



## LEHIGH COUNTY AUTHORITY

February 8, 2016

### WORKSHOP/BOARD MEETING AGENDA

1. Call to Order
2. Review of Agenda
  - *Public Participation Sign-In Request*
3. Executive Sessions
4. Approval of Minutes
  - *October 26, 2015 Board Meeting Minutes*
  - *November 9, 2015 Workshop Meeting Minutes*
  - *December 14, 2015 Board Meeting Minutes*
  - *January 11, 2016 Workshop Meeting Minutes*
5. Public Comments
6. Action / Discussion Items

#### **FINANCE AND ADMINISTRATION**

- *2016 Goals*
- *Board Meeting Designation*

#### **WATER**

- *Suburban Division - Facility Condition Assessment (Approval)*

#### **WASTEWATER**

- *Boston Beer Amendment*
- *Allentown Division – Wastewater Treatment Plant: Digester Cover Replacements (Approval)*

7. System Operations Overview
8. Staff Comments
9. Solicitor's Comments
10. Other Comments
11. Adjournment

#### **FEBRUARY MEETINGS**

Workshop Meeting  
Board Meeting

February 8 – 12:00 p.m.  
February 22 – 12:00 p.m.

#### **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. 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.

## FINANCE & ADMINISTRATION

### ACTION ITEMS

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### DISCUSSION ITEMS

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1. **2016 Goals**

Brief review of the goal-setting process that the Authority staff has undertaken, which will result in additional Board discussion at future meetings.

2. **Board Meeting Designation**

Staff proposes to eliminate the designation of one meeting per month as a “Workshop” meeting. In its place, the Authority would conduct two regular Board meetings per month instead according to the schedule already published. By conducting both meetings as regular Board meetings with a standard agenda, it would provide greater clarity for the public regarding what actions can be taken at each meeting. Discussion of this proposal is requested in order to implement this proposed change.

### INFORMATION ITEMS

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1. **Recently Purchased Investments – Certificates of Deposit (CDs)**

<b>CERTIFICATES OF DEPOSIT</b>						
Fund	Bank	Location	Gross Amount	Date of Purchase	Date Due	Net Rate %
LLRI CR	PSDLAF Collateralized CD	400,000.00	400,000.00	12/15/15	6/21/16	0.1
Cons Wtr (2)	PSDLAF Collateralized CD	155,000.00	155,000.00	12/15/15	6/21/16	0.1
Cons LL2 (314)	PSDLAF Collateralized CD	245,000.00	245,000.00	12/15/15	6/21/16	0.1
WW Capac	PSDLAF Collateralized CD	600,000.00	600,000.00	12/15/15	6/21/16	0.1
2010 Wtr Cons A	PSDLAF Flex Pool	2,000,000.00	2,000,000.00	12/15/15	6/21/16	0.1
Wtr R&R	PSDLAF Collateralized CD	1,000,000.00	1,000,000.00	12/15/15	6/21/16	0.1

Fund Descriptions for Investments:

Cons Wtr (2)	Consolidated Water (2)
LLRI CR	Little Lehigh Relief Interceptor Capital Reserves
Cons LL2 (314)	Consolidated Little Lehigh Relief Interceptor 2
WW Capac	Wastewater Capacity
2010 Wtr Cons A	2010 Water Construction, Series A Bond
Wtr R&R	Renewal and Replacement

## WATER

### **ACTION ITEMS**

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**1. Suburban Division – Facility Condition Assessment**

The project consists of a comprehensive facilities evaluation of the buildings, HVAC system and electrical system for 16 water and 11 sewer facilities in the Suburban Division. The Study will utilize asset management protocols and enable prioritizing and planning capital improvement projects in order to maintain an acceptable level of service and strategize funding. Project approval paperwork was provided to the Board in its January Board meeting packet (**yellow**).

### **DISCUSSION ITEMS**

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### **INFORMATION ITEMS**

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**1. Suburban Division - Water Main Replacement Program Cycle 1**

The project consists of the replacement of 1.73 miles of aged and/or failing Cast Iron water main. Design is currently under way.

**2. Suburban Division - Water Main Replacement Program Cycle 2**

The project consists of the replacement of 1.5 miles of aged and/or failing Cast Iron water main. Design is currently under way.

**3. Suburban Division – Pumping Station Projects**

This project will involve upgrades at two existing small system booster stations and the installation of one new major booster station in the Central Lehigh Division (CLD). The Pine Lakes Project will feature the conversion of the existing hydro-pneumatic station to a variable frequency drive controlled double pumping system (along with other miscellaneous improvements). The Crestwood Project consists of abandonment of existing wells and storage tank currently serving higher elevation customers and a connection of the pumping station to the main North Whitehall Division System. The CLD Auxiliary Pump Station Project will feature the installation of a new booster station and main extension to pump water from the Lower to the Upper System. The projects will also involve installation/conversion to a SCADA system at each of the sites. The design for all three projects commenced in June. The PADEP Public Water Supply (PWS) Permit applications were submitted for the Crestwood and Pine Lakes Projects. Comments were returned to our consultant on the CLD Auxiliary Pump Station Project application.

**4. Suburban Division – Capece Tract, WL #20 and Res #3 Improvements**

WL #20 will be switched over to a variable frequency drive motor to better control power usage and maintain steady output. Reservoir #3 will receive a motor activated control valve to maintain filling capabilities and chlorine contact levels. Both facilities will receive an upgrade to their SCADA systems. The design phase is under way.

**5. Suburban Division – Route 309 Crossing at Sand Spring Road**

A 12" water line will cross Route 309 through a previously installed 24" casing. Completion of this line will bring public water to the property line of Lehigh Carbon Community College. The design phase is under way.

**6. Allentown Division – Prelease Valve Replacements**

The project is the replacement of approximately 55 inoperable valves in multiple locations throughout the City that existed prior to the lease settlement. Design is currently under way. This project is identified as Un-Completed Work and will be funded by the City.

**7. Allentown Division – Water Main Replacement Program- Cycle 2**

The project is the replacement of 2-miles of aged and/or failing Cast Iron water main in multiple locations throughout the City. Construction is currently complete and project close out is under way. This Project is identified as Schedule-7 Work and will be funded by LCA Allentown Division.

**8. Allentown Division – Water Main Replacement Program- Cycle 3**

The project is the replacement of 4-miles of aged and/or failing Cast Iron water main in multiple locations throughout the City. Design is currently under way. This Project is identified as Schedule-7 Work and will be funded by LCA Allentown Division.

**9. Allentown Division - Miscellaneous Water Filtration Plant / Water Distribution**

One project consists of upgrading the existing stormwater pump/control at Water Distribution. Design is currently underway with a likely spring construction start date. This will be a capital project funded by the LCA Allentown Division. Another project consisted of repainting the finished water gallery piping. Construction started in mid-November and has been completed. The design for Phase II of painting (filter gallery) is under design. The design for the rehabilitation of the filter room high ceiling is also underway.

**10. Allentown Division – Water System Master Plan**

This project involves the creation of a Master Plan for the Allentown Water Plant, water storage tanks, water storage reservoirs, pressure booster stations, raw water springs, and surface water intakes. The Master Plan will involve several key sections including, but not limited to: full-scale condition assessments, treatment process optimization, and development of short term/long term capital plans. The Master Plan is a requirement included within the City of Allentown lease, and it also needs to be updated every 5 years throughout the life of the lease. RFPs were distributed to consultants in December 2015. Board approval to award the professional services contract is planned for February 2016. The project will be funded by the LCA Allentown Division.

