the “Attesting Officials”) and such officers are hereby authorized and directed to execute, or cause to be executed, the 2024 Bonds in such manner.

The Authority Officials are further authorized and directed to deliver the 2024 Bonds to the Trustee for authentication and delivery, and the Trustee is hereby requested, authorized and directed to authenticate and deliver the same to, or upon the order of, the Authority Officials in accordance with the provisions of the Indenture.

Payment of the principal of the 2024 Bonds shall be made to the registered owner thereof, when due, in lawful money of the United States of America at the designated office of the Trustee. Interest on the 2024 Bonds is to be paid in accordance with the Indenture to the registered owner of each Bond as his or her name appears on the registration books of the Authority kept for that purpose by the Trustee.

Section 3. Security for 2024 Bonds; Limited Obligations; Confirmation of Trustee. The 2024 Bonds shall be secured under the Indenture by the Trust Estate defined therein from the Authority to the Trustee, whose appointment as Trustee under the Indenture is hereby ratified and confirmed. Under the terms of the Indenture the Concessionaire Interest (as therein defined) is assigned, transferred and pledged to the Trustee for, *inter alia*, the payment of the principal or redemption price of and interest on the 2024 Bonds and such assignment, transfer and pledge is hereby confirmed.

The 2024 Bonds shall not in any manner pledge the credit or taxing power of the Commonwealth of Pennsylvania, County of Lehigh, or of any political subdivision thereof; nor shall they be deemed to be obligations of the Commonwealth of Pennsylvania, the County of Lehigh, or any political subdivision thereof; nor shall the Commonwealth of Pennsylvania, the County of Lehigh, or any political subdivision thereof be liable for the payment of the principal of, and interest on, such obligations but they shall be secured upon and be payable from the sources referred to above and from such other moneys as may be available for such purpose.

Section 4. Approval of 2024-1 Supplemental Indenture. The 2024-1 Supplemental Indenture, in such form and subject to such terms and conditions as shall be acceptable to the Authority Officials, with the advice of counsel to the Authority and McNees Wallace & Nurick LLC, bond counsel for the Authority ("Bond Counsel"), as well as the form, terms and conditions of the 2024 Bonds secured thereby, are hereby approved. The Authority Officials are hereby authorized and directed to execute the 2024-1 Supplemental Indenture in such form on behalf of the Authority, with the advice of counsel to the Authority and Bond Counsel, subject to such changes and modifications, if any, as may be approved by such Authority Officials, the execution of the 2024-1 Supplemental Indenture to be conclusive evidence of such approval, and the Attesting Officials of the Authority are hereby authorized and directed to cause the corporate seal of the Authority to be affixed thereto and to attest the same. The Authority Officials are further authorized and directed to acknowledge the same on behalf of the Authority and to deliver the 2024-1 Supplemental Indenture to the Trustee.

Section 5. Approval of Amended and Restated Consent Agreement. The Amended and Restated Consent Agreement, in such form and subject to such terms and conditions as shall be acceptable to the Authority Officials, with the advice of counsel to the Authority and Bond Counsel, is hereby approved. The Authority Officials are hereby authorized and directed to execute the Amended and Restated Consent Agreement in such form on behalf of the Authority, with the advice of counsel to the Authority and Bond Counsel, subject to such changes and modifications, if any, as may be approved by such Authority Officials, the execution of the Amended and Restated Consent Agreement to be conclusive evidence of such approval, and the Attesting Officials are hereby authorized and directed to cause the corporate seal of the Authority to be affixed thereto and to attest the same.

Section 6. Approval, Acceptance and Execution of Purchase Proposal. The Authority Officials, upon receipt of favorable advice from the Authority's counsel and Bond Counsel with respect thereto, are hereby authorized and directed to accept, approve, execute and deliver the Purchase Proposal for the 2024 Bonds as presented to the Authority by the Underwriter. Provided, however, that the Authority shall achieve interest savings equal to at least three percent (3.00%) of the principal amount of the Refunded 2013A Bonds.

The Authority further authorizes and directs that (i) the 2024 Bonds be awarded to the Underwriter upon the terms and conditions set forth in the Purchase Proposal subject to the execution thereof in accordance with the provisions of this Section 6, and (ii) the 2024 Bonds shall be delivered to the Underwriter after execution and authentication thereof, upon receipt of the full purchase price plus accrued interest and the performance of all other conditions of the Purchase Proposal as fully executed.

The Authority Officials are hereby authorized and directed to execute the Purchase Proposal in such form as the Authority's counsel and Bond Counsel may advise and the officer executing the Purchase Proposal may approve, such approval to be conclusively evidenced by the execution thereof, and to deliver a signed copy thereof to the Underwriter.

Section 7. Approval of Preliminary Official Statement, Official Statement and Use and Distribution Thereof. The Authority hereby authorizes the preparation of one or more Preliminary Official Statements for use in marketing the 2024 Bonds and authorizes the Authority Officials to approve the form of such Preliminary Official Statement(s) and final Official Statement(s), with such additions, insertions and changes as shall be necessary or appropriate to reflect the final terms and provisions of the 2024 Bonds, the Purchase Proposal and this Resolution. An Authority Official shall affix his or her signature to such Official Statement(s), as such officer, and such execution of the Official Statement(s) shall constitute conclusive evidence of the approval of the Official Statement(s) by the Authority. The Authority hereby further approves the distribution and use of the Official Statement(s) as so prepared and executed in connection with the sale of the Bonds.

