



## BOARD MEETING AGENDA – July 11, 2022 – 12:00 p.m.

**In-Person or Virtual Meeting Attendance Options Available:** Meetings of the LCA Board of Directors will be held at LCA’s Main Office as well as online using the Zoom Meetings application, which includes a telephone option. Public participation is welcomed both in-person or virtually. Instructions for joining the meeting online or by phone are posted on the LCA website in the morning on the day of the meeting, prior to the start of each meeting. You may also issue comment to LCA via email to [LCABoard@lehighcountyauthority.org](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

- *June 27, 2022 Board meeting minutes*

4. Public Comments

5. Action / Discussion Items:

**FINANCE AND ADMINISTRATION**

**WATER**

- *Water Main Replacement Program Cycle 6 (Approval) (blue) (digital Board packet, pages 8-26)*

**WASTEWATER**

- *Heidelberg Heights Sanitary Sewer Consent Order and Agreement (Approval) (yellow) (digital Board packet, pages 27-30)*

6. Monthly Project Updates / Information Items (1<sup>st</sup> Board meeting per month) (digital Board packet, pages 31-37) – **July 2022 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. Executive Sessions
- 13. Adjournment

<b>UPCOMING BOARD MEETINGS</b>		
July 25, 2022	August 8, 2022	August 22, 2022

**PUBLIC PARTICIPATION POLICY**

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

## **REGULAR MEETING MINUTES**

### **June 27, 2022**

*Notice of Preparation of Authority Meeting Minutes: Authority staff who are in attendance at each Authority Board meeting prepare a draft of the Minutes, which are subsequently distributed to all Board members for review. Board members may offer corrections prior to a vote of the full Board of Directors to approve the Minutes.*

The Regular Meeting of the Lehigh County Authority Board of Directors was called to order at 12:00 p.m. on Monday, June 27, 2022. Chairman Brian Nagle presiding. The meeting was hybrid via in-person and video and audio advanced communication technology (“ACT”), using the Zoom internet application, including telephone option. Each Board member and other attendees of the meeting were able to hear each other attendee and be heard by each other attendee. The public could also participate in the meeting in-person or via ACT, using the Zoom internet application, including telephone option. A Roll Call of Board members present was taken. Brian Nagle, Richard Bohner, Kevin Baker, Linda Rosenfeld, Jeff Morgan, and Amir Famili were present for the duration of the meeting.

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

Chairman Nagle announced that the Board received their electronic and hard copies of the Board packet in advance, along with the revised copy of Resolution No. 6-2022-2, and asked if anyone did not receive their copy of the packet or the revised Resolution. A copy of the packet and revised Resolution are also available online.

#### **REVIEW OF AGENDA**

Liesel Gross also announced that there was an adjustment to Resolution No. 6-2022-2 that removed the Suburban Water Tapping Fees and the packet posted on the website is correct. An Executive Session is planned after the regular meeting to discuss legal matters with the Solicitor.

#### **APPROVAL OF MINUTES**

##### **June 13, 2022 Meeting Minutes**

On a motion by Richard Bohner, seconded by Amir Famili, the Board approved the minutes of the June 13, 2022 Board meeting as written (6-0).

#### **PUBLIC COMMENTS**

None.

#### **ACTION AND DISCUSSION ITEMS**

##### **Resolution No. 6-2022-2: Suburban Division Wastewater Tapping Fees**

Liesel Gross introduced the revised Resolution No. 6-2022-2 that focuses on the Suburban Division Wastewater Tapping fees. Ed Klein commented that the fees have been updated to include additional capital spending since the last update, in accordance with the state statute on tapping fees. There are no significant changes to the fees. Dave Busch from Keystone Alliance Consulting, who prepared the fee calculation documents, commented that the process is identical to what was done in the past and according to state statute. Liesel Gross added that the 2020 Census data was

recently received and used in this fee calculation. The Census data affects the calculation for the Equivalent Dwelling Unit (EDU) in each municipality, based on the number of people per household. The EDU value is a component of the tapping fee calculation. These updated values will be in place until the next Census is completed in 2030.

There was some discussion regarding the EDU values, and the process for notifying customers and municipalities of the change.

On a motion by Linda Rosenfeld, seconded by Jeff Morgan, the Board approved Resolution No. 6-2022-2 that establishes the various components of the LCA capital recovery fees for the various Suburban Division Wastewater Systems (6-0).

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

Brian Nagle – yes  
Richard Bohner – yes  
Kevin Baker – yes  
Linda Rosenfeld – yes  
Jeff Morgan – yes  
Amir Famili – yes

#### **Water Filtration Plant: Filter Upgrade Project**

Chuck Volk gave a brief overview of the Water Filtration Plant filtration system, which consists of eight dual-media gravity filters that have exceeded their useful service life. Hazen & Sawyer was retained to perform preliminary engineering for the filter rehabilitation project and have been selected to perform the design phase as well. Mr. Volk reviewed the scope of work for the design and bid phase of the project, noting the construction work will be phased over a two-year period in order to maintain treatment capacity and minimize operational interruptions. Liesel Gross commented that the City of Allentown has committed American Rescue Plan funds to the project.

There was some discussion regarding the technology that will be used to increase efficiency of the filters.

On a motion by Amir Famili, seconded by Linda Rosenfeld, the Board approved the Capital Project Authorization for the Design and Bid phase in the amount of \$238,691.00, which includes the Professional Services Authorization to Hazen & Sawyer in the amount of \$199,792.00 (6-0).

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

Brian Nagle – yes  
Richard Bohner – yes  
Kevin Baker – yes  
Linda Rosenfeld – yes  
Jeff Morgan – yes  
Amir Famili – yes

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

Phil DePoe introduced Chris Curran and Ralph Eschborn from AECOM who were present at the meeting to discuss the progress on the regional Act 537 Plan development for the Kline's Island Sewer System. Mr. Curran and Mr. Eschborn gave a detailed presentation reviewing prior planning that had been conducted beginning in 2013 and current planning and engineering activities. They focused the discussion on various alternatives that had been reviewed related to upgrading the Authority's Pretreatment Plant (PTP) to full treatment, and the range of options to treat dry-weather and wet-weather flows at the PTP facility. A primary driver for these evaluations is to determine the downstream benefits of removing peak flows from the system. If adequate peak flows can be removed from the system at the PTP, downstream conveyance system upgrades could be reduced or eliminated, resulting in significant cost savings. At the same time, AECOM is supporting the engineering evaluation of peak flow treatment capacity at the Kline's Island Wastewater Treatment Plant (KIWWTP). As the program manager, AECOM is also reviewing regulatory implications of each alternative, including discussing the PTP upgrade options with the Delaware River Basin Commission. The engineering evaluations of the PTP and KIWWTP treatment options will be paired with the hydraulic flow modeling work that Arcadis is completing, so comprehensive solutions can be evaluated. Mr. Curran and Mr. Eschborn also reviewed key tasks and deliverables for their work as the program manager for the Act 537 Plan development process.

There was some Board discussion regarding the prior evaluations of the PTP upgrade concept, including a discharge location on the Jordan Creek and land application of treated waste. Mr. Eschborn reviewed those prior evaluations and the reasons that other options were eliminated. The most beneficial option that is currently being considered is to discharge treated effluent from the PTP through a pump station and force main to the Lehigh River, utilizing outfall facilities already constructed at the KIWWTP.

There was some additional discussion about the peak flow capacity of the system, and options to capture renewable natural gas.

AECOM representatives then reviewed the next steps in the planning process, which will result in a final Act 537 Plan being submitted to the Pa. Department of Environmental Protection (DEP) in 2025. They also reviewed their proposed scope of work for continuing program management services through early 2023.

The Board thanked Mr. Curran and Mr. Eschborn for their presentation and excused them from the meeting.

Board members discussed AECOM's presentation and commented that it would be beneficial to have the consultants present updates to the Board on regular intervals to help the Board members absorb the technical details of this complex planning project. Mr. DePoe noted that Jacobs is completing the PTP master plan and will be invited to present a summary to the Board this fall.

