



**BOARD MEETING AGENDA – January 13, 2020**

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

• *December 9, 2019 Board meeting minutes*

4. Public Comments

5. Action / Discussion Items:

**FINANCE AND ADMINISTRATION**

• *Lehigh County Authority Solicitor Contract & Resolution No. 1-2020-1 (Approval) (tan)*

**WATER**

**WASTEWATER**

• *Suburban Division – Park Pump Station Upgrade: Electrical Contract Change Order (Approval) (blue)*

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

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

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

9. Staff Comments

10. Solicitor’s Comments

11. Public Comments / Other Comments

12. Executive Sessions

13. Adjournment

**UPCOMING BOARD MEETINGS**

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

January 27, 2020

February 10, 2020

February 24, 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.

## **REGULAR MEETING MINUTES**

### **December 9, 2019**

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The Regular Meeting of the Lehigh County Authority Board of Directors was called to order at 12:04 p.m. on Monday, December 9, 2019, Chairman Brian Nagle presiding. Other Members present at the commencement of the meeting were: Linda Rosenfeld, Jeff Morgan, Richard Bohner, Norma Cusick, Scott Bieber, and Amir Famili. Authority Staff present were Liesel Gross, Brad Landon, Chuck Volk, Ed Klein, John Parsons, Susan Sampson, Mark Bowen, Todd Marion, Andrew Moore and Lisa Miller.

Chairman Nagle announced that today's Board meeting is being videotaped and streaming live and recordings will be posted to the Authority's website.

Chairman Nagle also announced that the Board received their packets prior to the meeting.

#### **REVIEW OF AGENDA**

Liesel Gross stated there are no changes to the agenda as presented and there will be an Executive Session at the end of the regular meeting to discuss matters of potential litigation and property acquisition.

#### **APPROVAL OF MINUTES**

##### **November 11, 2019 Regular Meeting Minutes**

Richard Bohner noted minor grammatical errors. On a motion by Richard Bohner, seconded by Norma Cusick, the Board approved the minutes of the November 11, 2019 meeting as corrected (7-0).

#### **PUBLIC COMMENTS**

None.

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

##### **Resolution No. 12-2019-1 – Customer Facility Fees**

The Resolution establishes the various components of the Authority's Capital Recovery fees specifically the customer facilities fees for the Allentown Division Water system and the Suburban Division Water and Wastewater systems and the connection fees for the Allentown Division Water system. Liesel Gross explained the connection fees are charged to a customer when they move in and require a meter or new service line be installed of a certain size or to replace a frozen meter. The Resolution is required because the fees are considered to be tapping fees which require Board authorization by Resolution. Ms. Gross said the schedule of rates and charges will be updated to reflect the new fees, which will become effective on January 1, 2020.

On motion by Norma Cusick, seconded by Linda Rosenfeld, the Board approved Resolution No. 12-2019-1 (7-0).

There was some discussion regarding the different meter reading components in the Suburban Division and the Allentown Division.

**2020 Board Meeting Schedule**

Liesel Gross explained that the schedule is required to be advertised in the beginning of the year and that while most meetings fall on the second and fourth Mondays of each month, some meeting dates have been adjusted to accommodate holidays and the annual Budget presentation and approval schedule.

On a motion by Norma Cusick, seconded by Jeff Morgan, the Board approved the 2020 Board Meeting schedule as presented (7-0).

**Suburban Division – Water Main Replacement Program Cycle 5 – Change Order No. 1**

Chuck Volk described the project where 58 plastic water service lines were replaced with copper lines. The replacements were required due to the plastic line sustaining damage over time from settlement, loading, or chlorine degradation. Mr. Volk explained that the plastic pipe was suitable at the time of installation and is not aware of any impact to the quality of the water. Mr. Volk asked for approval of Capital Project Authorization – Amendment No. 1 in the amount of \$155,880.00 for the previously completed scope of work for the Suburban Division Cycle 5 Water Main Replacement project in the Schnecksville North development to cover the replacement of the 58 plastic water service lines with new copper service lines. Mr. Volk explained the work was completed in October to take advantage of favorable unit pricing available through the construction contract.

The Board stated that the preferred sequence for such approvals would be to have the amendment request presented and approved prior to staff authorizing the work, but also understood the benefit of expeditiously replacing these failing service lines using existing favorable contract terms.

On a motion by Linda Rosenfeld, seconded by Norma Cusick, the Board approved the Capital Project Authorization – Amendment No. 1 in the amount of \$155,880.00 (7-0).

**Laboratory Analysis Contract**

Andrew Moore, LCA Compliance Manager, stated that the current Laboratory Analysis contract for water and wastewater samples is set to expire at the end of 2019. A Request for Proposals (RFP) was issued in September for the testing needs of the Suburban and Allentown Divisions and also for the Pretreatment Plant. Based on cost and qualifications, ALS Environmental has been awarded the bid for the three year contract with the option to extend for two additional one-year periods. ALS Environmental is from Middletown PA but has numerous satellite offices to provide free sample pick-up and reliable results. Mr. Moore explained that based on ALS' proposal and unit costs, along with the Authority's estimated testing volumes, the estimated three-year cost under the contract would be \$225,152.00.

