



LEHIGH COUNTY AUTHORITY

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Agendas & Minutes Posted:
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BOARD MEETING AGENDA – August 10, 2020 – 12:00 p.m.

Notice of COVID-19 Pandemic Meeting Format: Effective March 23, 2020 and until further notice, meetings of the LCA Board of Directors will be held virtually using the Zoom Meetings application, to avoid risk of infection during the national COVID-19 pandemic emergency. Public participation is welcomed via Zoom, and instructions for joining the meeting online or by phone are posted on the LCA website in the morning on the day of the meeting, prior to the start of each meeting. You may also issue comment to LCA via email to LCABoard@lehighcountyauthority.org in advance of any meeting, or view the meeting at a later time by visiting the LCA website. Please visit <https://www.lehighcountyauthority.org/about/lca-board-meeting-videos/> for specific instructions to join the meeting.

1. Call to Order

- NOTICE OF MEETING RECORDINGS

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

- *Public Participation Sign-In Request*

2. Review of Agenda / Executive Sessions

3. Approval of Minutes

- *July 20, 2020 Board meeting minutes*
- *July 27, 2020 Board meeting minutes*

4. Public Comments

5. Action / Discussion Items:

FINANCE AND ADMINISTRATION

- *Lease Bond Financing (Discussion)*

WATER

WASTEWATER

- *Suburban Division – Western Lehigh Service Area – 2020 Sewer Modeling Presentation (Discussion)*

6. Monthly Project Updates / Information Items (1st Board meeting per month) – **August report attached**

7. Monthly Financial Review (2nd Board meeting per month)

8. Monthly System Operations Overview (2nd Board meeting per month)

9. Staff Comments

10. Solicitor's Comments

11. Public Comments / Other Comments

12. Executive Sessions

13. Adjournment

UPCOMING BOARD MEETINGS

August 24, 2020

September 14, 2020

September 28, 2020

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.

SPECIAL MEETING MINUTES

July 20, 2020

A Special Meeting of the Lehigh County Authority Board of Directors was called to order at 12:02 p.m. on Monday, July 20, 2020, to discuss the proposed Allentown Water & Sewer Lease settlement and any other Authority business brought before the Board, Chairman Brian Nagle presiding. The meeting was held via video and audio advanced communication technology (“ACT”), using the ZOOM internet application, due to the COVID-19 pandemic emergency. 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 via ACT, using the ZOOM internet application. A Roll Call of Board members present was taken. Chairman Brian Nagle, Kevin Baker, Norma Cusick, Richard Bohner, Linda Rosenfeld, Jeff Morgan, and Amir Famili were present through ACT for the duration of the meeting.

Solicitor Michael Gaul was also present via ACT. Authority Staff present via ACT were Liesel Gross, Ed Klein, John Parsons, Chris Moughan, Lisa Miller, Susan Sampson, Phil DePoe, Andrew Moore, Chuck Volk, and Todd Marion.

Chairman Nagle announced the Board received the Board packet in advance of the meeting.

REVIEW OF AGENDA

Liesel Gross stated there are no changes to the agenda.

APPROVAL OF MINUTES

None.

PUBLIC COMMENTS

None.

ACTION AND DISCUSSION ITEMS

Allentown Water & Sewer Lease – Proposed Settlement of Disputes (presentation and discussion)

Liesel Gross gave a presentation of the proposed settlement between the City of Allentown and the Authority regarding the Allentown Water & Sewer Concession Lease. Ms. Gross emphasized that the approach is based on a renewed partnership between the City of Allentown and the Authority. She encouraged anyone with comments to email them to info@lehighcountyauthority.org, and all comments should include the person’s name and municipality. The Authority staff will read all submitted comments and questions following the conclusion of the presentation. Comments and questions can also be submitted during the meeting using the chat feature of the Zoom software.

Ms. Gross reviewed the background and history of the Allentown Water and Sewer Concession Lease Agreement (Lease) and the financial structure, including the Authority’s upfront payment to Allentown in the amount of \$220 million for the right to operate the City systems for a period of 50 years. She reviewed the bidding process and the bonds issued by the Authority to fund the upfront costs associated with the lease. During the first five years operating under the lease, revenues were much lower than anticipated, leading to a decreased ability to fund system improvements, and an increased risk to system operations. The biggest risk associated with these challenges is the

Authority's reduced ability to fund improvements to an aging system. Ms. Gross also reviewed the legal disputes raised by the Authority and the City during this time period, which added to the challenges. She stated an important reminder is that a well-run water and sewer system is essential for protecting public health and the environment, and for ensuring the economic vitality and quality of life of our region.

After reviewing the key goals shared by the Authority and the City during negotiations, which began about two years ago, Ms. Gross reviewed the details of the settlement agreement that has been reached. There are three major building blocks in the new agreement: meeting revenue requirements, upgrading the water and sewer system, and enhancing the partnership. Meeting revenue requirements consists of three main components: phased rate increases to City customers, opportunity for future rate relief, and a change in cost-sharing agreement for the bulk sale of water supply from the City system to the LCA Suburban Division. The rate increase to City customers will begin on October 1, 2020 and will equate to \$88 per year. Subsequent rate increases will be phased in annually over the next four years. Future rate relief is proposed as a new term of the lease, whereby rates to City customers will be frozen or reduced once the Authority achieves key financial metrics. For the purchase of water from the City system by the LCA Suburban Division, water treatment costs will be shared equitably based on the proportionate share of water sales, with no lease costs or debt service associated with the lease bonds passed on to the Suburban Division. This amendment to the water supply agreement, and extension of the term of that agreement to 2063, will allow for a watershed-based approach to supply management that the Authority has sought for many years.

The second building block of the settlement agreement relates to upgrading the water and sewer system. There are some adjustments that will be made to the method of recovering costs for capital improvements, including capping the equity rate of return applied to Major Capital Improvements at 5.45 percent. During the four-year phase-in period, water main replacements will be reduced to 1 mile per year and Authority leak detection activity will increase to 165 miles per year. Another component of system upgrades includes addressing sewer system rehabilitation following the City's completion of projects outlined in the Regional Flow Management Strategy. The settlement agreement provides for the Authority to continue sewer system improvement work after the City has completed its projects, at a cost of \$650,000 per year, to address inflow and infiltration into the City sewer collection system.

The third building block of the settlement agreement relates to enhancing the partnership and resolving the disputes between the Authority and the City. By settling the disputes, both the City and LCA can focus on system operations and improvements, rather than spending customer fees on legal fees. Some additional mutual support will be provided via cost-sharing for retiree health benefits, the Authority's contribution of \$400,000 per year to help defray the City's water and sewer administrative and regulatory expenses, and exploration of options for lease renewal, system sale or consolidation at the end of the lease.