**11. Developments**

Water system construction is occurring in the following developments:

- Hamilton Crossings, 2 commercial lots with 20 buildings having retail, financial, convenience and restaurant uses, LMT
- Highgate, Phase 3 (Dunbar Tract), 63 residential lots (sfa), UMT
- Liberty at Mill Creek, 2 industrial lots, UMT
- Spring Creek Settlement Properties, 14 commercial/industrial lots, LMT
- Valley West Estates, Phases 4, 5 & 6, 46 residential lots (sfd), UMT (currently on hold)

Water system plans are being reviewed for the following developments:

- Bortz Tract, 14 commercial units, UMT/SWT

Diocesan Pastoral Center, 2 commercial lots, 3 additional lots and residual lot for existing cemetery, LMT  
Farr Tract, 94 residential lots (sfd), LMT  
Fields at Indian Creek, 218 residential lots (sfd) & community center, LMT/UMiIT/Emmaus, water and sewer  
Grandview, 6 commercial units and 204 apartment units, LMT  
Grant Street Townes, 18 residential lots (sfa), WashT  
Hickory Park Estates, 3 residential lots (sfd), UMT  
Hillview Farms, 31 residential lots (sfd), LMT/SWT  
Indian Creek Industrial Park, 6 commercial lots, UMiIT, water and sewer  
Lehigh Hills, 247 residential lots (sfa/sfd), UMT  
Morgan Hills, 40 residential lots (sfd), WeisT, water and sewer  
North Whitehall Commercial Center (Walmart), 5 commercial lots, NWT, water & sewer  
Shepherd's Corner, 1 commercial lot, LMT  
Trexler Business Center, Lot 1, 1 commercial building, LMT  
Weilers Road Twins, 82 residential lots (sfa), UMT  
Woodmere Estates, 60 residential units (sfd), UMT

## WASTEWATER

### ACTION ITEMS

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1. **Boston Beer Amendment (Approval)**

Boston Beer (American Craft Brewery) has been operating under the Diageo agreement dated September 1, 2005, since they went on line in 2007. An amendment to the existing Diageo agreement was approved by the Board in 2011 with a five year term. The second Amendment has been negotiated over the last 9 months for the next five year period. A summary of the terms negotiated will be presented to the Board for approval if Boston Beer accepts the final changes to the agreement prior to the Board meeting.

2. **Allentown Division – Wastewater Treatment Plant: Digester Cover Replacements (Approval)**

This project involves the cover replacement of both the Primary Digester No. 1 and the Secondary Digester (the cover for Primary Digester No. 2 was previously replaced in 2010). A Major Capital Improvement (MCI) Conceptual Design has been submitted to the City and has been approved. A request for Board approval of the construction phase is scheduled for the February Workshop Meeting. This Project is identified in the Lease as Schedule 7 (required) project and will be funded by the LCA Allentown Division. *(blue)*

### DISCUSSION ITEMS

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### INFORMATION ITEMS

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1. **Wastewater Treatment Capacity**

The PaDEP has suggested that a 537 Plan for the additional 4 MGD of capacity be submitted to them at the time when the 4 MGD is needed or after the SCARP improvements are made. They anticipate that if the 537 Plan is submitted in the near term, the Department will require a revised Plan prior to any capital improvements.

2. **Suburban Division -Wynnewood Terrace Pump Station and Force Main Replacement**

Work started on April 13, 2015 and was Substantially Complete on October 12, 2015. Contractors are working towards final completion of punch lists and restoration.

3. **Suburban Division -Lynn Township – WWTP Improvements, Phases 1 & 2**

The project will upgrade the WWTP head works. Comments were sent to Gannett Fleming on the 100% design specifications.

4. **Allentown Division – Sanitary Sewer Manhole Lining, Cycle 3**

This annual project will install a lining system (to eliminate infiltration) in approximately 100 aged brick manholes identified by LCA staff. The design phase will be administratively approved. Board approval of the construction phase will be requested in the Spring of 2016. The project is identified as Administrative Order Work and will be funded by the City.

5. **Allentown Division – Manhole Collars with Water Tight Frame and Covers, Cycle 3**

This three year project will permanently secure the frame and cover of approximately 90 aged brick manholes identified by current LCA staff. This work will eliminate inflow from entering these manholes and eliminate the potential for sanitary sewer overflows (SSO's) from these manholes. Board approval of the construction phase will be requested in the Spring of 2016. The project is identified as Administrative Order and will be funded by the City.

**6. Allentown Division - WWTP-Replacement of Motor Control Centers**

This Project will replace five aged motor control centers that provide power on a 24/7 basis to various parts of the WWTP. The project has been approved by the City as a Major Capital Improvement (MCI). The project completion is still expected by the end of February 2016. This Project is identified in the Lease as Schedule 7 (required) project and will be funded the LCA Allentown Division.

**7. Allentown Division – Roof Rehabilitation and Replacements- Phase 1**

The Project consists of replacing 26 facility roofs that were identified as in need of immediate replacement in the Roof Evaluation report performed by D'Huy Engineering. The design of these replacements are proceeding. The project was presented to the City for review/approval as a Major Capital Improvement (MCI), but the city rejected it as such. Construction began in October and will be complete by February 2016. The project will be funded by the LCA Allentown Division.

**8. Allentown Division – Roof Rehabilitation and Replacements- Phase 2**

The Project consists of replacing 13 facility roofs that were identified as in need of "Phase 2" replacement in the Roof Evaluation report performed by D'Huy Engineering. The design of these replacements are proceeding. The project will be funded by the LCA Allentown Division.

**9. Allentown Division- SCADA System Installation –Wastewater Treatment Plant:**

Existing network equipment was transferred to new rack system. PLC panel factory acceptance testing was conducted January 13 & 14, 2016. Computer hardware is scheduled to be delivered and installed between January 21 and February 5, 2016. PLC panel installation will begin January 25, 2016, and system cut will take place in phases as not to disrupt Plant operation. Project completion is anticipated for the end of March. Configuration of historical data, trending and reports are progressing. The project is being funded by the City.

**11. Allentown Division – Wastewater Treatment Plant: Main Pump Station Suction Piping**

This project involves either the lining or replacement of the suction piping for Pump #1 at the Main Pumping Station. Holes have developed in the suction piping and without this repair, the ability to operate this pump properly may be compromised in the future

**12. Consolidated Systems- SharePoint:**

GHD is developing SharePoint sites for 4 applications, (1 & 2) Team sites – Plant services, customer service; (3) Workflow – Board/Staff notes, New employee orientation; (4) KPI/Dashboard – Employee safety, Bond coverage. Current schedule calls for delivery during March 2016.

**13. Suburban Division – Western Weisenberg Wastewater Treatment Plant Improvements**

This project includes: (1) the improvements necessary to rectify the cold weather nitrification issue at the WWTP, and (2) the installation of additional equipment to enhance operation. This project will be funded by the LCA Suburban Western Weisenberg Division. Preliminary design plans are expected by the end of February 2016.

14. **Suburban Division – SCARP**

The Round 2 final alternatives modeling has been completed. An internal meeting was held to discuss the recommended path forward. In 2016 the LCA Signatory communities will negotiate a Memo of Understanding for completion of the SCARP Capital Improvements Plan.

The “Order Extension on Consent” was executed by LCA and sent to EPA. South Whitehall Township and Coplay Whitehall Sewer Authority did not sign the Order by the due date. South Whitehall Township has now signed the extension and submitted it to EPA. There is no confirmation at this time if Coplay Whitehall has signed.

The test and seal project for a portion of the Western Lehigh Interceptor will be bid in the near future.