The Authority covenants to provide such continuing disclosure, at such times, in such manner and of such nature as is described in the Official Statement(s) and to execute and deliver such agreements and certificates with respect to continuing disclosure as are described in the Official Statement(s). Any continuing disclosure filing under this Resolution may be made solely by transmitting such filing through the EMMA System of the Municipal Securities Rulemaking Board, at www.emma.msrb.org.

Section 8. Disposition of Bond Proceeds. The Authority, upon receipt of the proceeds of the 2024 Bonds, shall deposit the same with the Trustee to be held and disbursed all as provided in the 2024-1 Supplemental Indenture.

Section 9. Refunding Project; Notices of Redemption; Approval of Escrow Agreement. Subject to completion of delivery of, and settlement for, the 2024 Bonds, the Authority, hereby authorizes and directs the current refunding and redemption of the Refunded 2013A Bonds as contemplated herein and subject to the Existing Indenture. In connection therewith, the Authority Officials are authorized and directed to execute and deliver such notices, directions or other instruments as may be necessary or appropriate in connection with the refunding and redemption of the Refunded 2013A Bonds.

The Trustee, in the name, place and stead of the Authority, shall give such notice or notices of redemption, as may be required by the terms of the Existing Indenture. Such notice or notices shall be in such form as acceptable to the Authority's counsel and Bond Counsel. The Authority hereby agrees to provide for payment of the expenses of such mailings, and gives and grants to the Trustee full authority to do and perform all and every act and thing whatsoever requisite and

necessary to effectuate such purposes as the Authority might do on its own behalf, and hereby ratifies and confirms all that said agent shall do or cause to be done by virtue thereof.

Upon the favorable recommendation by the Municipal Advisor, the Authority's counsel and Bond Counsel, the Authority Officials are hereby authorized and directed to execute and deliver to the Escrow Agent the Escrow Agreement, in such form and subject to such terms and conditions as shall be acceptable to the Authority Officials, with the advice of the Authority's counsel and Bond Counsel, subject to such changes and modifications, if any, as may be approved by such Authority Officials, the execution of the Escrow Agreement to be conclusive evidence of such approval, and the Attesting Officials are hereby authorized and directed to cause the corporate seal of the Authority to be affixed thereto and to attest the same.

Section 10. Payment of Fees and Expenses. The proper officers of the Authority are hereby authorized and directed to pay or cause to be paid all fees and expenses to the extent required in the Purchase Proposal in connection with the issuance and sale of the 2024 Bonds at the time of delivery of the 2024 Bonds to the Underwriter.

Section 11. Appointment of Disclosure Counsel. The Authority hereby ratifies and confirms the appointment of Stevens & Lee, P.C. as Disclosure Counsel for the 2024 Bonds.

Section 12. Liability of the Authority. No covenant, stipulation, obligation or agreement contained in this Resolution, the 2024-1 Supplemental Indenture, the Amended and Restated Consent Agreement, the Concession Amendment, the Escrow Agreement, the 2024 Bonds or other related and appropriate documents shall be deemed to be a covenant, stipulation, obligation or agreement of any past, present or future member, officer, agent or employee of the Authority in his or her individual capacity and neither the members of the Authority nor any officer executing the 2024 Bonds shall be liable personally on the 2024 Bonds, or be subject to any personal liability or accountability by reason of the issuance of the 2024 Bonds.

Section 13. Authorizing Incidental Actions; Municipal Bond Insurance. The proper officers of the Authority are hereby authorized, directed and empowered on behalf of the Authority to execute any and all papers and documents, including the Authority's Continuing Disclosure Agreement described in the Official Statement under the caption "Continuing Disclosure Undertaking", enabling the Underwriter to meet the requirements imposed upon it by SEC Rule 15c2-12(b)(5), and the related certificate described in the Purchase Proposal; and to do or cause to be done any and all acts and things necessary or proper for the carrying out of the provisions of this Resolution, the 2024-1 Supplemental Indenture, the Amended and Restated Consent Agreement, the Escrow Agreement, and in the issuance, sale and delivery to the Underwriter of the 2024 Bonds, including if applicable the purchase of municipal bond insurance and the payment of the premiums therefor from the proceeds of the 2024 Bonds. Further, the proper officers are hereby authorized, directed and empowered on behalf of the Authority to execute any and all agreements, papers and documents necessary or proper in connection with the application for, and issuance of, municipal bond insurance.

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Section 14. Rescinding Inconsistent Resolutions. All resolutions or parts of resolutions inconsistent herewith be and the same hereby are rescinded, canceled and annulled.

Section 15. Effective Date. This Resolution shall take effect immediately.

NOW THEREFORE, BE IT RESOLVED that the Lehigh County Authority Board hereby approves Resolution No. 1-2024-2.

On motion of _____, seconded by _____, this resolution was adopted the 22nd day of January 2024.

Tally of Votes: Yeas _____ Nays _____

✍

I, Kevin C. Reid, of the law firm of King, Spry, Herman, Freund & Faul, LLC, Solicitor of 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 22 January 2024, after notice thereof had been duly given as required by law, at which meeting a quorum was present and voting and which resolution No. 1-2024-2 is now in full force and effect on the date of this certification.

