BOARD MEETING AGENDA

1. Call to Order
2. Review of Agenda
   • Public Participation Sign-In Request
3. Executive Sessions
4. Approval of Minutes
   • August 11, 2014 Workshop Meeting Minutes
   • September 8, 2014 Workshop Meeting Minutes
5. Public Comments
6. Action / Discussion Items
   FINANCE AND ADMINISTRATION
   • Pension Plan Minimum Municipal Obligation (MMO) for 2015
   WATER
   • None
   WASTEWATER
   • Park Pump Station Improvements – Fuel Tank Replacement (Approval)
   • Allentown Division Sanitary Sewer Manhole Lining (below-ground) (Approval)
   • Sanitary Sewer System Flow Metering for LCA (Approval)
   • Wastewater Capacity/537 Plan Update
7. System Operations Overview
8. Staff Comments
9. Solicitor's Comments
10. Other Comments
11. Adjournment

OCTOBER MEETINGS

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
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<tbody>
<tr>
<td>Workshop Meeting</td>
<td>October 13 – 12:00 p.m.</td>
</tr>
<tr>
<td>Board Meeting</td>
<td>October 27 – 12:00 p.m.</td>
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PUBLIC PARTICIPATION POLICY

In accordance with Authority policy, members of the public shall record their name, address, and discussion item on the sign-in sheet at the start of each meeting; this information shall also be stated when addressing the meeting. Members of the public will be allowed 5 minutes to make comments/ask questions regarding non-agenda items, but time may be extended at the discretion of the Chair; comments/questions regarding agenda items may be addressed after the presentation of the agenda item. Members of the public may not request that specific items or language be included in the meeting minutes.
The Workshop Meeting of the Lehigh County Authority was called to order at 12:11 p.m., on Monday, August 11, 2014, Chairman Asa Hughes presiding. Other Members present at the commencement of the meeting were: Tom Muller, Richard Bohner, Brian Nagle, Scott Bieber, Norma Cusick and Ted Lyons. Authority Staff present were Aurel Arndt, Liesel Adam, Bradford Landon, Ed Bielarski, Frank Leist, Pat Mandes and Kevin German.

Steve Marcino of Johnson, Mirmiran & Thompson (JMT) was also in attendance.

REVIEW OF AGENDA

Mr. Arndt stated there would be no additional items for this meeting.

PUBLIC COMMENTS

Mr. Marcino introduced himself and his consulting firm, JMT, to the Board and explained he was attending the meeting in order to become more familiar with Authority projects.

EXECUTIVE SESSION

Mr. Arndt stated there would be one Executive Session to be held following the completion of the regular meeting agenda to discuss personnel matters.

APPROVAL OF MINUTES

July 14, 2014 Workshop Meeting Minutes

On a motion by Mr. Bohner, seconded by Ms. Cusick, the Board unanimously approved the minutes of the July 14, 2014 Workshop Meeting (5-0). Messrs. Nagle and Lyons abstained.

ACTION AND DISCUSSION ITEMS

Health & Safety Manual (Approval)

Mr. Arndt introduced Mr. German, the Authority's Risk Manager, to present the Health & Safety Manual update.

Mr. German explained that the Authority's risk management program has undergone significant changes since the Allentown water and sewer systems were transferred, and he would be preparing quarterly reports for the Board's review to share information about claims, accidents, and other incidents addressed by the risk management team. He explained a new risk management team has been formed, comprised of the Risk Manager, Human Resources Manager, and Facility Team Leaders representing each of the Authority's key facilities. Furthermore, each facility has formed a safety team, made up of employees who work at the facility and led by the Facility Team Leader.

He explained that the Health & Safety Manual presented to the Board is a revision from the Authority's existing manual and includes updated information on policies, facilities, roles and responsibilities. He explained that the Facility Team Leaders will facilitate adoption of employee safety programs that are pertinent to each facility, and the manual will provide overall guidance on safety policies and their enforcement.

Mr. Hughes commented that having a strong safety program is essential for the Authority's operation.

Ms. Cusick inquired about the Authority's experience for workers' compensation claims or other accidents or safety incidents, and whether this has changed since the transfer of the Allentown systems. Mr. German explained that the Authority's prior claims history was very favorable, with very low incident rates. The incident rate has increased since August 2013, and the focus on employee safety is very important to reduce this trend moving forward.

On a motion by Ms. Cusick, seconded by Mr. Muller, the Board unanimously approved the Health & Safety Manual as presented (7-0).
SYSTEM OPERATIONS OVERVIEW

Mr. Boehner inquired about the status of the USEPA Administrative Order for the elimination of sewer system overflows in the Allentown and Western Lehigh sewer systems. Ms. Mandes explained that a meeting has been scheduled for early September for the Authority and its municipal sewer signatories to meet with USEPA on this matter and to request a five-year deadline extension for compliance with the order. She explained that significant progress has been made on compliance due to the initiation and completion of several projects to monitor and remove infiltration and inflow into the sewer system, and this progress should be viewed favorably by regulators as an indication that the Authority will use the deadline extension as an opportunity to continue this positive progress.

Mr. Hughes inquired about a recent media report on a sewer backup that occurred in the Allentown system, and whether the Authority’s preventative maintenance program would eliminate such incidents in the future.

Mr. Arndt explained that the Authority has completed significant preventative maintenance in the Allentown system since it was transferred, but this maintenance alone will not prevent backups from occurring. In particular, root intrusion is a problem that cannot be predicted, and blockages caused by grease and other objects that customers put into the sewer system can only be controlled by changes in customer behavior. He suggested that customer education is one approach that may prove useful in reducing sewer backups.