On a motion by Scott Bieber, seconded by Norma Cusick, the Board approved the Professional Services Authorization for laboratory analysis to ALS Environmental for a term of three years with the option to extend for two additional one-year periods in the estimated amount of \$225,152.00 for the first three-year period based on ALS' proposed unit pricing (7-0).

**MONTHLY PROJECT UPDATES / INFORMATION ITEMS**

Liesel Gross updated the Board on upcoming projects for January noting that John Parsons will provide a detailed update on the Western Lehigh emergency project including the closing out of that

emergency declaration. There will also be some additional updates on the sewer capacity work. A review of the goals and accomplishments for 2019 will also be reviewed in January.

Ms. Gross noted that the November financial report and monthly systems operations report were published on the Authority's website and emailed to the Board.

#### **STAFF COMMENTS**

None.

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

Today's meeting is Brad Landon's last Board meeting due to his retirement. Mr. Landon commented that it has been an honor to work for the Board and the Authority for so many years. The Board thanked him for his years of employment and wished him well in the future.

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

None.

Chairman Nagle called a recess at 12:35 p.m. The meeting reconvened at 12:45 p.m.

#### **EXECUTIVE SESSION**

An Executive Session was held at 12:45 p.m. to discuss matters of potential litigation and property acquisition.

The Executive Session ended at 1:42 p.m.

#### **ADJOURNMENT**

There being no further business, the Chairman adjourned the meeting at 1:42 p.m.

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Richard H. Bohner  
Secretary



**KINGSPRY**

December 12, 2019

VIA E-MAIL: [lieselgross@lehighcountyauthority.org](mailto:lieselgross@lehighcountyauthority.org)  
and **FIRST CLASS MAIL**

Liesel Gross, Chief Executive Officer  
Lehigh County Authority  
1053 Spruce Road, PO Box 3348  
Allentown, PA 18106

**RE: Scope of Services and Compensation Agreement for  
Lehigh County Authority**

Dear Ms. Gross:

Our understanding is that Lehigh County Authority (the "Authority") desires to engage the Law Firm of King, Spry, Herman, Freund & Faul, LLC ("KingSpry"), to serve as Solicitor to the Authority. This letter sets forth the terms of our engagement for legal services. We are grateful for the opportunity to work with the Authority. Our engagement shall become effective upon our receipt of a counter-signed copy of this letter.

SERVICES

KingSpry will provide comprehensive general counsel, legal consultation services, and representation on all legal matters affecting the Authority. It is anticipated that, from time to time, after consultation with KingSpry, the Authority may engage special counsel as may be recommended by KingSpry, as required by the Attorney's Code of Professional Responsibility, or in the best interests of the Authority.

There are also currently pending Authority legal matters that are being handled by other outside counsel. It is understood that the other counsel will continue to handle those matters unless and until the Authority specifically requests that KingSpry take them over.

TERM

The initial term of the engagement shall be from the date of the Authority's acceptance of this engagement letter through December 31, 2021. After the initial term, KingSpry shall continue to act as Solicitor and provide legal services until the matters it is then working on are completed, or the Authority engages substitute counsel. In the event that KingSpry's engagement is terminated, the Authority will be responsible for all fees earned and costs incurred to date, as well as fees reasonably necessary to protect the client's interest until substitute counsel is in place. (Code of Professional Responsibility 1.16(d)).

**KING, SPRY, HERMAN, FREUND & FAUL, LLC • ATTORNEYS & COUNSELORS AT LAW**  
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WEISS BURKARDT KRAMER, LLC  
PITTSBURGH, PA 15219

\*LICENSED IN PA AND NJ  
\*\*LICENSED IN PA AND NY

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KingSpry acknowledges that the Authority reserves the right to terminate the engagement, for its convenience, prior to the end of the term upon 30 (thirty) days advance written notice to KingSpry.

### COMPENSATION

1. Annual Fee. The Authority shall pay to KingSpry an annual retainer fee in the amount of \$24,000, payable in equal monthly installments (except that legal services prior to the end of year 2019, if any, shall be billed at the hourly rates set forth below for services usually outside of the annual fee). The services included under the Annual Fee are as follows:

- All telephone conferences and email exchanges between KingSpry and the Authority officials involving general legal advice which resolves the issue in the telephone conference or email exchange;
- Attendance at two (2) public Board meetings monthly, together with any executive sessions which immediately precede or follow the public meeting;
- Any email exchanges or telephone calls with the Authority officials and resolution of any Authority issues that do not involve extensive research;
- Attend one (1) monthly meeting with the Authority's CEO and her designee(s) to review legal matters;
- Preparation of Board resolutions; review of Board policies; and assistance in preparation of legal notices;
- Right To Know Law opinions and advice, but not including the filing or appearance in appeals at the administrative or judicial level or extensive redacting of documents;
- Review legal specifications for bidding for routine Authority purchases. Routine Authority purchases shall not include construction projects;
- Routine review of contracts and agreements; and
- Preparation of letters to state and local auditors regarding claims against the Authority.