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

Attest:

_____ Lisa J. Miller Executive Administrative Support Specialist	_____ Date
--	---------------

MEMORANDUM

Date: January 22, 2024

To: Lehigh County Authority Board of Directors
From: Amy Rohrbach, Project Manager
Subject: Allentown Division – Water Filtration Plant Emergency Power Design and Bidding Phase Services

MOTIONS / APPROVALS REQUESTED:

No.	Item	Amount
1	Capital Project Authorization – Design and Bidding Phase Services	\$67,212
2	Professional Services Authorization – Keystone Engineering Group (1)	\$57,212

(1) Included in the Capital Project Authorization

PROJECT BACKGROUND

As part of our efforts to increase power reliability at the Water Filtration Plant (WFP), upgrades are needed to the existing electrical power feeds. Currently, the WFP is fed by dual electrical power feeds from PPL; however, both services originate from the same PPL substation known as the Central Allentown Substation. This is not a recommended power distribution scenario because it is possible that a single point of failure could exist. This in fact did happen in November 2022 when there was a fire at the substation and in October 2011 due to a surprise snowstorm.

LCA retained Keystone Engineering Group (Keystone) to perform an Emergency Power Feasibility Study in 2023. Several options were identified in the Study, including the recommended alternative of adding a new PPL service from a different substation to replace one of the existing services. This option is to add a new PPL service from the Mack Substation which is located south of the WFP and approximately 2 miles away from the Central Allentown Substation. This is the most cost effective of the four options provided and provides the level of redundancy needed to ensure reliable power at the WFP.

With an option selected, the next step is detailed design and bidding services. Since Keystone performed the study and has the background information necessary to advance to detailed design, it is preferred that Keystone move the project forward to construction. Keystone has provided a proposal for the detailed design and bidding phase services.

FINANCIAL

This Project will be funded by the LCA Allentown Division.

THIS APPROVAL – DESIGN AND BIDDING PHASE SERVICES

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

Professional Services
1. Attend virtual meetings with LCA staff (kick-off and design submission)
2. Site visits as part of design phase services
3. Preparation of contract documents including design drawings & technical specifications signed and sealed by a PA Professional Engineer.
4. Preparation of Construction cost opinion
5. Management of bidding documents on the PennBID platform
6. Bidding services including answering bidders' questions and preparing any necessary addenda
7. Preparation of agenda and chair of pre-bid meeting
8. Review of bids and preparation of recommendation to award to LCA

PROJECT SCHEDULE

Assuming approval of the Design and Bidding Phase Services at the January 22, 2024 Board meeting, it is anticipated that the design phase work will be completed in the 3rd quarter of 2024, at which time LCA will advertise for construction bids.

FUTURE AUTHORIZATIONS – FINAL ENGINEERING DESIGN & BIDDING PHASE

Following Design and Bidding Phase, Capital Project Authorization for Construction Phase will be presented to the Board for approval.



December 1, 2023

Amy Rohrbach
Lehigh County Authority
1053 Spruce Road Po box 3348
Allentown, PA 18106

RE: Proposal for Electrical Engineering Services
Lehigh County Authority
LCA WFP Emergency Power Design
Keystone Proposal No. 2023-0433

Dear Amy,

Keystone Engineering Group, Inc. (Keystone) appreciates the opportunity to present this proposal to Lehigh County Authority (LCA) for the above referenced project.

1.0 INTRODUCTION

LCA is proposing to increase the reliability of the Water Filter Plant by adding a new PPL service, from the South, and replace one of the existing services, located in Allentown, PA. This proposal is for Keystone to work directly for LCA to provide electrical engineering services for the project.

2.0 SCOPE OF WORK

2.1 Detailed Design

Keystone will provide detailed design services for the electrical portions of the project consisting of drawings and specifications for public bidding. Keystone's drawings will be prepared using the latest version of AutoCAD and the specifications will be in the CSI Master Spec format on Microsoft Word.

The scope of Keystone's design services will be in accordance with the preliminary design report submitted to LCA in October 2023.

We understand the project scope to be:

- Coordinate with PPL to establish a new utility feed from an alternate substation
- Modify the existing medium voltage switchgear to accept the new feed
- Review potential solutions to incorporate all three utility feeds

The scope of our design services will include the following:

- Contract Documents
- Design Drawings
- Technical Specifications
- Construction Cost Opinion

- Sign and Seal Keystone's design by PA Professional Engineer
- Two site visits as part of the design phase
- Two virtual meetings as part of the design phase

The following drawings are anticipated for this project:

1. Project Title Sheet
2. Electrical Legend Sheet
3. Electrical Site Plan
4. Switchgear Power Plan
5. Switchgear Elevation
6. Single Line Diagram
7. Interconnection Diagram
8. Electrical Details
9. Electrical Schedules

In addition to Division 00 and Division 01, the following technical specification sections are anticipated for this project:

- 260001 Basic Electrical Materials and Methods
- 260010 Electrical Demolition
- 260513 Medium-Voltage Cables
- 260519 Low-Voltage Electrical Power Conductors and Cables
- 260523 Control Voltage Electrical Power Cables
- 260526 Grounding and Bonding for Electrical Systems
- 260529 Hangers and Supports for Electrical Systems
- 260533 Raceways and Boxes for Electrical Systems
- 260553 Identification for Electrical Systems

2.2 Bidding Phase Services

Keystone will provide the following services during the bidding phase of the project for the electrical work:

- Document upload to PennBID
- Preparation of agenda and chair the Pre-Bid Meeting
- Answering questions during bidding
- Develop Addenda as necessary
- Review Bidder proposal and provide recommendation of Award to LCA

2.3 Construction Phase Services

No construction phase services are included in this proposal; however, Keystone can provide technical assistance during the construction and startup phases of the project, including attending meetings, shop drawing reviews, answering RFIs and site inspections on a T&M or negotiated lump sum price basis.