A summary of the expected results was reviewed, highlighting the expected improved financial performance of the lease and the positive impact of future rate relief for City customers. The proposed settlement includes the following four documents: an amendment to the lease agreement, amendment to the memorandum of understanding regarding capital cost recovery charges, amendment to the LCA Water Supply Agreement, and a stand-alone settlement agreement to capture items that are not covered in any of the other prior documents. These four agreements together present the integrated approach to addressing all the items presented and resolving the disputes between Allentown and Lehigh County Authority. In addition to approving the four agreement documents, the Authority Board will also be asked to approve updated water and sewer

rate schedules, which were attached to the Board packet. Another important step is to receive bondholder consent. Ms. Gross said the option to refinance a portion of the lease bonds will be reviewed with the Board in August.

No questions or comments were received through email or Zoom during the meeting.

Jennifer McKenna, City of Allentown Office of Compliance, complimented Ms. Gross on a great presentation and stated that the City Compliance team will use the same template when they give a presentation to City Council, which will keep the message consistent and will emphasize the new partnership between the City and the Authority. The Board also complimented Ms. Gross and staff for their work on the settlement agreement.

Ms. Gross noted that the settlement agreement will be presented at the City Council meeting on Wednesday, July 22nd for discussion and comments. A link to view the meeting online will be provided to the Board and staff.

Jeff Morgan asked if the Authority received any comments from the public. Ms. Gross said none were received to date. She noted that any public comments received, along with any feedback received from City Council, will be sent to the Board by Friday, July 24th, and any additional comments received after Friday will be shared with the Board at the next regular meeting on Monday, July 27th. The Board will be asked to approve all documents and updated rate schedules at the July 27th meeting.

STAFF COMMENTS

None.

SOLICITOR'S COMMENTS

None, except to comment that Ms. Gross's presentation of the proposed settlement agreement was excellent.

PUBLIC COMMENTS / OTHER COMMENTS

Jennifer McKenna commented that the settlement agreement is the first agenda item at the City Council Committee of the Whole meeting on Wednesday, July 22nd, beginning at 6:00 p.m.

EXECUTIVE SESSION

None.

ADJOURNMENT

There being no further business, the Chairman adjourned the meeting at 1:05 p.m.

Richard Bohner
Secretary

REGULAR MEETING MINUTES

July 27, 2020

The Regular Meeting of the Lehigh County Authority Board of Directors was called to order at 12:03 p.m. on Monday, July 13, 2020, Chairman Brian Nagle presiding. The meeting was held via video and audio advanced communication technology ("ACT"), using the ZOOM internet application, due to the national COVID-19 pandemic emergency. 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 via ACT, using the ZOOM internet application. A Roll Call of Board members present was taken. Chairman Brian Nagle, Ted Lyons, Kevin Baker, Linda Rosenfeld, Amir Famili, Jeff Morgan, Norma Cusick, and Richard Bohner were present through ACT for the duration of the meeting.

Solicitor Michael Gaul was also present via ACT. Authority Staff present via ACT were Liesel Gross, Ed Klein, Susan Sampson, Chris Moughan, Lisa Miller, Todd Marion, Andrew Moore, Phil DePoe, John Parsons, and Jason Peters.

REVIEW OF AGENDA

Liesel Gross stated there are no changes or additions to the agenda but suggested the COVID-19 Financial & Organizational Impacts discussion item be moved to the Monthly Financial Review. There are no topics for an Executive Session but will be at the Board's discretion if an Executive Session is needed after the regular meeting.

Chairman Nagle announced the Board received the Board packet in advance of the meeting and all presentations for today's meeting were distributed and posted to the Authority's website.

APPROVAL OF MINUTES

July 13, 2020 Meeting Minutes

Richard Bohner presented a minor correction to the July 13, 2020 minutes. On a motion by Richard Bohner, seconded by Norma Cusick, the Board approved the minutes of the July 13, 2020 Board meeting as corrected (8-0).

PUBLIC COMMENTS

None.

ACTION AND DISCUSSION ITEMS

Allentown Water & Sewer Lease – Proposed Settlement of Disputes

Liesel Gross gave a brief presentation of the proposed settlement between the City of Allentown and the Authority regarding the Allentown Water & Sewer Concession Lease. Chairman Nagle confirmed that the paperwork has not changed. Ms. Gross stated the approach is based on a renewed partnership between the City of Allentown and the Authority. She instructed anyone with comments to email them to info@lehighcountyauthority.org, and all comments should include the person's name and municipality. Comments and questions can also be submitted during the meeting using the chat feature of the Zoom software. The Authority staff will read all submitted comments and questions following the conclusion of the presentation. One comment from a member of the public has been received to date and will be read at the conclusion of the presentation.

Through negotiations, the City and Authority sought solutions to achieve important goals such as the financial stability of LCA, permanent solutions to avoid future disputes, financial capacity to fund system improvements when they are needed, and long-term rate stability for Allentown customers. The resolution consists of four agreements that make up the integrated global settlement, which must be adopted through a single action as described in Resolution 7-2020-1. These agreements were reviewed, highlighting key terms included in each agreement.

Ms. Gross explained that in addition to approving the integrated settlement via Resolution 7-2020-1, the Board is asked to approve updated rate schedules, with an effective date of October 1, 2020. The updated Schedule of Water Rates and Charges and Schedule of Wastewater Rates and Charges were reviewed along with an example residential bill to illustrate the impact on a quarterly and annual basis. Ms. Gross noted that, since the billing will remain on a quarterly bill cycle and new rates are prorated through the three months following their effective date, customers will not see the full impact of the rate change until January 2021. She also briefly reviewed the bond refinancing efforts and noted the Board will be asked to authorize this action via a parameters resolution to be presented in August.

A public comment submitted by email from Mr. Jamin Sell of Schnecksville, PA, was read into the record. Mr. Sell stated he is opposed to the cost-sharing proposal included in the proposed settlement agreement and stated he does not wish to pay sewer costs when his property does not receive sewer service. He also noted the customer newsletter he received did not provide adequate time for customers to review information and provide comment. Liesel Gross noted that she has reached out to the customer to clarify the cost-sharing concepts included in the agreements and that only customers who receive sewer service pay for that service. Some discussion followed regarding the public input process.

A recorded phone message was played for the record from Board member Scott Bieber. Mr. Bieber stated his support for approval of the settlement agreements. He was unable to attend the meeting but asked for his support to be noted to the Board.

Solicitor Mike Gaul read Resolution No. 7-2020-1 which authorizes and approves the settlement of the Allentown Water & Sewer Lease disputes and authorizes and approves the execution of agreements as described in the Resolution as presented to the Authority Board. On a motion by Linda Rosenfeld, seconded by Richard Bohner, the Board adopted Resolution No. 7-2020-1 (7-1).