2. Services Outside of the Annual Fee for General Legal Matters (other than litigation or Bond Counsel services). For all general legal matters outside of the Annual Fee, not involving litigation or Bond Counsel services, the Authority will be billed at the blended rate of \$160.00 per hour for services performed by KingSpry attorneys. Paralegal services when utilized will be billed at \$80.00 per hour. In the year 2021, the hourly rate for attorney time will be increased by five (\$5) dollars to

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\$165.00, with the paralegal hourly rate increased to eighty-two (\$82) dollars. There would be no charge for clerical or secretarial time.

3. Services Involving Litigation. For matters where we represent the Authority in litigation, the Authority will be billed at a blended rate of \$175.00 per hour. Litigation shall include identifiable disputes or claims against the Authority where the Authority will need to be represented before courts, administrative agencies, or mediation or arbitration panels. In the year 2021, the hourly rate for attorney time would be increased by five (\$5) dollars to \$180.00, with paralegal hourly rate increased to eighty-two (\$82) dollars.

Where the firm is approved as defense counsel by the Authority's insurance carrier, our rates will be consistent with those rates approved by the carrier. The firm is approved and qualified as defense counsel for a number of insurance carriers, including those that cover errors and omissions insurance. In the event of litigation, or a claim or suit within the coverage of the Authority's insurance policy, and assuming the Authority agrees to submit such claims for coverage and defense, we will handle such claims upon the request of the Authority designating our firm as the defense counsel for the Authority. In the event of such designation, we agree to accept the hourly rate approved by the insurance carrier in lieu of our normal rate.

4. Reimbursable Expenses. We shall bill to the Authority out-of-pocket expenses advanced on behalf of the Authority, including, but not limited to, filing fees for legal documents, legal advertising, experts, exhibit preparation, stenographical services and deposition transcripts, extraordinary photocopying, and overnight or courier delivery costs. Long distance telephone charges, normal photocopying and mail postage will not be charged.

5. Billing. On a monthly basis, we will submit itemized invoices for services performed on an hourly rate basis. Litigation matters, to be paid by the insurance carrier, will be invoiced separately from the Authority Solicitor services. Bond counsel fees for a specific transaction will be paid at and upon a successful closing.

6. Finance and Bond Counsel Services. KingSpry is qualified and experienced in the handling of finance and bond counsel matters. In the event we are selected to provide the Authority services for bond counsel purposes in a typical revenue financing, our fee structure will be calculated as follows:

<u>Issue Amount</u>	<u>Fee Amount/Multiplier</u>
Up to \$3,500,000	\$5,000.00 - Flat
Between \$3,500,000 to 10,000,000	.0015 x total issue up to \$10,000,000
Over \$10,000,000 to 35,000,000	Above multiplier plus .0010 x issue over \$10,000,000
Over \$35,000,000	Above multipliers plus .0005 x issue over \$35,000,000.

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Should the finance or bond transaction present unusual issues or complexity, we will advise the Authority and arrive at a mutually-agreed upon fee before undertaking the assignment.

In situations where KingSpry would serve as bond counsel in an Authority financing transaction, KingSpry would waive any Solicitor's fee in connection with the transaction, but would charge its usual bond counsel fee. In the event we are not selected to provide services for bond counsel purposes, the firm will continue to provide general counsel services as required on behalf of the Authority.

7. Compensation after the Initial Term. After the initial term of engagement, KingSpry reserves the right to change its compensation rates upon thirty (30) days notice to the Authority. If the Authority is dissatisfied with the increased rate, the Authority may terminate our relationship. Ordinarily, any change in rates occurs on an annual basis.

#### PERSONNEL ASSIGNED

KingSpry represents that it has adequate personnel trained in municipal law and public finance to meet the Authority's needs. The primary responsible attorney will be KingSpry partner Michael A. Gaul, with assistance as needed from partners Kent H. Herman, Kevin C. Reid, and Keely Jac Collins, or other members of the firm as we deem appropriate. Time charges are based upon the professional nature of the task and not personnel assigned. Task assignments shall be at the sole discretion of the primary responsible attorneys.

#### INSURANCE

KingSpry shall maintain insurance coverages in the types and limits as outlined in the Authority Insurance Requirement sheet, attached as Appendix B to the Authority's Request for Proposals, dated June 14, 2019.

#### CONFLICTS OF INTERESTS

The KingSpry Law Firm uses a screening process in connection with the undertaking of new clients, or new client matters involving third parties. Information regarding new matters, including names of potential new clients and adverse parties, are reviewed by Firm attorneys and staff to ascertain whether a conflict of interest would exist, in addition to checking the new information against Firm computer records on prior/existing clients and matters.