2.4 Proposal Assumptions

For pricing our services, we have made the following assumptions:

- Does not include an emergency generator design.
- The existing electrical service and switchgear at the WFP is adequate.
- The existing switchgear will be utilized for the new feeder.
- No additional transfer equipment is included in the base design.
- The work described in this proposal is bid as one contract.
- SCADA system design and Programming are not included.
- Mechanical design is not included.
- Plumbing Design is not included.
- All background layout drawings will be provided in AutoCAD by LCA.
- Electronic files of the drawings and specifications will be provided to LCA at the completion of appropriate stages of the design.
- A final hard copy set of sealed drawings will be provided to LCA for bidding.
- Each site visit will include travel time for two employees and up to four hours on site.
- Each virtual meeting will include two employees and up to two hours via teleconference.
- LCA will be responsible for permit application. Keystone's involvement will be limited to answering electrical questions and revising drawings, as required, to obtain electrical building permits.

3.0 BUSINESS TERMS

3.1 Compensation

We propose to provide the services indicated above for the following T&M Not To Exceed amounts:

2.1	Detailed Design	\$ 48,525
2.2	Bidding Phase Services	\$ 8,687
	Total	\$ 57,212

These fees are firm and cannot be changed unless both parties agree to changes in the scope. This proposal is valid for 90 days. Invoicing will be done on a monthly T&M basis. Payment to Keystone shall not be contingent upon payment to LCA by others.

Additional services beyond the scope of this proposal can be provided based on negotiated lump sum amounts or on a per diem basis.

3.2 Schedule

Design Phase Schedule

The schematic design phase will take four weeks from receipt of background drawings and equipment information. After discussions with LCA and PPL, the design development phase will take four weeks to complete for submission. The construction document package will take four weeks to complete upon receipt of LCA comments. We assume LCA will take two weeks for comments for each submission phase.

Bidding Phase Schedule

We understand the bidding process to be four weeks. We will coordinate our schedule closely with the bidding schedule proposed by LCA in order to coordinate with the Board's meeting schedule.

3.3 Business Conditions

Keystone will enter into a Professional Services Agreement with LCA for this project.

If you should have any questions concerning this proposal, please feel free to contact us. Thank you for the opportunity to submit this proposal.

Respectfully,



Adam C. Menko, P.E., CESP
Engineering Manager

CAPITAL PROJECT AUTHORIZATION

PROJECT NO.:	AD-W-24	BUDGET FUND:	Allentown Div\W\Capital
PROJECT TITLE:	Allentown Division – Water Filtration Plant Emergency Power Design		PROJECT TYPE:
THIS AUTHORIZATION:	\$67,212	<input type="checkbox"/>	Construction
TO DATE (W/ ABOVE)	\$99,712	<input checked="" type="checkbox"/>	Engineering Design
		<input type="checkbox"/>	Equipment Purchase
		<input type="checkbox"/>	Amendment No. 1

DESCRIPTION AND BENEFITS:

The purpose of this project is to improve electrical power reliability to the Water Filtration Plant (WFP). Currently, the plant has dual electrical power feeds, but they originate from the same PPL substation. This is not a recommended power distribution scenario and a recent Power Study, performed by Keystone Engineering Group, recommended a new feed from a separate PPL substation. Keystone Engineering Group will provide detailed design and bidding phase services for the project.

AUTHORIZATION STATUS:

Prior Authorizations	
Power Study Phase – Keystone Engineering Group	\$32,500
Requested This Authorization – Design and Bidding Phase	
Design and Bidding Phase Services – Keystone Engineering Group	\$57,212
Staff	\$5,000
Contingencies	\$5,000
Total This Authorization	\$67,212

Future Authorizations	
Construction Phase	

Total Estimated Project	\$700,000
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REVIEW AND APPROVALS:

<u>Amy Rohrbach</u> Project Manager	<u>1/22/2024</u> 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: KEYSTONE ENGINEERING GROUP
590 Lancaster Ave, Suite 200
Frazer, PA 19355

Date: January 22, 2024

Requested By: Amy Rohrbach

Approvals

Department Head: _____

Chief Executive

Officer: _____

Allentown Division – Water Filtration Plant Emergency Power Design

Keystone Engineering Group will perform the following design and bidding services for the Water Filtration Plant Emergency Power Design Project. This design includes adding a new electrical power feed from PPL's Mack Substation as recommended in the Emergency Power Feasibility Study dated October 2023. The following professional services are included:

Professional Services ⁽¹⁾
1. Attend virtual meetings with LCA staff (kick-off and design submission)
2. Site visits as part of design phase services
3. Preparation of contract documents including design drawings & technical specifications signed and sealed by a PA Professional Engineer.
4. Preparation of Construction cost opinion
5. Management of bidding documents on the PennBID platform
6. Bidding services, including answering bidders' questions, and preparing any necessary addenda
7. Preparation of agenda and chair of pre-bid meeting
8. Review of bids and preparation of recommendation to award to LCA

(1) Per attached 12/1/2023 Keystone Engineering Group proposal letter

Preliminary Design Phase:

This Authorizations: \$57,212

Time Table and Completion Deadline: As necessary to complete the project as outlined in the proposal.