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

Brian Nagle – yes
Kevin Baker – yes
Ted Lyons – yes
Richard Bohner – yes
Norma Cusick – no
Jeff Morgan – yes
Amir Famili – yes
Linda Rosenfeld – yes
Scott Bieber – not present

On a motion by Richard Bohner, seconded by Kevin Baker, the Board approved the updated Schedule of Water Rates and Charges and the updated Schedule of Wastewater Rates and Charges, both with an effective date of October 1, 2020 (8-0).

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

Brian Nagle – yes
Kevin Baker – yes
Ted Lyons – yes
Richard Bohner – yes
Norma Cusick – yes
Jeff Morgan – yes
Amir Famili – yes
Linda Rosenfeld – yes
Scott Bieber – not present

Suburban Division – Heidelberg Heights 2020 Sanitary Sewer Replacement Project

Jason Peters described the background of the project, which is part of the Corrective Action Plan (CAP) submitted to the Pennsylvania Department of Environmental Protection (DEP) in May 2019. The CAP commits LCA to eliminating hydraulic overloads and bypasses at the Heidelberg Heights Wastewater Treatment Plant. The project is a re-bid of the third phase of the annual sewer main and lateral replacement program due to previous bids exceeding the budget, possibly due to the impact of the pandemic restrictions. The project scope was modified to reduce costs, and the current scope includes the replacement of approximately 800 feet of sewer main and 18 residential sewer laterals. The work will consist of replacing sewer laterals from the main to the property line with a cleanout assembly installed on each lateral at the property line. Existing manhole structures in the project area will be retrofitted with new frames and covers, and new watertight manhole chimney wrap and watertight gaskets will be installed.

On a motion by Linda Rosenfeld, seconded by Norma Cusick, the Board approved the Capital Project Authorization for the construction phase in the amount of \$308,500.00 which includes the Contract Award – Contract No. 1 for general construction to Ankiewicz Enterprises, Inc. in the amount of \$234,200.00, the contract award – Contract No. 2 for permanent paving to Ankiewicz Enterprises, Inc. in the amount of \$35,500.00 and the Professional Services Authorization for construction inspection to Keystone Consulting Engineers in the amount of \$16,300.00 (8-0).

MONTHLY FINANCIAL REVIEW

Chairman Nagle noted that the June financial statements were received electronically. Liesel Gross stated that the COVID-19 Financial & Organizational Impacts will be discussed first, then Ed Klein will review the June financial statements.

COVID-19 Financial & Organizational Impacts

Liesel Gross presented information regarding the impact of the COVID-19 pandemic on the Authority's finances. The amount of past-due receivables for direct customers of the Authority's water and sewer systems has increased mainly due to the suspension of collections activities including applying late fees and terminating service due to non-payment. Richard Bohner commented that it is imperative that the Authority develop a solid philosophy regarding how customers who have difficulty paying will be supported once these collections activities resume. Ms. Gross noted that the number of customers that normally have difficulty paying on time has not increased significantly during the pandemic, but their outstanding balances have increased and will require special attention once the Authority resumes service terminations. The schedule for taking this action has not been determined.

Ms. Gross then reviewed water sales trends by customer class, comparing information from April to June 2019 versus April to June 2020. She noted in particular that commercial water usage in the City Division has decreased by 26 percent, which is likely due to broad business closures during the pandemic. Usage will continue to be monitored as businesses reopen and adjust their operation in the months ahead. She also reviewed increased payroll and other additional expenses the Authority has faced as a result of the pandemic, as well as some cost-cutting measures taken to offset the losses described in the presentation.

Chairman Nagle questioned if there is any relief or recovery available through government agencies. Ms. Gross explained that federal and state emergency management agencies could potentially be sources of funds for reimbursement of emergency-related expenses, but it appears funds available for such reimbursements will be limited. The Authority is also investigating customer relief programs that may be available to help alleviate the growing past-due receivables.

Ms. Gross noted that this is an evolving situation and will be monitored closely. The timing of water service terminations will be determined based on guidance from the state and the availability of grants. Also, the debt service reductions in 2020 due to the Lease bond refinancing may provide some relief which will be discussed further in August.

Jeff Morgan left the meeting at 1:20 p.m.

Ed Klein presented the June monthly financial reports that were distributed to the Board. Mr. Klein reported that the forecast and cash flows are positive at this point, but he will be monitoring the revenues and expenses carefully in the second half of 2020, especially in the City Division, in light of the pandemic impacts presented. Chairman Nagle asked for clarification on whether the forecast is developed quarterly or annually. Mr. Klein stated the forecast is updated quarterly. Amir Famili asked that the forecasts be labeled for clarification.

MONTHLY SYSTEM OPERATIONS OVERVIEW

John Parsons reviewed the June 2020 operations report included in the Board packet. The Board did not have questions regarding the information presented.

STAFF COMMENTS

None.

SOLICITOR'S COMMENTS

None.

PUBLIC COMMENTS / OTHER COMMENTS

Linda Rosenfeld commented that the Hamilton Street bridge project is due to be complete in August. The delay was not caused by the Authority.

Jennifer McKenna, Office of Compliance City of Allentown, commended the Authority for the work done on the City's Inflow & Infiltration (I&I) Source Reduction Improvements project, as John Parsons reviewed in his report. She also thanked the Authority for working through the Lease settlement.

Richard Bohner thanked all involved in the negotiation of the Lease settlement agreement and called it a humanitarian approach to a commonsense issue.

EXECUTIVE SESSION

Chairman Nagle announced that an Executive Session will be held after the regular meeting to discuss a matter of potential litigation.

ADJOURNMENT

There being no further business, the Chairman adjourned the meeting at 1:46 p.m.

Richard Bohner
Secretary

FINANCE & ADMINISTRATION

ACTION ITEMS

1. Resolution 8-2020-1 (Authorizing Refinancing of Lease Bonds Based on Established Parameters) – August 24, 2020

Following presentation on August 10, 2020, the LCA Board will be asked to approve a “parameters resolution” on August 24, 2020 to authorize refinancing of a portion of the Lease Bonds so long as the refinancing falls within the parameters established in the resolution.

DISCUSSION ITEMS

1. Lease Bond Refinancing – August 10, 2020

LCA staff, along with a team of professionals assembled in June 2020, have been evaluating the option to refinance a portion of the bonds issued in 2013 to fund the Allentown Water & Sewer Lease. Refinancing is viewed as a favorable method to achieve bondholder consent requirements following the amendment of the Lease that was approved by the LCA Board on July 27, 2020, subject to Allentown City Council approval on August 5, 2020. At the August 10, 2020, the team will present a review of the work completed to date and the expected structure of the refinancing.

