BOARD MEETING AGENDA – MAY 23, 2016

1. Call to Order
   - Public Participation Sign-In Request

2. Review of Agenda / Executive Sessions

4. Approval of Minutes
   - May 9, 2016 Board meeting minutes

5. Public Comments

6. Action / Discussion Items:

   **FINANCE AND ADMINISTRATION**
   - Organizational Goal # 4 – Organizational Development – 2nd Quarter Update *(yellow)*

   **WATER**
   - Allentown Division – Water Filtration Plant: Filter Room Ceiling Improvements *(blue)*

   **WASTEWATER**
   - Lehigh County Authority/Upper Milford Township & Lower Macungie Township Wastewater Transportation Agreement *(green)*

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

8. Monthly Financial Review (2nd Board meeting per month) **No report attached**

9. Monthly System Operations Overview (2nd Board meeting per month) – **April 2016 report attached**

10. Staff Comments

11. Solicitor’s Comments

12. Public Comments / Other Comments

13. Executive Sessions

14. Adjournment

**UPCOMING BOARD MEETINGS**

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

- June 13, 2016
- June 27, 2016
- July 11, 2016

**PUBLIC PARTICIPATION POLICY**

In accordance with Authority policy, members of the public shall record their name, address, and discussion item on the sign-in sheet at the start of each meeting; this information shall also be stated when addressing the meeting. 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.
The Regular Meeting of the Lehigh County Authority was called to order at 12:17 p.m. on Monday, May 9, 2016, Chairman Brian Nagle presiding. Other Members present at the commencement of the meeting were: Linda Rosenfeld, Kevin Baker, Tom Muller, Richard Bohner, Norma Cusick, Scott Bieber and Deana Zosky. Authority Staff present were Liesel Gross, Ed Klein, Pat Mandes, Frank Leist, Brad Landon, John Parsons, Chuck Volk, and Lisa Miller.

REVIEW OF AGENDA

Liesel Gross stated that there will not be an Executive Session after the regular meeting.

APPROVAL OF MINUTES

April 25, 2016 Regular Meeting Minutes

Chairman Nagle said there is one correction on page 2, paragraph 4, the word in should be added after included.

On a motion by Richard Bohner, seconded by Norma Cusick, the Board approved the Minutes of the April 25, 2016 Regular meeting as corrected (8-0).

PUBLIC COMMENTS

None.

ACTION AND DISCUSSION ITEMS

Ted Lyons arrived at 12:20 p.m.

Suburban Division – Western Weisenberg Wastewater Treatment Plant Improvements

Frank Leist gave an overview and background of the project which implements the Gannett Fleming, Inc. recommendations to correct the cold weather nitrification issue at the Western Weisenberg wastewater treatment plant. The improvements will include insulating the exposed exterior reactor walls, covering the two reactor tanks and insulating the blower piping. Submersion heaters will also be installed in the reactor tanks. This project will be funded by the LCA Suburban Western Weisenberg division.

Mr. Leist is asking for approval of the Budget Amendment in the amount of $251,095.00, Capital Project Authorization – Amendment No. 1 for the Construction Phase in the amount of $529,595.00 which includes the Professional Services Authorization – Amendment No. 1 for construction and engineering to Gannett Fleming, Inc. in the amount of $9,600.00, Professional Services Authorization – Amendment No. 3 for management and inspection to Cowan Associates, Inc. in the amount of $31,000.00, awarding of the construction contracts to JEV Construction LLC for the general contract in the amount of $394,500.00 and Albarel Electric for the electrical contract in the amount of $37,494.00.

The reason for the budget amendment request is that originally, the emersion heaters were to be installed in 2017 but after re-evaluation of the inhibitory impact that the elevated levels of cooper, zinc and quaternary ammonia in the wastewater influent had on the nitrification process during cold weather, it was moved up to 2016. Also, the general contract bid prices exceeded the engineer's estimate, and some expenditures anticipated for 2015 were actually spent in early 2016.

Scott Bieber questioned if the designer of the project, or the Authority, overlooked the specifications on this project when it was designed. Mr. Leist explained that standard assumptions were made by the design engineer as to how the plant would operate properly, but those are in question because of the unique characteristics of the waste stream for this plant.
Deana Zosky said that she is not supportive of budget amendment approvals until we know where we are with the budget. Mr. Leist explained that without approval of this project, the Authority will likely be in violation of the NPDES permit during periods of cold weather, as it has been in the past, so it is important to implement the changes now during the construction season before winter arrives.

The Board had a discussion regarding performance guarantee and the original plant design specifications.

On a motion by Linda Rosenfeld, seconded by Tom Muller, the Board approved the Budget Amendment in the amount of $251,095.00, Capital Project Authorization – Amendment No. 1 for the Construction Phase in the amount of $529,595.00 which includes the Professional Services Authorization – Amendment No. 1 for construction and engineering to Gannett Fleming, Inc. in the amount of $9,600.00, Professional Services Authorization – Amendment No. 3 for management and inspection to Cowan Associates, Inc. in the amount of $31,000.00, awarding of the construction contracts to JEV Construction LLC for the general contract in the amount of $394,500.00 and Albarell Electric for the electrical contract in the amount of $37,494.00 (9-0).