(For Authority Use Only)

Authorization Completion:

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

MEMORANDUM

Date: January 22, 2024

To: Lehigh County Authority Board of Directors
From: Amy B. Rohrbach, Project Manager
Subject: Allentown Division - Kline's Island WWTP Septage Receiving and Vacuum Truck Unloading Area Modifications

MOTIONS / APPROVALS REQUESTED:

No.	Item	Amount
1	Capital Project Authorization – Construction Phase	\$442,027
2 ⁽¹⁾	Professional Services Authorization – Construction Engineering and Administration – D'Huy Engineering, Inc.	\$54,700
3 ⁽¹⁾	General Construction Contract Award – PSI Pumping Solutions, Inc.	\$362,327

(1) Included in the Capital Project Authorization

PROJECT OVERVIEW

The Kline's Island Wastewater Treatment Plant (WWTP) currently receives waste from septage haulers on a regular basis averaging 20 loads a week. The septage unloading location is currently at a manhole located at the bottom of the access roadway ramp at the entrance to the plant. The WWTP also has a vacuum truck unloading facility, located near the entrance to the plant to the left of and below the access roadway ramp, in which vacuum trucks can discharge for dewatering prior to the solids being removed and properly disposed of. These areas are used on a regular basis but are inadequate for current operations.

The septage haulers must park their trucks at the main driveway entrance to unload into a manhole resulting in traffic obstruction issues as well as cleanup duties for plant staff due to the occasional spills. The proposed Septage Receiving station will be a dedicated area with connections for truck hoses, and any potential spillage will be collected in the proposed trench drain and piped back to the plant influent thus eliminating traffic flow issues and possible maintenance duties from spills.

The proposed vacuum truck unloading improvements will also improve site safety and traffic flow as the unloading area will be expanded to allow trucks to back in with enough area to safely unload and dewater without fluids flowing out into the driveway area causing cleanup issues. Both upgrades will allow for more efficient handling of the septage received as well as the vacuum trucks that unload at the WWTP. There will also be ability to expand in the future if LCA installs an automated user interface at the unloading site.

FINANCIAL

The project will be funded from the Allentown Division in the KIWWTP Annual Improvements capital budget category.

THIS APPROVAL - CONSTRUCTION PHASE

The contract time for this work is 150 days from Notice to Proceed to substantial completion. Assuming construction phase authorization at the 1/22/2024 Board meeting, construction is anticipated to conclude in August 2024.

BIDDING SUMMARY

The project was advertised for bid on November 17, 2023 and a mandatory pre-bid meeting was held on November 28, 2023. Bids were received and publicly opened, via PennBid, on January 4, 2024. The results of which are as follows:

Bidder	Base Bid	Bid Alt. 1	Base + Bid Alt. 1
PSI Pumping Solutions, Inc.	\$331,269	\$31,058	\$362,327
Blooming Glen	\$450,027	\$81,973	\$532,000
LB Industries, Inc.	\$543,752	\$98,617	\$642,369
Allan Myers	\$590,305	\$60,000	\$650,305

Bid Alternate No. 1 consists of additional paving and drainage improvements in the vicinity of the proposed septage receiving station. PSI Pumping Solutions is the low bidder on both the Base Bid and Bid Alternate, at a total bid-plus-alternate amount of \$362,327. The engineer's estimate for this project is \$447,000.

LCA's design consultant on this project, D'Huy Engineering, Inc., and LCA staff have reviewed the references and qualifications and experience statement provided by PSI Pumping Solutions, Inc., and have determined that the contractor is qualified to complete this project. Based on the above, LCA staff recommend the award of Construction Contract to the lowest bidder, PSI Pumping Solutions, Inc., subject to the receipt of the necessary Performance Bonds, Insurance and other required documentation.

PROFESSIONAL SERVICES

Construction Administration Services

D'Huy Engineering, 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 for and attend job conference monthly meetings
4. Process and review shop drawings and RFIs
5. Process contractor applications for payment
6. Process any necessary change orders
7. Provide weekly construction observation (PT)
8. Perform project closeout activities, including punch list development and final inspection

PROJECT SCHEDULE

Assuming approval of construction phase at the January 22, 2024 Board meeting, contracts will be executed by early February 2024. Major construction expected to commence in late spring 2024 and final completion is anticipated in August 2024.

FUTURE AUTHORIZATIONS

No future authorizations are anticipated for this project.



January 8, 2024

Ms. Amy Rohrbach
Project Manager
Lehigh County Authority (LCA)
1053 Spruce Road
Wescosville, PA 18106

Subject: LCA Klines Island Wastewater Treatment Plant (KIWWTP)
Septage Receiving and Vacuum Truck Unloading Area Modifications
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 the LCA for the above-referenced project. Below is a project description and summary detailing the proposed services:

PROJECT DESCRIPTION

The work consists of construction administration services during the modifications to the existing vacuum truck pad unloading area and construction of a new septage receiving area at the KIWWTP. This work is expected to be ready for final payment within 180 days (6 months) from Notice to Proceed (NTP). It is anticipated that NTP will be issued in February 2024, with onsite construction starting in March and continuing through August 2024 (20 weeks).

SCOPE OF SERVICES

D'Huy Engineering Inc. will provide the following construction administration services:

1. Facilitate completion of the Agreement and other contractual elements (4 hours).
2. Prepare for, attend and facilitate a pre-construction conference (8 hours).
3. Prepare for and attend 5 job conference monthly meetings (24 hours).
4. Process and review and shop drawings and RFIs. (80 hours).
5. Process applications for payment (10 hours).
6. Process any necessary change orders (24 hours).
7. Provide weekly construction observation. Our estimate is 15 hours per week for 20 weeks. (300 hours).