KingSpry has provided legal services to the Authority several times in the past. On each of those occasions, there was no conflict of interest involving another client of the Firm. The Firm is not aware of any material conflicts that would likely arise if the Firm were appointed Authority Solicitor. The Firm is not currently handling any matters that would be adverse to the Authority, and has not been involved in a matter previously that was adverse to the Authority.



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If any conflict or potential conflict should arise, it would be handled in accordance with the Pennsylvania Rules of Professional Conduct, including disclosure to the Authority. If the Rules prohibited the Firm from representing a client due to a conflict, the Firm would follow the Rules, unless the effected parties waived the conflict. If the Authority policies imposed a standard in excess of the Rules, the Firm would adhere to the Authority policies.

In preparing KingSpry's Proposal, dated July 31, 2019, the firm reviewed the Authority RFP's conflict lists. The firm determined that none of the persons or entities listed would create a material conflict in the firm acting as the Authority's general solicitor. The KingSpry Proposal disclosed certain information regarding (1) local governmental entities for whom KingSpry, or one of its attorneys, serves or has served as general or assistant Solicitor (Appendix "A"), and (2) individuals or organizations for whom KingSpry, or one of its attorneys, has performed legal services, or had a personal relationship with, in the past (Appendix "C"). This letter confirms that information.

MISCELLANEOUS

It is impossible to determine, in advance, the amount of time that will be needed to complete the work assigned to KingSpry. We shall use our best judgment to determine the amount of time, who is to perform the work, and the nature of the services to be performed in the Authority's best interest, all in accordance with the Authority's directions. If the Authority desires that a budget be developed for any project, the Authority should discuss that with us and we will work with the Authority to develop a budget. However, a budget should not be considered a not-to-exceed amount for the costs of services, unless otherwise expressly stated, in writing, by an authorized Member of the firm.

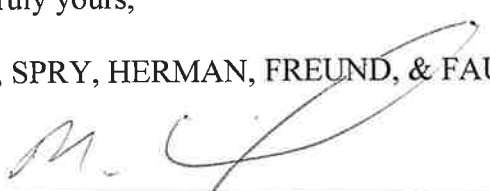
The Authority acknowledges that we have made no guarantees as to the disposition of any phase of the matters for which we have been engaged, or will be engaged, as all statements made by us are our opinions only.

Please date and countersign this Engagement Letter and return it to us by e-mail and regular mail, so that we will have a mutual memorandum of our understanding. Enclosed is a self-addressed stamped envelope, for your convenience. Please also retain a signed copy for the Authority's files.

KingSpry looks forward to serving the needs of the Authority.

Very truly yours,

KING, SPRY, HERMAN, FREUND, & FAUL, LLC



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Michael A. Gaul, Esquire, Partner  
Chair of Municipal Law Practice Group

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cc: Kevin C. Reid, Esquire  
Kent H. Herman, Esquire  
Keely J. Collins, Esquire

Acknowledged and Agreed to:

Lehigh County Authority

By: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

# **RESOLUTION No. 1-2020-1**

(Duly adopted 13 January 2020)

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***A RESOLUTION CLARIFYING THE LEHIGH COUNTY AUTHORITY SOLICITOR POSITION AND CERTAIN DUTIES TO BE ADDRESSED BY THE SOLICITOR AND OTHER MEMBERS OF THE AUTHORITY STAFF.***

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WHEREAS, Lehigh County Authority (the "Authority") Board of Directors (the "Board") established the position of Solicitor as an in-house staff position by Resolution 5-82-5.; and

WHEREAS, in order to fill a current vacancy in the Solicitor position, the Authority desires to contract with the law firm of *KING SPRY HERMAN FREUND & FAUL, LLC*, to serve as Authority Solicitor; and

WHEREAS, the Board desires to clarify or expand its authorization in regard to the hiring or engagement of an individual or law firm for the Authority Solicitor position;

NOW THEREFORE, it shall be resolved that:

1. The Board rescinds Resolution 5-82-5 and replaces it with this resolution, with the intent to clarify that the Authority Solicitor may be an in-house staff attorney, independent non-staff attorney, or law firm, at the discretion of the Chief Executive Officer. It is intended that such appointment will involve dialogue with the Board of Directors, with approvals following standard Authority procedures for the filling of vacant positions and/or authorizing contracts with external service providers.

2. In all cases, the Solicitor's duties shall be as set forth in the Authority's then-current Solicitor job description.

3. Through prior action, the Board has specifically authorized the Solicitor to perform certain duties in regard to attesting to the signatures of certain management staff, as well as certifying Authority Board action such as resolutions and motions when necessary. In the event the Solicitor is not present in the Authority offices to provide such services, the Executive Administrative Support Specialist and the Human Resources Manager are hereby both authorized to perform such duties in addition to the Solicitor. All prior actions by the Board specifying the Solicitor to attest to signatures are revised to include authorization of both the Executive Administrative Support Specialist and the

Human Resources Manager to also attest signatures.