Additional discussion occurred regarding a performance guarantee. Frank Leist said that he will pursue looking into performance guarantee requirements. Brad Landon explained that the Authority typically does not request a performance guarantee in the fashion suggested by various board members, per se, from professionals, only contractors. With professionals, the requirements are that the engineers shall perform their services at the level customary for competent and prudent engineers performing such services at the time and place where the services are provided.

**Suburban Division – SCARP – Western Lehigh Interceptor Test and Seal Project**

Pat Mandes reviewed the project and informed the Board that in June, the Authority will be prepared to give a more detailed status report presentation on the work completed to date and future work planned to address the USEPA Administrative Order. Ms. Mandes provided a handout regarding costs to date on the project. Chuck Volk, Project Manager on this project, described the project, which consists of sanitary sewer cleaning, inspections via closed circuit TV, cured-in-place point repairs, pressure testing and chemical grout sealing of pipe joints, and post construction inspection for sanitary sewer lines located in western and central Lehigh County previously identified as areas subjected to infiltration leakage. The sewer pipeline areas included in portions of the Western Lehigh Interceptor are Alburtis/Macungie Trunk line, Breinigsville Trunk lines and several additional sections of pipe at the connection to the WLI, all totaling 10.4 miles. The project will be funded by the LCA Suburban Division.

Discussion followed regarding quantifying the results of this project. Chuck Volk and Pat Mandes explained the difficulty in quantifying how much infiltration will be removed from a system due to the many variables. A large amount of data was collected from the predesign studies and will be used as a baseline for the projects. This project does have a performance criteria with strict specifications and a rigorous schedule. The Board asked, upon completion of the project and to satisfy the EPA regarding the EPA Administrative Order, will the Authority be able to quantify the amount of infiltration and inflow (I&I) that was removed. Pat Mandes said that the Authority’s consultant, Arcadis, will use the hydraulic model and additional flow metering data to provide more comprehensive data to EPA.

Mr. Volk is asking for approval of the Capital Project Authorization for the construction phase in the amount of $1,828,500.00 which includes Contract Award for the Test & Seal contract (AMB trunk lines and SAPR lines) to Video Pipe Services, Inc. in the amount of $1,590,000.00 and the Professional Services Authorization – Amendment No. 24 for construction engineering, management and inspection to Arcadis in the amount of $198,500.00.

On a motion by Scott Bieber, seconded by Linda Rosenfeld, the Board approved the Capital Project Authorization for the construction phase in the amount of $1,828,500.00 which includes Contract Award for the Test & Seal contract (AMB trunk lines and SAPR lines) to Video Pipe Services, Inc. in the amount of $1,590,000.00 and the Professional Services Authorization – Amendment No. 24 for construction engineering, management and inspection to Arcadis in the amount of $198,500.00 (9-0).
Suburban Division – Wynnewood Terrace Test and Seal Project

Chuck Volk informed the Board that this is part of the previous bid for the Western Lehigh Test and Seal project, and there is a budget amendment request for this project to be completed in the Wynnewood Terrace system. The reason for the budget amendment request is that upon completion of the design by Arcadis, the scope increased because of what was found in the system and also because of the rigorous schedule required by the contractor. Also, the bid prices exceeded the engineer’s estimate. The goal of this project is to reduce infiltration leakage into the sewage collection system for Wynnewood Terrace and reduce hydraulic overload conditions at the wastewater treatment plant and preserve capacity in the sewage collection system. Ed Klein stated that the costs for this project will come out of project reserves.

Mr. Volk is asking for approval of the Budget Amendment in the amount of $144,895.00, the Capital Project Authorization – Construction Phase in the amount of $319,895.00 which includes the Professional Services Authorization to Arcadis, Inc. for construction, inspection, and engineering in the amount of $40,630.00 and awarding the construction contract to Video Pipe Services, Inc. in the amount of $261,765.00.

On a motion by Ted Lyons, seconded by Norma Cusick, the Board approved the Budget Amendment in the amount of $144,895.00, the Capital Project Authorization – Construction Phase in the amount of $319,895.00 which includes the Professional Services Authorization to Arcadis, Inc. for construction, inspection, and engineering in the amount of $40,630.00 and awarding the construction contract to Video Pipe Services, Inc. in the amount of $261,765.00 (9-0).

PROJECT UPDATES/INFORMATION ITEMS

Liesel Gross said that the Monthly Project Update currently shows only one action item for the May 23, 2016 Board meeting.