8. Perform project closeout activities, including punch list development and final inspection (24 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 \$54,700. In the event additional construction administration services are necessary, DEI 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.

Respectfully submitted,

D'HUY ENGINEERING, INC.



Craig W. Murray, PE
Principal

C: Chuck Volk, LCA
Bryan Geissel, LCA
Gary Huntington, DEI



**SEPTAGE RECEIVING AND VACUUM TRUCK UNLOADING AREA MODIFICATIONS
CONSTRUCTION ADMINISTRATION SERVICES FEE BREAKDOWN**

TOTAL PROJECT HOURS AND FEE									
Task		Principal & QA/QC	Senior Project Manager	PE	Engineer in Training	Field Inspector II	Admin	Total Labor Hours	Total Task Labor Fee
1	Meetings and Project Management	4	8		8	12	4	36	\$ 4,904
2	Shop Drawings			12	48			60	\$ 6,780
3	RFIs		2	4	14			20	\$ 2,404
4	Pay Applications					10		10	\$ 1,300
5	Change Orders		8		16			24	\$ 2,976
6	Construction Observation				220	80		300	\$ 32,400
7	Punch List and Closeout		4		8	12		24	\$ 3,048
TOTAL HOURS		4	22	16	314	114	4	470	53,812
Hourly Rate		\$ 225	\$ 172	\$ 165	\$ 100	\$ 130	\$ 67	-	-
Total Labor Category Fee		\$ 900	\$ 3,784	\$ 2,640	\$ 31,400	\$ 14,820	\$ 268	-	\$ 53,544
Reimbursible Expenses									\$ 1,156
TOTAL PROJECT FEE									\$ 54,700

CAPITAL PROJECT AUTHORIZATION

PROJECT NO.:	AD-S-A	BUDGET FUND:	Allentown Div\WW\Capital
PROJECT TITLE:	Allentown Division – KIWWTP Septage Receiving and Vacuum Truck Unloading Area Modifications	PROJECT TYPE:	<input checked="" type="checkbox"/> Construction <input type="checkbox"/> Engineering Study <input type="checkbox"/> Equipment Purchase <input type="checkbox"/> Amendment No. 1
THIS AUTHORIZATION:	\$442,027		
TO DATE (W/ ABOVE)	\$498,327		

DESCRIPTION AND BENEFITS:

The Kline's Island Wastewater Treatment Plant's (WWTP) currently receives waste from septage haulers on a regular basis averaging 20 loads a week. The WWTP also has a vacuum truck unloading facility in which vacuum trucks can discharge for dewatering prior to the solids being removed and properly disposed of. These areas are used on a regular basis but are inadequate for current operations. The septage haulers must park their trucks at the main driveway entrance to unload into a manhole resulting in potential traffic flow issues as well as cleanup duties for plant staff due to the occasional spills. The proposed Septage Receiving station will be a dedicated area with connections for truck hoses and any potential spillage will be collected in the proposed trench drain and piped back to the plant influent thus eliminating traffic flow issues and possible maintenance duties from spills. The proposed vacuum truck unloading improvements will also improve site safety and traffic flow as the unloading area will be expanded to allow trucks to back in with enough area to safely unload and dewater without fluids flowing out into the driveway area causing cleanup issues. Both upgrades will allow for more efficient handling of the septage received as well as the vacuum trucks that unload at the WWTP. There will also be ability to expand in the future if LCA installs an automated user interface at the unloading site which would eliminate the need for drivers to check in with the lab.

Notice to Proceed shall be issued in February 2024 and substantial completion is expected in August 2024.

AUTHORIZATION STATUS:

Prior Authorizations	
<i>Design Phase – D'Huy Engineering, Inc.</i>	<i>\$56,300</i>
Requested This Authorization – Construction Phase	
General Contract: PSI Pumping Solutions, Inc.	\$362,327
Construction Administration Services: D'Huy Engineering, Inc.	\$54,700
Staff	\$10,000
Contingencies	\$15,000
Total This Authorization	\$442,027

REVIEW AND APPROVALS:

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



Lehigh County Authority

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

PROFESSIONAL SERVICES AUTHORIZATION

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

Date: January 22, 2024

Requested By: Amy Rohrbach

Approvals

Department Head: _____

Chief Executive

Officer: _____

Allentown Division – KIWWTP Septage Receiving and Vacuum Truck Unloading Area Modifications – Construction Administration Services

D'Huy Engineering, Inc. will perform construction administration services for the KIWWTP Septage Receiving and Vacuum Truck Unloading Area Modifications Project. The following professional services are included in this authorization:

Professional Services ⁽¹⁾
1. Facilitate completion of agreement and contract elements
2. Prepare for, attend, and facilitate pre-construction conference
3. Prepare for and attend job conference monthly meetings
4. Process and review shop drawings and RFIs
5. Process contractor applications for payment
6. Process any necessary change orders
7. Provide weekly construction observation (PT)
8. Perform project closeout activities, including punch list development and final inspection

(1) Reference the D'Huy proposal dated January 8, 2024, for additional information.