On a motion by Jeff Morgan, seconded by Linda Rosenfeld, the Board approved the Capital Project Authorization for the Regional Act 537 Plan Program Management, Planning Phase in the amount of \$310,000.00 which includes a Professional Services Authorization to AECOM for the Regional Act 537 Plan Program Management services in the amount of \$270,000.00 (6-0).

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

Brian Nagle – yes

Richard Bohner – yes  
Kevin Baker – yes  
Linda Rosenfeld – yes  
Jeff Morgan – yes  
Amir Famili – yes

### **Park Pump Station Phase 2 Upgrade**

Chuck Volk introduced Phase 2 of the project that will replace the existing original backup generator with a new natural-gas sound-attenuated generator. He noted that removing the diesel fuel storage tank from the facility, which sits along the Little Lehigh Creek, will be a big improvement from an environmental protection viewpoint. Bids were received for the Electrical Contract for the project, including the generator. On the other hand, no bids were received for the General Construction Contract. Mr. Volk noted that the long lead time for the receipt of the generator was likely the reason for not receiving bids for the General Construction Contract, as pricing for construction materials have been volatile and may change by the time the generator is delivered. Therefore, the Authority will re-bid the General Construction Contract at a later date, closer to the delivery date of the generator. Jeff Morgan asked legal procedures when no bids are received. Solicitor Mike Gaul explained the required bidding process when there are no bids received. Amy Kunkel explained that LCA was able to achieve a \$414,000.00 cost savings through inclusion of an alternate in the bid specifications, subject to review by the City of Allentown of the project and the application of the City's sound ordinance. The City has completed its review and determined that the lower cost sound-attenuating system would comply with the City's ordinance.

On a motion by Amir Famili, seconded by Linda Rosenfeld, the Board approved the Capital Project Authorization for the Construction Phase in the amount of \$1,762,726.25 which includes the Construction Contract for Electrical to Albarell Electric, Inc. in the amount of \$1,415,250.25 and the Professional Services Authorization for Construction Phase Engineering to Whitman, Requardt, and Associates, LLP in the amount of \$151,876.00 and the Professional Services Authorization for the Construction Phase Inspection to Cowan Associates, Inc. in the amount of \$22,600.00 (6-0).

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

Brian Nagle – yes  
Richard Bohner – yes  
Kevin Baker – yes  
Linda Rosenfeld – yes  
Jeff Morgan – yes  
Amir Famili – yes

### **MONTHLY FINANCIAL REVIEW**

Ed Klein gave an overview of the May 2022 financial statements, highlighting variances between actual expenses and budgeted or forecasted expenses. Mr. Klein then discussed the upcoming financing for the Suburban Water Division capital program, noting that the 2022-2027 Capital Plan specified that the Authority would borrow \$12,180,000 to fund selected projects and maintain rate stability. Due to recent interest rate increases and risk of continued interest rate increases, a request for proposals was issued to begin the process of securing bond financing or a bank loan on an expedited basis. He explained that the Board would be presented with a parameters resolution in the future to consider authorization of the financing. The information presented at today's meeting is for informational purposes and to seek feedback from the Board. Chris Gibbons of Concord Financial

was in attendance at the meeting, and he commented that interest rates are continuing to rise but are still low from a historical perspective, suggesting it is still a favorable borrowing environment for the Authority. There was some Board discussion, followed by a general consensus that the staff should continue pursuing the financing.

### **MONTHLY SYSTEM OPERATIONS OVERVIEW**

Andrew Moore reviewed highlights of the May 2022 report, noting that there was an increase in water production in May due to increasing temperatures, along with increased sewer flows in all service areas due to over 5.27 inches of rainfall in May. He also reviewed the bypasses, sewer overflows, and boil advisories that occurred in May as outlined in the report.

Chris Moughan reported on a main break in Allentown where Operations employees discovered a gas leak at Gordon and 9<sup>th</sup> Streets. He gave special thanks to Anthony Morales, David Diaz, John Maco, and Nathan Roush for their quick response.

### **STAFF COMMENTS**

Liesel Gross thanked the Board for their support for staff attendance at the American Water Works Association annual conference in Texas earlier this month. Attending the Water Utility Council meeting during the conference was beneficial as well, providing staff with additional resources to support the review of the new health advisories for PFAS that were issued in June by the U.S. Environmental Protection Agency. She noted that Chris Moughan and Susan Sampson also attended the conference.

### **SOLICITOR'S COMMENTS**

None.

### **PUBLIC COMMENTS / OTHER COMMENTS**

None.

### **EXECUTIVE SESSION**

An Executive Session will follow the regular meeting to discuss legal matters with the Solicitor.

### **ADJOURNMENT**

There being no further business, the Chairman adjourned the meeting at 1:52 p.m.

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Richard Bohner  
Secretary



**Lehigh County Authority**

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**MEMORANDUM**

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**Date:** July 11, 2022

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

**From:** Jason Peters, Capital Works Project Coordinator  
Charles Volk, P.E.

**Subject:** Allentown Division Cycle 6 Water Main Replacement Project -  
Construction Phase

**MOTIONS /APPROVALS REQUESTED:**

No.	Item	Amount
1	<u>Capital Project Authorization - Construction Phase:</u> Allentown Division Cycle 6 Water Main Replacement	\$3,178,725
2 **	<u>Professional Services Authorization:</u>  <ul style="list-style-type: none"> <li>• Construction Engineering and Administration Services - <i>Gannett Fleming Inc.</i></li> <li>• Construction Inspection Services - <i>Keystone Consulting Engineers</i></li> </ul>	\$45,220  \$75,000
3 **	<u>General Construction Contract:</u>  <ul style="list-style-type: none"> <li>• General Construction – <i>JOAO Bradley Construction Co., Inc.</i></li> </ul>	\$2,542,505
4 **	<u>Final Paving Restoration Contract:</u>  <ul style="list-style-type: none"> <li>• Cost Sharing Agreement – <i>City of Allentown</i></li> </ul>	\$366,000

(\*\*) *Included in the Capital Project Authorization*

**PROJECT OVERVIEW:**

The amended Operating Standards of the Lease Agreement (Agreement) in the 2020 settlement with the City of Allentown (City) requires LCA to replace four (4) miles of aged spun and/or pit cast-iron water main through the end of 2024. The water main replacement projects are closely coordinated with the City’s Compliance Office, Streets Program, PennDOT, and private utilities



(such as UGI). Given the complex nature of a project that includes construction in a highly populated urban area with many underground facilities and maintenance of traffic flow, the many challenges presented require a significant amount of coordination and public relations efforts.

Approximately one mile of water main was replaced in 2021, and the scope of this project (“cycle 6”) consists of approximately one mile of water main replacement as well.

**FUNDING:**

The Project will be funded by the LCA Allentown Division and City grant funds from the American Rescue Plan Act of 2021. Annual Water Main Replacement is identified as required work in the Agreement and is classified as a Major Capital Improvement.

**PROJECT STATUS:**

In March 2016 the Board approved the engineering consultant proposal for Design Phase (including pipe replacement prioritization) for Cycles 4-6 for the Allentown Division Annual Water Main Replacement Projects. Working closely with the City to obtain Major Capital Improvement approvals (as required by the Agreement) and outside agencies, Capital Works has obtained all approvals and permits required for the Cycle 6 Construction Phase.

Prioritization of water mains to be replaced as part of this Cycle was completed in early 2022, and the substantially complete plans were submitted to the city in Spring 2022 in accordance with Agreement requirements.

Water main pipe for this project was procured directly by LCA via prior LCA Board authorization on 4/25/22, and all pipe has been delivered as of this date.

**THIS APPROVAL: CONSTRUCTION PHASE CYCLE 6**

The Allentown Division Cycle 6 Water Main Replacement Project includes a pipe replacement length of 1.17 mile in order to work towards satisfying the Lease Agreement requirement of 4 miles completed by 2024. All water main pipe sections are located within City-owned streets.