STAFF COMMENTS

Mr. Arndt reviewed the Authority’s efforts to update its Strategic Plan, focusing current efforts on revising the Authority’s vision and mission statements. To that end, he distributed a worksheet to all Board members, inviting them to provide feedback on the Authority’s critical stakeholders that should be included in the revised Strategic Plan.

Mr. Arndt also commented that the August 21, 2014 Board meeting would be canceled unless additional action or discussion items were identified as needing attention prior to September.

SOLICITOR’S COMMENTS

Mr. Landon informed the Board that residual property located at the Authority’s wastewater pre-treatment facility in Fogelsville, which was owned by the County of Lehigh, has been transferred to the Authority, with all proper documentation filed for the transfer of the deed. The County has retained four acres for their own use, including possible sale to a third party.

Mr. Landon also reported that the bankruptcy filing by KidsPeace has been concluded, and the Authority’s prior agreements with KidsPeace regarding future sewer services in North Whitehall Township remains in place.
OTHER COMMENTS

None.

EXECUTIVE SESSION

Mr. Hughes called an Executive Session at 12:59 p.m. to discuss personnel matters. Staff members and Mr. Marcino left the meeting. The Executive Session ended at 2:25 p.m.

ADJOURNMENT

There being no further business, the Chairman adjourned the meeting at 2:25 p.m.

______________________________
Richard H. Bohner
Secretary
WORKSHOP MEETING MINUTES  
September 8, 2014

The Workshop Meeting of the Lehigh County Authority was called to order at 12:23 p.m., on Monday, September 8, 2014, Chairman Asa Hughes presiding. Other Members present at the commencement of the meeting were: Tom Muller, Richard Bohner, Emrich Stellar, Scott Bieber, Ted Lyons, and Brian Nagle. Authority Staff present were Aurel Arndt, Liesel Adam, Bradford Landon, Ed Bielarski, Frank Leist, Dan Standish, Pat Mandes, John Parsons, Bob Kerchusky, and Lisa Miller.

REVIEW OF AGENDA

Mr. Arndt introduced his new Executive Assistant, Lisa Miller, to the Board.

Review Items for September Board meeting.

Mr. Arndt stated that the September 22nd Board meeting will need to be rescheduled due to a schedule conflict. It was the consensus of the Board to reschedule the meeting for September 30, 2014.

PUBLIC COMMENTS

None.

EXECUTIVE SESSION

Mr. Hughes stated there would be an Executive Session immediately following the Workshop Agenda items.

ACTION AND DISCUSSION ITEMS

Allentown Division – Belt Filter Presses- Construction Phase (Approval)

Mr. Parsons reviewed the history of the project and reviewed bids that were received on August 26, 2014. Two bids were received for General Construction with Michael Ronca & Sons providing the lowest bid. He stated that past work with Michael Ronca & Sons has been satisfactory and all items were in order with their bid submission. Four bids were received for the Electrical Construction with High Peak Electrical providing the low bid. He recommended award of the General Construction bid to Michael Ronca and Sons for $390,000 and the Electrical Construction bid to High Peak Electrical for $163,000.

He asked for approval of the Capital Project Authorization for a total of $617,120, which includes the Professional Services Authorization Amendment No. 1 for the remainder of the D'Huy contract in the amount of $9,120. Mr. Parsons stated that work on Unit # 2 will start in November, Unit # 3 in December, and the manufactured unit will be in place in January 2015. This schedule is subject to change.

Mr. Lyons asked if these projects are budgeted before they go to bid. Mr. Arndt explained the Capital Plan and Budget process. Capital projects are included in the Capital Plan, which is a 10 year outlook for expenditures. Then, the projects that are included for next year are included in the annual budget. Additionally, projects are approved individually throughout the year according to Authority purchasing guidelines.

On a motion made by Mr. Emrich, seconded by Mr. Nagle, the Board unanimously approved the Capital Project Authorization AD-S-14-1, Construction Phase, in the amount of $617,120 and the Professional Services Authorization, Amendment 1, to D'Huy Engineering for $9,120 (7-0).

Wynnewood Terrace Pump Station and Force Main Replacement – Resolution No. 9-2014-1 (Approval)

Mr. Landon said that this Resolution authorizes filing of the PENNVEST application for funding and ratifies who the people are that are allowed to sign for it. It is retroactive to August 1, 2014 because the application was filed earlier in the month.

Mr. Bohner asked how much of the project will be paid through the $1,000,000 funding the Authority is seeking. Mr. Leist said that the $1,000,000 will cover the entire project budget.
On a motion made by Mr. Bieber, seconded by Mr. Muller, the Board unanimously approved the Resolution (7-0).

**Strategic Plan Update**

Mr. Arndt presented results of ongoing efforts to update the Authority’s strategic plan, which is being undertaken in particular to ensure it reflects the organization’s updated plans since completing the Concession Lease with the City of Allentown water and sewer systems. He explained that an important part of this effort would be to educate the employee base as to what the Authority’s priorities and focus will be looking forward into the future. Feedback from staff managers, employees and the Board was reviewed, along with a draft vision statement, mission statement and organizational values.

Board discussion followed, with feedback focused on terminology presented in the new mission statement, and ensuring that stakeholder concerns are properly represented. Mr. Hughes suggested Board members provide all feedback to Mr. Arndt in writing.

Mr. Arndt explained that the staff will review all feedback, modify the plan documents as needed, and begin developing critical goals to complete the strategic plan update.

**SYSTEM OPERATIONS OVERVIEW**

None.