FINANCIAL REVIEW

Ed Klein presented the Board with updated financial sheets for March 2016. He explained the new format of the report that is similar to audited statements, which was requested by the Finance Committee. He informed the Board that he spent time reviewing the past two years of the budget and is in the process of re-phasing it. He said that the revenues are close to what was budgeted if it were phased correctly. The next step is to complete a second quarter forecast. Deana Zosky thanked Ed for moving the Authority forward on the process of monthly financials and would like consideration to be given to the reserves regarding what they are and what we are using them for both operating and long term. Liesel Gross agreed and explained that the ongoing investigation and discussion about the Authority's long-term financial health is an evolving process as we learn more about industry best practices.

SYSTEM OPERATIONS OVERVIEW

None.

STAFF COMMENTS

Liesel Gross informed the Board about the Authority’s annual drinking water week event, HydroMania, which takes place on May 12th, and invited them to attend the event.

Ms. Gross also stated that we need to bring the email usage issue to a close. Two Board members require hand-on instruction, which will be done at the end of the meeting. At that time, Authority issues communicated through email will be migrated from Board member’s personal email address to solely the Board member’s LCA address.

SOLICITOR’S COMMENTS

Brad Landon stated that closing on the Lowhill Township Sewer System Acquisition will be June 8, 2016.
PUBLIC COMMENTS / OTHER COMMENTS

Frank Leist informed the Board that the Wastewater Transportation Agreement with Lower Macungie Township has been approved and signed by Lower Macungie Township and will be provided to the Board for consideration at the next Board meeting.

Scott Bieber inquired about the Authority’s response to the Lehigh County Commissioners regarding the Resolution on lead. Liesel Gross said that the Authority is following the path that was discussed at the April Board meeting and that has generated some interest from customers in the water testing program. The Authority is continuing to develop its own educational materials and have updated the website with the information. June will mark the beginning of the three-year lead and copper required monitoring and testing period and the next two quarters of customer newsletters will also include educational information on lead.

EXECUTIVE SESSION

None.

ADJOURNMENT

There being no further business, the Chairman adjourned the meeting at 1:39 p.m.

______________________________
Richard H. Bohner
Secretary
MEMORANDUM

TO: LCA Board of Directors
FROM: Liesel Gross
DATE: May 16, 2016
RE: 2nd Quarter Goal Update – Organizational Development

At our upcoming Board meeting on May 23, 2016, I will present a status report on one of Lehigh County Authority's four organizational goals for 2016. The presentation will focus on Goal # 4 – Organizational Development. Please reference the attached goal statement form, which was discussed earlier this year.

Because most of the material we plan to cover will relate to personnel information, we expect this discussion may be best suited for executive session. Some of the specific topics we will cover will include:

- Status of union negotiations
- Review of employee demographics & succession planning needs
- Personnel policy review

We plan to review the status of each of the remaining organizational goals through Board presentations and discussions planned for June and July.
2016 Organizational Goal # 4 – Organizational Development

LCA Strategic Plan Components:

1. **Goal Category – Organizational Synergy:** Create a dynamic and unified organizational culture that drives performance and teamwork.

2. **Goal Category – Workforce Sustainability:** Create a supportive and empowering work environment where employees actively seek to contribute toward LCA’s mission.

2016 Vision / Goal(s):

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

Critical Milestones:

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Milestones</th>
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</table>
| 1st Quarter 2016 | • Organizational goals defined. Calendar established for employee / manager / Board review of goals & progress.  
                     • Focused discussion with managers: Development needs & training required. |
| 2nd Quarter 2016 | • Internal contract negotiation team & goals established. Data gathered to support salary/benefits discussions during contract negotiations.  
                     • Focused discussion with managers: Identifying & planning for retirements.  
                     • Management development/training program kicks off. |
| 3rd Quarter 2016 | • Any special topics identified as requiring extended discussion/research are discussed in advance of union contract negotiations.  
                     • Retirements in 1-3 year timeframe are identified. |
| 4th Quarter 2016 | • Union contracts negotiated and approved.  
                     • Future retirement gaps outlined with knowledge gaps identified.  
                     • Focused discussion with managers: What’s next? |
MEMORANDUM

To: Authority Board
From: Phil DePoe
Subject: Allentown Water Filtration Plant: Filter Room Ceiling Replacement - 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 – Construction Phase</td>
<td>$306,000</td>
</tr>
<tr>
<td>2</td>
<td>Professional Services Authorization – D’Huy Engineering</td>
<td>$10,500</td>
</tr>
<tr>
<td>3</td>
<td>General Contract Award – Machemer Contracting, Inc.</td>
<td>$265,500</td>
</tr>
</tbody>
</table>

(1) Included in the Capital Project Authorization.

PROJECT OVERVIEW:
The project generally consists of the installation of a new PVC linear panel system on the walls and ceilings in the clerestory area of the Water Filtration Plant’s filter room. The same system was installed above the filters themselves approximately ten years ago. This project is needed for three reasons: aesthetics, continuous maintenance issues, and the possibility of filter water contamination due to falling debris. This filter room is highly visible to both plant staff and visiting guests; thus, improving its aesthetics is necessary. Plant staff must also maintain the existing paint and drywall of the walls and ceilings approximately every six months. This is needed to ensure the chipping paint and drywall does not continue to fall on the floor and/or filtered water.