**BIDDING SUMMARY - CONSTRUCTION CONTRACTS**

The project was advertised for bid on June 1, 2022, a mandatory pre-bid meeting was held virtually on June 15, 2022, with six contractors in attendance. Bids were opened on June 30, 2022. An Alternate was added in the Bid Form for replacement of a critical 45-foot-long section of 30-inch diameter steel transmission main located near the Kline’s Island Wastewater Treatment Plant that has experienced repeated breakage in recent years and was previously spot-repaired by LCA D&C operations. The bidding results are as shown in Table 1 below:

<b>Table 1 – Bid Results</b>			
<b>General Construction – Cycle 6</b>			
<b>Bidder</b>	<b>Base Bid Amount</b>	<b>Alternate Amount</b>	<b>Total with Alternate</b>
<b>JOAO &amp; Bradley Construction Co., Inc.</b>	<b>\$2,288,505</b>	<b>\$254,000</b>	<b>\$2,542,505</b>
<i>No other bidders</i>			

One bid was submitted for this contract. The Engineer's Estimate for the base bid amount is \$2,700,000, which is based on construction prices within the last six months on similar size project in the region. The single bid received is from JOAO & Bradley Construction Co., Inc. ("Bradley") for the base bid amount of \$2,288,505, which is well below the Engineer's Estimate. The total with Alternate amount is \$2,542,505. Regarding the lack of other bidders, we believe the aggressive construction schedule (substantial completion by 10/15/22) combined with uncertainties regarding the availability of fittings (not previously procured by LCA) were factors that weighed in for decisions to not bid the project.

Bradley has successfully completed the construction of the Allentown Division Cycles 2, 3 and 5 Water Main Replacement Projects for LCA. Prior to the Lease, the Contractor performed many water main replacements for the City. Bradley is currently utilized by LCA's Distribution and Collection Department for emergency repairs, and the contractor also performs emergency and routine repairs for LCA's Suburban Division. Therefore, we recommend awarding the General Construction contract (total with Alternate) to JOAO Bradley Construction Co., Inc., subject to the receipt of the necessary Performance Bonds, Insurance and other required documentation.

#### **FINAL RESTORATION COST SHARING AGREEMENT:**

In 2021, Capital Works reviewed paving restoration cost data from prior City water main replacement projects and determined that a cooperative arrangement with the City Streets Department would yield significant cost savings, better control over construction schedule, and improved quality control. Capital Works and the City Compliance Office worked together to develop a Cost Sharing Agreement for final restoration of streets. The Agreement contains clearly outlined procedures and responsibilities for each party, that includes provisions for scheduling, payment, material handling, inspection, and notification of completion. This was first applied during the Cycle 5 Water Main Replacement Project in 2021.

The Agreement for the Cycle 6 street restoration work includes pavement milling, pavement overlay, and ADA ramp construction within City rights-of-way. Per the terms of the Agreement, LCA's payment to the City is for compensation of labor and paving materials costs for work performed by the COA paving department.

#### **PROFESSIONAL SERVICES - CYCLE 6**

##### **1. Construction Engineering & Management**

Gannett Fleming Inc., the design engineer of record, will provide construction engineering and administration services for the construction phase of the project. The work will generally include:

- Conduct preconstruction conference.
- Review contractor's construction schedule and updates for compliance with project.
- Arrange and conduct monthly progress meetings and provide meeting minutes.
- Review all contractor submittals to ensure that design objectives and requirements of the Contract Documents are met.
- Prepare Change Orders.
- Respond to contractor Requests-for-Information.
- Review certified payrolls.
- Conduct walkover of the project site with contractors and LCA representatives.

- Provide LCA with recommendation on completeness of work, final acceptance and release of final payment.

## 2. **Construction Inspection**

Keystone Consulting Engineers (KCE) will provide daily construction inspection related services for the project. The work will generally include:

- Act as the daily field contact person for the project.
- Attend pre-construction & monthly progress meetings
- On-site contract management and coordination
- Maintain daily record of project activities, quantities of work performed, site conditions, etc.
- Review documentation for change order requests
- Review monthly pay estimates
- Perform substantial and final completion inspections

Keystone Consulting Engineers (KCE) previously provided construction inspection services in Cycle 3 and 5 AD Water Main Replacement Projects and has provided construction phase services on many other LCA water and wastewater projects. KCE historically provides a high level of technical expertise at a reasonable cost.

A Professional Services Authorization is attached for both firms for LCA Board approval.

### **SCHEDULE**

Assuming approval of Construction Phase at the July 11, 2022, LCA Board meeting, construction will commence in late Summer and all water main replacements for Cycle 6 will be operational by October 15, 2022 (the contract substantial completion date).

2022 CYCLE 6 WATERMAIN REHABILITATION  
COST-SHARING AGREEMENT FOR STREET RESTORATION AND REPAVING

This COST-SHARING AGREEMENT FOR STREET RESTORATION AND REPAVING is made and entered into on the Effective Date defined herein by and between the City of Allentown, a Home Rule Third-Class City organized and existing under the laws of the Commonwealth of Pennsylvania, having a place of business at 641 South 10th Street, Allentown, PA 18103 (the "City"), and the Lehigh County Authority, organized and existing under the Municipal Authorities Act of 1945, as amended, having a place of business at 1053 Spruce Rd, Allentown, PA 18106 ("LCA") (hereinafter referred to as "a/the Party," singularly and the "Parties" collectively.)

WHEREAS, the City owns and has jurisdiction over street rights-of-way within the City's limits, excluding streets designated as State highways and roads, which are under the exclusive jurisdiction and control of the Commonwealth of Pennsylvania, Department of Transportation ("PennDOT").

WHEREAS, LCA maintains public utility facilities, particularly underground water and sewer mains and related lines located within City street rights-of-way, pursuant to Section 5607 (a) (5) and (10) of the Municipal Authorities Act, 53 Pa. C. S. §§ 5607 (a) (5), 5607(a)(10).

WHEREAS, the City has adopted a Street Excavation Ordinance, appearing as Article 901 of the City's Codified Ordinances ("the Streets Ordinance") establishing certain requirements for street openings and excavations.

WHEREAS, in connection with LCA's occupancy of City street rights-of-way ("the Streets"), LCA has planned in 2022 certain work in connection with main replacements (hereinafter referred to as the "Betterment Projects") listed on Exhibit "A" attached hereto, made a material part hereof and incorporated herein by reference.

WHEREAS, LCA, in the usual course, would be obligated to restore and repave the Streets affected by the Betterment Projects pursuant to all the applicable provisions of the Streets Ordinance.

WHEREAS, given that the City has its own program for the restoration and repaving of the Streets, involving a milling, overlay and paving process ("City Restoration Work"), the Parties discussed LCA's Betterment Projects and each Party's desire to coordinate the performance of LCA's Betterment Project work so as to maximize efficiencies and minimize the possibility of LCA performing Betterment Project work on any Streets recently subjected to City Restoration Work. For purposes of this Agreement, "City Restoration Work" shall also include the design and installation of ramps, in compliance with the Americans with Disabilities Act and related regulations (collectively, "ADA") and City Ordinances for the streets that are subject to the Betterment Projects in Exhibit "A" hereto.

WHEREAS, as a result of those discussions, the Parties have reached an understanding regarding the scope, allocation of work and costs for Streets which are the subject of Betterment Projects, including the reimbursement of certain costs associated with the City Restoration Work ("City Street Repair Costs") subject to the terms and conditions as set forth in this Agreement.

NOW, THEREFORE, in consideration of the mutual promises of the Parties and for good and other valuable consideration and agreeing to be legally bound hereby, the Parties agree as follows:

1. incorporation of Recitals. The Parties do hereby incorporate by reference the terms, definitions and descriptions set forth in the forgoing recitals of this Agreement as though the same were fully set forth at length herein.

2. LCA's Cost-Sharing Payment to the City.

A. It is acknowledged and agreed that, subject to the City's continuing full and timely performance of its duties and obligations under this Agreement, LCA shall pay to the City the total amount of Three Hundred Sixty-Six Thousand 00/100 (\$366,000.00) Dollars toward the City Street Repair Costs (the "Cost-Sharing Payment"), payable as indicated below. It is further

agreed the Cost-Sharing Payment consists of \$150,000.00 relating to and associated with costs of labor and paving materials for the milling and overlaying paving work on Streets to be performed by the City as the City Restoration Work hereunder, plus \$216,000.00 toward the cost of materials and for the installation of ramps, in compliance with the American Disabilities Act and related regulations (collectively "ADA") for the roads which are the subject of the Betterment Projects under this Agreement. The Cost-Sharing Payment is allocated between the various Betterment Projects and ADA ramp installation work as indicated in Exhibit "A" hereto. The Cost-Sharing Payment shall also be in lieu of any other City fees that would ordinarily be payable by LCA in connection with the LCA Betterment Projects and LCA Restoration Work.