**STAFF COMMENTS**

Mr. Arndt presented a chart of the US Drinking Water System summary. Since the Concession Lease with Allentown, the Authority now sits in the top 1% of “very large” water systems in the U.S.

**SOLICITOR’S COMMENTS**

None.

**OTHER COMMENTS**

None.

**EXECUTIVE SESSION**

The Chairman called for an executive session at 1:23 p.m. to discuss a personnel item, at which time the staff, except for Mr. Arndt, left the meeting.

The session ended at 2:50 p.m.

**ADJOURNMENT**

There being no further business, the Chairman adjourned the meeting at 2:50 p.m.

________________________________________
Richard H. Bohner
Secretary
**FINANCE & ADMINISTRATION**

**ACTION ITEMS**

1. None.

**DISCUSSION ITEMS**

1. **Pension Plan Minimum Municipal Obligation (MMO) for 2015**

   The Pennsylvania Municipal Retirement System (PMRS), which the Authority is enrolled in for employee pension benefits, requires that the Authority calculate its MMO for 2015 and present the information to the Board of Directors prior to submitting to PMRS in October. The information required for this calculation is included in the attached memo and form (yellow).

**INFORMATION ITEMS**

1. **CMMS Upgrade and Expansion Project**

   RJN installed the Cityworks application on June 24. Development of the base map has begun. Pilot phase is scheduled November. Verizon Wireless is willing to provide sample mobile devices, ex. IPad, Android tablet, for evaluation during the pilot phase.

2. **WEB Map Upgrade Project**

   CDM has delivered the pilot updated web map for LCA testing and evaluation. LCA is still evaluating the map for functionality and the updated map will be made Live for all employees as soon as the testing and evaluation have been completed.

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

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<th>Fund</th>
<th>Bank</th>
<th>Location</th>
<th>Gross Amount</th>
<th>Date of Purchase</th>
<th>Date Due</th>
<th>Net Rate</th>
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<tbody>
<tr>
<td>LLRI CR</td>
<td>Goldman Sachs Bank USA</td>
<td>New York, NY</td>
<td>141,000.00</td>
<td>9/17/14</td>
<td>9/19/16</td>
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</table>

**Fund Descriptions for Investments:**

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

ACTION ITEMS

1. None.

DISCUSSION ITEMS

1. None.

INFORMATION ITEMS

1. **Arcadia West Pumping Station Modifications**
   The general contractor is revising the temporary bypass pumping plan. Although there is not a firm delivery date from the factory, the contractor is expecting delivery of the high service pump by mid-October. The booster pumps and their control panel were installed. Booster pump testing is scheduled for the week of September 22nd. A second customer outage is being planned for October 4th as preparation to demolish the remaining piping in the station.

2. **Pine Lakes of Lynn Township Pump Station Upgrade**
   Currently this pump station is a hydro-pneumatic system that has proven to be problematic over time. This project will convert the hydro-pneumatic operated equipment to a variable frequency drive controlled double pumping system. Other miscellaneous improvements are included in the project scope. A RFP for engineering services was sent to Consultants on August 22, 2014. The RFP’s are due September 30, 2014.

3. **Allentown Division- Schantz Spring Chlorination Issue**
   Alternative options in-lieu-of a CL₂ Booster Station as originally scoped by the City are being fully evaluated based on cost and feasibility. Backup power supply, more reliable chemical feed pumps, and full-time data recording are all being considered in an effort to reduce the potential for unchlorinated slugs of water in the future. Barry Isett Inc. has provided a proposal to determine costs of the alternate plan vs the original booster station. City of Allentown has agreed to the concept and has been authorized to proceed with the evaluation. Barry Isett, Inc is proceeding with the evaluation. A draft of the Engineering Report was submitted on September 9, 2014. Comments have been returned and a finalized version is expected by mid-October and will be presented to the city for their review. This Project is identified as Un-Completed Work and will be funded by the City.

4. **Allentown Division- WFP Chemical Building Roof Replacement**
   The Project includes modifications to the roof of WFP chemical storage area (i.e. installation of hatches), removal and replacement of (2) 8,000 gallon chemical storage tanks; and replacement of the 20-year old rubber membrane roof system. Construction has been underway since 3/31/2014. Water pipes, sprinklers, storm drains, etc. were moved first. Steel and other construction materials started arriving on May 19, 2014. Dismantling of the existing roof began on May 19, 2014. Both replacement sodium hypochlorite tanks are set in-place and on-line. Replacement tank #1 was certified for use by PaDEP on 6/5/2014. Replacement tank #2 was certified for use as of 6/27/2014. All
four new hatches are now in place. The new membrane roof has been installed but still needs to have an acceptable warrantee inspection by Firestone. Firestone’s first inspection did not pass and several small items needed to be addressed. The anticipated completion date for the project has been delayed again, pending the final roof inspection, and is now revised to September 30, 2014. This Project is identified as Un-Completed Work and will be funded by the City.

5. **Allentown Division - Water Main Replacement Program**

The Board authorized the design phase of this project in October 2013 and a Professional Service Authorization was awarded to Gannett Fleming, Inc. The project will replace the required one-mile of main and an additional 1,475 LF for the first year “cycle 1”. The project was advertised for bid on May 6, 2014 and bids were received on June 5, 2014. On June 18, 2014 the Board authorized the cycle 1 construction phase of this project and a Professional Service Authorization was awarded to Gannett Fleming, Inc. for construction management and inspection. Additionally the Board authorized Doli Construction Corp. (Doli) as the General Contractor for the project. The notice of award and notice to proceed both have been issued to Doli. As of August 8, 2014 Doli started construction of the approximate 550 feet of water main to be installed on South 18th Street. As of September 18, 2014, Doli has installed all 6,755 feet of water main and is actively testing water mains for bacteria per design specification on the remaining seven project sites as one project site has passed bacteria testing and services have already been initiated at this time. Project is identified as Schedule-7 Work and will be funded by LCA.