15. **Lowhill Township – Sewer System Acquisition**

The Board approved this acquisition earlier in 2015, but there are a number of items that need to be completed before settlement can take place, particularly an agreement with Upper Macungie Township for use of its system to transport waste from the Lowhill sewer system to the Western Lehigh Interceptor. The original transportation agreement with Lowhill Township is not assignable, so Upper Macungie has asked that the agreement be revised. There has been a meeting on this at which the parties seemed to have reached agreement, but the Authority manager left the position shortly thereafter. Upper Macungie was originally preparing the first draft, but they have now asked the Authority to do so.



**REGULAR MEETING MINUTES**  
**October 26, 2015**

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The Regular Meeting of the Lehigh County Authority was called to order at 12:30 p.m., on Monday, October 26, 2015, Chairman Brian Nagle presiding. Other Members present at the commencement of the meeting were: Linda Rosenfeld, Emrich Stellar, Tom Muller, Richard Bohner, Norma Cusick, Scott Bieber, Ted Lyons and Deana Zosky. Authority Staff present were Aurel Arndt via video conference, Liesel Adam, Pat Mandes, Ed Klein, Frank Leist, Brad Landon, John Parsons, Phil DePoe, Bob Kerchusky, Linda Eberhardt and Lisa Miller.

Present from the public were Rob Hamill, Mike Siegel, Dave McGuire, Joe Hilliard, Jan Keim and John Donchez.

**REVIEW OF AGENDA**

Chairman Nagle said that there will be an Executive Session following the regular meeting regarding potential litigation.

**APPROVAL OF MINUTES**

**September 14, 2015 Workshop Meeting Minutes**

Chairman Nagle has one change. Under Action and Discussion Items, the dates for the Capital Plan should read 2016-2025. On a motion by Richard Bohner, seconded by Norma Cusick, the Board unanimously approved the Minutes of the September 14, 2015 Workshop Meeting as changed (9-0).

**September 28, 2015 Regular Meeting Minutes**

Richard Bohner said that under Action and Discussion Items, Well WL-20 and Reservoir-3 – Coordinated Capital and Operational Changes, the Capital Project Authorization shows a different total cost as to what is being requested and what is listed in the actual paperwork. Since this is not a typo, the Minutes will be tabled until the correct amount of the CPA is determined.

**PUBLIC COMMENTS**

Joe Hilliard of South Allentown was present and expressed his concerns of transparency with the Board. He read from a list of items that he believes would improve the Authority's transparency. The Board requested the list be supplied to the Authority in writing for consideration.

Rob Hamill was present to discuss his concerns with transparency and the monitoring of Wells 8 & 12. He states that he believes the Authority is not completing the monitoring work it agreed to do to ensure the wells would not impact the Little Lehigh Creek. Liesel Adam responded that LCA has provided Lower Macungie Township with the information on the monitoring wells and also reached out to assist them with any questions and so all terms of the monitoring requirements have been met.

David McGuire with the Sierra Club of Allentown was present to comment on the monitoring wells and also the EPA Administrative Order (AO).

Jan Keim was present and discussed her concerns regarding sewage overflows in the Little Lehigh Creek and the solutions that the municipalities and LCA were proposing to correct the problem. Some discussion followed regarding a presentation that Bill Erdman from Keystone Consulting Engineers had presented to some of the Western Lehigh Signatories and their engineers to discuss the options on the EPA AO. The Board did not have a copy of, nor were familiar with Mr. Erdman's presentation, and therefore requested additional information about this topic be presented at a future meeting.

Mike Siegel, President of the Little Lehigh Watershed Coalition was present. He stated that the Coalition has been essential in getting water quality improved in the Little Lehigh Creek. He also wanted to let the Board members know that the Coalition has hired an attorney to monitor LCA's activity for the past six years. He said that his attorney will sue LCA and its signatories if there is another sewage overflow on the Little Lehigh Creek. The Coalition is watching and will hold LCA and its signatories accountable.

**ACTION AND DISCUSSION ITEMS****2016 Budget**

The preliminary 2016 Budget had been presented at the previous Workshop meeting and is now up for approval. Liesel Adam gave an overview and Ed Klein presented a PowerPoint slide show highlighting debt service ratios and any changes made from the preliminary Budget. There was discussion on the signatory rates. Ed Klein also explained the use of reserves to fund capital improvements.

There was public comment on the transparency of LCA's budget review and approval process and also capital improvement costs.

There was discussion on the Budget timeline. Ed Klein explained that the 2016 budget timeline was compressed significantly to meet Concession financing bondholder requirements of budget adoption prior to November 1<sup>st</sup>. Future budget timelines can be modified if needed, which the Board will discuss at a future meeting.

Norma Cusick proposed a motion to adopt the 2016 Budget as presented, seconded by Richard Bohner. To ensure a clear record of this action, a roll call vote was requested, with the following votes cast:

Linda Rosenfeld – yes  
Emrich Stellar – yes  
Tom Muller – yes  
Brian Nagle – yes  
Richard Bohner – yes  
Norma Cusick – yes  
Scott Bieber – yes  
Ted Lyons – yes  
Deana Zosky – no

With such votes cast, the Board adopted the 2016 Budget (8-1).

Pat Mandes gave an overview of the proposed 2016 Wastewater User Charges report. The report consists of the proposed rates for the Western Lehigh Signatories. LCA stated that rates were lowered 14% last year.

On a motion by Ted Lyons, seconded by Norma Cusick, the Board unanimously gave preliminary approval of the Proposed 2016 Wastewater User Charges (9-0).

**Allentown Division – Miscellaneous Water Filtration Plant/Water Distribution (Approval)**

Frank Leist gave an overview of the project that consists of repainting the processed water pipe at the Water Filtration Plant. The work includes the preparation (sand blasting) of processed water piping including connection joints, support posts and miscellaneous pipe support steel. He is asking for approval of the Capital Project Authorization for the Construction Phase in the amount of \$122,097.00, which includes the Professional Services Authorization to D'Huy Engineering in the amount of \$9,200.00 and the General Contract Award to D.M. Coatings, Inc. in the amount of \$82,897.00.

On a motion by Scott Bieber, seconded by Tom Muller, the Board unanimously approved the Capital Project Authorization for the Construction Phase in the amount of \$122,097.00, which includes the Professional Services Authorization to D'Huy Engineering in the amount of \$9,200.00 and the General Contract Award to D.M. Coatings, Inc. in the amount of \$82,897.00 (9-0).

**Allentown Division – Miscellaneous Projects at the Wastewater Treatment Plant (Approval)**

Frank Leist gave an overview of the project that consists of the purchase and installation of a new 250 kW standby generator with sub-base fuel tank, concrete pad, automatic transfer switch, interconnecting conduit

and wiring and tie-in to an existing Motor Control Center. He is asking for approval of the Capital Project Authorization for the Construction Phase in the amount of \$162,200.00, which includes the Professional Services Authorization to D'Huy Engineering in the amount of \$13,500.00 and the General Contract Award to Wind Gap Electric in the amount of \$108,700.00.

On a motion by Emrich Stellar, seconded by Norma Cusick, the Board unanimously approved the Capital Project Authorization for the Construction Phase in the amount of \$162,200.00, which includes the Professional Services Authorization to D'Huy Engineering in the amount of \$13,500.00 and the General Contract Award to Wind Gap Electric in the amount of \$108,700.00 (9-0).

There was a brief discussion on Boston Beer and their pretreatment plant rates.

### **SYSTEM OPERATIONS OVERVIEW**

Robert Kerchusky reported that in September, the Water Filtration Plant produced 20.5 million gallons per day. The projects that were completed were the #23 standpipe was cleaned inside and out and surface coated, the #2 High lift motor was removed for rebuild, and one of the Crystal Spring motors was removed for rebuild. Kline's Island Wastewater Plant treated 30.09 million gallons per day. Major projects that are ongoing are the motor control center replacement and the SCADA system. All parameters were met at both plants.