FINANCIAL:
This Project will be funded by the LCA Allentown Division.

PROJECT STATUS:
The project was advertised for bid on April 6, 2016. A mandatory pre-bid meeting was held on April 12, 2016. Bids were received on April 26, 2016.
THIS APPROVAL – CONSTRUCTION PHASE:

The construction phase includes activities that are necessary to install the PVC linear panel system. The General Contractor will be responsible for all construction activities. The design engineer will be responsible for periodic oversight of the construction, which will be supplemented by in-house project management provided by LCA.

BIDDING SUMMARY:

The project requires a General Construction (GC) Contract. The bid results are summarized below:

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Base Bid Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machemer Contracting, Inc.</td>
<td>$265,500</td>
</tr>
<tr>
<td>Shane Patrick Associates</td>
<td>$267,374</td>
</tr>
</tbody>
</table>

Based upon the review of the bids, we recommend award of the General Construction contract to Machemer Contracting, Inc., subject to the receipt of the necessary Performance Bonds, Insurance and other required documentation. LCA staff has reviewed the supplied references and Machemer Contracting, Inc. is qualified to complete this project. In fact, Machemer completed the installation of this same panel system over the filters approximately ten years ago.

PROFESSIONAL SERVICES:

D’Huy Engineers has been our design consultant on this project and will provide construction engineering and on-site inspection services for the construction phase of the filter room ceiling system installation. Their work will also include:

1. Attend and facilitate a pre-construction conference
2. Prepare for and attend two job conference meetings
3. Review and approve contractor’s submittals and respond to RFIs
4. Process applications for payment and any necessary change orders
5. Provide limited construction observation
6. Prepare punch list and final project close-out
**PROJECT SCHEDULE:**
The specifications require the project to be complete by the end of August 2016.

**FUTURE AUTHORIZATIONS:**
No future authorizations are anticipated for this project.
CAPITAL PROJECT AUTHORIZATION

**PROJECT NO.:** AD-W-16-6

**BUDGET FUND:** Allentown Div\Water\Capital

**PROJECT TITLE:** Allentown Water Filtration Plant: Filter Room Ceiling Replacement – Construction Phase

**THIS AUTHORIZATION:** $306,000

**TO DATE (w/ ABOVE):** $327,000

**PROJECT TYPE:**
- Construction
- Equipment Purchase
- Amendment No. 1

**DESCRIPTION AND BENEFITS:**

The project generally consists of the installation of a new PVC linear panel system on the walls and ceiling surfaces in the clerestory area of the Water Filtration Plant’s filter room. The same system was installed above the filters themselves approximately ten years ago. This project is needed for three reasons: aesthetics, continuous maintenance issues, and the possibility of filter water contamination due to falling debris.

Please see attached Board Memo for further project details.

**Authorization Status:**

<table>
<thead>
<tr>
<th>Previous Authorizations</th>
<th>Design Phase</th>
<th>$21,000</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Requested This Authorization</th>
<th>Construction Phase</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff</td>
<td>$10,000</td>
<td></td>
</tr>
<tr>
<td>Construction Contractor</td>
<td>$265,500</td>
<td></td>
</tr>
<tr>
<td>Engineering Consultant</td>
<td>$10,500</td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
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<td></td>
</tr>
<tr>
<td>Contingency</td>
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<td></td>
</tr>
<tr>
<td>Total This Authorization</td>
<td>$306,000</td>
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**Future Authorizations**

<table>
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<tr>
<th>None Anticipated</th>
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</table>

**Total Estimated Project**

<table>
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<tr>
<th>$327,000</th>
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**REVIEW AND APPROVALS:**

<table>
<thead>
<tr>
<th>Project Manager</th>
<th>Date</th>
<th>Chief Executive Officer</th>
<th>Date</th>
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<thead>
<tr>
<th>Chief Capital Works Officer</th>
<th>Date</th>
<th>Chairman</th>
<th>Date</th>
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PROFESSIONAL SERVICES AUTHORIZATION
Amendment No. 1

Professional: D’HUY ENGINEERING, INC.
One East Broad Street, Suite 310
Bethlehem, PA 18018

Date: May 23, 2016

Requested By: Phil DePoe

Department Head: __________________________
Chief Executive Officer: _______________________

Allentown Division – Water Filtration Plant: Filter Room Ceiling Replacement

Previous Authorizations – Design Phase: $17,500

This Authorization – Construction Phase: $10,500

D’Huy Engineering will conduct periodic inspection of the construction activities throughout the entire construction phase. Other consultant services will be provided and are listed below:

<table>
<thead>
<tr>
<th>Professional Services</th>
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<tbody>
<tr>
<td>1. Attend and facilitate a pre-construction conference</td>
</tr>
<tr>
<td>2. Prepare for and attend two job conference meetings</td>
</tr>
<tr>
<td>3. Review and approve contractor’s submittals and respond to RFIs</td>
</tr>
<tr>
<td>4. Process applications for payment and any necessary change orders</td>
</tr>
<tr>
<td>5. Provide limited construction observation</td>
</tr>
<tr>
<td>6. Prepare punch list and final project close-out</td>
</tr>
</tbody>
</table>

Cost Estimate (not to exceed without further authorization): $28,000

Time Table and Completion Deadline: All construction activities are to be completed by the end of August 2016.