6. **Developments**

Water system construction is occurring in the following developments:

- Parkland Fields, Phase 2, 18 residential lots (sfd), UMT
- Trexler Fields, Phases 2, 4, 5 & 10, 28 residential lots (sfd), UMT
- Valley West Estates, Phases 4, 5 & 6, 46 residential lots (sfd), UMT (currently on hold)

Water system plans are being reviewed for the following developments:

- Above & Beyond (personal care facility), 2 commercial lots, UMT
- Diocesan Pastoral Center, 2 commercial lots, 3 additional lots and residual lot for existing cemetery, LMT
- Grant Street Townes, 18 residential lots (sfa), WashT
- Hamilton Crossings, 2 commercial lots with 20 buildings having retail, financial, convenience and restaurant uses, LMT
- Hickory Park Estates, 3 residential lots (sfd), UMT
- Hillview Farms, 31 residential lots (sfd), LMT/SWT
- Indian Creek Industrial Park, 6 commercial lots, UMiT, water and sewer
- Lehigh Hills, 247 residential lots (sfa/sfd), UMT
- Lehigh Hills, Lot 4, 1 commercial building, UMT
- Liberty at Mill Creek, 2 industrial lots, UMT
- Morgan Hills, 40 residential lots (sfd), WeisT, water and sewer
- North Whitehall Commercial Center (Walmart), 5 commercial lots, NWT, water and sewer
- Route 100 Bypass & Cetronia Road Proposed Commercial Development, 1 commercial lot with 4 buildings having auto, convenience, financial and day care uses, UMT
- Shepherd's Corner, 1 commercial lot, LMT
Spring Creek Properties Settlement Subdivision (formerly Spring Creek Properties Subdivision I), 16 commercial and industrial lots, LMT
Trexler Business Center, Lot 1, 1 commercial building, LMT
Weilers Road Twins, 82 residential lots (sfa), UMT
West Park, Lot 8, 1 industrial building, UMT
Woodmere Estates, 60 residential units (sfd), UMT
Woodmont at Upper Macungie (formerly Rabenold Farms II), 288 apartment units and clubhouse, (Portion north of I-78), UMT

WASTEWATER

ACTION ITEMS

1. Park Pump Station Improvements (Approval)
Fuel Tank Replacement
Staff bid this project on August 28, 2014. Bid opening was September 22. Total project costs are anticipated to be $110,000.00. Board approval of the Construction Phase of this project is requested at the September Board meeting (details will be sent out under separate cover).

2. Allentown Division – Sanitary Sewer Manhole Lining (below-ground) (Approval)
This project will install a lining system in approximately 50 aged brick manholes identified by previous City staff and current LCA staff. This lining system will eliminate infiltration and will provide additional structural reinforcement to the manholes. The project is identified as Administrative Order Work and will be funded by the City. A RFP was issued for engineering consulting services and proposals were received. A professional service agreement was approved administratively with Barry Isett & Associates (BIA) on April 4, 2014. The City has directed LCA to bring the project to a bid ready stage, reviewed the Conceptual Design, and has authorized the bid. Bids were advertised on August 28, 2014 and were received on September 12, 2014. Board approval of the Construction Phase of this project is requested at the September Board meeting (blue).

3. Sanitary Sewer System Flow Metering for LCA (Approval)
A recommendation for award of a flow metering contract will be presented to the Board for consideration.

DISCUSSION ITEMS
1. Wastewater Capacity/537 Plan Update
   The 537 Team will present an update to the Board regarding the 537 Plan Study currently underway. The previous update concentrated on the option to discharge to the Jordon Creek. This presentation will focus on the land application alternative and will touch on the 537 planning, DRBC effluent requirements, and conveyance modeling.

INFORMATION ITEMS
1. Infiltration and Inflow (I&I) Program Update
   Current Information:
   - LCA and other City Signatories have a meeting scheduled with the US EPA to discuss the Administration Order (AO). The progress made to date with be presented and the AO expiration date will be discussed. As a follow-up to the meeting, an extension will be requested in writing.