B. LCA shall pay to the City the entire Cost-Sharing Payment no later than July 21, 2022 (i.e., the tenth day following the LCA Board's first regular meeting in July 2022), subject to any later potential LCA additional payment in connection with LCA's modification of the Betterment Projects, as discussed in subparagraph C. below. The payment shall be made by check in the applicable amount. There shall be no penalty, assessment of interest, accrued or unaccrued, or any other charge for any prepayments of this obligation.

C. The agreed amount of the Cost-Sharing Payment shall be subject to adjustment based on modification of the Betterment Projects in the following circumstances. LCA may perform additional work in an area near or adjacent to a Betterment Project street, or otherwise expand the scope of a project, based on operational, financial, convenience, or other considerations. In the event that LCA desires to perform such additional work, the City shall provide a cost analysis for the additional work, using the same methodology for establishing cost as used in Exhibit "A" hereto. LCA will review the costs analysis and determine whether to include such work as part of the Betterment Projects under this Agreement, at the cost provided by the City. In the event that LCA decides to include such additional work as part of the Betterment Projects under this Agreement, LCA shall pay to the City the additional Cost-Sharing Payment amount within thirty (30) days of LCA giving the City notice of the completion of the LCA Restoration Work (defined below) for a Betterment Project, including its modified or expanded scope. All

additional work shall follow procedures set forth in section 3.

3. Procedures to be Followed for Work to be Performed Pursuant to this Agreement. The Parties agree that the following procedures shall apply to LCA's Betterment Project street-opening work ("the LCA Restoration Work") and the City Restoration Work applicable thereto:

A. LCA Obligations.

(1) LCA will submit, in part with the requirements of the lease for Major Capital Project Improvements, the Substantially Complete Design plan submission for the Betterment Projects, which the City will review and, when satisfied with the submission, will issue a conditional approval at the plan review stage in the form of a letter noting that project is approved as designed. As part of the conditional approval, COA will establish an expiration date on the conditional approval covering a yearly construction season for a cycle. Prior to initiating construction in a given road segment, LCA's contractor will then submit for a formal City permit which will be good for 60-days upon issuance.

(2) LCA shall not be required to pay the Permit Fee required under Section 901.01.14 (Permit Fee) of the Streets Ordinance and the fee required under Section 901.01.12 (Inspection Fee) of the Streets Ordinance; However, the City may impose this fee onto the associated contractor at the time of formal submission to the City.

(3) LCA will install its facilities by open trench cut in continuing sections along the route or routes of the particular Street which is the subject of each such Project.

(4) The existing water main line (which is being replaced) is permitted to be left in place under the street surface.

(5) LCA will excavate and install its new water line within the excavated area. LCA will then backfill and compact the excavated area and place "hot mix" temporary paving material on top to match the road surface. Materials must be approved by the City. Final base restoration must be inspected and approved by the City.

(6) LCA shall notify the City's Engineering Bureau, Department of Public Works in writing when LCA has completed the LCA Restoration Work and within thirty (30) days of receiving said

notification, weather permitting, the City shall commence performance of the City Restoration Work, to be completed such that the Street involved is improved to its final fully paved condition.

(7) When the Street is ready for the City Restoration Work, LCA will remove the hot mix temporary asphalt paving material and install and compact 25mm BCBC to the final level and height designated for the LCA Restoration Work, at which point the LCA Restoration Work will be completed.

(8) LCA agrees to indemnify and save harmless the City and its officers, employees, and agents from any and all costs, claims, losses, injuries, damages, liabilities, or expense which may accrue or be claimed to accrue by reason of LCA's Restoration Work.

#### B. City Obligations.

(1) The City shall provide appropriate inspection of the LCA Restoration Work;

(2) The City agrees to accept as satisfactory work performed by LCA in connection with any Street openings for Betterment Projects which are the subject of this Agreement, so long as that work has been performed to comply with the applicable standards of PennDOT;

(3) The City will then commence the City Restoration Work, which shall include inspecting the rolling of the 25mm BCBC to ensure proper compaction, following which the City will mill to the depth specified on the approved detail Exhibit "B" and following which it will install, including rolling, the final paving material of hot mix asphalt.

Upon receipt of the Cost-Sharing Payment, the City agrees to indemnify, and save harmless, LCA and its officers, employees and agents, from any and all costs, claims, losses, injuries, damages, liabilities or expense, which may accrue or be claimed to accrue by reason of the City's Restoration Work, including, without limitation, the City's installation of ADA ramps for the streets that are subject to Betterment Projects.

4. Term. It is the intent and agreement of the Parties that the term of this Agreement shall be for the period from January 1, 2022 through December 31, 2022, inclusive; provided, however, if any LCA's Betterment Project street-opening work and the City Restoration Work is not yet complete, the



agreement shall continue through the completion of such work.

5. No Degradation Fee to be Assessed Against LCA. Notwithstanding any provisions of the Ordinance to the contrary, particularly Section 901.01.9 and 901.04.B of the Streets Ordinance, and out of recognition for the fact that the Streets which are the subject of this Agreement are being restored partially by LCA, and then completed by the City Restoration Work (following inspection and approval by the City of the LCA Restoration Work) and as a material consideration to this Agreement, the City acknowledges and agrees that it shall at no time attempt to charge or assess a degradation fee against or from LCA in connection with the Betterment Projects which are the subject of this Agreement, and related street openings and excavations.

6. Additional Modifications to Streets Ordinance Provisions. In light of the fact that road restoration work is being performed both by the LCA Restoration Work as well as the City Restoration Work, it is acknowledged and agreed that the following provisions of the Streets Ordinance shall not apply to LCA and these Betterment Project street openings: Section 901.04.B of the Streets Ordinance (relating to permanent surface restoration work being performed by a permittee) and deposits to be paid by any permittee in connection therewith; the requirement of maintaining convenience to the public and temporary approaches to and crossings of intersecting streets to be provided for and kept in good condition where practicable, shall apply to LCA only until the LCA Restoration Work has been performed (Section 901.04.H of the Streets Ordinance) after which those responsibilities shall belong to the City;

LCA's obligation to safeguard and maintain in good order the excavation (Section 901.04.G of the Streets Ordinance) shall apply only until such time as the LCA Restoration Work has been completed and approved by the City and after which it shall be the responsibility of the City; the milling and overlay requirements of Section 901.04.O of the Streets Ordinance, shall not apply to LCA, but instead shall apply to the City, as being part of the City Restoration Work, and any permittee responsibility set forth therein associated with final restoration shall not be applicable to LCA, nor shall any inspection and repair obligations relating to or associated with any final restoration, and/or milling and overlay; any obligation of LCA to indemnify or hold the City harmless (under Section 901.04.P of the Streets

Ordinance) shall not apply to any of the City Restoration Work, and/or any consequences, claims, damages, or losses to the extent arising or resulting therefrom, LCA shall not be obligated to save and hold harmless the City for any damages or liability (under Section 901.04.Q of the Streets Ordinance) for personal injury or property damage to the extent arising directly or indirectly from the City Restoration Work; any indemnification agreement provided previously or to be executed by LCA (pursuant to Section 901.04.R of the Streets Ordinance) shall not apply to any of the City Restoration performed; and the guarantee and maintenance requirements (under Section 901.04.T of the Streets Ordinance) shall not apply to any correction of Work to the extent arising or resulting from the City Restoration Work.

7. Notification to Property Owners. It is LCA's practice to send notification letters to property owners along streets on which Betterment Projects are being undertaken to advise that work will be done within each street. With respect to the Betterment Projects which are the subject of this Agreement, it is agreed that LCA may include in any such communications reference to the fact that the City will be performing the final milling and overlay work upon completion of LCA Restoration Work, and that, as such, any inquiries, telephone calls, voice messages, and emails regarding concerns or complaints following completion of the LCA Restoration Work should be directed to the City representatives.