INFORMATION ITEMS

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

CERTIFICATES OF DEPOSIT						
30-Jun-20			Gross	Date of	Date	Net Rate
Fund	Bank	Location	Amount	Purchase	Due	%
Cons Wtr (2)	Florida Capital Bank	Jacksonville, FL	249,000.00	5/15/2020	5/1/2022	0.500
WW Capac	Westfield Bank	Westfield, MA	249,000.00	5/15/2020	11/15/2021	0.350
LLRI CR	American National Bank - Fox Citi	Appleton, WI	245,000.00	5/20/2020	5/20/2022	0.400
Cons Wtr (2)	Quantum Naational Bank	Suwanee, GA	248,000.00	5/21/2020	5/23/2022	0.350
Cons Wtr (2)	Security State Bank	Scott City, KS	248,000.00	5/22/2020	5/23/2022	0.350
LLRI CR	Preferred Bank	Los Angeles, CA	245,000.00	5/22/2020	3/22/2022	0.350
Cons Wtr (2)	US Treasury Bills		244,682.38	5/22/2020	5/20/2021	-
Cons Wtr (2)	Maine Community Bank	Biddeford, ME	245,000.00	6/5/2020	6/6/2022	0.300

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

2. Developments

Water system construction is occurring in the following developments:
 5374/5392 Hamilton Blvd., 1 commercial lot, LMT
 8615/8783 Congdon Hill Drive, 2 industrial lots with warehouses, LMT

Fields at Indian Creek, Phases 4 & 5, 86 residential units (sfd), water and sewer, UMiIT & Emmaus

Kohler Tract, 123 residential lots (sfa), water and sewer, UMiIT

Ridings at Parkland, 53 residential units (sfd), NWT

Schaefer Run Commons, Phase 1, 61 residential units (sfd), UMT

Water system plans are being reviewed for the following developments:

749 Route 100, 1 industrial lot with warehouse, UMT

1047 Cetronia Road, 8 unit apartment building, UMT

1224 Weilers Road Townhouses, 144 townhouse units (sfa), UMT

5329-5347-5357 Hamilton Blvd., 1 commercial lot, LMT

5354 Hamilton Blvd., 1 commercial lot, LMT

5420 Crackersport Road, 1 commercial lot, UMT

8323/8449 Congdon Hill Drive, 2 industrial lots with warehouses, LMT

ATAS International, 1 industrial lot, UMT

Cedarbrook Road Industrial Park, 2 industrial lots, LMT

Estates at Maple Ridge, 30 residential units (sfd), UMiIT

Jaindl Commercial Park North, 1 commercial lot, LMT

Laurel Field, Phase 5, 25 townhouses, UMT

Madison Village at Penn's View, 66 manufactured homes, 1 lot, water and sewer, LynnT

Mountain View Estates, 27 residential units (sfd), LMT

Ridings at Parkland – Phase 2, 38 residential units (sfd), NWT

Schoeneck Road, Lot 1, 1 lot warehouse, LMT

Shepherds Corner, 1 commercial lot, LMT

Towneplace Suites by Marriott, 91-room hotel, UMT

Sewage Planning Modules Reviewed in Prior Month:

1942 Schadt Ave. – Homes, CWSA, 430 gpd.

Filmtech - Mitchell Ave. Site, Allentown, 3,340 gpd.

440 Oldt Road - Randall Hoffman, UMT, 223 gpd.

4025 Fish Hatchery Road, LMT, 40 gpd.

WATERACTION ITEM

DISCUSSION ITEMS

INFORMATION ITEMS

1. Allentown Division – Hamilton Street Cedar Creek Bridge Water Main Relocation Project

As part of the Pennsylvania Rapid Bridge Replacement Program, the replacement of the Cedar Creek Bridge on Hamilton Street has required the relocation of approximately 500 linear feet of water main. The design phase was approved at the December 2016 Board meeting and the construction phase at the January 2018 meeting. As of February 22, 2018, the contractor completed a majority of the relocation work for LCA's facilities; however, they were pulled off the site due to construction conflicts. As of March 22, 2019 the original LCA water line relocation scope of work was completed, however an additional relocation of a LCA sanitary sewer line was added to the original scope and agreement as of April 15, 2019 with an anticipated completion of April 26, 2019. LCA anticipates submitting all final paper work to the state for reimbursement in the very near future when the project has reached 100% completion. As of November 27, 2019 the project is still under construction due to delays caused by environmental timelines to preserve the high quality clear water fishery. It is anticipated that this work will be reimbursed 100% by the state and that the construction related activities. As of February 2020, the LCA utility relocation portion of this project is 100% complete; total project is approximately 95% complete. **(No Change)**

2. Allentown Division – Water Main Replacement Program Cycle 5

The project is for the replacement of 2-miles of aged and/or failing cast iron water main in multiple locations throughout the City, in accordance with the lease requirement, and using our engineer's risk prioritization protocol. The design engineer (Gannett Fleming) halted work on Cycle 5 following main replacement prioritization identification and preliminary project scoping until funds become available. Construction is not anticipated in 2020. **(No Change)**

3. Allentown Division – Water Filtration Plant: SCADA System Replacement

The project consists of the replacement of the existing SCADA System at the Water Filtration Plant. The purchase and installation of new servers, new control panel cabinets, new cabling, and new programming software will encompass this project. Board approval to purchase this equipment was granted at the August 27, 2018 Board Meeting. Replacement will be completed by early 2020. Construction is 95% complete. This project will be funded by LCA Allentown Division. **(No Change)**

4. Allentown Division – Water Filtration Plant: High Lift Pump VFD Replacements

The Water Filtration Plan (WFP) supplies water to residential and commercial customers in the City of Allentown, as well as wholesale water to surrounding communities. One of the critical elements at the WFP is the High Service Pumping System (HSPS), which is the primary means of conveying treated water into the distribution system. The HSPS has experienced regular failures of aging electrical components. The July 2017 Allentown Water Master Plan categorizes the pump variable frequency drives (VFDs) in very poor condition and notes that the VFDs are no longer supported by the manufacturer. This project will replace two of the existing VFDs and add a third VFD. This project is currently unfunded, but may be supported through a PENNVEST loan pending ongoing discussion with the City of Allentown. Board approval was granted at the 8/12/19 Meeting for the design phase of this project to ensure loan application timelines can be met - in the event an agreement can be reached. Contract drawings representing 90% design were received in mid-November. Since the discussions with Allentown were not concluded by

the 5/6/20 PENNVEST application deadline, the project is on hold. The next application deadline is 11/4/20.