   Back-ground Information:
   The following is work planned for 2014:
   - Submission of reports to EPA and DEP.
   - Rehab effectiveness metering in Phase 1 pipe lining project areas to determine the reduction in peak flows as a result of the rehab work.
   - Phase 2 of Signatory pipe lining projects as determined by KCE.
   - Rehab effectiveness metering in Phase 2 pipe lining project areas.
- WLI Manhole Inspections. This work is near completion.
- Test and seal project for branches of the WLI that were CCTVed in 2011 – 2012.
- Long term flow meters will continue on a limited basis. Two rain gauges and meters remain in the system.
- Alternative modeling and feasibility analysis to evaluate the various alternatives to achieve the preliminary objectives. The alternatives will include various combinations of I & I elimination, storage and capacity increases.
- Preliminary Program Objectives Evaluation Report will be submitted to DEP by the end of 2014. This document will define the current system performance and assess what it will take to achieve the system preliminary objectives. The report will include a discussion of the investigation and evaluation work completed including flow evaluation, SSES prioritization, modeling, current and future level of service, current and future system sizing requirements, and will propose the Level of Control for system operation.
- The development of the Capital Improvements Plan is scheduled to begin by the end of the year. This will identify the rehab needs, replacement needs, expansion requirements, costs of improvements and schedule for implementation to achieve the program objectives.
- The City and LCA hydraulic models have been combined by Arcadis. The model is referred to as the “KISS Model”, Kline’s Island Sewer System. A meeting was held with City representatives, the City Engineer, LCA representatives and our Engineer to discuss the combined model and to determine if additional flow monitoring is required to calibrate the models. Ten meters have been installed near the Park Pump Station to collect flow data for three to four months. The flow data will help the two models work together. Arcadis is updating the calibration of the KISS Model with the new flow data.
- A meeting was held with the EPA, PADEP, City, City Signatories, and LCA Signatories to present the investigative and rehabilitative activities competed to date and discuss our plan for presenting a Plan of Action to EPA by mid-November. The Plan of Action will set-forth the work remaining to satisfy the AO and the expected schedule for completion. Our intention to request an extension of the Administrative Order (AO) with the Plan of Action was discussed. The EPA was receptive to this plan and will consider our progress, our Plan of Action and our commitment in determining their plan forward.
- LCA has developed a Public Communication Plan in conjunction with the City to educate the public, special interest groups and stakeholders on the progress made since the AO was issued 5 years ago. Other City Signatories are planning to participate. A Public Meeting will be held sometime in November.

2. **Wastewater Treatment Capacity**

**Current Information:**

A meeting with Wastewater Capacity Team was held at the DRBC office. The DRBC was receptive to our concerns related to the newly drafted limits and grand-fathered loads. We will be providing the DRBC with suggested changes. The Wastewater Capacity Team will
be updating the Board in September on the Land Application option, the DRBC limits and the preliminary conveyance issues.

**Back-ground Information:**

The Memo of Understanding (MOU) regarding working together on a joint Act 537 Plan with the City was never executed with the City. The MOU was revised as a result of the Concession. The City revised the MOU and returned to LCA. We are in the process of continued negotiations.

A Stakeholder’s Advisory Committee (SAC) Meeting will be scheduled for summer 2014.

DEP has indicated that a Jordan Creek study must be submitted to DEP prior to the issuance of final effluent standards. If we want to avoid the study, then water quality standards would be imposed for effluent limitations. There is no work currently being done on the Jordan Creek discharge option.

A meeting was held with the DRBC to discuss updating the prospective effluent limits for the various alternatives. The model was refined and the grandfathered loads for Phosphorus and Ammonia have been updated based on the actual Kline’s Island data. The new effluent limits have been developed and provided by the DRBC. The Engineering team held a meeting to discuss the revised effluent limits provided by the DRBC. A follow-up letter is being provided to the DRBC requesting back-up documentation and sources of data.

A meeting was held at the Pretreatment Plant with the DEP to discuss the land application option. Four individuals from DEP toured the area to see the various sites that are being investigated for land application of the plant effluent. DEP is still excited about this option but did present the requirement for total dissolved solids (TDS) which will be one of the challenges.

A Public Outreach event is being scheduled for January 2015,

3. **Northern Lehigh Wastewater System**

The project is composed of the following:

*Wastewater Treatment Plant (on a 5-acre tract at KidsPeace)*

The North Whitehall Township (NWT) Board of Supervisors granted approval of the Conditional Use for the proposed WWTP. In late November 2012 the opposition, the Voice of the Jordan (Voice), appealed the NWT decision to Lehigh County Court of Common Pleas. On June 5, 2013 the Court ordered “that the decision of the NWT Board of Supervisors dated October 23, 2012 is hereby reaffirmed”. On July 29, 2013 the Voice filed an appeal of the previous Court ruling to Commonwealth Court. Arguments in Harrisburg took place on December 11, 2013, a decision rendered by the Court on January 9, 2014 affirmed the lower Courts decision and Township approval. The Voice has filed a Petition with the Pennsylvania Supreme Court to hear the case. We are evaluating the timing of any legal action to request that the Court require the Voice to post a bond. **No Current Activity**

The total cost of the WTP including soft costs and KidsPeace acquisition costs is estimated at $4.69 million.

*Wal-Mart*
Wal-Mart has put the proposed store on-hold indefinitely. Wal-Mart was a key financial contributor to the offsite conveyance facilities, which includes gravity sewers, a pump station and force main to deliver the wastewater from their proposed development and other future wastewater customers to the proposed wastewater treatment facilities at the Kids Peace site. Cost-sharing negotiations are on hold. No Current Activity.

**KidsPeace Agreement**

A revised amendment to the Agreement has been sent to KidsPeace. It primarily focuses the financial impact on the Jordan Creek Wastewater system because of KidsPeace’s sale of the 101 Acre parcel to Lehigh Carbon-Community College (LCCC). The 101 Acre parcel was an integral economic component for LCA in the 2006 Agreement. Since that revised amendment submittal, KidsPeace has filed for Chapter 11 Bankruptcy. We have retained an attorney who specializes in bankruptcy, Jack Seitz, to represent LCA in this matter. LCA has agreed not to contest the motion filed by the KidsPeace with the bankruptcy court that allows KidsPeace to retain the Acquisition Agreement after the bankruptcy proceedings. No Current Activity

**Act 537 Plan (Plan) Revision**

NWT continues to work on developing an alternate a solution for the wastewater treatment needs for a revised 1-5 year service area which would include a WTP located on the eastside of Route 309 that would discharge to the Coplay Creek. LCA met with NWT on November 21, 2013 to discuss the status of their efforts. NWT has requested that LCA work their engineer to obtain the information necessary to secure conceptual pricing for the WTP and to develop high level capital and operating cost estimates. No Current Activity.