Previous Authorization – Design & Bidding Phase: \$56,300

Cost Estimate (not to be exceeded without further authorization): \$54,700

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

(For Authority Use Only)

Authorization Completion:

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

Lehigh County Authority
System Operations Review - December 2023
Presented: January 22, 2024

		<u>Dec-23</u>	<u>2023</u> <u>Totals***</u>	<u>2022 Totals</u>	<u>2021 Totals</u>
Recordable Safety Incidents*	Total LCA	0	12	7	8
Non-Recordable Safety Incidents	Total LCA	2	21		
Incident Types **	Injuries	1	19		
	Property Damage	2	12		
	Near Miss	0	2		

***Numbers adjusted to match current tracking methodology

* Recordable Safety Incidents are those that result in death, days away from work, restricted duty, medical treatment beyond first aid.

** Safety incidents may be categorized in more than one incident type.

<u>Year To Date Safety Incidents</u>		<u>Root Cause Analysis Completed</u>	<u>Corrective Actions Identified</u>	<u>Corrective Actions Completed</u>
		25	24	14
<u>Current Month Incidents</u>				
<u>Description</u>	<u>Date</u>	<u>Type</u>	<u>Root Cause(s)</u>	<u>Corrective Action(s)</u>
<u>Incident # 61</u> - Employee was backing his vehicle up and backed into a pole	12/29/2023	Vehicle Incident	Obstructed view	Use of a spotter in obstructed view scenarios
<u>Incident # 62</u> - While loading a dump truck employee hit and broke the dump truck cover with the loader.	12/20/2023	Vehicle Incident	Obstructed view	Use of a spotter in obstructed view scenarios
<u>Incident # 63</u> - While running a hammer drill employees hand slipped causing bruising.	12/13/2023	Injury _ Bruising	Wet working conditions	Use of proper anti slip gloves in appropriate situations

Lehigh County Authority
System Operations Review - December 2023
Presented: January 22, 2024

Lehigh County Authority
System Operations Review - December 2023
Presented: January 22, 2024

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<u>Critical Activities</u>	<u>System</u>	<u>Description</u>	<u>Dec-23</u>	<u>2023 Totals</u>	<u>2022 Totals</u>	<u>Permit</u>
			<u>Daily Avg (MGD)</u>	<u>Daily Avg (MGD)</u>	<u>Daily Avg (MGD)</u>	<u>Daily Max (MGD)</u>
Water Production	Allentown	Total	21.16	22.52	22.47	39.0
		Schantz Spring	6.40	6.93	6.90	9.0
		Crystal Spring	3.88	3.89	3.87	4.0
		Little Lehigh Creek	10.80	11.66	11.68	30.0
		Lehigh River	0.08	0.04	0.03	28.0
	Central Lehigh	Total	10.71	11.27	11.30	19.04 MGD Avg
		Feed from Allentown	6.74	7.28	7.20	7.0 MGD Avg 10.5 MGD Max
		Well Production (CLD)	3.97	3.98	4.10	8.54 MGD Avg
		Sum of all (12) other Suburban Water Systems	0.13	0.13	0.14	1.71 Sum of all wells
Wastewater Treatment		Kline's Island	38.18	32.24	32.61	40.0
		Pretreatment Plant	4.71	4.78	5.06	5.75 (design capacity)
		Sum of all (5) other Suburban WW Systems	0.29	0.19	0.20	0.36
			<u>Dec-23</u>	<u>2023 Totals</u>	<u>2022 Totals</u>	<u>2021 Totals</u>
Precipitation Totals (inches)			8.62	46.38	46.47	44.67
Compliance Reports Submitted to Allentown			17	280	277	280
Notices of Violation (NOVs)		(Allentown + Suburban)	1	3	4	3
Sanitary Sewer Overflows (SSOs)/Bypasses		(Allentown + Suburban)	13	24	18	26
Main Breaks Repaired		Allentown	0	8	34	20
		Suburban	2	12	15	14
Customer Service Phone Inquiries		(Allentown + Suburban)	726	11221	10,539	15,857
Water Shutoffs for Non-Payment		(Allentown + Suburban)	169	1995	1,975	1,773
Injury Accidents		(Allentown + Suburban)	1	19	7	8
Emergency Declarations		Allentown	0	2	(3) @ \$386,225.43	0
		Suburban	0	0	(4) @ \$933,077.1	(1) @ \$48,000

<u>Significant Repairs/Upgrades:</u>	N/A
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<u>Description of Non-Compliance Events:</u>
<p>The Lehigh Valley recorded ~8.62" of rain in December, making it the wettest December on record. Due to the significant amount of rainfall and rising ground water levels, LCA's wastewater systems experienced numerous compliance issues. A summary of the non-compliance events is included with this report.</p> <p>A Notice of Violation was received from PA DEP for failure to submit payment of the Chapter 302 Water and Wastewater Operator Certification Service Fee.</p>