5. **Allentown Division – Water Filtration Plant: Raw Water Pump Room Painting Construction Phase**

Since 2015, the piping and appurtenances of the high lift pump station (Phase 1) and the filter gallery (Phase 2) have been painted. It is the intent of Phase 3 to paint the piping and associated appurtenances in and around the raw water pump room, as the coatings are in poor condition. The project was advertised for bid in late December and bids were received mid-January. Construction phase Board approval was approved at the 2/10/20 Board meeting. The pre-construction meeting was held on 2/12/20, construction began in March and is currently on hold due to pandemic related concerns. Construction is anticipated to resume once restrictions are eased - should be completed in Fall 2020. **(No Change)**

6. **Suburban Division – CLD Auxiliary Pump Station Project**

The project consists of installation of a new booster pumping station with SCADA and water main extension to pump water from the Lower Pressure System to the Upper Pressure System. The LCA Suburban Division will fund the project. Bids for the project were received on 6/29/18. Board approval for the construction phase of the project was granted at the 7/23/18 meeting. A preconstruction meeting was held on 8/28/19. Construction was substantially completed in February 2020. Current status is addressing punch list items not completed during start-up testing – construction is 99% complete. **(No Change)**

7. **Suburban Division – Upper Milford-CLD Interconnection Project (Kohler Tract)**

The project features the installation of a new booster pumping station and water main extension to interconnect the Central Lehigh Division (CLD) with the Upper Milford Division (UMD) allowing the abandonment of the UMD water supply facilities, and to provide water service to the proposed 123-lot Kohler Tract subdivision in Upper Milford Township. Costs are being shared between the LCA Suburban Division and the developer of the Kohler Tract (Jasper Ridge). Pumping station bids were opened on 4/25/19. Board approval for the construction phase of the project was granted at the 5/13/19 meeting and a preconstruction meeting was held on 6/25/19. The NPDES permit was issued on 3/9/20 and a premobilization teleconference was held on 3/19/20. Upper Milford Township has issued building permits. Construction is underway and is anticipated to be completed in October of 2020 – construction is 40% complete.

8. **Suburban Division – Watershed Monitoring Program**

The project will include setting up a surface water flow-monitoring network for the Little Lehigh Creek. The work is in response to the Watershed Monitoring Plan that was developed and reported to LCA by AI Guiseppe (SSM, Inc.) in 2017. In 2018, USGS selected the Delaware River Basin to pilot the National Next Generation Integrated Water Observing System (NGWOS). The Little Lehigh Watershed was picked as a targeted area of the NGWOS Project and additional surface water and ground water monitoring stations will be developed. USGS and LCA met on 11/19/2019 to discuss the proposed monitoring stations and the program in general. A follow up meeting was held on 12/16/2019. USGS and LCA have now found all three GW monitoring wells, LE860, LE 861 and LE862, who's usage had all been discontinued decades ago and their locations were presently unknown. USGS is now checking the viability of using them again. USGS has now completed the installation of (4) new surface water (SW) Gauging Stations in the Little Lehigh Watershed and all are collecting data. Two additional SW stations need to be relocated because of the intermittent streams they were originally planned to monitor. Additional ground water (GW) flow monitoring stations are in the planning stages. All six (6) Fybr sites are currently collecting flow data and the calibration process is expected to last several months. Four (4) out of eight (8) planned weather stations are currently operational and are recording data.

9. Suburban Division – Buss Acres Pump Station Replacement Construction

The project consists of the consolidation and replacement of two well stations with a single new pump station and a new water storage tank to replace two antiquated hydropneumatic pump stations. The new station will be a variable frequency drive controlled double pumping system with full SCADA control. The design will include radon reduction elements and also accommodate the future installation of additional radon removal equipment, to be implemented upon DEP's mandate of a regulatory limit. The project is in construction phase. The Notice to Proceed was issued to the contractors on 9/24/19. Construction began in February 2020 and is approximately 25% complete.

10. Suburban Division – Water Meter Reading Equipment Upgrade

LCA's capital program includes the replacement of 20,000 transceiver units, and 10,000 units will be replaced in 2019 with the remaining to be replaced in 2020 under separate authorization. The new units have a 20-year battery life and are compatible with the new meter reading software purchased in 2017. This project will replace 100% of the remaining old style radio units over a two-year period. Construction phase services for the first round of 10,000 units was approved at the 5/13/19 Board meeting. Construction began in July 2019 and a change order was issued to the contractor for the installation of the remaining transceiver units that were originally scheduled for replacement in 2020, in order to expedite the completion of the work under the program and take advantage of favorable contract unit pricing. The project is substantially complete. Work has been suspended due to the Covid-19 virus. The contractor is scheduled to return in August to install remaining radios and replace any radios that are not working properly.

11. Suburban Division - Additional (Redundant) Water Supply - Small Satellite Divisions

This Project is focusing on the development of an additional well for the Madison Park North system. An engineer has been retained to assist with the development of a second well for Madison Park North. An agreement is in place with an adjoining property owner to Madison Park North to drill a test well on their property, in coordination with DEP guidelines. The "step drawdown test" was performed on 3/26/19 and indicated that the test well is a viable backup source to Well 1. A Pre-Drilling and Aquifer Test Plan was conditionally approved by DEP in late September of 2019. The reconstruction of the test well was completed in mid-January of 2020. The next item to be completed will be a 72-hour sustained pump test, scheduled for this summer. If the test is successful, we will need to obtain approval from the Agricultural Lands Condemnation Approval Board prior to permitting and construction of the new well facilities. Authorization was granted at the June 22 Board meeting for aquifer testing of the proposed well as per the combined Pre-Drilling and Aquifer Test Plan. The test is scheduled for the beginning of August.

1. Arcadia West Division – Water Storage Tank Replacement

The Arcadia West water storage tank has had several leaks in recent years and the coating has reached the end of its useful life. This project is for the replacement of the tank with a new concrete reservoir. Design phase authorization was awarded to Entech Engineering at the April 27, 2020 Board meeting. This project will be funded by the LCA Suburban Division. Design is underway and expected to be completed and ready for bid at the end of 2020.

WASTEWATER

ACTION ITEMS

1. **Resolution 8-2020-2 (Adopting the Interim Act 537 Plan Prepared for the Kline's Island Sewer System) – August 24, 2020**

Following several months of discussion with the Pennsylvania Department of Environmental Protection (PA-DEP) in late 2019, all municipalities flowing into the Kline's Island Wastewater Treatment Plant have completed an Interim Act 537 Plan ("Interim Plan") and are asking for their respective municipal adoption via Resolution this August. LCA staff presented the Interim Plan in detail to the LCA Board on May 11, 2020. Each municipality's planning commission reviewed the plan over a 60-day period this spring, and a public comment period was concluded in July. Due to the interim status of this plan, which lays out the next steps for a full regional Act 537 Plan to be completed in the next five years, minimal comments or questions were received during this review period. Although not required by DEP regulations, LCA staff is requesting LCA Board adoption of the Interim Act Plan 537 via Resolution at the 8/24/2020 meeting.