4. **Arcadia West WWTP Improvements**

The 14-day Performance test was successfully completed on July 21. With this activity complete, we move forward with completion of the contract documentation. Projected project total expenses should be about $3,350,000.00, which is less than the $3,501,100.00 in the approved budget.

5. **LCA WTP**

**Digester Mixer Replacements:**

The General contractor has completed the installation of mixers in the first two digesters. The new mixers in the 3rd and final digester have been installed. We expect the project will be completed by the end of October 2014.

6. **Allentown Division - WWTP-New Bar Rack at Headworks**

The Project includes the replacement of the existing screen equipment with new coarse bar screens to minimize potential for jamming or mechanical malfunctions experienced by the existing screening equipment, resulting in discharges from Outfall 003 during high flow events. The project has been bid by the City and a contract in the amount of $737,000 has been awarded to Blooming Glen Contractors. The City released the check for procurement of the screens on June 5, 2014. Infilco required 85% of the equipment costs to be paid in advance of shipment. Installation has been delayed until some issues with Blooming Glen are resolved. Godwin, the subcontractor supplying the bypass pumping equipment, was on site August 11th. Both bar racks were delivered on July 31, 2014. A pre-construction meeting was held on August 4, 2014. Both bar racks and the new auger are installed and all that remains to be done are Punch List items, anticipated to be done...
by the end of September. This Project is identified as Administrative Order / Un-Completed Work and will be funded by the City.

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

This Project will replace five aged motor control centers that provide power on a 24/7 basis to various parts of the WWTP. The motor control centers are located in areas where they are exposed to corrosive wastewater gas and have deteriorated considerably. Because of the age of the existing MCCs, replacement parts are nearly impossible to find. This equipment is critical for the daily operation of the WWTP. The design of the electrical upgrade was awarded to CDM and kickoff meeting for project was held 2-12-14. A contract amendment with CDM was approved and it will allow for additional design services that were not part of the original specifications. 100% design was received and later submitted to Barry Isett for third party review which was approved. Substantially Completed Design approval was granted by the city after the successful third party review. CDM's schedule has construction bids being due on Oct 16, 2014. Currently, the CDM projected construction schedule has the MCC fully installed and operational by August 2015. This Project is identified as Schedule-7 Work and will be funded by LCA.

8. **Allentown Division - PPL Combined Heat & Power (CH&P) Facility**

The Combined Heat and Power (CH&P) facility at the Kline’s Island WWTP which was constructed through Addendum No.3 of Energy Services Master Agreement between the City and PPL Energy Plus fired digester gas on all thirty-one days during the month of August. The CH&P produced a total of 441,738kWh of electricity which reduced the plant’s use of commercial power from the grid by 45%.

9. **Wynnewood Terrace Pump Station and Force Main Replacement**

Design work is complete and we have received all permits. The project was placed to bid, via Penn Bid, on August 13, 2014. Bid opening is expected to be October 2, with Board approval requested at the October Workshop meeting.

10. **WWTP SCADA Upgrade**

Transdyne conducted the radio communication study for the SCADA system upgrade on April 28, 2014. Additional walk through of the PSPS was conducted on June 16, 2014. We received their SCADA Upgrades System Propagation Study report on June 30, 2014. We have received revised proposal from Transdyne. This Project is identified as Un-Completed Work and will be funded by the City.

11. **Lynn Township – WWTP Improvements, Phases 1 & 2**

The revised Water Quality Management (WQM) Part II permit package was submitted to DEP on August 28. Application will be made for PennVEST funding after permits have been acquired. It appears that replacing the RAS pumps and blowers will be performed in-house. We learned that township adoption of a 55+ active adult community overlay district is still in the approval process. The impact that this district will have on the timing to upgrade the 80,000 GPD plant to 160,000 GPD (Phase 3) will need to be investigated with the affected property owners.

12. **Allentown Division – Manhole Collars with Water Tight Frame and Covers (above-ground)**

This project involves, where applicable, installing a 5-foot diameter, three to four foot deep concrete collar around 100 aged brick manholes identified by previous City staff. This technique will be used to secure a new water tight frame and cover onto the manhole. Where
vehicular accesses to the manholes are problematic, alternative solutions will be investigated to secure new water tight frame and covers. This work will eliminate the potential for inflow and infiltration (I/I) entering these manholes, this eliminating the potential for sanitary sewer overflows (SSO’s) from these manholes. The City has directed LCA to bring the project to a bid ready stage, but not to bid unless authorized to do so by the City. A RFP was issued and proposals were received on March 26, 2014 for engineering consulting services. A professional service agreement was approved administratively with Barry Isett & Associates (BIA) on June 25, 2014. The project is anticipated to be bid ready by early October 2014. The project is identified as Administrative Order and will be funded by the City.

13. **Allentown Division – Sanitary Sewer Evaluation Study (SSES)**

This project involves field investigatory work to identify sources of inflow and infiltration (I/I) in the City’s sanitary sewer system located in the Primary and Secondary basins as identified in the WR&A report. The work will include closed circuit television (CCTV) inspection of approximately 102,000 linear feet of sanitary sewer mains ranging in size from 8 to 36 inches in diameter. The work will include the inspection of approximately 550 manholes and sewer piping point repairs, joint repairs, smoke testing, and heavy cleaning. The design phase of this project was authorized administratively. The project was advertised for bid on March 20, 2014 and bids were opened on April 28, 2014. Board approval for the construction phase of the project was given on at the May 27, 2014 Meeting. The construction contract was awarded to Video Pipe Services and the Notice to Proceed was issued on June 23, 2014. The project has an anticipated completion date of September 30, 2014 (90 calendar contract plus one week extension). An additional time extension for one contingent bid item (point repairs) will be granted on September 23, 2014. This contingent bid item will be completed prior to the end of 2014. This project is identified as Administrative Order / Un-Completed Work and will be funded by the City.