4. Furthermore, the Board in Resolution No. 2-91-1 authorized the then General Manager and Solicitor to perform various functions in regard to procurement of real estate interests, which in addition to the Solicitor being given authority to attest the General Manager's signature, the Solicitor was also "...authorized to file with the appropriate County, Commonwealth and Federal agencies, departments and offices any documents necessary to procure and perfect these real property interests... ." The Board hereby amends the portion of Resolution No. 2-91-1, §4, quoted above, such that other Authority staff members are authorized to file and record real estate documents, except those that may require a Solicitor's review and opinion, by law or at the discretion of Authority staff, in which case the Solicitor will complete the filing.

On motion of \_\_\_\_\_, seconded by \_\_\_\_\_,  
this resolution was adopted the 13<sup>th</sup> day of January 2020.



**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](mailto:service@lehighcountyauthority.org)

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**MEMORANDUM**

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**Date:** January 13, 2020

**To:** Lehigh County Authority Board of Directors  
**From:** Charles Volk, P.E., Chief Capital Works Officer  
**Subject:** Suburban Division – Park Pump Station Upgrade Electrical Contract Change Order

**MOTIONS /APPROVALS REQUESTED:**

No.	Item	Amount
1	<u>Capital Project Authorization - Amendment No. 1</u>	\$60,954
2	<u>Construction Change Order – Electrical Contract</u> <u>Shannon A. Smith, Inc.</u>	\$60,954

**PROJECT BACKGROUND**

The Park Pump Station Upgrade Project purpose is to restore the station to its design capacity (level of service), extend the service life, and enhance/improve station reliability. The scope of work includes the replacement of extended shaft type pumps with dry pit submersible type pumps, replacement of the electrical controls (which feature antiquated rheostat drives) with modern controls and variable frequency drives, upgrade/replacement of the HVAC system, roof replacement, replacement of wet well level control system, replacement of influent slide gate, installation of new hoist system and related structural members, construction of new floor opening and larger hatch to facilitate removal of dry well equipment, electrical service upgrade, electrical Code upgrades, SCADA system upgrade, new instrumentation, and replacement of all internal piping, valves and fittings. The above work represents a comprehensive structural/mechanical/electrical upgrade to the station.

**CHANGE ORDER SCOPE AND OBJECTIVE**

The scope of this Change Order involves the addition of soft starters to the variable frequency drive (VFD) units (3 each). The soft starters represent a value added project scope addition that was recommended by LCA Operations during construction phase as a means to operate the pumps in event of a VFD failure. Without the soft starters in a VFD failure situation, emergency

wiring would be required to bypass the disabled VFD to allow for constant speed running of the connected pump, which would be time consuming and costly and potentially impact station capacity. Provision of soft starters on the VFDs is preferred over bypass wiring. The work also includes programming of instrumentation and controls to facilitate automatic operation in event of VFD failure.

**FINANCIAL**

The Project is being funded by the LCA Suburban Division.

**PROJECT STATUS**

The pumps and controls have been activated for a seven day run test. After successful completion of the seven day run test substantial completed will be declared. Final project completion should be by the end of March 2020.

**THIS APPROVAL:** Electrical Contract Change Order

**FUTURE AUTHORIZATIONS**

None anticipated.

## CAPITAL PROJECT AUTHORIZATION Amendment No. 1

<b>PROJECT NO.:</b>	<u>SD-S-15</u>	<b>BUDGET FUND:</b>	<u>Suburban Div\Wastewater\Capital</u>
<b>PROJECT TITLE:</b>	<u>Park Pump Station Upgrade – Electrical Contract Change Order No. 1</u>	<b>PROJECT TYPE:</b>	
<b>THIS AUTHORIZATION:</b>	<u>\$ 60,954</u>	<input checked="" type="checkbox"/>	Construction
<b>TO DATE (W/ ABOVE)</b>	<u>\$ 4,796,098</u>	<input type="checkbox"/>	Engineering Design
		<input type="checkbox"/>	Equipment Purchase
		<input type="checkbox"/>	Amendment

**DESCRIPTION AND BENEFITS:**

**Pump Station Rehabilitation/Improvements – Electrical Contract Change Order:**

The scope of this Change Order involves the addition of soft starters to the variable frequency drive (VFD) units (3 each). The soft starters represent a value added project scope addition that was recommended by LCA Operations as a means to operate the pumps in event of a VFD failure. Without the soft starters in a VFD failure situation, emergency wiring would be required to bypass the disabled VFD to allow for constant speed running of the connected pump, which would be time consuming and costly and potentially impact station capacity. Provision of soft starters on the VFDs is preferred over bypass wiring. The work also includes programming of instrumentation and controls to facilitate automatic operation in event of VFD failure.