2. **Regional Act 537 Plan Alternatives Analysis: Pretreatment Plant Upgrade Option – August 24, 2020**

To begin the process of developing the long-term Regional Act 537 Plan, the evaluation of the LCA Pretreatment Plant Alternatives was identified as an immediate need to assist with completing the full alternatives analysis to be completed within the next five years. The alternative to upgrade the Pretreatment Plant to full treatment was previously evaluated in the 2011-2016 timeframe. Additional study is required to fully evaluate the facility's capacity to treat current and future dry-day, wet-weather, and peak flows. To complete this evaluation, LCA staff has received proposals for two engineering firms that will serve in Program Manager and Technical Lead roles. The Program Manager will oversee all alternatives being evaluated at both the Pretreatment Plant and Kline's Island Wastewater Treatment Plant in Allentown as the Act 537 Plan is being developed. The Technical Lead will provide specific engineering and treatment plant modeling services to support evaluation of the Pretreatment Plant alternatives. Board approval for these professional services authorizations will be requested at the 8/24/2020 meeting.

DISCUSSION ITEMS

1. **Suburban Division – Western Lehigh Service Area: 2020 Sewer Modeling Presentation – August 10, 2020**

The Western Lehigh Sewer Partnership (WLSP) hydraulic model has been calibrated using 2019 flow meter and rainfall data and is available to support long-term Act 537 planning for the Western Lehigh Interceptor (WLI). Five separate modeling tasks are currently being performed, with the results to be used to support alternative analyses that will occur over the next several years. At the August 10, 2020 meeting, consultants from Arcadis will provide a presentation of sewer modeling concepts, an overview of the 2019 WLI modeling work and examples, and a review of current and future modeling work to be completed.

INFORMATION ITEMS

1. **Allentown Division – Kline's Island WWTP: Phase 1 AO Design Improvements**

This project includes the design of the AO improvements at the wastewater treatment plant. This conceptual design concept was approved by the City and the relevant final deliverables were received by LCA. The City then directed LCA to proceed with the final design of improvements related to the blending alternative. Board approval for the Professional Services Authorization

with Kleinfelder East, Inc. was granted at the September 11, 2017 Board Meeting. The project is identified as Administrative Order Work and will be funded by the City. The 30% design drawings and specifications have been received. The City directed to “pause” the design phase of the project. The City has now directed LCA to keep this project on indefinite hold. **(No Change)**

2. **Allentown Division – Kline’s Island WWTP: Max Monthly Flow Capacity Evaluation**

DEP has noted that the KIWWTP has been performing at a high level and meeting its permitted effluent quality limits during a period of prolonged wet weather since early 2018. This study will provide the basis for confirming the plant’s maximum monthly average that can be sustained during prolonged periods of wet weather – while remaining in full compliance with effluent quality requirements of the plant’s permit. Approval of the study was granted at the 8/26/19 Board Meeting. The study was completed in mid-October 2019 and a Part II Permit was sent to DEP on 10/18/19. The permit will be resubmitted in early 2021 upon action by DEP on the Interim Act 537 Plan (to be submitted in September 2020). Therefore, the original permit submission is 100% completed – awaiting Revision #1. This project is considered an AO expense under terms of the Lease and is City funded. **(No Change)**

3. **Allentown Division – Lehigh Street (Rte. 145) Water and Sewer Main Relocation Project**

As part of the Pennsylvania Rapid Bridge Replacement Program, the proposed replacement of the Lehigh Street Bridge near the intersection with MLK Boulevard has required the relocation of existing City water and sewer lines that are located within the PennDOT right of way. Because the bridge is owned by Lehigh County and not the Commonwealth, the normal PennDOT relocation reimbursement schedules do not apply. Therefore, the County and LCA have executed an agreement on cost reimbursement on similar terms. LCA’s engineer is working on behalf of LCA on a final sewer relocation design that minimizes the extent of the relocation. There will be less water infrastructure relocation work required since the existing water main is attached under the bridge and will be reattached after the new bridge is constructed. Construction will commence in 2021. **(No Change)**

4. **Allentown Division – Sanitary Sewer Collection System: I&I Source Reduction Program Plan (Year 1)**

This project includes the design of the City of Allentown’s I&I Source Reduction Program Plan. In 2014, Video Pipe Services complete various CCTV inspections throughout twenty Primary and Secondary Basins. All pipe segments that called for complete pipe replacement have already been repaired. The remaining source reduction activities within the twenty Basins have been organized into a 5-Year Plan, with each year focusing on a different geographic region of the City’s sewer collection system. Design has been approved for all five years, with the first project commencing in 2020 and the last project finishing in 2024. Board approval for the construction phase of the “Year 1 Project” was granted at the March 9, 2020 Board Meeting. This project commenced in early May 2020 and was finished in the middle of June 2020. Closeout paperwork remains. This project is considered an AO expense under terms of the Lease and is City funded.

5. **Kline’s Island Sewer System – Regional Sewer Capacity & Wet-Weather Planning – Interim Act 537 Plan Preparation**

Following several months of discussion with the Pennsylvania Department of Environmental Protection (PA-DEP), all municipalities flowing into the Kline’s Island Wastewater Treatment Plan have agreed to complete an Interim Act 537 Plan (“Interim Plan”) by September 2020. This Interim Plan will primarily consist of projecting new connections to the regional sewer system from 2021 through 2025 and outlining steps to be taken during this timeframe to prepare a full Regional (Long-Term) Act 537 Plan (“Regional Plan”). This two-step planning process has been developed to allow all municipalities to work cooperatively toward a Regional Plan to meet future sewer capacity needs of the region, and to provide proper regulatory oversight and control of

new connections to the system while the Interim Plan is in force from 2021 to 2025. To begin the process of compiling the Interim Plan, a consulting engineer has been preliminarily retained, and approval of their full Professional Service proposal was granted at the February 10, 2020 Board meeting. Costs associated with the development of the Interim Plan will be paid by the City of Allentown and reimbursed through existing intermunicipal agreements and by City customers through the use of the Administrative Order Fee. As of late June 2020, the Interim 537 Draft is 100% completed and was delivered to sixteen planning commissions on 3/16/2020. Planning commission meetings have occurred with public advertisement opening on 6/10/20 and closing on 7/10/20. Municipal resolution adoptions are anticipated in August with delivery to DEP by 9/14/20.