<u>Other:</u>
N/A

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<u>Critical Activities</u>	<u>System</u>	<u>Description</u>	<u>Dec-23</u>	<u>2023 Totals</u>	<u>2022 Totals</u>
Wastewater Compliance	Allentown	Bypass	3	4	2
		Bypass Volume	1,587,871	1,589,466	369,704
		Permit Exceedances	0	0	1
		Sanitary Sewer Overflows	4	6	3
		COA Issued NOVs	0	1	1
		Regulatory Agency issued NOVs	0	0	0
	Arcadia	Bypass	0	0	0
		Bypass Volume	0	0	0
		Permit Exceedances	1	3	7
		Sanitary Sewer Overflows	0	0	0
		NOVs	0	0	0
	Heidelberg Heights	Bypass	3	8	8
		Bypass Volume	1,396,914	1,872,796	1,392,261
		Permit Exceedances	3	14	16
		Sanitary Sewer Overflows	0	0	0
		NOVs	0	0	0
	Lynn	Bypass	1	1	2
		Bypass Volume	350,000	350,000	472,000
		Permit Exceedances	1	1	7
		Sanitary Sewer Overflows	0	0	1
		NOVs	0	0	0
	Sand Spring	Bypass	0	0	0
		Bypass Volume	0	0	0
		Permit Exceedances	3	39	77
		Sanitary Sewer Overflows	1	1	0
		NOVs	0	0	1
	Wynnewood	Bypass	0	0	0
		Bypass Volume	0	0	0
		Permit Exceedances	1	5	4
		Sanitary Sewer Overflows	1	3	0
		NOVs	0	0	0
Water Compliance	Allentown	Boil Water Advisories	0	2	1
	Central Lehigh	Boil Water Advisories	0	1	2
	Suburban Water Systems	Boil Water Advisories	0	3	4

MEMORANDUM

Date: January 16, 2024

To: LCA Board of Directors

From: Andrew Moore, Director of Plant Operations

Description of Non-Compliance Events – December 2023:

System	Discharge Type	Start Date	End Date	Reason	Volume
Kline's Island	Bypass	12/3/2023	12/3/2023	Electrical Outage	361,794 gallons
Heidelberg Heights	Bypass	12/11/2023	12/14/2023	Wet Weather	695,684 gallons
Heidelberg Heights	Bypass	12/18/2023	12/22/2023	Wet Weather	438,397 gallons
Kline's Island	Bypass	12/18/2023	12/18/2023	Wet Weather	973,652 gallons
Lynn Township	Bypass	12/18/2023	12/19/2023	Wet Weather	350,000 gallons
Heidelberg Heights	Bypass	12/28/2023	1/1/2024	Wet Weather	262,833 gallons
Kline's Island	Bypass	12/28/2023	12/28/2023	Wet Weather	252,425 gallons
Wynnewood	SSO	12/18/2023	12/18/2023	Wet Weather	650 gallons
Sand Spring	SSO	12/18/2023	12/18/2023	Wet Weather	2,100 gallons
Kline's Island	SSO	12/18/2023	12/18/2023	Wet Weather	500 gpm
Kline's Island	SSO	12/18/2023	12/18/2023	Wet Weather	5 gpm
Kline's Island	SSO	12/28/2023	12/28/2023	Grease & Rags	500 gallons
Kline's Island	SSO	12/28/2023	12/28/2023	Grease & Rags	500 gallons

NOTICE OF VIOLATION

December 28, 2023

LEHIGH CNTY AUTH
1053 SPRUCE RD
ALLENTOWN PA 18106-9408

Dear Permittee:

On July 1, 2023, the Department of Environmental Protection (DEP) issued an Available Operator Report (AOR) for completion, and an invoice for payment of the Chapter 302 Water and Wastewater Operator Certification Service Fee under the authority of 25 Pa. Code §302.1202(b) and §302.202(c). The details of this invoice are as follows:

Permittee Name: LEHIGH CNTY AUTH
Facility Name: LEHIGH CNTY AUTH PUMP STA & FORCE MAIN
IMPROVEMENTS PROJ
Permit No.: 3923401
Account No.: 980964
Amount Due: \$65
Due Date: August 31, 2022

In addition, in October 2023, DEP issued email notice to systems which had not submitted the AOR nor paid the annual fee and provided an extension to the due date. **As of the date of this letter, the Chapter 302 Operator Certification Service Fee has not been paid.** We remind you that failure to pay the annual fee in full and/or failure to submit the Available Operator Report constitutes violations of 25 Pa. Code §302.202(c) and 302.1202(b), respectively, and subjects the permittee named above to enforcement action under the Water and Wastewater Systems Operators' Certification Act, 63 P.S. § 1014(c). The Act provides for up to \$1,000 per day in civil penalties and up to \$1,000 per day in summary criminal penalties for each violation. Each day of continued violation constitutes a separate offense. Continued failure to submit the fee will require an interest payment when the next annual fee invoice is transmitted. Other actions may be pursued such as revocation of your permit and/or referral to the Office of the Attorney General. You should also be aware that this violation is a matter of public record and may be found on DEP's website at [www.dep.pa.gov/DATA AND TOOLS/TOOLS/EFACTS](http://www.dep.pa.gov/DATA_AND_TOOLS/TOOLS/EFACTS).

Please submit the AOR and provide payment within **15 days** from the date of this letter. Otherwise, DEP may use any, and all, enforcement procedures, penalties and remedies afforded under the Water and Wastewater Systems Operators' Certification Act to compel compliance. Checks should be made payable to the "Commonwealth of Pennsylvania." Please include your permit number with all correspondence. The AOR and payment should be mailed to the following address:

December 28, 2023

ATTN: Chapter 302 Annual Service Fee
PA Department of Environmental Protection
P.O. Box 8467
Harrisburg, PA 17105-8467

This Notice of Violation is neither an order nor any other final action of the Department. It neither imposes nor waives any enforcement action available to the Department under any of its statutes. If the Department determines that an enforcement action is appropriate, you will be notified of the action.

If you have any questions about this notice, you have already submitted the AOR and payment, or would like a re-print of the AOR and Invoice, please contact me at wjkin@pa.gov or 717.705.8024.

Sincerely,

A handwritten signature in black ink, appearing to read 'W. King', is written over a horizontal line.

William King
Water Program Specialist
Operator Certification Water and Wastewater