Tom Muller left the meeting at 2:00 p.m.

Linda Rosenfeld commented that she recently toured the Wastewater Treatment Plant. She said it was terrific and was amazed at how well it was working compared to when she had toured it in the past. She thanked Steve Stahlberg for the tour.

### **STAFF COMMENTS**

Liesel Adam recognized Linda Eberhardt for her tremendous effort in the Budget process. The Board thanked her.

### **SOLICITOR'S COMMENTS**

None.

### **OTHER COMMENTS**

David McGuire commented on the Inflow and Infiltration issue. The Board commented that LCA is and has been trying to get the right solution for all those involved. Joe Hilliard stated that the City has oversold its capacity for years. Mike Siegel commented on the odor issues in the Lehigh Parkway area and in sections of the Little Lehigh Creek. Deana Zosky commented that she is aware that LCA is working on the odor issues with the residents.

### **EXECUTIVE SESSION**

The Chairman called an Executive Session at 2:10 p.m. to discuss potential litigation.

Linda Rosenfeld left the meeting at 2:55 p.m.

The session ended at 3:05 p.m.

### **ADJOURNMENT**

There being no further business, the Chairman adjourned the meeting at 3:05 p.m.

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Richard H. Bohner  
Secretary

## **WORKSHOP MEETING MINUTES**

### **November 9, 2015**

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The Workshop Meeting of the Lehigh County Authority was called to order at 12:07 p.m., on Monday, November 9, 2015, Chairman Brian Nagle presiding. Other Members present at the commencement of the meeting were: Linda Rosenfeld, Emrich Stellar, Tom Muller, Richard Bohner, Norma Cusick, and Deana Zosky. Authority Staff present were Aurel Arndt, Liesel Adam, Brad Landon, Pat Mandes, Ed Klein, Frank Leist, John Parsons, Bob Kerchusky, Chuck Volk and Lisa Miller.

Also present were James Shelton of Arcadis, Bill Bohner of ARRO, and Ralph Eschborn of AECOM.

#### **REVIEW OF AGENDA**

Aurel Arndt stated that there will be one Executive Sessions regarding potential litigation at the end of the regular meeting agenda.

#### **PUBLIC COMMENT**

Chairman Nagle stated that he would like to revisit the Board Norms. He asked that Board members review the current Norms and have any comments back to him by November 20, 2015 for discussion at a later date.

Joe Hilliard of Allentown was present to discuss a written response he prepared to the Board's request of how he would make LCA more transparent. He read his list of responses but would not provide it to the office unless he was provided with the Board members personal email addresses.

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

##### **EPA Administrative Order**

Pat Mandes presented a PowerPoint presentation for discussion regarding the EPA Administrative Order. The LCA Infiltration and Inflow (I&I) Program Consultant, Jim Shelton from Arcadis, also presented information on the final alternatives analysis for the Western Lehigh Interceptor System. The hydraulic model was utilized to cost out various alternatives to meet the level of service necessary to meet the EPA Administrative Order. Combinations of storage, conveyance upsizing, and I&I removal were evaluated. The lowest cost alternatives were discussed in more detail. The alternative favored by the Western Lehigh Sewerage Partners include I&I removal of over 60 miles of pipe in the Signatory systems. Discussion followed. No action was requested.

##### **Western Lehigh Interceptor 537 Plan Study Update**

Ralph Eschborn of AECOM presented a PowerPoint presentation and provided the background on the 537 Plan that was previously presented to the Board. He presented the cost estimates developed in 2013 for the four options to obtain 4 MGD of wastewater capacity which include the expansion of Kline's Island WWTP, upgrade and direct discharge from the Pretreatment Plant (PTP) to either the Lehigh River, Jordan Creek, or land application. Since 2013, the focus of the study has been to further evaluate the land application for cost savings and to develop hybrid scenarios for Kline's Island. The results of the various evaluations would be used to update the four costs estimates.

Previous evaluations on land application costs did not consider the Total Dissolved Solids (TDS) levels in the PTP effluent. DEP has established a standard of 500 mg/L for TDS for drinking water, which must be met by wastewater treatment for land application, or through proper dilution of land-applied effluent. Agricultural use of land-applied effluent is typically capped at 1000 mg/L. Characterization of the PTP effluent indicates TDS levels in excess of 1300 mg/L. An evaluation of potential land application sites in Western Lehigh County determined that year round land application of effluent was possible and could result in a significant reduction in costs. Mr. Eschborn explained that the limiting factor would be TDS in the PTP effluent. A source reduction evaluation was performed to determine if the source or sources of TDS in the PTP influent would be reduced to levels which would produce effluent that meet the DEP TDS standards for land application.

The wastewater discharge from the major industrial discharges into the PTP was characterized. The largest contributor of the PTP TDS was further evaluated. The conclusion of the study was that source reduction of

TDS is not possible with the conclusion that reverse osmosis (RO) would be required at the PTP to be able to meet the DEP TDS levels for land application. The additional costs of RO significantly increased the cost of the land application option

The hydraulic model was utilized to generate costs for conveyance improvements necessary for each of the four options for obtaining the additional 4 MGD of treatment capacity. The findings of the study were that full diversion of flow to the PTP would save no more than \$7 million dollars in conveyance relief piping rather than sending all flows to Kline's Island WWTP. This cost comparison includes all costs currently contemplated for remediation of I&I issues as presented in the earlier discussion about the USEPA Administrative Order.

AECOM evaluated previous cost estimates for upgrades at Kline's Island WWTP to determine if other technologies could reduce costs. The findings of the evaluation were that the midstream de-ammonification process and chemically enhanced primary treatment have cost savings benefits of \$10 million dollars. There is also a benefit of phasing the improvements.

In conclusion, Ralph Eschborn presented the economic summary of the future options. With the updated studies, a Kline's Island expansion is the least costly alternative. The recommendation made to the Board was to defer the pursuit of alternatives other than Kline's Island expansion and to integrate conveyance capacity increases with the future wet weather improvements related to the EPA Administrative Order. Some discussion followed. No action was requested.

#### **INFORMATION ITEMS**

None.

#### **SYSTEM OPERATIONS OVERVIEW**

None.

#### **STAFF COMMENTS**

None.

#### **SOLICITOR'S COMMENTS**

None.

#### **OTHER COMMENTS**

None.

#### **EXECUTIVE SESSION**

The Chairman called an Executive Session at 2:23 p.m. to discuss potential litigation.

Emrich Stellar left the meeting at 2:30 p.m.

The session ended at 2:50 PM.

#### **ADJOURNMENT**

There being no further business, the Chairman adjourned the meeting at 2:55 p.m.

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Richard H. Bohner, Secretary

**REGULAR MEETING MINUTES**  
**December 14, 2015**

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The Regular Meeting of the Lehigh County Authority was called to order at 12:18 p.m., on Monday, December 14, 2015, Chairman Brian Nagle presiding. Other Members present at the commencement of the meeting were: Linda Rosenfeld, Emrich Stellar, Tom Muller, Richard Bohner, Norma Cusick, Scott Bieber and Deana Zosky. Authority Staff present were Aurel Arndt, Liesel Gross, Ed Klein, Pat Mandes, Frank Leist, Brad Landon, John Parsons, Chuck Volk, Bob Kerchusky, Phil DePoe and Lisa Miller.

**REVIEW OF AGENDA**

Aurel Arndt stated there would be an Executive Session following the regular meeting regarding potential litigation and a personnel issue.