8. Notice. The Parties agree to designate specific representatives to be the principal contact person regarding ongoing street opening and repaving projects set forth on Exhibit A attached hereto. All notices are to be given by either Party to the other shall be in writing and delivered personally, by email, sent by Certified Return Receipt First Class United States Mail, postage prepaid or by recognized overnight delivery service providing positive tracking of items (such as Federal Express) as follows:

TO THE CITY:

Mark Shahda, Director of Public Works City of Allentown  
641 S. 10th Street, Allentown, PA 18103  
610-437-7587

Mark.shahda@allentownpa.gov

TO LCA:

Jason Peters, Project Coordinator, Lehigh County Authority,  
1053 Spruce Rd, Allentown, PA 18106  
610-972-0619,  
jasonpeters@lehighcountyauthority.org

9. Changes and Modifications Must be in Writing. This Agreement may not be modified, amended, or otherwise changed in any way except in writing signed by both Parties.

10. Binding Upon Successors. This Agreement shall be binding upon and inure to the benefit of the Parties and each one's successors and assigns. The City acknowledges and agrees that this Agreement may extend beyond the time period for the current City administration, but that this Agreement shall nonetheless be binding on any subsequent Administration, meaning both the Mayor and City Council.

11. Execution and Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original and all of which shall constitute one and the same document. A signature transmitted by facsimile or other electronic means shall be considered an original.

12. Entire Agreement: Prior Communications, Agreements Superseded and Extinguished. This Agreement supersedes and terminates any and all prior or contemporaneous oral or written agreements between or among any of the Parties hereto regarding cost sharing relating to City Restoration Work on the Betterment Projects referenced herein, all of which shall be deemed merged herein and extinguished hereby. This Agreement does not impact the Amended and Restated Concession and Lease Agreement between the Parties, or any other existing agreements between the

Parties, all of which shall remain in full force and effect, and are not amended or extinguished by this Agreement, and do not merge into this Agreement. This Agreement sets forth the entire understanding and agreement of the Parties with respect to the matters set forth herein and there are no other promises, representations, warranties, agreements, or undertakings (written or verbal) between the Parties hereto, regarding the subject matter hereof.

13. Product of Mutual Negotiation and Draftsmanship. This Agreement is the product of negotiations between the Parties and each Party's counsel, and as a consequence, in construing the provisions of this Agreement, no inference or presumption shall be drawn against any Party on the basis of which party or its attorney may have drafted any portion of this Agreement, and further, the doctrine of contract interpretation relating to ambiguities being interpreted against the drafter of the document shall not be applicable.

14. Adoption by Appropriate Municipal Action and Authority. The City and LCA warrant and represent, recognizing that the Parties are materially relying thereon in entering into this Agreement, that the terms of this Agreement have been authorized and approved by all necessary and appropriate municipal action and authority.

15. Recording. This Agreement shall not be recorded in the Lehigh County Office of Judicial Records-Recorder of Deeds Division without the express written consent of the City and LCA.

16. Disputes. in the event of a dispute arising under this Agreement, the Parties shall confer and make good faith efforts to resolve any such dispute prior to instituting legal action to enforce the terms of this Agreement. Such good faith efforts shall include, without limitation, written notice of any alleged breach sent to the purported breaching party with reasonable opportunity for the purported breaching party to respond. Notice of alleged breach shall be issued within fifteen (15) days of the non-breaching party learning of such alleged breach and shall be sent to the purported breaching party with a copy to such party's counsel in a method that confirms receipt (i.e., overnight mail, electronic mail with a return receipt confirmation, etc.) Such good faith efforts shall also include reasonable consideration by

both parties of mediation and arbitration. in no event shall any party institute legal action until the purported breaching party has had an opportunity to respond to the allegations and engage in meaningful communications with the other party or counsel to try to resolve any concerns. in no event shall litigation be commenced until seven (7) days after receipt of such notice. Nothing in this section shall limit either party from initiating legal action in the event that the good faith efforts described above have not led to a satisfactory resolution of a dispute.

17. Interpretation. This Agreement shall be construed, interpreted, and enforced in accordance with the laws of the Commonwealth of Pennsylvania.

18. Captions. The captions preceding the paragraphs of this Agreement are inserted for the convenience of reference only and shall not constitute, nor shall they in any way affect its meaning, construction and effect a part of this Agreement.

19. Effective Date. The Effective Date if this Agreement shall be the date of the last authorized signature appearing hereon.

20. LCA Reservation of Rights.

A. This agreement, the plans prepared or approved under it, and work performed pursuant to such plans, shall not constitute a precedent as to the level or scope of work required under the City Street Ordinance, or any other City rule or regulation; nor shall it constitute an admission or acceptance by LCA of the City's requirements. LCA and the City are entering into this agreement merely as matter of convenience to them in this instance, and without prejudice to their rights except as may be limited by this agreement. This agreement shall not have any impact or consequence as to any other agreement between LCA and the City, whether currently existing or in the future.

B. This agreement shall not constitute a waiver of any right of LCA under the Concession Lease with the City to receive additional compensation, or to recovery through utility system rate increases, the expense related to a Change of Law applicable to the standards for LCA

Restoration Work on Betterment Projects, or other related costs. LCA reserves its right to recover such additional costs due to any Change of Law.

IN WITNESS WHEREOF, the undersigned, intending to be legally bound, and representing that each has authority to execute this Agreement on behalf of its respective Party, have executed this Agreement effective as of the Effective Date.

LEHIGH COUNTY AUTHORITY

By: (witness)

\_\_\_\_\_

Name: Liesel Gross

Title: Chief Executive Officer

Date: \_\_\_\_\_

By: \_\_\_\_\_ (witness)

CITY OF ALLENTOWN

Name: Matthew Tuerk

Title: Mayor

Date: \_\_\_\_\_

**CYCLE 6 WATER MAIN REHABILITATION**

Label	STREET NAME	FROM	TO	MEASUREMENTS	SQ YDS	NOTES
6-A	HIGHLAND	MAIN	26TH	1587X28	4937	
6-A	MAIN	LIVINGSTON	HIGHLAND	670X28, 51X17,28X40	2302	
6-A	27TH	LIVINGSTON	HIGHLAND	654X28, 81X28	2287	
6-A	OTT	LIVINGSTON	HIGHLAND	657X28, 71X28	2265	
6-B	TIOGA	BRADFOD	BOYD	528X40	2347	PAVING BRADFORD TO CARLISLE
6-C	GREEN	PENN	MEADOW	1071X24,36X76, 24X71	3349	
6-C	MEADOW	TILLGHMAN	WASHINGTON	545X24, 8X24	1475	

ADA COST \$216,000	MATERIAL COST \$150,000	6- Alt 112 Union Street is not included. No paving required.
Material Cost \$150,000		
Total Cost <u>\$366,000</u>		

## CAPITAL PROJECT AUTHORIZATION

<b>PROJECT NO.:</b>	AD-W-22-1	<b>BUDGET FUND:</b>	Allentown Div\Water\Capital
<b>PROJECT TITLE:</b>	<b>Allentown Division -Water Main Replacement Project - Cycle 6</b>	<b>PROJECT TYPE:</b>	
<b>THIS AUTHORIZATION</b>	<b><u>\$ 3,178,725</u></b>	<input checked="" type="checkbox"/> Construction	
		<input type="checkbox"/> Engineering Study	
		<input type="checkbox"/> Equipment Purchase	
		<input type="checkbox"/> Amendment No.	

**DESCRIPTION AND BENEFITS:**

The amended Operating Standards of the Lease Agreement (Agreement) in the 2020 settlement with the City of Allentown requires Lehigh County Authority to replace a minimum of four (4) miles of water main from 2021 through the end of 2024. The replacements of these mains are critical in maintaining infrastructure reliability and meeting the requirements of the Agreement.

The scope of this CPA consists of 1.17 mile of water main replacement plus the replacement of a critical section of 30-inch transmission main.