Authorization Completion:

(For Authority Use Only)

Approval: __________________________ Actual Cost: ___________ Date: ___________
MEMORANDUM

To: Authority Board
From: Frank Leist
Subject: Lehigh County Authority/Upper Milford Township and Lower Macungie Township Wastewater Transportation Agreement

MOTIONS / APPROVALS REQUESTED:

<table>
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<tr>
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<tbody>
<tr>
<td>Lehigh County Authority/Upper Milford Township and Lower Macungie Township Wastewater Transportation Agreement - Approval</td>
</tr>
</tbody>
</table>

BACKGROUND:

There are some instances where an area of a municipality that needs public sanitary sewer service for a proposed development or perhaps to correct an environmental problem, such as failing on-lot sewage disposal systems, is too far away from the municipality’s existing infrastructure to make it economically or hydraulically feasible, but another adjoining municipality’s infrastructure may be in close proximity. In many cases it can be advantageous to one or both the parties to have sewage collected in certain parts of one system discharged into the other system for transportation to another point such as an interceptor and/or wastewater treatment plant.

As an example, in July 1987 LCA and the Borough of Emmaus negotiated such an agreement which at first only addressed the transportation of sewage from the Upper Milford Township (UMiT) system through the Emmaus system, but in July 1995 there was a need to amend the agreement to also address transportation of sewage from the Emmaus system through the UMiT system.

LCA/UMiT AND LOWER MACUNGIE TOWNSHIP WASTEWATER TRANSPORTATION AGREEMENT (reference attached agreement and map)

In June 1994 and February 1995, LCA approved the transportation of wastewater from the Lower Macungie Township (LMT) system through the LCA UMiT collection system to the LCA Western Lehigh Interceptor from the following LMT developments:

- Waterfall Crossing Phase IV development, 11 lots
- Watermill development, 54 lots.

These arrangements were covered by interim letter agreements because at that time LCA and LMT were in the process of negotiating a permanent agreement. The permanent agreement never came to fruition.
In June 2014, the proposed 219 single family unit Fields at Indian Creek- Active Adult Community was submitted for approval to the proper entities. The proposed development is located primarily in UMiT (~188 units), with a portion in Emmaus (~31 units) and a portion in LMT (no units). Because of the proximity of the LMT system, LCA met with William Erdman, P.E. of Keystone Consulting Engineers (LMT engineer) and recommended that the best solution for providing public wastewater service to the development would be for the flow from the entire development via the proposed UMiT collection system be transported by the LMT system (in the Olympic Ridge development) to the Emmaus Liebert Creek interceptor and ultimately to the LCA Western Lehigh Interceptor and the Allentown Wastewater Treatment Plant.

The previous interim agreements for the Waterfall and Watermill developments and the proposed Fields at Indian Creek development presented an opportunity for LCA and LMT to negotiate a permanent reciprocal agreement that addresses the transportation of wastewater from one party’s system through the other party’s system in any areas of each township when deemed applicable by the parties. In May 2015 LCA prepared a draft agreement for LMT review; the final agreement was completed in February 2016, with the LMT Commissioners approving it at their May 5, 2016 meeting.

UMiT has reviewed the agreement and will consider it for approval at their June 2nd Supervisors meeting. UMiT is a party to the agreement because the LCA-UMiT Wastewater Service Agreement provides a mechanism for UMiT to assume ownership of the system from LCA in the future, should UMiT choose to do so.
WASTEWATER TRANSPORTATION AGREEMENT

THIS AGREEMENT, dated for convenience the ____ day of ________________ 2016,
by and between

TOWNSHIP OF LOWER MACUNGIE, a political subdivision of the
Commonwealth of Pennsylvania (hereinafter called "Lower Macungie"),
situate in Lehigh County, Pennsylvania, party of the first part,

AND

LEHIGH COUNTY AUTHORITY, a Pennsylvania municipal authority organized
and existing under the Pennsylvania Municipality Authorities Act
(hereinafter called "Authority"), and the TOWNSHIP OF UPPER MILFORD, a
political subdivision of the Commonwealth of Pennsylvania (hereinafter
called "Upper Milford"), situate in Lehigh County, Pennsylvania,
collectively parties of the second part.