**APPROVAL OF MINUTES**

**September 28, 2015 Regular Meeting Minutes**

Richard Bohner suggested two corrections to the Minutes. Under Action and Discussion items, Well WL-20 and Reservoir 3, the vote should be 8-0 and the second correction, under Action and Discussion items, the second to the last paragraph should have the heading Staff Comments.

On a motion by Richard Bohner, seconded by Norma Cusick, the Board unanimously approved the Minutes of September 28, 2015 with the addition of Richard Bohner's suggestions (8-0).

**October 19, 2015 Workshop Meeting Minutes**

On a motion by Richard Bohner, seconded by Linda Rosenfeld, the Board approved the Minutes of October 19, 2015 as written. Emrich Stellar abstained (7-0).

**November 23, 2015 Regular Meeting Minutes**

Richard Bohner suggested a correction to the Minutes. Under the Approval of the August 31, 2015 Minutes, the vote should be 4-0.

On a motion by Richard Bohner, seconded by Norma Cusick, the Board approved the Minutes of November 23, 2015 as corrected. Emrich Stellar, Tom Muller and Brian Nagle abstained (5-0).

**December 9, 2015 Board Meeting Minutes**

On a motion by Richard Bohner, seconded by Norma Cusick, the Board unanimously approved the Minutes of December 9, 2015 (8-0).

**PUBLIC COMMENTS**

Glen Hunsicker of Allentown was present to ask questions to understand if there would be a reduction in number of employees in the City Division. Liesel Adam explained that this is in the 2016 Budget and part of LCA's restructuring.

**ACTION AND DISCUSSION ITEMS**

**Water & Sewer Rate Schedules**

Liesel Adam gave an overview of the water and wastewater rates and charges per the schedules that were distributed. Resolution #12-2015-1 was also presented for approval as required for adopting the capital recovery fees outlined in the schedules. An updated 2016 Report on Wastewater Charges was also submitted for Board approval which reflects charges that have arisen since the preliminary report was approved with the 2016 budget. Aurel Arndt explained tapping fees. Some discussion followed.

On a motion by Richard Bohner, seconded by Norma Cusick, the Board unanimously approved the schedules of water and wastewater rates and charges and the Proposed 2016 Wastewater User Charges (8-0).

On a motion by Norma Cusick, seconded by Linda Rosenfeld, the Board unanimously approved Resolution #12-2015-1 (8-0).

### **Resolutions – Management Staff Changes**

Brad Landon explained the management staff changes and the requirements for the financial institutions. Resolution #12-2015-2 recognizes that the position of Chief Administrative Officer will be eliminated and the reassignment of responsibilities to newly created or existing positions.

On a motion by Emrich Stellar, seconded by Tom Muller, the Board unanimously approved Resolution 12-2015-2 (8-0).

Brad Landon presented a series of resolutions to deal with changes necessary for various accounts with financial institutions recognizing the changes set forth in the previous resolutions. Resolution No. 12-2015-3 addresses the actual management positions with authority to perform specific functions and Resolution No. 12-2015-4 designates particular persons by name who presently are in those positions since this is often required by financial institutions. It was the intent to have these resolutions serve broadly for all financial institutions, but National Penn Bank, where many of the Authority accounts are located, insisted on their own resolution form. Because of the lack of enough time before Aurel retires to pursue this to a higher level, and the fact that many of the Authority's operational accounts are with National Penn Bank, the staff recommended Board approval of Resolution No. 12-2015-5, the National Penn Bank form resolution.

There was some discussion on bonding of employees. The Board will revisit this issue at the next meeting so the LCA Staff can investigate it and report back.

On a motion by Emrich Stellar, seconded by Linda Rosenfeld, the Board adopted Resolution #12-2015-3, Resolution #12-2015-4, and Resolution #12-2015-5 (7-1). Deana Zosky opposed.

### **2016-2025 Capital Plan – City Concerns**

Dan Koplisch, consultant to the City of Allentown, was present to discuss a letter he sent to the Board stating his concerns regarding the 2016-2025 Capital Plan. He is concerned about the lack of response from LCA regarding the City's comments and review of the preliminary Capital Plan. He is also concerned about project AD-W-21 Fixed Meter Reading station. He feels there is not enough justification for the replacement of the meter reading system.

Another concern Dan Koplisch raised is the rate increases in the City Division, especially considering large projects in the future to address the USEPA Administrative Order as well as wastewater capacity expansion projects. The Authority will need to weigh projects very carefully to ensure the customers can afford the rates. Aurel Arndt responded that he agrees with the large numbers regarding capacity and the Administrative Order. He also explained that LCA uses the Capital Plan as a planning tool and there is a preliminary assessment that gets done before a project gets full authorization for funding. The City's comments about the justification about a specific project such as the meter reading system is premature if the Authority has not yet completed this assessment or proposed authorization of the work. Dan Koplisch stated that, even though it is LCA's intent to use the Capital Plan as a planning tool, the reality is that every project has been initiated exactly as shown in the Capital Plan. Frank Leist commented that LCA's record of completing projects exactly as planned in the Capital Plan, for the Allentown Division, thus far is due to the City requiring the projects to be completed through the terms of the lease. Previously, there has been no discretionary projects in the Capital Plan; LCA was required to do them.

Chairman Nagle commented that the Board will continue to review and study all aspects of the projects that are presented prior to authorizing them.

### **Allentown Division – Water Main Replacement Program Amendment Design Phase Cycles 1-3**



Frank Leist gave an overview of the project for the added design phase work. An additional 2.69 miles of water main replacements were added. The reason for the additional miles was because of extending the mains past the intersections. In addition, there is a cost savings to do the extra miles now because of the increasing interest rates on bonds. He is asking for approval of the Capital Project Authorization (Amendment) Design Phase 1-3 in the amount of \$115,000.00 which includes the Professional Services Authorization Amendment No. 3.

On a motion by Richard Bohner, seconded by Norma Cusick, the Board unanimously approved the Capital Project Authorization (Amendment) Design Phase 1-3 in the amount of \$115,000.00 which includes the Professional Services Authorization Amendment No. 3 (8-0).

### **SCARP Program Management**

Pat Mandes gave an overview of the request for the 2016 Program Management for the Signatory Inflow & Infiltration (I & I) Investigation/Remediation program. She is asking for approval of the Capital Project Authorization Amendment No. 23 in the amount of \$100,000.00 which includes the Professional Services Authorization Amendment No. 22.

On a motion by Emrich Stellar, seconded by Tom Muller, the Board unanimously approved the Capital Project Authorization Amendment No. 23 in the amount of \$100,000.00 (8-0).

Following discussion, Pat Mandes explained that on the Capital Project Authorization sheet, under Program Management for previous years, the amount in 2015 will be amended to \$50,000.00, which does not affect the 2016 funding request.

On a motion by Norma Cusick, seconded by Emrich Stellar, the Board unanimously approved the Professional Services Authorization in the amount of \$100,000.00 (8-0).

### **Allentown Division – Roof Replacements Phase II**

Frank Leist gave an overview of the project for the design phase. He is asking for approval of the Capital Project Authorization – Design Phase in the amount of \$78,500.00 which includes the Professional Services Authorization to D'Huy Engineering in the amount of \$48,500.00.

On a motion by Linda Rosenfeld, seconded by Emrich Stellar, the Board unanimously approved the Capital Project Authorization – Design Phase in the amount of \$78,500.00 which includes the Professional Services Authorization to D'Huy Engineering in the amount of \$48,500.00 (8-0).