**Allentown Division Water Main Replacement Project Cycle 6 - Construction Phase**

*Please reference the cover Memo for additional information.*

<b>REQUESTED THIS AUTHORIZATION</b>	
<b>Construction Phase Cycle 6</b>	
<b>Staff</b>	<b>\$50,000</b>
<b>Professional Services:</b>	
<b>Construction Engineering / Management</b>	<b>\$45,220</b>
<b>Inspection</b>	<b>\$75,000</b>
<b>General Construction Contract – JOAO &amp; Bradley Co., Inc.</b>	<b>\$2,542,505</b>
<b>City Cost Sharing Agreement (Final Paving and ADA ramps)</b>	<b>\$366,000</b>
<b>Contingency</b>	<b>\$100,000</b>
<b>Total This Authorization</b>	<b>\$3,178,725</b>

**REVIEW AND APPROVALS:**

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





**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

**PROFESSIONAL SERVICES AUTHORIZATION**

**Professional:** GANNETT FLEMING, INC.  
P.O. Box 67100  
Harrisburg, PA 17106

**Date:** July 11, 2022

**Requested By:** Jason Peters

**Approvals**

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

**Chief Executive**

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

**Allentown Division – Water Main Replacement Program Cycle 6**

**This Authorization - Construction Phase, Cycle-6: \$45,220**

Gannett Fleming, Inc. will provide construction phase services including the following:

<b>Professional Services</b>
1. Conduct preconstruction conference & monthly progress meetings
2. Review all contractor schedules and submittals for compliance with specs
3. Prepare change orders as necessary
4. Respond to contractor RFIs
5. Review certified payroll receipts
6. Perform substantial and final completion inspections
7. Provide recommendations regarding release of payment, completeness of work, and final acceptance

*See cover memo for more information*

**Cost Estimate (not to be exceeded without further authorization): \$45,220**

**Timetable and Completion Deadline:** As required to meet various critical deadlines as set forth in the proposal.

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**(For Authority Use Only)**

**Authorization Completion:**

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



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(610)398-2503 \* FAX (610)398-8413 \* Email: service@lehighcountyauthority.org

**PROFESSIONAL SERVICES AUTHORIZATION**

**Professional:** KEYSTONE CONSULTING  
ENGINEERS  
5012 Medical Center Circle,  
Suite 1  
Allentown, PA 18106

**Date:** July 11, 2022

**Requested By:** Jason Peters  
**Approvals**  
**Department Head:** \_\_\_\_\_  
**Chief Executive Officer:** \_\_\_\_\_

**Allentown Division – Water Main Replacement Program Cycle 6**

**This Authorization - Construction Phase, Cycle 6: \$75,000**

Keystone Consulting Engineers will provide construction inspection related services including the following:

<b>Professional Service</b>
1. Provide full-time field inspection services
2. Attend pre-construction meeting, progress meetings, and other field meetings as necessary
3. Provide on-site contract management and coordination
4. Maintain daily inspection records and quantity tracking
5. Review change order documentation
6. Review monthly payment applications
7. Perform substantial & final completion inspections and issue punchlists

*See cover memo for more information*

**Cost Estimate (not to be exceeded without further authorization): \$75,000**

**Timetable and Completion Deadline:** As required to meet various critical deadlines as set forth in the proposal.

(For Authority Use Only)

**Authorization Completion:**

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

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# MEMORANDUM

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**Date:** July 11, 2022

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

**From:** Charles Volk, P.E., Chief Capital Works Officer  
Jason Peters, Capital Works Project Coordinator

**Subject:** Suburban Division – Heidelberg Heights Sanitary Sewer System Consent Order and Agreement - Private Side Sewer Inspection Program

**MOTIONS / APPROVALS REQUESTED:**

No.	Item	Amount
1	Capital Project Authorization – Planning Phase	\$73,075
2	Professional Services Authorization – Planning Phase Private Side Sewer Inspection Program: Keystone Consulting Engineers*	\$62,575

\* Included in the Capital Project Authorization

**BACKGROUND**

Inspection of the private side of the Heidelberg Heights Sanitary Sewer System is required as part of the Heidelberg Heights Sanitary Sewer System Consent Order and Agreement (CO&A), which was executed by DEP and LCA in Spring 2019. The CO&A mandates implementation of a Corrective Action Plan (CAP) to eliminate sewer system inflow and infiltration and commits LCA to eliminating hydraulic overloads and bypasses at the Heidelberg Heights Wastewater Treatment Plant. The Corrective Action provisions of the CO&A contain an implementation schedule that mandates the development of a private side sewer inspection program with follow-up enforcement actions. The goal of the private side sewer system inspection program is to identify any prohibited connections and broken/deficient private side sewer laterals.

Note that as of this date, approximately 4,425 feet of original vitrified clay (VCP) sewer main line and 128 each VCP public laterals have been replaced in the system. One more sewer main and lateral replacement project needs to be completed and is scheduled for 2023.

**PROJECT OVERVIEW**

In preparation for the upcoming private side sewer inspection program, LCA initiated a public outreach program earlier this year. Several mailers were sent informing residents of Heidelberg Township sewer ordinance #2019-1 that grants LCA the authority to investigate private side sewer system components and stressed the importance of prohibiting stormwater and groundwater from entering the sanitary sewer system. The mailers also advised residents of the upcoming private side inspection program and schedule.

The program includes the inspection of private side sewer laterals and internal home plumbing. These inspections will include the use of smoke testing and in-person home inspection to verify prohibited connections to the sanitary sewer system, such as roof drains, sump pumps, floor drains etc. Our consultant will be responsible to schedule and coordinate the home inspections at the convenience of LCA’s customers in the Heidelberg Heights sanitary sewer system.

**FUNDING**

The Project will be funded by the LCA Suburban Division.

**THIS APPROVAL – PLANNING PHASE**

**PROFESSIONAL SERVICES**

Keystone Consulting Engineers (KCE) will provide private side inspection related services for the project. The work will generally include:

- Distribution of customer notifications
- Arrange home inspections and setup appointments
- Conduct Smoke testing and inspections
- Conduct home inspections
- Provide project locations maps and field data reports
- Provide progress update meetings
- Provide post analysis and reporting for corrective action measures
- Act as the daily field contact person for the project.
- Maintain daily record of project activities.

**PROJECT SCHEDULE**

Based on Board authorization at the July 11, 2022, LCA Board meeting, the Private Side Sewer Inspection Program will be completed by the end of the year.

**FUTURE AUTHORIZATIONS**

Annual private side sewer system repair projects – to be determined.

## CAPITAL PROJECT AUTHORIZATION

<b>PROJECT NO.:</b>	SD-S-22-1	<b>BUDGET FUND:</b>	Suburban Div\Wastewater\Capital
<b>PROJECT TITLE:</b>	Suburban Division – Heidelberg Heights Sanitary Sewer Consent Order and Agreement – Private Side Sewer Inspection Program	<b>PROJECT TYPE:</b>	
<b>THIS AUTHORIZATION:</b>	<b>\$73,075</b>	<input type="checkbox"/> Construction	
<b>TO DATE (W/ ABOVE)</b>	<b>\$73,075</b>	<input checked="" type="checkbox"/> Engineering Study	
		<input type="checkbox"/> Equipment Purchase	
		<input type="checkbox"/> Amendment	

**DESCRIPTION AND BENEFITS:**

**Private Side Sewer Inspection Program:**

This project is required in accordance with the Corrective Action Provisions in the DEP Consent Order and Agreement (CO&A). The goal of the Private Side Sewer Inspection Program is to identify prohibited connections to the sanitary sewer system and deficient private side laterals that will require follow-up repairs and/or disconnections commencing in 2023.