14. **Wynnewood Terrace Collector System Rehabilitation**

In May, LCA applied for a grant from the PA Small Sewer Systems Grant Program. PA Department of Community & Economic Development took action to award at their September 9 meeting. They received over $31 million in applications, for $3 million in available funding. LCA was unsuccessful in receiving a $125,800 grant for this $148,000 test and seal project.
MEMORANDUM

Date: September 18, 2014
To: Lehigh County Authority Board of Directors
From: Edward Bielarski, CFO/COO
Subject: 2015 Minimum Municipal Obligation (MMO) for the Lehigh County Authority Pension Plan (39-448-6N)

Act 205 of 1984, as amended, governs the funding requirements for all municipal pension plans. The law requires the Chief Administrative Officer of each municipal pension plan to inform the governing body of the municipality of the plan’s expected financial obligation for the coming year. This must be done by the last business day in September. This memo, provided under the guidance of the Pennsylvania Municipal Retirement System (the plan’s administrator), is intended to satisfy the legal requirements of Act 205.

The calculation of the 2015 plan cost, or the MMO, required an estimate of the 2014 W-2 wages of the employees covered by the plan. I have indicated on the attached worksheet my best estimate of the same. Questions on the pension cost calculation may be addressed to either myself or the staff of the Pennsylvania Municipal Retirement System at (800) 622-7968.

Please understand that the MMO is the municipality’s 2015 bill for the pension plan. The calculated obligation must be paid by December 31, 2015. The obligation must be met with general fund monies or with any General State Aid to Municipal Pensions to which we may be entitled to under Act 205.

Edward Bielarski
COO/CFO
EdBielarski@lehighcountyauthority.org
(610) 398-2503, extension 160

Attachment: 2015 MMO Worksheet
The Minimum Municipal Obligation Worksheet (MMO)
For The
Lehigh County Authority Pension Plan (39-448-6 N)
For Plan Year 2015

CHARGES
Estimated 2014 W-2 Payroll
For Covered Plan Members:
PMRS Determined Normal Cost
Expressed as a Decimal:

\[(A) \quad \$8,674,554.68\]

\[(B) \quad .1241\]

RESULT: \((A) \times (B) = \)
Administrative Charge (PMRS Determined)
# of Plan Members times $20:
Amortization of Unfunded Liability
(PMRS Determined)

\[(C) \quad \$1,076,512\]

\[(D) \quad 3,400\]

\[(E) \quad 0\]

\[(F) \quad \$1,079,912\]

TOTAL CHARGES: \((C) + (D) + (E) = \)

CREDITS
Repeat Estimated 2014 W-2 Payroll
For Covered Plan Members:
Employee Contribution Rate
Expressed as a Decimal:

\[(A) \quad \$8,674,554.68\]

\[(G) \quad .01\]

RESULT: \((A) \times (G) = \)
Amortization of the Actuarial Surplus
(PMRS Determined)

\[(H) \quad \$8,674.6\]

\[(I) \quad 14,830\]

\[(J) \quad \$101,576\]

(MMO) \$978,336

TOTAL CREDITS \((H) + (I) = \)

MINIMUM MUNICIPAL OBLIGATION
(Based on 01/01/2013 Actuarial Valuation)

Equals TOTAL CHARGES Minus
TOTAL CREDITS \((F) - (J) = \) (Please round numbers to dollars)

Prepared By: Edward Biclarzki (Name)
Chief Financial Officer (Title)
(410) 790-2503 (Telephone #)

Please complete the above worksheet with your best estimates and return a copy to the Pennsylvania Municipal Retirement System by October 17. The official copy must be shared with the plan's governing board by the last business day in September.
<table>
<thead>
<tr>
<th></th>
<th>Count</th>
<th>Total Salary</th>
<th>OT</th>
<th>Total Salary</th>
<th>12.41% Admin Charge</th>
<th>Employee Contribution</th>
<th>Surplus</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Allentown</td>
<td>103</td>
<td>$5,669,823</td>
<td>$175,775</td>
<td>$5,845,598</td>
<td>$725,439</td>
<td>$2,060.00</td>
<td>($58,455.98)</td>
<td>$669,043</td>
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<tr>
<td>Suburban</td>
<td>46</td>
<td>$2,794,686</td>
<td>$34,272</td>
<td>$2,828,957</td>
<td>$351,074</td>
<td>$920.00</td>
<td>($28,289.57)</td>
<td>($14,830.00) $308,874</td>
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<tr>
<td>Inactive</td>
<td>21</td>
<td>$420.00</td>
<td></td>
<td>$420.00</td>
<td>$420.00</td>
<td></td>
<td></td>
<td>$420</td>
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<tr>
<td>Total</td>
<td>170</td>
<td>$8,464,508.22</td>
<td>$210,046.45</td>
<td>$8,674,554.68</td>
<td>$1,076,512.24</td>
<td>$3,400.00</td>
<td>($86,745.55)</td>
<td>($14,830.00) $978,337</td>
</tr>
</tbody>
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MEMORANDUM

Date: September 23, 2014

To: Aurel M. Arndt, C.E.O.