Previous Authorizations	
Design Phase + Construction Phase	\$4,735,144

<b>REQUESTED THIS AUTHORIZATION</b>	
<b>Construction Phase</b>	
E.C. Contract Change Order - Shannon A. Smith, Inc.	<b>\$60,954</b>
<b>Total This Authorization</b>	<b>\$60,954</b>

Future Authorization	
None anticipated	

Total Estimated Project	\$4,796,098
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**REVIEW AND APPROVALS:**

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

## **FINANCE & ADMINISTRATION**

### **ACTION ITEMS**

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**1. Lehigh County Authority Solicitor Contract & Resolution 1-2020-1 – January 13, 2020**

Upon the retirement of Brad Landon as the Authority's Solicitor, who has served in this capacity since 1982, the Authority must update its authorization to fill this position as described in Resolution 1-2020-1. In addition, following a comprehensive search for a new Solicitor, the Authority recommends Board approval of a contract with King Spry in accordance with the engagement letter provided. King Spry has been providing services to the Authority since December 20, 2019, the date of Atty. Landon's retirement, and the Board is requested to provide approval of the contract at the January 13, 2020 Board meeting to ensure their services will continue in accordance with the terms of the engagement letter.

**2. Resolution 1-2020-2 – Approval of Updated Pension Documents – January 27 or February 10, 2020**

The Pennsylvania Municipal Retirement System (PMRS) administers the Authority's pension program which is funded through a combination of Authority and employee contributions. In late 2019, PMRS distributed updated plan documents that are compliant with updated Internal Revenue Service requirements. The plan document changes do not affect the pension benefits provided or change the funding mechanisms. The new documents must be approved by the Board of Directors via resolution, and Resolution 1-2020-2 includes required language provided by PMRS, which the Board is requested to approve.

### **DISCUSSION ITEMS**

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**1. LCA Strategic Plan – 2019 Action Plan Update & 2020 Planning Effort – January 27, 2020**

Authority staff will prepare a brief review of the organization's performance in achieving the 2019 Action Plan goals and key performance indicators. In addition, Board discussion is required to develop plans for a comprehensive strategic plan to be prepared in 2020.

**2. Preliminary 2021-2025 Capital Plan – January 27 & February 10**

Staff will present the preliminary 2021-2025 Capital Plan. The Plan follows the revised planning cycle that allows for more time to review projects and priorities, funding sources and rate impacts of LCA's plans. The presentation of the preliminary plan will be divided into two parts (Suburban Division and Allentown Division) to allow for full discussion of the projects and financial impacts. Board review, public distribution for comment, subsequent staff revisions and final review and approval are expected to be completed within the first quarter of 2020.



**INFORMATION ITEMS**

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

<b>CERTIFICATES OF DEPOSIT</b>						
6-Jan-20						
Fund	Bank	Location	Gross Amount	Date of Purchase	Date Due	Net Rate %
LLRI CR	PSDLAF Flex Pool	400,000.00	12/13/19	1/31/20	1.5	1.5
Cons Wtr (2)	PSDLAF Flex Pool	155,000.00	12/13/19	1/31/20	1.5	1.5
Cons LL2 (314)	PSDLAF Flex Pool	245,000.00	12/13/19	1/31/20	1.5	1.5
WW Capac	PSDLAF Flex Pool	600,000.00	12/13/19	1/31/20	1.5	1.5
Wtr R&R	PSDLAF Flex Pool	1,000,000.00	12/13/19	1/31/20	1.55	1.55

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:

- 5354 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
- Lehigh Hills, Lot 5, Phase 1, 273 apartments & clubhouse, UMT
- Millbrook Farms, Section 6, 42 residential units, LMT & UMiIT
- Wrenfield Townhouses, 98 townhouse units, UMT - NEW

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
- 5329-5347-5357 Hamilton Blvd., 1 commercial lot, LMT
- 5374/5392 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
- Mill Creek Hotel, 1 commercial lot with 205 room hotel & restaurant, UMT

Mountain View Estates, 27 residential units (sfd), LMT  
Ridings at Parkland, 53 residential units (sfd), NWT  
Ridings at Parkland – Phase 2, 38 residential units (sfd), NWT  
Schoeneck Road, Lot 1, 1 lot warehouse, LMT  
Towneplace Suites by Marriott, 91-room hotel, UMT  
Weilers Road Twins, 82 residential lots (sfa), UMT

Sewage Planning Modules Reviewed in Prior Month:

The following modules were reissued at the request of DEP to include an updated SCARP Letter and Component 3 for the Allentown Division:

Park 100 Logistics Center, UMT, 400,000 gpd.

Mill Creek Hotel, UMT, 17,000 gpd.

Deanna Caldwell, LMT, 223 gpd.

Barry Isett & Associates Crackersport Road Office, UMT, 1,150 gpd.

Route 100 Logistics Warehouse, UMT, 1,200 gpd.

ATAS International, Inc., UMT, 1,560 gpd.

The Towns at South Mountain, Emmaus, 14,700 gpd.

WATERACTION ITEMS

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DISCUSSION ITEMS

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INFORMATION ITEMS

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**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. **(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 our risk prioritization protocol. The design engineer (Gannett Fleming) halted work on Cycle 5 after prioritization scope identification and preliminary layout until monies 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. This project will be funded by LCA Allentown Division.