Previous Authorizations	
none	

REQUESTED THIS AUTHORIZATION	
Planning Phase	
Sewer Inspection Services – Keystone Consulting Engineers	\$62,575
Staff	\$8,000
Contingency	\$2,500
<b>Total This Authorization</b>	<b>\$73,075</b>

Future Authorization	
Private side sewer repairs	TBD

**REVIEW AND APPROVALS:**

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



**Lehigh County Authority**

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

**PROFESSIONAL SERVICES AUTHORIZATION**

Professional: KEYSTONE CONSULTING  
ENGINEERS  
5012 Medical Center Circle,  
Allentown, PA 18106

Date: July 11, 2022

Requested By: Jason Peters

Approvals

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

Chief Executive \_\_\_\_\_

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

**Description of Services:**

**Suburban Division Facilities – Heidelberg Heights Sanitary Sewer System Consent Order and Agreement: Private Side Sewer Inspection Services**

Keystone Consulting Engineers, Inc. will perform planning phase services for the Heidelberg Heights Private Side Sewer Inspection Program, in accordance with their proposal dated May 27, 2022. The scope of services includes the following:

<b>Professional Services</b>
1. Conduct smoke testing and home inspections
2. Arrange home inspections and distribute notification
3. Provide project location maps and field data reports
4. Provide progress update meetings
5. Provide post analysis and reporting for corrective action measures
6. Maintain daily record of project activities
7. Act as the daily field contact person

**Cost Estimate (not to be exceeded without further authorization): \$62,575**

**Timetable and Completion Deadline:** Assumes work will be completed by the end of 2022.

**(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 – July 2022

Published: July 5, 2022

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

#### **FINANCE & ADMINISTRATION**

**Project Title: Monthly Financial Review**

Division / Funding: n/a

Status or Action Desired: Discussion

Board Action Date: 7/25/2022

Project Phase: n/a

Project Notes: June 2022 monthly financial report will be presented. Staff Responsibility: Ed Klein

**Project Title: LCA Strategic Plan - 2022 Quarterly Progress Reporting**

Division / Funding: n/a

Status or Action Desired: Discussion

Board Action Date: 7/25/2022

Project Phase: n/a

Project Notes: A quarterly report of staff progress on key initiatives outlined in LCA's Strategic Plan will be presented for Board review and discussion. Staff Responsibility: Liesel Gross

**Project Title: Resolution 7-2022-1: Suburban Water Division Financing**

Division / Funding: Suburban Division

Status or Action Desired: Approval

Board Action Date: 7/25/2022

Project Phase: n/a

Project Notes: As outlined in the recently adopted 2022-2027 Capital Plan, additional financing will be sought to fund approximately \$12 million in capital improvements within the Suburban Division Water capital plan. A parameters resolution will be presented to the Board for consideration for approval at the 7/25/2022 meeting. Staff Responsibility: Ed Klein

#### **SYSTEM OPERATIONS**

**Project Title: Monthly Operations Report**

Division / Funding: n/a

Status or Action Desired: Discussion

Board Action Date: 7/25/2022

Project Phase: n/a

Project Notes: June 2022 monthly operations report will be presented. Staff Responsibility: Andrew Moore & Chris Moughan

## WATER PROJECTS

**Project Title: Water Main Replacement Program Cycle 6**

Division / Funding: Allentown Division

Status or Action Desired: Approval

Board Action Date: 7/11/2022

Project Phase: Construction Phase

Project Notes: The project is for the annual replacement of aged and/or failing cast iron water mains in multiple locations throughout the City, in accordance with the new amended lease requirements (one mile per year), based on the design engineer's risk prioritization protocol. As of December 2021, LCA has received conceptual plan approval from the City and began the process of negotiations of a cost sharing agreement for road surface restoration just as conducted in the Cycle 5 program. Advance procurement of the ductile iron pipe was approved at the 4/25/22 Board meeting. LCA submitted substantially complete plans and specifications to the City for approval in May 2022. This project was bid on June 1, 2022 with bidding open on June 29, 2022. LCA is seeking construction phase Board approval at the July 11, 2022 meeting. Staff Responsibility: Jason Peters

## WASTEWATER PROJECTS – SUBURBAN DIVISION

**Project Title: Heidelberg Heights Sanitary Sewer Consent Order & Agreement**

Division / Funding: Suburban Division

Status or Action Desired: Approval

Board Action Date: 7/11/2022

Project Phase: Planning Phase

Project Notes: In accordance with the Consent Order and Agreement (CO&A) executed by LCA and DEP in 2020, LCA is required to complete annual sanitary sewer system inflow and infiltration mitigation projects to eliminate hydraulic overloads and bypass at the Heidelberg Heights wastewater treatment plant. The Corrective Action Plan, which is incorporated into the CO&A, includes an implementation schedule that requires all original VCP sewer main and public laterals to be replaced by the end of 2024, followed by the investigation of private side sewer components and removal/disconnection of all prohibited connections (basement drains, sump pumps, roof leader, etc.). LCA notified sewer customers of the upcoming private side sewer inspection program. LCA solicited a proposal from a local engineering consultant to perform 3rd party inspections of private side sewer components in the Heidelberg Heights system, and data from this planning effort will be used in the following years to develop individual repair projects for residences with prohibited connections in order to comply with the Heidelberg Township Sewer System Rules and Regulations Ordinance (#2019-1). Approval for this inspection program will be requested at the 7/11/2022 LCA Board meeting. Staff Responsibility: Chuck Volk



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

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### **FINANCE & ADMINISTRATION**

**Project Title: LCA Enterprise Resource Planning (ERP) Needs Assessment & Roadmap**

Division / Funding: Internal Services

Board Action Date: n/a

Status or Action Desired: Updated

Project Phase: Planning Phase

Project Notes: Within the recently adopted 2022-2027 Strategic Plan, LCA has identified the need to improve its administrative and financial processes to eliminate paper-based and spreadsheet-based processes, improve reporting accuracy and efficiency, and provide greater opportunity for process optimization, automation and self-service access for employees and customers. A key component of this initiative is to evaluate the configuration and use of the Enterprise Resource Planning (ERP) system currently in place to determine if the system can meet LCA's needs. At the April 11, 2022 Board meeting, approval was granted for a professional services authorization for Raftelis to assist with this evaluation and needs analysis. In May and June, the Raftelis team conducted three site visits to conduct the initial needs assessment, involving interviews and group meetings with 23 employees. Validation of the assessment is under way, and Raftelis will visit LCA again in July to review preliminary recommendations. A final report is expected to be delivered in August. Staff Responsibility: Liesel Gross

**Project Title: LCA-South Whitehall Township Emergency Water System Interconnection**

Division / Funding: Suburban Division

Board Action Date: n/a

Status or Action Desired: Updated

Project Phase: Construction Phase

Project Notes: An emergency water system interconnection has been designed and permitted to connect LCA's Central Lehigh Division with the South Whitehall Township water system for emergency back-up water supply. An agreement regarding the interconnection is required to complete the required permitting of the interconnection, which the Board approved at the May 23, 2022 Board meeting. Construction started and was completed in mid-June 2022, with a formal DEP walkthrough scheduled for the second week of July. Staff Responsibility: Phil DePoe

**Project Title: LCA Tapping Fee Policy Update & Suburban Water Division Tapping Fees**

Division / Funding: Suburban Division

Board Action Date: n/a

Status or Action Desired: Updated

Project Phase: n/a

Project Notes: Following detailed review of LCA's Suburban Division water tapping fees, the current Tapping Fee Policy, and associated policy documents, it was determined that a more comprehensive internal review is required to ensure updated procedures are documented. Any necessary policy updates or tapping fees changes will be brought to the Board for further consideration at a meeting later this summer. Staff Responsibility: Liesel Gross & Ed Klein

## WATER PROJECTS – SUBURBAN DIVISION

**Project Title: Fixed Base Meter Reading Stations**

Division / Funding: Suburban Division

Status or Action Desired: Updated

Board Action Date: n/a

Project Phase: Planning Phase

Project Notes: The project focuses on moving from an Automatic Meter Reading system to an Advanced Metering Instructure (AMI) system for the Suburban Division. An engineer was retained to prepare a site alternative study to meet our AMI goal of maximizing service coverage while minimizing the amount of new infrastructure (towers) needed. In addition to LCA owned properties, the study is evaluating co-locatable existing structures where new tower construction and local zoning and land development approvals would not be required. By optimizing the site selection process, we will reduce jurisdictional approvals required, impact to neighbors and construction costs. Upon completion of the study, a presentation of findings will be given to the LCA Board. Staff Responsibility: Amy Kunkel