WITNESSETH:

WHEREAS, the Authority was formed by the Commissioners of Lehigh County, in
part, to provide public water and sewer service in the Lehigh Valley; and

WHEREAS, the Authority and Upper Milford have agreed that the Authority shall
provide public sewer service to customers in Upper Milford; and

WHEREAS, the Authority is the owner of a sanitary sewer system (hereinafter called
"Upper Milford System") which is used to collect sewage in portions of Upper Milford for
transportation to the Western Lehigh Interceptor and the Little Lehigh Relief Interceptor
(hereinafter collectively the "Interceptor") and ultimately the sewerage treatment plant of
the City of Allentown (hereinafter called "City"); and

WHEREAS, Lower Macungie is the owner of a sanitary sewer system (hereinafter
called "Lower Macungie System") which is used to collect sewage in portions of Lower
Macungie also for transportation to the Interceptor and treatment at the City; and

WHEREAS, portions of Upper Milford presently needing, and other adjoining areas
that in the future may need, public sewer service are currently some distance from the
Interceptor, but in close proximity to the Lower Macungie System; and

WHEREAS, portions of Lower Macungie presently needing, and other adjoining
areas that in the future may need, public sewer service are currently some distance from
Interceptor, but in close proximity to the Upper Milford System; and
WHEREAS, it would be advantageous to the parties to have sewage collected in
certain parts of one system to be discharged into the other system for transportation to the
Interceptor; and

WHEREAS, the parties desire to enter to an agreement governing all future use of
the Lower Macungie System by Upper Milford properties and of the Upper Milford
System by Lower Macungie properties, rather than through individual agreements each
time a situation arises.

NOW THEREFORE, in consideration of the promises and mutual covenants made
herein, and expressing the intent to be legally bound hereby, the parties agree that the
above recitals do form a part of this agreement and it is further agreed as follows:

1. Definitions:
   a) System: Sanitary Sewer System
   b) Collecting Party: The municipality or municipal authority that owns the
      System which is used to collect sewage from properties it serves.
   c) Transporting Party: The municipality or municipal authority that owns the
      System that will transport the wastewater from the Collecting Party’s System
      either to an Intermediate Party or directly to the Interceptor and ultimately the
      City.
   d) Intermediate Party: The municipality or municipal authority that owns a
      System that will transport the Collecting Party’s wastewater to or from the
      Transporting Party’s System to the Interceptor and ultimately the City.

2. When the Collecting Party receives a request to serve a particular tract of
   land in the municipality where it provides service (hereinafter called the
   “Development”), and the most efficient way to provide for transportation of the
   sewage from the Development to the Interceptor is by connecting to the
   Transporting Party’s System, the Collecting Party shall submit a written request to
   the Transporting Party to use the Transporting Party’s System for that purpose.
   Approval of the Collecting Party’s request to use of the Transporting Party’s System
   shall be at the sole discretion of the Transporting Party, based upon a determination
   by the Transporting Party of whether its System has adequate current and future
   capacity to convey the wastewater from the proposed Development. Each Collecting
   Party’s request shall be evaluated by the Transporting Party on an individual basis,
   and nothing in the Agreement shall be construed as creating an obligation or
   responsibility on the part of Transporting Party to provide any service to the
   Collecting Party beyond those previously approved. Transporting Party approval
   shall not be unreasonably withheld.

3. The Collecting Party shall reimburse the Transporting Party for all reasonable
   review expenses, including but not limited to salary and engineering fees related to the
   above approval; including, engineering evaluation to determine whether system capacity
   is available and approval of design. Additionally this provision would apply to
construction inspection of facilities (a) at the point of connection to the Transporting Party System and (b) if applicable, facilities that connect Collecting Party users directly to the Transporting Party System in a location outside of the municipal entity where the Collecting Party provides service. The Transporting Party shall provide estimates of the cost of such services to the Collecting Party before commencing any work.

4. The Collecting Party shall provide inspection of the wastewater facilities constructed in its System under the direction and supervision of a certified professional engineer, who will certify to the Transporting Party that construction was in compliance with the Collecting Party's specifications for sanitary sewer construction.

5. The owner of a connecting property and/or developer of the Development shall pay the Transporting Party's then-current per equivalent dwelling unit (EDU) wastewater capital recovery fee, the same fee which is charged for the Transporting Party's own customers for each unit in the Development or per individual property. Payment by the owner of a connecting property and/or developer shall be made to the Transporting Party at the time of application for service.

The Transporting Party shall notify the Collecting Party whenever there is any change in the rates or fees related to wastewater capital recovery fees. No change in fee shall occur without a sixty (60) day notice to the Collecting Party.

6. It is understood the allocation for wastewater conveyed through the Interceptor and treated at the City sewerage treatment plant from customers served by the Collecting Party shall be attributed to the Collecting Party, and not the Transporting Party.