6. **Kline's Island Sewer System – Regional Sewer Capacity & Wet-Weather Planning – Sewage Billing Meter QAQC Data Analytics and 2021 Flow Metering Preparation**

As part of the Interim Act 537 Plan, the municipalities served by the Kline's Island Sewer System have committed to completing a flow metering and modeling project beginning in 2021. The flow metering data will be used to prepare modeling and identify the capital improvements needed to meet the future sewage capacity needs of the region through 2050. The flow metering will include a mix of temporary meters and the existing sewage billing meters. Data delivery and storage procedures, quality assurance, and flow analytics need implemented in 2020 for these sewage billing meters. Without this meter development program, the data cannot be used from these meters. Therefore, to prepare for 2021 flow metering, a consulting engineer has been preliminarily retained, and approval of their full Professional Service proposal was granted at the April 27, 2020 Board meeting. Costs associated with the development of the QAQC data analytics and the 2021 flow metering preparation will be paid by the City of Allentown and reimbursed through existing intermunicipal agreements and by City customers through the use of the Administrative Order Fee. **(No change)**

7. **Suburban Division – Western Lehigh Service Area – 2020 Flow Metering Program**

Future flow metering work is anticipated over the next several years for both the Western Lehigh service area as well as the entire regional Kline's Island Sewer System. In 2020, the Western Lehigh group will conduct flow metering for a period of eight months to gather additional data on inflow and infiltration and the impact of prior rehabilitation work. It is anticipated that more extensive flow metering will be required in 2021 and 2022 to develop a Regional Plan. Approval of a Professional Services Authorization and three-year contract with Flow Assessment Services was granted at the February 10, 2020 Board meeting. Also on February 10, 2020, the Board approved a Professional Services Authorization for Arcadis to provide quality assurance and data analysis services for the 2020 flow monitoring program. As of late July 2020, data collection is 60% completed). The second QA/QC of the data has concluded and recommendations have been provided.

8. **Suburban Division – Western Lehigh Service Area: 2020 Sewer Modeling**

The Western Lehigh Sewer Partnership (WLSP) hydraulic model has been calibrated using 2019 flow meter and rainfall data and is available to support long-term Act 537 planning for the Western Lehigh Interceptor (WLI). Five separate modeling tasks will be performed in order to facilitate broader Kline's Island Sewer System (KISS) planning need discussions. The results of this 2020 modeling will help to inform further future modeling decisions and alternative analyses that will occur during the full KISS model calibration period in 2022. A consulting engineer has been preliminarily retained and full authorization was granted at the 5/11/2020 Board meeting. The full model results will be available by November of 2020. The project will be funded by the LCA Suburban Division. A presentation will be presented to the Board at the 8/10/20 Board Meeting.

9. **Suburban Division – Park Pump Station Force Main Rehabilitation**

The Park Pump Station and Force Main line were constructed in 1980 to provide wet weather relief to the Little Lehigh Creek Interceptor, which conveys wastewater from ten municipalities from outlying areas to the Kline's Island Wastewater Treatment Plant (KIWWTP). The force main consists of 8,715 linear feet of prestressed concrete cylinder pipe (PCCP) of various sizes (2,615' of 24"; 2,695' of 30"; and 3,405' of 36"), and connects with the 54" sanitary sewer interceptor that runs to KIWWTP. PCCP is particularly sensitive to deterioration due to hydrogen sulfide gas from wastewater, and corrosion of exposed reinforcing steel can result in structural degradation and pipe failure. An internal investigation of the pipe is required to assess the condition of the PCCP pipe and identify damage areas, in order to determine the locations and extent of rehabilitation needed to restore the level of service, prolong service life, and mitigate the risk of failure. LCA will conduct a limited manned inspection (tentatively Q4 of 2020) of the force main pipe at 5 air release valve (ARV) locations, 100 feet in both directions from the ARV manhole, which will be used as the initial evaluation of the representative condition of the pipe. One-day trial runs are tentatively scheduled in August or September to verify the amount of time available to keep Park Pump Station offline. The pump station must be inactive in order to perform the investigations.

10. **Suburban Division – Park Pump Station Upgrade**

The Park Pump Station is to be upgraded to address mitigate risk of failure, restore station capacity, and prolong the service life of this critical facility. Design was completed in December 2017. The Park Pump Station Upgrade was advertised for bid in December 2017, pre-bid meeting was held on 1/4/2018, and bids were opened 2/1/2018. Construction phase was authorized at the 2/12/2018 Board meeting. Notice to proceed for the construction contracts was issued dated 3/26/2018. A pre-construction meeting was conducted in early April 2018, and construction was substantially completed in January 2020. Start-up and performance testing of the new mechanical and electrical equipment was successfully performed in January 2020, and the project is approximately 99% complete. Final project completion and contract closeout will be completed Summer 2020. **(No Change)**

11. **Suburban Division – Wynnewood WWTP Upgrade Project**

Wynnewood Terrace WWTP was constructed in 1980 by the developer to serve the Wynnewood Terrace subdivision, located in the Laury's Station area in North Whitehall Township. Sewer service is provided to approximately 217 residential and 2 commercial properties. LCA acquired the system in 2003.

The plant, while meeting effluent limits, has reached the end of its useful life. The plant is constructed of in-ground steel tanks that are in poor condition, with areas of corrosion and loss of structural integrity. The mechanical and electrical systems are also at the end of their service life and in need of replacement. The proposed project includes replacement of the existing treatment facility in entirety with new technology and concrete tanks appropriate for the wastewater flows and loading characteristics. The new facility shall meet the effluent limits criteria established in the respective DEP and DRBC permits, including new or additional limits that may be imposed during the permitting process. Design phase was authorized in February 2017 and was concluded in late Summer 2018. The DEP Part 2 Water Quality Management Permit was received in March 2018. The project was advertised for bid in August 2018, bids were opened in September 2018, and bids were authorized for award at the October 22, 2018 Board meeting. Construction work mobilized in early 2019 and is anticipated to finish in Summer 2020. Construction is approximately 95% complete. **(No Change)**

12. **Suburban Division - Lynn Township Corrective Action Plan**

Excessive inflow and infiltration (I&I) and high wet-weather flows into the Lynn Township sewer system has been ongoing and increasingly challenging to address. As noted in LCA's monthly operations reports, treatment plant bypasses and sanitary sewer overflows have occurred in this system and must be addressed. On 6/4/19 a meeting was held with DEP, Lynn Township and