From: Phil DePoe, Frank Leist

Subject: Allentown Division
Sanitary Sewer Manhole Lining – Construction Phase

MOTIONS / APPROVALS REQUESTED:

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Capital Project Authorization Amendment No. 1 - Construction Phase</td>
<td>$268,388</td>
</tr>
<tr>
<td>2</td>
<td>Professional Services Authorization Amendment No. 1 – Construction Phase: Barry Isett &amp; Associates (*)</td>
<td>$22,445</td>
</tr>
<tr>
<td>3</td>
<td>Contract Awards – Construction Phase: Lake County Sewer (*)</td>
<td>$125,491</td>
</tr>
</tbody>
</table>

(*) Included in the Capital Project Authorization.

PROJECT OVERVIEW:
This project will install a lining system for approximately 50 aged brick manholes identified by previous City staff. This lining system will eliminate infiltration and will provide additional structural reinforcement to the manholes.

FINANCIAL:
The project is identified as Administrative Order Work and will be funded by the City.

PROJECT STATUS:
In accordance with the Lease Agreement, the City is responsible for determining what Administrative Order (AO) work is to take place, and LCA is responsible to execute said work. The design phase of this project was previously authorized by LCA.

The project was advertised for bid on August 22, 2014. A mandatory pre-bid meeting was held on September 3, 2014. Bids were received on September 12, 2014.

THIS APPROVAL: CONSTRUCTION PHASE

BIDDING SUMMARY: CONSTRUCTION CONTRACT
This project requires a General Construction Contract. The bid documents were e-mailed electronically to six (6) contractors. Six contractors attended the mandatory pre-bid meeting and we received three compliant bid packages. The bidding results, which reflect the Base Bid, are as follows:

<table>
<thead>
<tr>
<th>Consultant</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lake County Sewer</td>
<td>$125,491</td>
</tr>
<tr>
<td>USG</td>
<td>$138,745</td>
</tr>
<tr>
<td>Tri-State Grouting</td>
<td>$143,775</td>
</tr>
</tbody>
</table>
Reference checks for the low bidder, Lake County Sewer, have identified no issues. Therefore, we recommend awarding the General Constriction to Lake County Sewer subject to receipt of the necessary Performance Bonds, Insurance and other required documentation.

**PROFESSIONAL SERVICES:**
Barry Isett and Associates will provide construction administrative phase services and inspection phase services.

**PROJECT SCHEDULE:**
Assuming approval of the Construction phase at the September 30, 2014 Board Meeting, Notice to Proceed will be issued early October 2014 with an estimated completion date of early December 2014.

**FUTURE AUTHORIZATIONS:**
None anticipated.
CAPITAL PROJECT AUTHORIZATION

PROJECT NO.: AD-S-14-2  
BUDGET FUND: Allentown Div/Wastewater/Capital

PROJECT TITLE: Allentown Division  
Sanitary Sewer Manhole Lining - Planning & Construction Phase

PROJECT TYPE:
- Construction

THIS AUTHORIZATION: $268,388
TO DATE (W/ABOVE): $290,000

DESCRIPTION AND BENEFITS:
This project will install a lining system for approximately 50 aged brick manholes identified by previous City staff. This lining system will eliminate infiltration and will provide additional structural reinforcement to the manholes.

The design phase of this project was previously authorized. The project is identified as Administrative Order Work and will be funded by the City. The project is anticipated to be complete by December 2014.

Please reference the cover Memo for additional information.

Authorization Status:

<table>
<thead>
<tr>
<th>Previous Authorizations</th>
<th>$21,612</th>
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</thead>
</table>

REQUESTED THIS AUTHORIZATION

<table>
<thead>
<tr>
<th>Planning &amp; Design Phase</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff</td>
<td>$10,000</td>
</tr>
<tr>
<td>Professional Services</td>
<td>22,445</td>
</tr>
<tr>
<td>General Construction Contract</td>
<td>125,491</td>
</tr>
<tr>
<td>Miscellaneous (1)</td>
<td>100,452</td>
</tr>
<tr>
<td>Contingencies</td>
<td>10,000</td>
</tr>
<tr>
<td>Total This Authorization</td>
<td>$268,388</td>
</tr>
</tbody>
</table>

(1) This project will be funded by the City - the intent is to utilize a total sum of $290,000. The City will provide authorization to line additional manholes if necessary to reach their targeted budget goal.

Future Authorization

| None Anticipated | $0 |

Total Estimated Project

| $290,000 |

REVIEW AND APPROVALS:

Project Manager  Date  Chief Executive Officer  Date

Chief Capital Works Officer  Date  Chairman  Date
PROFESSIONAL SERVICES AUTHORIZATION
Amendment No. 1

Professional: BARRY ISETT & ASSOCIATES
85 S. Route 100
Allentown, PA 18106

Date: September 23, 2014
Requested By: Phil DePoe

Approvals
Department Head: ______________________
Chief Executive Officer: ______________________

Allentown Division – Sanitary Sewer Manhole Lining – Construction Phase

Barry Isett & Associates will perform the construction administration and inspection phase services for the Sanitary Sewer Manhole Lining Project (for approximately 50 brick sanitary sewer manholes in the City of Allentown).

<table>
<thead>
<tr>
<th>Professional Services (^{(1)})</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Provide construction administration phase services</td>
</tr>
<tr>
<td>2. Provide inspection phase inspections</td>
</tr>
</tbody>
</table>

\(^{(1)}\) For Construction Phase Only.

Please reference the cover Memo for additional information.

Previous Authorization - Design Phase:
Cost Estimate (not to be exceeded without further authorization): $13,112

This Authorization - Construction Phase:
Cost Estimate (not to be exceeded without further authorization): $22,445

Cost Estimate (not to be exceeded without further authorization): $35,557

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