### **SYSTEM OPERATIONS OVERVIEW**

Robert Kerchusky gave an overview of the systems for the month of November. The Water Filtration plant produced 18.9 mgd and the Kline's Island Wastewater Treatment plant average flow was 28.1 mgd. Projects that are ongoing at the Water Filtration plant are the painting of the High Lift pump gallery and the No. 2 High Lift pump motor installation. Ongoing projects in the wastewater system include the cables pulled into the Power Zone House, Sulfa-Treat replacement on the Combined Heat & Power System, the head replacement on the Cat engine, Meter station No. 5 replacement of mag-meters, and the installation of temporary insulation at Arcadia wastewater plant.

He also reported that the groundwater level is at 73.3' which is approximately 6' below normal. This information comes from the USGS gauging station in Haafsville. Some discussion followed.

### **STAFF COMMENTS**

None.

### **SOLICITOR'S COMMENTS**

None.

**OTHER COMMENTS**

None.

**EXECUTIVE SESSION**

Aurel Arndt stated that this is his last week before retiring on December 18, 2015. He thanked the Board and everyone for their support, help and guidance through the years and wished everyone well.

The Chairman called an Executive Session at 1:37 p.m. to discuss potential litigation and also a personnel matter.

The Executive Session ended at 2:10 p.m.

**ADJOURNMENT**

There being no further business, the Chairman adjourned the meeting at 2:10 p.m.

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Richard H. Bohner  
Secretary

**WORKSHOP MEETING MINUTES**  
**January 11, 2016**

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The Workshop Meeting of the Lehigh County Authority was called to order at 12:20 p.m., on Monday, January 11, 2016, Chairman Brian Nagle presiding. Other Members present at the commencement of the meeting were: Linda Rosenfeld, Tom Muller, Richard Bohner, Norma Cusick, and Scott Bieber. Deana Zosky was on the conference phone. Authority Staff present were Liesel Gross, Brad Landon, Frank Leist, Pat Mandes, John Parsons, Robert Kerchusky, Chuck Volk, and Lisa Miller.

Chairman Nagle noted that we received a Thank You note from Aurel Arndt regarding his retirement.

Chairman Nagle stated that LCA received a Certificate of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association for its Comprehensive Annual Financial Report for the Fiscal Year ended December 31, 2014.

**REVIEW OF AGENDA**

Liesel Gross stated that she would like to discuss the 2016 Goals at the end of the Action/Discussion items.

**EXECUTIVE SESSION**

Liesel Gross stated there would be an Executive Session immediately following the regular agenda items to discuss potential litigation.

**PUBLIC COMMENTS**

None.

**ACTION AND DISCUSSION ITEMS**

**Board Norms**

Liesel Gross provided the updated Norms for clarification based on questions and comments from the Board discussion at the December 14, 2015 meeting.

On a motion by Tom Muller, seconded by Richard Bohner, the Board unanimously approved the Board Norms as amended (7-0).

**Bonding Issue**

Ed Klein researched LCA's bonding for Authority Staff and others who have financial authorization. He found that two specific Board positions, the Treasurer and Assistant Treasurer, are bonded for \$250,000.00 each. LCA has a criminal policy that covers all Authority employees for \$250,000.00. Ed explained that LCA is covered under this policy whether the act is criminal or not. However, some wire transactions exceed \$250,000.00 in value; therefore, the Authority's policies have been amended to increase the coverage limit to \$500,000.00 for wire transfers.

**2016 Board Meeting schedule**

Liesel Gross suggested that the Board may want to discuss this when there is a full Board present. The Board wanted to approve the 2016 schedule and adjust it as necessary in the future.

On a motion by Norma Cusick, seconded by Linda Rosenfeld, the Board unanimously approved the 2016 Meeting schedule (7-0).

Chairman Nagle said that this issue will be revisited by the Board at a later date.

**2016 Goals**

Liesel Gross stated that she will explain what the goal setting process is and what the priorities are for 2016. She presented a PowerPoint presentation to review and discuss these goals with the Board. The topics discussed were LCA's strengths, weaknesses, opportunities, and threats. The goals for 2016 are Financial Health, Asset Management, Environmental/Regional Leadership, and Organizational Development. Discussion followed, and Liesel Gross explained that additional plans and details will be provided for additional discussion at a future Board meeting.

**SYSTEM OPERATIONS OVERVIEW**

None.

**STAFF COMMENTS**

None.

**SOLICITOR'S COMMENTS**

None.

**OTHER COMMENTS**

None.

**EXECUTIVE SESSION**

The Chairman called for an Executive Session at 1:39 p.m. to discuss potential litigation.

The session ended at 1:40 p.m.

**ADJOURNMENT**

There being no further business, the Chairman adjourned the meeting at 1:40 p.m.

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Richard H. Bohner  
Secretary



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**MEMORANDUM**

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**Date:** January 25, 2015

**To:** Authority Board  
**From:** Charles Volk, P.E. Asset Management Engineer  
**Subject:** Suburban Division – Facility Condition Assessment, Water and Sewer Facilities

**MOTIONS /APPROVALS REQUESTED:**

No.	Item	Amount
1	Capital Project Authorization - Study Phase (year 1 capital plan)	\$120,000
2	<u>Contract Award (consultant):</u>	\$71,220
**	<ul style="list-style-type: none"> <li>• Facility Condition Assessment Study – D’Huy Engineering, Inc.</li> </ul>	

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

**PROJECT OVERVIEW:**

Many of LCA’s Suburban Division water and sewer facilities include components that are approaching the end of their design service life, and a comprehensive facilities evaluation is needed to assess condition. The Facility Condition Assessment Study will include 11 sewer facilities and 16 water facilities in the Suburban Division. The facilities within the scope of study were selected based upon the following factors: 1) presence of buildings/structures at the site; 2) the age of the facility (not recently constructed, upgraded or examined in a separate study); 3) the relative importance and criticality of the facility. The Study is to comprise of a detailed evaluation of the structure, roof, HVAC system and electrical system at each facility. The Study will utilize asset management protocols, and enable prioritizing and planning capital improvement projects through evaluation of asset condition, expected life, and criticality parameters in order to maintain an acceptable level service for the asset and help strategize capital funding.

**FINANCIAL:**

The Project will be funded by the LCA Suburban Division.

**PROJECT STATUS**

The Request for Proposals was issued early December and four (4) proposals were received on 1/12/16. Proposals were reviewed and the firm, D’Huy Engineering, Inc., was selected as most qualified (see bids below).

**THIS APPROVAL:** Study Phase

**BIDS**

Four (4) engineering firms were invited to submit proposals for the project in early December 2015. The firms were selected based on prior LCA project performance and general expertise. A mandatory pre-proposal meeting was held December 10, 2015 at LCA’s main office where representatives from the four (4) consulting firms attended. Proposals were received on January 12, 2016. The proposal amounts are as shown in Table 1 below:

<b>Table 1 – Bid Results</b>	
<b>Study Phase</b>	
<b>Consultant</b>	<b>Amount</b>
<i>D’Huy Engineering</i>	<i>\$71,220</i>
<i>ARRO Consulting</i>	<i>\$51,602</i>
<i>BCM Engineers</i>	<i>\$73,988</i>
<i>JMT</i>	<i>\$53,740</i>

Each firm was pre-qualified based on prior completed LCA projects. D’Huy was selected as most qualified based on the following factors:

- 1) Demonstrated project understanding and approach
- 2) Prior similar project experience
- 3) Experience with asset management program development
- 4) Strength of project team
- 5) Adequate manhours budgeted to preform comprehensive evaluation
- 6) Familiarity with LCA and track record

**MATERIAL PROCUREMENT:** N/A

**PROFESSIONAL SERVICES :** See attached.

**SCHEDULE**

Assuming approval at the January 25, 2016 Board meeting, the Study is anticipated to be complete by July 31, 2016.