**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. 90% contract drawings were received in mid-November. Since an agreement will not be reached by the 2/5/20 PennVEST application deadline, the project is on indefinite hold. **(No Change)**

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

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. The project will be advertised in late December and bids are expected by the middle of January. Board approval will be requested at the first board meeting in February. Construction is expected to begin in late February and will be completed by May 2020.

6. **Suburban Division – Mechanical Asset Management Upgrade Project**

This third phase of Suburban Division Asset Management upgrade program will again focus on mechanical components, and will replace components that were deferred due to budget limitations in 2019. Design phase will commence in Q4 of 2019, and the project will be bid in early 2020. The upgrade locations were determined from asset management data collected from internal interviews conducted by Capital Works with senior Operations staff, and based on risk ratings. **(No Change)**

7. **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 August 28<sup>th</sup>. Due to delays in station startup, construction should be substantially completed in January of 2020.

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

The project will feature 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. 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. A preconstruction meeting was held on 6/25/19. Construction should be completed by September of 2020.

9. **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. Flow monitoring in 2019 will focus on the Little Lehigh Creek only. 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. Four sites are relatively firm, including one near the mouth of the Swabia Creek, one at Schantz Spring, one near the mouth of Cedar Creek and one on the Little Lehigh Creek near SR100. The other two sites are TBD. Additional groundwater monitoring sites may be added to the program as well. All six (6) Fybr sites are currently collecting flow data and the calibration process is expected to last several months.

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

This Project addresses the needs of three satellite water systems that currently are operating on one source of supply and have no redundant water supply. The Clear View Farms system long operated on one well, and in 2019 Well No. 2 was successfully rehabilitated to restore

diminished well capacity for use as a secondary source. The Madison Park North system has only one well, and an additional well is planned to be developed and constructed. An engineer has been retained to assist with the development of a second well for Madison Park North and the rehabilitation of an existing well at Clear View Farms. 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 has been approved by DEP. The next step is reconstruction of the test well and permitting which is currently being coordinated with the Engineer and well driller. **(No Change)**

11. **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. **(No Change)**

12. **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 is expected to be concluded by December of 2019. The first phase of the project is currently 95% complete. This project is funded by the LCA Suburban Division. 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 second phase of the project is approximately 90% complete.

## WASTEWATER

### **ACTION ITEMS**

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1. **Suburban Division – Park Pump Station Upgrade: Electrical Contract Change Order – January 13, 2020**

A major component of the Park Pump Station Upgrade project is the replacement of old liquid rheostat pump controllers with current technology variable frequency drives (VFDs), which control pump speed in order to optimize station performance and power consumption. The scope of this change order involves the addition of soft starters to the three new VFDs as a value-added risk mitigation feature that will allow LCA Operations to operate the pumps in the event of a VFD failure. Without the supplemental soft starters, emergency wiring would be required to bypass the disabled VFD which would be time consuming and costly. The change order also includes instrumentation and control programming to facilitate automatic VFD bypass in the event of VFD failure.

2. **Suburban/Allentown Division – Interim Act 537 Plan – January 27 or February 10, 2020**

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 by September 2020. This Interim Plan will primarily consist of projecting new connections to the regional sewer system from 2021 through 2025, which is the planning timeline for the region to complete a Full (Long-Term) Act 537 Plan. This two-step process has been developed to allow all municipalities to work cooperatively toward a long-term plan to meet future sewer capacity needs of the region, and to provide proper regulatory oversight and control of new connections to the system during the interim planning period. To begin the process of compiling the Interim Plan (due in September 2020), a consulting engineer has been preliminarily retained, and approval of their full Professional Service proposal will be requested at the January 27, 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.

3. **Suburban Division – Flow Metering Contract (2020-2022) – January 27 or February 10, 2020**

LCA previously contracted with a flow metering company for various sewer flow metering projects from 2009 to 2019. The contract ended in 2019 with the completion of flow metering work in October 2019. 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 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 long-term Act 537 plan for the regional system. To ensure cost-effective and professional data management services are available for this work as well as other flow metering projects that will arise over the next several years, LCA invited three leading flow metering companies to submit a proposal for a three-year assignment. Approval of this Professional Service will be requested at the January 27, 2020 Board meeting.

### **DISCUSSION ITEMS**

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1. **Suburban Division – Closure of WLI High Flow Emergency Declaration – January 27 or February 10, 2020**

LCA began the Emergency Response protocol to deal with the high flows within the Western Lehigh Interceptor (WLI) on November 28, 2018. The Emergency Declaration was presented to

and approved by the Board on December 10, 2018, retroactive to November 29, 2018. Monthly reports were provided to the LCA Board as part of the Monthly System Operations Overview. A report to the Board of this work will be presented in January 2020 and the Emergency Declaration closed. Future work on the WLI will be completed according to standard authorization processes.