## WASTEWATER PROJECTS – SUBURBAN DIVISION

**Project Title: Heidelberg Heights 2021 and 2022 Sanitary Sewer Replacement Project**

Division / Funding: Suburban Division

Status or Action Desired: Updated

Board Action Date: n/a

Project Phase: Construction Phase

Project Notes: In accordance with the Consent Order and Agreement (CO&A) executed by LCA and DEP, LCA is required to complete annual inflow and infiltration mitigation projects to eliminate hydraulic overloads and bypass events at the Heidelberg Heights wastewater treatment plant. The CO&A requires that all original vitrified clay sewer main and lateral pipe be replaced within five years. The 2021 sewer replacement project bids were opened on 3/31/2021. Only two bids were received, both of which significantly exceeded the engineer's estimate. The Board approved rejection of bids at the 4/26/2021 Board meeting. The project scope was expanded to include the 2022 required sewer main replacement (Phase 2), in order to gain economy of scale and attract more bidders. The expanded project was advertised for bid on 8/24/2021, and bids were opened on 9/15/2021. Construction phase authorization was granted at the 9/27/2021 Board meeting. Phase 1 of the project was substantially completed by the end of 2021, and Phase 2 construction commenced in early 2022. The project will be closed out following completion of the Phase 2 work. Staff Responsibility: Jason Peters

**Project Title: Heidelberg Heights Wastewater Treatment Plant - Mechanical Screen Project**

Division / Funding: Suburban Division

Status or Action Desired: Updated

Board Action Date: n/a

Project Phase: Design Phase

Project Notes: Since acquiring the Heidelberg Heights WWTP in 1998, LCA has performed numerous plant upgrades to extend service life and meet DEP discharge requirements. The original plant headworks consists of equipment that is obsolete and allows passage of rags and bulky material into the plant, which creates downstream pump clogging and instrumentation fouling. This project consists of the installation of a mechanical screen to remove the rags from the influent waste stream. The screen system is equipped with an auger that compacts and conveys material to a trash container. Design phase is in progress and the project is anticipated to be bid in summer 2022. Staff Responsibility: Chuck Volk

**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	Suburban Water & Sewer Facilities - SCADA System Upgrade	Suburban Division	Construction Phase	Chris Moughan
System Operations	Large Diameter Valve Prioritization Program	Allentown Division	Planning Phase	Chris Moughan
System Operations	Watershed Monitoring Program	Suburban Division	Ongoing	Andrew Moore
Water - Suburban	2022 Commercial Meter Replacement Project	Suburban Division	Construction Phase	Amy Kunkel
Water - Suburban	Far View Farms Pump Station Demolition	Suburban Division	Construction Phase	Ed Hoyle
Water - Suburban	Arcadia West Water Storage Tank Replacement	Suburban Division	Construction Phase	Amy Kunkel
Water - Suburban	Water Main Replacement Program Cycle 6	Suburban Division	Design Phase	Jason Peters
Water - Suburban	Upper System Pump Station and Main Extension	Suburban Division	Design Phase	Ed Hoyle
Water - Suburban	Central Lehigh and North Whitehall Systems – Water Supply Study	Suburban Division	Planning Phase	Phil DePoe
Water - Allentown	SmartBall Inspection - 30" and 36" Transmission Main - East Side	Allentown Division	Planning Phase	Chris Moughan
Water - Allentown	Water Filtration Plant: Filter Upgrade Project	Allentown Division	Design Phase	Chuck Volk
Water - Allentown	Water Filtration Plant: 2022 Indenture Upgrades	Allentown Division	Construction Phase	Bryan Geissel
Water - Allentown	Water Filtration Plant: Filter Upgrade Project	Allentown Division	Preliminary Design	Chuck Volk
Water - Allentown	Water Filtration Plant: High Lift Pump VFD Replacements	Allentown Division	Construction Phase	Chuck Volk
Water - Allentown	Water Filtration Plant & System Master Plan	Allentown Division	Planning Phase	Phil DePoe

<b>Project Category</b>	<b>Project Title</b>	<b>Division / Funding</b>	<b>Project Phase</b>	<b>Staff Responsibility</b>
Sewer - Act 537	Sanitary Sewer Collection System: Rain Derived Inflow and Infiltration (RDII) Analysis - Signatory Systems	Allentown Division	Planning Phase	Phil DePoe
Sewer - Act 537	KISS System Modeling - Capacity Problem Definition	City of Allentown (AO)	Planning Phase	Phil DePoe
Sewer - Act 537	KISS System Modeling - Rain Derived Inflow and Infiltration (RDII) Analysis - City System	City of Allentown (AO)	Planning Phase	Phil DePoe
Sewer - Act 537	City of Allentown: 2022 Nighttime Weiring	City of Allentown (AO)	Planning Phase	Phil DePoe
Sewer - Act 537	KIWWTP - Wet Weather Treatment Options	City of Allentown (AO)	Planning Phase	Phil DePoe
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	Kline's Island WWTP: Phase 1 AO Design Improvements	City of Allentown (AO)	On Hold	Phil DePoe
Sewer - Act 537	KISS System Modeling - Sewage Billing Meter QA/QC Data Analytics and 2021 Flow Metering Preparation	City of Allentown (AO)	Planning Phase	Phil DePoe
Sewer - Act 537	KISS System Modeling - 2021 Model Expansion and Calibration	City of Allentown (AO)	Planning Phase	Phil DePoe
Sewer - Act 537	Resolution 6-2022-1: Trexlertown Act 537 Special Study	Suburban Division	Planning Phase	Phil DePoe
Sewer - Act 537	Regional Sewer Capacity & Wet-Weather Planning: Engineering & Program Support	Suburban Division	Planning Phase	Phil DePoe
Sewer - Act 537	Upper Western Lehigh Pump Station and Force Main	Suburban Division	Design Phase	Amy Kunkel
Sewer - Act 537	Western Lehigh Service Area: 2022 Nighttime Weiring & Budget Amendment	Suburban Division	Planning Phase	Phil DePoe
Sewer - Act 537	Western Lehigh Service Area: 2020 Sewer Modeling	Suburban Division	Planning Phase	Phil DePoe
Sewer - Act 537	Western Lehigh Service Area - Engineering & Program Support	Suburban Division	Planning Phase	Phil DePoe

<b>Project Category</b>	<b>Project Title</b>	<b>Division / Funding</b>	<b>Project Phase</b>	<b>Staff Responsibility</b>
Sewer - Act 537	Industrial Pretreatment Plant Master Plan	Suburban Division	Planning Phase	Phil DePoe
Sewer - Suburban	Lynn Township Corrective Action Plan	Suburban Division	Ongoing	Jason Peters
Sewer - Suburban	Park Pump Station Phase 2 Upgrade	Suburban Division	Construction Phase	Chuck Volk
Sewer - Suburban	Western Lehigh Manhole Rehabilitation Project - Phase 3	Suburban Division	Design Phase	Jason Peters
Sewer - Allentown	Kline's Island WWTP: 2022 Indenture Upgrades	Allentown Division	Construction Phase	Bryan Geissel
Sewer - Allentown	Kline's Island WWTP: Dechlorination System Pilot Program	Allentown Division	Preliminary Design	Bryan Geissel
Sewer - Allentown	KIWWTP Primary Digester No. 1 Cleaning	Allentown Division	Construction Phase	Bryan Geissel
Sewer - Allentown	Kline's Island WWTP: Sludge Thickener Tank No. 3 Mechanical Upgrade	Allentown Division	Construction Phase	Bryan Geissel
Sewer - Allentown	Kline's Island WWTP: Main and Auxiliary Pump Station Improvements	Allentown Division	Preliminary Design	Chuck Volk
Sewer - Allentown	Kline's Island WWTP: Intermediate Pump Station Improvements	Allentown Division	Preliminary Design	Chuck Volk
Sewer - Allentown	Kline's Island WWTP: Solids Process Boiler and HVAC System Upgrade Project	Allentown Division	Design Phase	Bryan Geissel
Sewer - Allentown	Lehigh Street (Rte. 145) Water and Sewer Main Relocation Project	Allentown Division	Construction Phase	Jason Peters
Sewer - Allentown	Sanitary Sewer Collection System: I&I Source Reduction Program Plan (Year 3)	City of Allentown (AO)	Construction Phase	Phil DePoe