LCA representatives as a result of a hydraulic overload at the wastewater treatment plant, based on 2018 Chapter 94 Report monthly plant flows. At the meeting, DEP directed LCA to submit an amendment to the pre-existing Corrective Action Plan (originally submitted by Lynn Township Sewer Authority) to include an updated system condition assessment and an outline of steps to be taken to mitigate I/I flows and maintain NPDES permit compliance. The Corrective Action Plan (CAP) includes structural and non-structural initiatives and involves coordination with the host municipality. The framework for the CAP was shared with the Board in February 2019. A meeting was held at Lynn Township with DEP in June 2019 to discuss the Lynn Township CAP and Township sewer planning/growth issues, and DEP directed LCA to submit a CAP Amendment by the end of summer 2019. The CAP Amendment contained an updated sewer system condition assessment and a corrective plan to further mitigate I/I flows. Updated CCTV work of the entire system was substantially completed in August 2019, and the inspection data was summarized in the CAP Amendment and is being used to scope a capital repair project. The Lynn Township Board of Supervisors adopted a sewer system rules and regulations ordinance on 9/12/19, which gives LCA the authority to inspect private laterals and facilities for illegal connections and perform follow-up enforcement. A meeting with DEP and Lynn Township representatives was held on 1/15/20 to discuss the CAP Amendment and plan moving forward. DEP sent a letter to LCA dated 6/8/20 granting 55 EDUs of sewer allocation relief for new connections to the system. **(No Change)**

13. **Suburban Division - Heidelberg Heights Corrective Action Plan**

On 2/11/19, DEP submitted a notice of violation to LCA regarding bypasses and permit exceedances at the Heidelberg Heights wastewater treatment plant. As discussed with the LCA Board during several meetings in 2018, this small satellite system has been challenged by high groundwater levels and significant infiltration and inflow (I&I) of clear water into the sewer system during rain events. LCA staff met with DEP officials on March 6, 2019 to discuss the problems and, as a result, LCA prepared a comprehensive Corrective Action Plan (CAP) and submitted DEP on 5/5/19. A draft of the plan was attached for Board review at the 4/22/19 Board meeting. The final CAP was submitted to DEP on 4/29/19. The Heidelberg Heights Board of Supervisors approved the advertisement for adoption of a sewer system rules and regulations ordinance on 9/19/19, which gives LCA the authority to inspect private laterals and facilities for illegal connections and perform follow-up enforcement. The ordinance was adopted by the township the in October 2019. A Consent Order & Agreement (CO&A) was drafted by DEP and sent to LCA in May 2020, which incorporates the projects and schedule outlined in LCA's proposed CAP. The final CAP was adopted by resolution by the LCA board at the 6/22/20 meeting. **(No Change)**

14. **Suburban Division – Sand Spring WWTP Upgrade Project Construction**

The Sand Spring WWTP was constructed in 1972 by the developer to serve the Sand Spring development, located in the Schnecksville area in North Whitehall Township. Sewer service is provided to approximately 248 apartment units, 8 commercial properties, and an elementary school. Lehigh County Authority (LCA) acquired the system in 2005.

The plant, while meeting effluent limits, has reached the end of its useful life. The plant is constructed of in-ground steel tanks that are in poor condition, with areas of corrosion and loss of structural integrity. The mechanical and electrical systems are also at the end of their service life and in need of replacement. The proposed project includes replacement of the existing treatment facility in entirety with new technology and concrete tanks appropriate for the wastewater flows and loading characteristics. The new facility shall meet the effluent limits criteria established in the respective DEP and DRBC permits, including new or additional limits that may be imposed during the permitting process. Design phase was authorized in February 2017 and final design was delayed due to DEP Part 2 Water Quality Management and NPDES permitting issues. DEP approval of the Water Quality Management Permit was received in late

December 2018, the design was finalized in late Spring 2019, and the project was advertised for bid in July 2019. Bids were opened on 8/13/19 and construction phase authorization was approved at the 8/26/19 Board meeting. A pre-construction meeting was held on 11/1/19 following execution of contract documents. Conditional Use approval and land development waiver were granted by North Whitehall Township in Spring 2020. Construction mobilization for site work occurred in late winter 2020 and construction is proceeding. **(No Change)**

15. Suburban Division - Trexlertown Wastewater Storage Facility

As part of the Western Lehigh service area's Sewer Capacity Assurance & Rehabilitation Program (SCARP), a conveyance capacity "bottleneck" was identified in the Trexlertown area of the Western Lehigh Interceptor, and this area was assigned a high priority due to occurrence of sanitary sewer overflows and basement backups in the vicinity. A parallel interceptor was originally conceived to run approximately from Cetronia Rd to Spring Creek Rd. The concept was modified to focus on providing storage capacity in the system for this area, due to concerns about downstream hydraulic impacts. This project is an interim solution to address local impacts of the system bottleneck, and will become part of the future long-term solution to alleviate regional conveyance capacity challenges. A pre-design feasibility study is being performed to evaluate various engineering alternatives, including an "in-line" parallel storage tank, conventional concrete tank (flow equalization basin), or other options. Award of the pre-design feasibility study to HDR was authorized at the 10/21/2019 Board meeting. Preliminary modeling data was received from Arcadis and HDR is reviewing that data with regard to feasible alternatives.

16. Suburban Division – Lynn Township Manhole Rehabilitation Project

This project involves the rehabilitation of manholes in the Lynn Township service area found to be structurally deficient &/or leaking. The project includes frame and cover replacement, interior pipe connection grouting, exterior concrete work and sealing of manholes, and sealing around manhole frames located within roadway surfaces that are found experiencing infiltration through the frame and cover. The purpose of the project is to eliminate inflow and infiltration into manholes in the system. The project scope includes approximately 185 manholes will be rehabilitated in 2020. The project was advertised for bid in early June 2020, bids were opened on 6/26/20, and construction phase authorization was approved at the 7/13/20 LCA board meeting. Construction will be completed by late fall of 2020.

17. Suburban Division - Heidelberg Heights 2020 Sanitary Sewer Replacement Project

In accordance with the adopted, executed Corrective Action Plan mandated by DEP, LCA is required to complete annual I/I mitigation projects to eliminate hydraulic overloads and bypass events at the Heidelberg Heights wastewater treatment plant. The Order requires that all original vitrified clay sewer main and lateral pipe be replaced within the next 5 years. This project was originally advertised for bid in March 2020 and bids were opened on 3/24/20. The low bid price exceeded this capital project construction budget for 2020, and the LCA board authorized rejection of bids at the 4/13/20 board meeting. The project scope was modified to reduce cost and the project was re-advertised for bid in June 2020, bids were opened on 7/13/20, and board authorization of construction phase was approved at the 7/27/20 LCA board meeting. Construction will be completed by late fall of 2020.