## INFORMATION ITEMS

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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 – Sanitary Sewer Collection System: I&I Source Reduction Program Plan**

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 of the “Year 1 Project” will be requested in Q1 of 2020. This project is considered an AO expense under terms of the Lease and is City funded. **(No Change)**

3. **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. This project is considered an AO expense under terms of the Lease and is City funded. **(No Change)**

4. **Allentown Division – Kline’s Island WWTP: Sodium Hypochlorite Disinfection**

This project involves the replacement of the existing gas chlorination system at the WWTP. The use of gas chlorination for sewage disinfection, while reliable, is outdated and contains inherent risks. In addition, the existing equipment has reached the end of its useful life. Switching to sodium hypochlorite was also identified in the recently completed WWTP Maser Plan. The design started in March of 2019. The project was advertised for bid in December 2019 and approval of the construction contract will be requested in early 2020. The construction phase of the project will begin in Q2 of 2020 and will be completed by Q4 of 2020. This project will be funded by the LCA Allentown Division. **(No Change)**

5. **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. PennDOT initially indicated that LCA would be eligible for 75% reimbursement for all projects costs associated with the utility relocations, and the LCA board adopted Resolution No. 3-2019-1 in March 2019 to authorize the negotiation of the PennDOT cost reimbursement. Following the submission of project incorporation paperwork to PennDOT by LCA's design engineer, the local PennDOT office submitted the resolution and agreement to the Harrisburg office, and was later informed that this bridge is owned by Lehigh County and not the Commonwealth. Although PennDOT is handling all preconstruction activities and will administer the federal funding participation between the Commonwealth and the County, the cost reimbursement agreement with PennDOT does not apply. 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. LCA staff will pursue water and sewer relocation cost reimbursement from the County out of the federal (80%) and state (15%) funds being applied to this project. Final design plans were submitted by LCA's design engineer to PennDOT on 10/22/19 and we are awaiting approval. Construction will commence in 2021. **(No Change)**.

6. **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. Capital Works is planning a limited manned inspection 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. Using this data, the need for performing a complete pipeline condition assessment will be determined, possibly utilizing a new electromagnetic technology for performing an internal pipe condition assessment that entails minimal interruption of operation of the pump station and force main. Commencement of this work will follow the return of "normal" dry weather flows, and also following the completion of the Park Pump Station upgrade construction. **(No Change)**

7. **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 1/4/18, and bids were opened 2/1/18. Construction phase was authorized at the 2/12/18 Board meeting. Notice to proceed for the construction contracts was issued dated 3/26/18. A pre-construction meeting was conducted in early April 2018, and construction is anticipated to be completed by late 2019. Start-up and performance testing of the new mechanical and electrical equipment is scheduled for late December 2019. **(No Change)**

8. **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 the first quarter of 2020. **(No Change)**

9. **Suburban Division – SCARP**

Since the U.S. Environmental Protection Agency (EPA) lifted the Administrative Order regarding the regional sewer system in March 2019, LCA, the City of Allentown, and other municipalities have continued to work on elements of the Regional Flow Management Strategy that was submitted to both EPA and the Pa. Department of Environmental Protection (DEP) while awaiting further direction from DEP.

Since August 2018, exceptionally high rainfall amounts have caused the system to experience high flows exceeding capacity limits during several months of this time period. In August 2019, DEP began communicating with LCA, the City and the other municipalities regarding this high-flow situation, the need for Act 537 planning, and other related matters. Meetings took place in October and November with DEP and all municipalities to discuss DEP's recommended approach in addition to remaining tasks in the Regional Flow Management Strategy. Additional information about the next steps for addressing regional sewer capacity requirements will be presented at a future LCA Board meeting.

10. **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 to discuss the CAP amendment and plan moving forward has been scheduled for 1/15/20.

**11. Suburban Division - Heidelberg Heights Sanitary Sewer Rehabilitation Project**

High wet-weather flows caused by excessive inflow and infiltration into the sewage collection system have challenged the Heidelberg Heights sanitary sewage system and has been the cause of numerous wastewater treatment plant bypasses over the past two years. This project includes the replacement of approximately 1,100 lf of VCP sewer main and 26 residential sewer laterals to address high priority areas of the system to continue to work toward eliminating leakage. The pre-bid meeting was held on 3/28/19, bids were opened on 4/9/19, and award of bid and construction phase services was requested at the 4/22/19 Board meeting. Construction is anticipated to begin in late Summer 2019 and the project has been completed.

**12. 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 following month. **(No Change)**

**13. 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. **(No Change)**

**14. 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 to be performed to evaluate various engineering alternatives, including an “in-line” parallel storage tank, conventional concrete tank (flow equalization basin), or a hybrid option. LCA issued a Request for Proposals in August 2019 to four pre-qualified engineering firms. A pre-proposal meeting was held on 9/5/19, and proposals were received on 9/20/19. Following Capital Works review and follow-up telephone interviews, award of the pre-design feasibility study to HDR was authorized at the 10/21/19 Board meeting. The study is anticipated to be completed in late Spring 2020. **(No Change)**