7. In determining the total volume of wastewater discharged by the Collecting Party at any connection point to the Transporting Party's System, the following methods of measurement may apply.

a) The Collecting Party shall install and maintain, at its own expense, a permanent sewage metering facility acceptable to the Transporting Party, which will record the actual sewage flow into the Transporting Party System whenever the average daily flow at that point exceeds 30,000 gallons per day; or

b) When a singular user's wastewater discharge exceeds 30,000 gallons per day, an individual customer sewage meter shall be used, which meter shall be installed and maintained by the Collecting Party or that customer, if the Collecting Party so designates. Said meter is typically installed on the customer's sewer lateral.

If the permanent sewage metering facilities are not required as set forth in (a) or (b) above, the volume of wastewater shall be estimated by the sum of:

y) Individual customer's water usages shall be based upon that customer's water meter readings for the first quarter of the year, except for non-residential customers shall be based upon actual water readings during each billing cycle of the year; or
z) If water meters are not in place, the wastewater treatment capacity allocated to that customer shall be used to determine the discharge.

8. Transportation Fee. If the Transporting Party so desires, the Collecting Party shall pay quarterly to the Transporting Party, a transportation fee on a per-thousand gallon basis of sewage discharged into the Transporting Party System pursuant to the terms of this Agreement. For this purpose the sewage discharged shall be measured in accordance with §7 above.

9. The parties recognize that the purpose of the transportation fee is to compensate the Transporting Party for normal operation and maintenance costs associated with the facilities through which the sewage is transmitted from the Collecting Party, and thus that shall be the basis for the transportation fee. Normal operation and maintenance is generally defined as, but not necessarily limited to, infiltration/inflow analyses or studies, sewer line flushing, removal of roots, and other deposits such as detergent, sediment, grease deposits, sewer line inspections, trenchless sewer line point repairs, excavation and repair of sewer line fractures or breaks, manhole repair, or adjustment or resetting of manhole frames and covers, and installation of water tight manhole inserts.

In the event that extraordinary operation and maintenance costs associated with the facilities are incurred by the Transporting Party, the parties hereto agree that the transportation fee as set forth in the paragraph can be increased to compensate the Transporting Party for such extraordinary operational and maintenance for that year based on those costs being shared by both parties in proportion to the respective average daily sewage flow through said facilities that require the extraordinary operation and maintenance. This average daily sewage flow shall be calculated based on the four calendar quarters preceding the date the work is completed. Extraordinary operation and maintenance would include, but not necessarily be limited to, major sinkhole repair, sewer line test and seal efforts and extended by-pass pumping that is not necessary for a capital expenditure.

In the interest of simplifying the transportation fee for normal operation and maintenance the parties agree to establish a common normal transportation fee of $0.14 per/thousand gallons. Effective January 1, 2017, said fee will be adjusted annually based upon the lesser of 2.5% or the Consumer Price Index- for all Urban Consumers (CPI-U), Northeast Region - (not seasonally adjusted) as published by the U.S. Department of Labor, Bureau of Labor Statistics. The initial CPI-U shall be based on the date of this Agreement.

For billing purposes, the volume of wastewater discharged by the Upper Milford System into the Lower Macungie System shall be compared to the volume of wastewater discharged by the Lower Macungie System into the Upper Milford System; the smaller volume will be subtracted from the larger volume resulting in a net-volume. The party with the larger discharge volume shall make payment to the party with the smaller discharge volume based upon the net-volume and the Transportation Fee of the party with the smaller discharge volume. Payments shall be made on a quarterly basis.
If the Collecting Party's wastewater that is transported by the Transporting Party is also transported by an Intermediate Party, the costs for the use of the Intermediate Party's System shall be the responsibility of the Collecting Party and not the Transporting Party.

10. Unless otherwise agreed to by both parties in writing, all users of the Lower Macungie System located in Upper Milford and provided service pursuant to this Agreement shall be customers of the Authority; and all users of the Upper Milford System located in Lower Macungie and provided service pursuant to this Agreement shall be customers of Lower Macungie.

11. In the event of an emergency or catastrophe causing a temporary failure or reduced capacity, the Transporting Party agrees to treat the Collecting Party users on the same basis as it does for all of its own customers and the Collecting Party agrees that it will impose upon its users such restrictions as the Transporting Party shall have imposed upon its own customers.

12. The Transporting Party agrees to grant and convey to the Collecting Party, at no cost, any and all easements in public roads and other properties owned by the Transporting Party which are necessary for the construction of wastewater facilities to connect Collecting Party users to the Transporting Party System, provided that all necessary sewer planning approvals are obtained and the Collecting Party shall return the surface of such easements as nearly as possible to their preconstruction condition. The Transporting Party agrees to permit the Collecting Party without further authorization, payment of fees, or security to excavate in such easements for purpose of maintaining, improving, replacing and repairing said wastewater facilities and appurtenances provided that the Collecting Party shall promptly notify the Transporting Party of such excavation and, after such work is completed, restore the surface of said easements as nearly as possible to their preconstruction condition.

13. The Transporting Party, at its own expense, has the right to inspect, review, and monitor the Collecting Party's facilities and records relative to the service covered under this Agreement, and vice versa.