**FUTURE AUTHORIZATIONS**

The project will yield a list of upgrade projects, to be ranked according to criticality and then to be prioritized by staff and incorporated into the CIP. The estimated cost and amount of future authorizations is unknown at this time.

## CAPITAL PROJECT AUTHORIZATION

<b>PROJECT NO.:</b>	SD-S-11 & SD-W-11	<b>BUDGET FUND:</b>	Suburban Capital
<b>PROJECT TITLE:</b>	Facility Condition Assessment, Suburban Division Water and Sewer Facilities	<b>PROJECT TYPE:</b>	<input type="checkbox"/> Construction <input checked="" type="checkbox"/> Engineering Study <input type="checkbox"/> Equipment Purchase <input type="checkbox"/>
<b>THIS AUTHORIZATION:</b>	\$120,000		
<b>TO DATE (W/ ABOVE)</b>	\$ 120,000 (year 1 capital plan)		

**DESCRIPTION AND BENEFITS:**

Many of LCA's Suburban Division water and sewer facilities consist of aging components that are approaching the end of their design service life, and a comprehensive facilities evaluation is needed in order to plan improvements. The Facility Condition Assessment Study will include 11 sewer facilities and 16 water facilities in the Suburban Division. The facilities were selected based upon the following factors: 1) presence of buildings/structures at the site; 2) the age of the facility (not recently constructed, upgraded or examined in a separate study); 3) the relative importance and criticality of the facility. The Study is to comprise of a detailed evaluation of the structure, roof, HVAC system and electrical system at each facility. The Study will utilize asset management protocols, and enable prioritizing and planning capital improvement projects through evaluation of asset condition, expected life, and criticality parameters in order to maintain an acceptable level service for the asset and help strategize capital funding.

**Authorization Status:**

<i>Previous Authorizations</i>	
<i>none</i>	
<b>Requested This Authorization</b>	
<b>Study Phase</b>	
<b>Staff</b>	<b>\$15,000</b>
<b>Professional Services</b>	<b>\$71,220</b>
<b>Construction Allowance for Emergency Critical Repairs Identified</b>	<b>\$28,780</b>
<b>Contingency</b>	<b>\$5,000</b>
<b>Total This Authorization</b>	<b>\$120,000</b>

**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 25, 2016

**Requested By:** Charles Volk

**Approvals**

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

**Chief Executive**

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

**Suburban Division – Facility Condition Assessments, Water and Sewer Facilities**

D’Huy Engineering, Inc. will perform the study phase services (upon LCA authorization) for the Condition assessment of specific Suburban Division water and sewer facilities, including incorporation of asset management protocol and cost opinions for needed upgrade work in accordance with the Request for Proposals.

<b>Professional Services <sup>(1)</sup></b>
1. Perform Suburban Division facility condition assessment evaluation
2.
3.
4.

*(1) For Design Phase Only.*

Please reference the cover Memo for additional information.

**Study Phase:**

**Cost Estimate (not to be exceeded without further authorization):** \$71,220

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



**(For Authority Use Only)**

**Authorization Completion:**

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



**PROFESSIONAL SERVICES AUTHORIZATION  
INDEMNIFICATION  
Allentown Division  
WWTP: Digester Cover System Replacements**

(To be signed by Professional and returned to the Authority)

I am or represent the Professional indicated above, and as such I am authorized to:

Accept the terms of the professional services authorization dated January 19, 2015 attached; and

Agree to indemnify and hold harmless LCA, the City of Allentown, their employees, agents, officials, representatives, attorneys, and assigns from any and all liability, arising out of all activities conducted by the Consultant in connection with this contract and/or the Consultant's performance hereof, including but not limited to payment of all fees for its/their attorneys and all incidental litigation expenses in the event LCA or any of its employees, agents, officials, representatives, attorneys, and assigns are sued upon a claim emanating from the Consultant's performance thereof. Professional shall not, however, be liable for any portion of a judgment nor associated litigation expenses, including attorney's fees, ultimately determined to be the result of the negligence of the Authority.

\_\_\_\_\_  
Name (signature):

\_\_\_\_\_  
Name (printed)

Title: \_\_\_\_\_

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## MEMORANDUM

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**Date:** February 8, 2016

**To:** Liesel Gross, C.E.O.  
**From:** Phil DePoe  
**Subject:** Allentown Division  
WWTP: Digester Cover Replacements – Construction Phase

**MOTIONS / APPROVALS REQUESTED:**

No.	Item	Amount
1	<i>Capital Project Authorization Amendment No. 1 - Construction Phase</i>	\$2,982,156
2	<i>Professional Services Authorization Amendment No. 1 – Construction Phase: GHD (*)</i>	\$91,988
3	<i>Contract Awards – Construction Phase: Quad Construction (*)</i>	\$2,754,750
4	<i>Contract Awards – Construction Phase: Diefenderfer Electric (*)</i>	\$15,418

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

**PROJECT OVERVIEW:**

Failing process equipment is affecting the ability to effectively utilize the biogas produced by anaerobic digesters located at the City of Allentown's Kline's Island Wastewater Treatment Plant. The proposed scope of this multiyear project is the phased replacement of two anaerobic digester covers (Secondary Digester in 2016 and Primary No. 1 Digester in 2017). The digester covers are of carbon steel construction and after 40 years of use have reached the end of their expected service life. Other miscellaneous electrical improvements are proposed with the project as well. This project is identified as a Schedule 7 Project in the Lease Agreement.

In addition to replacing the two digester covers, miscellaneous piping inside the Digester Control Building will also be replaced.

*Note: The cover on Primary Digester No. 2 actually failed and was replaced in 2009-2010 by the City.*

**FINANCIAL:**

The project has been approved by the City as a Major Capital Project and it will be funded by the LCA Allentown Division.

**PROJECT STATUS:**

Pending Board approval of the Construction Phase.

**BIDDING SUMMARY: CONSTRUCTION CONTRACT**

This project requires both a General and Electrical Construction Contract. The bidding results, which reflect the Base Bid, are as follows:

### General Contract

Contractor	Cost
<i>Quad Construction</i>	\$2,754,750
Blooming Glen Contractors	\$2,874,991
Eastern Environmental Contractors	\$2,898,980
Michael F. Ronca Sons	\$2,971,000
Spectraserv	\$3,024,000
Stone Hill Contracting	\$3,035,771
Worth Company	\$3,124,000
BR Welding	\$3,702,510
C Industrial Services	\$3,730,820

### Electrical Contract

Contractor	Cost
<i>Diefenderfer Electric</i>	\$15,418
Philips Brothers Electrical Contractors	\$23,434
Eastern Environmental Contractors	\$29,190
Wind Gap Electric	\$41,100
A.N. Lynch Co.	\$43,750

Reference checks for the low bidders, Quad Construction and Diefenderfer Electric, have identified no issues. In fact, Quad Construction replaced the Primary No. 2 Digester Cover in 2010. Diefenderfer is performing the electrical work on the ongoing MCC project as well. Therefore, we recommend awarding the General Construction to Quad Construction and the Electrical Construction to Diefenderfer Electric - subject to receipt of the necessary Performance Bonds, Insurance and other required documentation.

#### **PROFESSIONAL SERVICES:**

GHD will provide construction engineering services, construction administrative services, and inspection services.

#### **PROJECT SCHEDULE:**

The Secondary Digester project is anticipated to be complete by October of 2016 and the Primary No. 1 Digester is anticipated to be complete by October of 2017.

#### **FUTURE AUTHORIZATIONS:**

None.