14. The Lower Macungie System shall be and remain the property of Lower Macungie and the Upper Milford System shall be and remain the property of the Authority. Both the Authority and Lower Macungie covenant and agree to maintain their systems in good repair and operating condition; to operate the same continuously in an economical fashion, efficient manner, and in compliance with all regulatory and statutory requirements; and to make all repairs, renewals, replacements and improvements thereto as required to maintain adequate wastewater service as applicable to the each party pursuant to the terms set forth in this Agreement. If, however, any part of a System is in any way damaged by any cause originating in the System owned by the other party, or is damaged by reason of the acts or omissions of the users or agents of the other party, then the cost of repairing any such damage to the extent attributable to the other party or its agents shall be paid by such other party within sixty (60) days of receiving an invoice therefor. Either party shall have the right to contest the conclusion as to the cause of the damage.
15. All previous agreements between parties for wastewater transportation covered by this Agreement shall be superseded by this Agreement. In particular, these agreements are: June 1994 interim agreement for the Water Fall Crossing Development, Phase IV and February 12, 1995 interim agreement for the Water Mill Development. In both these agreements the Authority is the Transporting Party.

16. This Agreement shall inure to the benefit of and shall be binding upon the parties hereto and their respective successors and assigns.

17. This Agreement may be amended at any time by mutual agreement in writing, executed by all parties hereto.

18. If any provisions of this Agreement are held to be invalid or unenforceable, such invalidity will not affect any other provision hereof, and the remaining provisions hereof shall be construed and enforced as if such invalid provisions had not been contained herein.

19. This Agreement may be executed in multiple counterparts, each of which shall be regarded for all purposes as an original, and such counterparts shall constitute but one and the same instrument.

20. This Agreement will be governed by and constructed under the laws of the Commonwealth of Pennsylvania. Any action or proceeding seeking to enforce any provision of, or based on any right arising out of this Agreement may be brought against any of the parties in the Court of Common Pleas of the County of Lehigh, and each party consents to the jurisdiction of such court (and of the appropriate appellate courts) in any such action or proceeding and waives any objection to venue made therein.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day and year first above written.

ATTEST:

Renea Flexer
Name: Renea Flexer
Position: Township Secretary

ATTEST:

Bradford E. Landon
Solicitor

LOWER MACUNGIE TOWNSHIP

By: Bruce E. Fosselman
Name: Bruce E. Fosselman
Position: Township Manager

LEHIGH COUNTY AUTHORITY

By: Liesel M. Gross
Name: Liesel M. Gross
Position: Chief Executive Officer
ATTEST:

__________________________
Name:
Position:

__________________________
By:
Name:
Position:

UPPER MILFORD TOWNSHIP
### Critical Activities

<table>
<thead>
<tr>
<th>System</th>
<th>Description</th>
<th>Apr-16 Daily Avg (MGD)</th>
<th>2016-to-Date Daily Avg (MGD)</th>
<th>2015 Totals Daily Avg (MGD)</th>
<th>Permit Daily Max (MGD)</th>
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<tr>
<td>Water Production</td>
<td>Allentown Total</td>
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<td>Schantz Spring</td>
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<td>Crystal Spring</td>
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<td></td>
<td>Little Lehigh Creek</td>
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<td>Lehigh River</td>
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<td>0.10</td>
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<td></td>
<td>Central Lehigh Total</td>
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<td>9.08</td>
<td>19.04 MGD Avg</td>
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<td></td>
<td>Feed from Allentown</td>
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<td>6.03</td>
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<td>6.0 MGD Avg</td>
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<td></td>
<td>Well Production (CLD)</td>
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<td>8.54 MGD Avg</td>
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<td>Sum of all (12) other Suburban Water Systems</td>
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<td>0.17</td>
<td>0.17</td>
<td>1.71 Sum of all wells</td>
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<td>Wastewater Treatment</td>
<td>Kline's Island</td>
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<td></td>
<td>Pretreatment Plant</td>
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<td>5.75 (design capacity)</td>
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<td>Sum of all (5) other Suburban WW Systems</td>
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<td>0.21</td>
<td>0.21</td>
<td>0.36</td>
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### Other Highlights:

On 4/1/2016, Mink Estates and Far View Farms were issued a “Do Not Consume” notice because of an overdosing of sodium hydroxide. Repairs were made, the system was flushed, and the notice was removed within 12 hours of the discovery of the problem. Operations of these systems have been normal since the 4/1/2016 episode.

**Significant Repairs:**

The Haistead Water Tank (Allentown system) has been out of service since 4/22/2016 for various maintenance projects including preparation and painting of the interior surface. The tank is expected to be back in service by mid-late May. During this time, the high level Haistead system has had its pressure booster station running full-time with two fire hydrants blow-offs installed near the tank and are set to release at 45 PSI.

**Description of NOVs and/or SSOs:**

There were no NOVs or SSOs during April 2016.