## CAPITAL PROJECT AUTHORIZATION

<b>PROJECT NO.:</b>	AD-S-16-1	<b>BUDGET FUND:</b>	Allentown Div\Wastewater\Capital
<b>PROJECT TITLE:</b>	Allentown Division WWTP: Digester Cover Replacements – Construction Phase	<b>PROJECT TYPE:</b>	<input type="checkbox"/> Construction <input type="checkbox"/> Engineering Study <input type="checkbox"/> Equipment Purchase <input checked="" type="checkbox"/> Amendment No. 1
<b>THIS AUTHORIZATION:</b>	\$2,982,156		
<b>TO DATE (W/ABOVE):</b>	\$3,144,850		

**DESCRIPTION AND BENEFITS:**

Failing process equipment is affecting the ability to effectively utilize the biogas produced by anaerobic digesters located at the City of Allentown’s Kline’s Island Wastewater Treatment Plant. The proposed scope of this project is the phased replacement of two anaerobic digester covers (Secondary and Primary No. 1 Digester). The digester covers are of carbon steel construction and after 40 years of use have reached the end of their expected service life. This project is identified as a Schedule 7 project in the Lease Agreement and will be funded by LCA.

GHD Inc. will be used for construction management and inspection services. Bids were received on January 29, 2016. The Secondary Cover replacement shall be in service by October of 2016 and the remaining cover replacement shall be in service by the October of 2017. Please reference the cover Memo for additional information.

**Authorization Status:**

Previous Authorization	
Design Phase	\$ 162,694
<b>REQUESTED THIS AUTHORIZATION</b>	
<b>Construction Phase</b>	
Staff	\$ 100,000
Engineering Consultant	91,988
General Contractor	2,754,750
Electrical Contractor	15,418
Miscellaneous	10,000
Contingencies	10,000
<b>Total This Authorization</b>	<b>\$ 2,982,156</b>
Future Authorizations	
None	\$0
<b>Total Estimated Project</b>	<b>\$3,144,850</b>

**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  
AMENDMENT NO. 1**

**Professional:** GHD INC.  
3655 East Swamp Road  
Doylestown, PA 18902

**Date:** February 8, 2016

**Requested By:** Phil DePoe

**Approvals**

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

**Chief Executive**

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

**Allentown Division – WWTP: Digester Cover System Replacements**

*Previous Authorization – Design Phase:* \$82,694

**This authorization – Construction Phase:** \$91,988

GHD Inc. will perform the construction and inspection phase services for the construction of the Secondary Digester (in 2016) and Primary No. 1 Digester (in 2017) cover system replacements at the City of Allentown’s Wastewater Treatment Plant (WWTP).

<b>Professional Services</b>
1. Attend the preconstruction and progress meetings
2. Review shop drawings for conformance with the contract requirements
3. Provide construction observation services to ensure proper equipment installation
4. Conduct substantial and final acceptance inspections
5. Coordinate with the Contractors as appropriate

**Cost Estimate (not to be exceeded without further authorization):** \$174,682

**Time Table 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:** \_\_\_\_\_

## 2016 LCA Goals – Timeline

### Objectives:

1. Finalize organizational goals & associated plans by March 28, 2016.
  2. Quarterly review of goal progress and KPIs.
- 

### **Goal # 4 – Organizational Development**

- Format and details developed for Board / staff review at February 8, 2016 meeting (see reverse).

### **Goal # 3 – Environmental / Regional Leadership**

### **Goal # 2 – Asset Management**

- Develop goal details using template, present for Board review at February 22, 2016 meeting.

### **Goal # 1 – Financial Health**

- Staff discussion of concepts, terminology, reports, KPIs and philosophy (February 11, 2016).
- Board discussion of concepts, terminology, reports, KPIs and philosophy (February 22 or March 14, 2016).
- Develop goal details using template, present to Board at March 14 or 28, 2016 meeting.

### **Final Tasks:**

- Compile all four goals for March 28, 2016 meeting.
  - All-managers' meeting scheduled for March 31, 2016 meeting (approximate date).
- 

### Quarterly Review (dates are approximate):

1<sup>st</sup> Quarter – April 11, 2016

2<sup>nd</sup> Quarter – July 11, 2016

3<sup>rd</sup> Quarter – October 10, 2016

4<sup>th</sup> Quarter / 2017 Planning – January 9, 2017



## LEHIGH COUNTY AUTHORITY

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

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

Published: 2/15/2016

### **SAMPLE BOARD MEETING AGENDA – FEBRUARY 22, 2016**

1. Call to Order
  - *Public Participation Sign-In Request*
2. Review of Agenda / Executive Sessions
4. Approval of Minutes
  - *Meeting dates listed for minutes attached.*
5. Public Comments
6. Action / Discussion Items:

#### **FINANCE AND ADMINISTRATION**

- *Title / description of item to be discussed, including notation of action requested, starting page number and/or attachment paper color.*

#### **WATER**

- *Title / description of item to be discussed, including notation of action requested, starting page number and/or attachment paper color.*

#### **WASTEWATER**

- *Title / description of item to be discussed, including notation of action requested, starting page number and/or attachment paper color.*

7. Monthly Project Updates / Information Items (1<sup>st</sup> Board meeting per month)

8. Monthly Financial Review (2<sup>nd</sup> Board meeting per month)

9. Monthly System Operations Overview (2<sup>nd</sup> Board meeting per month)

10. Staff Comments
11. Solicitor's Comments
12. Other Comments
13. Executive Sessions
14. Adjournment

#### **UPCOMING BOARD MEETINGS**

*Meetings begin at Noon at LCA's Main Office, unless noted otherwise below.*

March 14, 2016  
March 28, 2016  
April 11, 2016

#### **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. 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.

## 2016 Organizational Goal # 4 – Organizational Development

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### LCA Strategic Plan Components:

1. **Goal Category – Organizational Synergy:** Create a dynamic and unified organizational culture that drives performance and teamwork.
2. **Goal Category – Workforce Sustainability:** Create a supportive and empowering work environment where employees actively seek to contribute toward LCA’s mission.

### 2016 Vision / Goal(s):

- We have established organizational goals for 2016 and methods to communicate / engage with all employees about our progress.
- We know what the next wave of retirements looks like and have plans to address the gaps they will create.
- Our managers and supervisors have resources, training and tools needed to be effective in their people-management roles.
- We have successful union contract negotiations that result in enhanced collaboration and teamwork across all of LCA.
- We know what the next steps are to advance our organizational development program goals.

### Critical Milestones:

1 <sup>st</sup> Quarter 2016	<ul style="list-style-type: none"> <li>● Organizational goals defined. Calendar established for employee / manager / Board review of goals &amp; progress.</li> <li>● Focused discussion with managers: Development needs &amp; training required.</li> </ul>
2 <sup>nd</sup> Quarter 2016	<ul style="list-style-type: none"> <li>● Internal contract negotiation team &amp; goals established. Data gathered to support salary/benefits discussions during contract negotiations.</li> <li>● Focused discussion with managers: Identifying &amp; planning for retirements.</li> <li>● Management development/training program kicks off.</li> </ul>
3 <sup>rd</sup> Quarter 2016	<ul style="list-style-type: none"> <li>● Any special topics identified as requiring extended discussion/research are discussed in advance of union contract negotiations.</li> <li>● Retirements in 1-3 year timeframe are identified.</li> </ul>
4 <sup>th</sup> Quarter 2016	<ul style="list-style-type: none"> <li>● Union contracts negotiated and approved.</li> <li>● Future retirement gaps outlined with knowledge gaps identified.</li> <li>● Focused discussion with managers: What’s next?</li> </ul>