



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

Agendas & Minutes Posted:
www.lehighcountyauthority.org

LEHIGH COUNTY AUTHORITY

Published: July 3, 2023

BOARD MEETING AGENDA – July 10, 2023 – 12:00 p.m.

In-Person or Virtual Meeting Attendance Options Available: Meetings of the LCA Board of Directors will be held at LCA's Main Office as well as online using the Zoom Meetings application, which includes a telephone option. Public participation is welcomed both in-person or virtually. Instructions for joining the meeting online or by phone are posted on the LCA website in the morning on the day of the meeting, prior to the start of each meeting. You may also issue comment to LCA via email to LCABoard@lehighcountyauthority.org in advance of any meeting or view the meeting at a later time by visiting the LCA website. Please visit <https://www.lehighcountyauthority.org/about/lca-board-meeting-videos/> for specific instructions to join the meeting if you are attending virtually. If attending in-person at LCA's Main Office, please follow all safety and sanitation protocols posted.

1. Call to Order

- **NOTICE OF MEETING RECORDINGS**

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

- *Public Participation Sign-In Request*

2. Review of Agenda / Executive Sessions

- Additions to Agenda (vote required if action will be taken)

3. Approval of Minutes

- *June 26, 2023 Board meeting minutes*

4. Public Comments

5. Action / Discussion Items:

FINANCE AND ADMINISTRATION

- *LCA Strategic Plan – 2023 Quarterly Progress Report (Discussion) (yellow) (digital Board packet, pages 3-8)*
- *LCA Safety Program Review (Presentation)*

WATER

- *Allentown Division – Large Meter Chamber Replacement (Approval) (blue) (digital Board packet, pages 9-11)*

WASTEWATER

- *KISS Act 537 Planning – Financial & Institutional Evaluation, Phase 2 (Approval) (green) (digital Board packet, pages 12-22)*

6. Monthly Project Updates / Information Items (1st Board meeting per month) (digital Board packet, pages 23-29)– **July 2023 report attached**

7. Monthly Financial Review (2nd Board meeting per month) (*digital Board packet, pages*)
8. Monthly System Operations Overview (2nd Board meeting per month) (*digital Board packet, pages*)
9. Staff Comments
10. Solicitor's Comments
11. Public Comments / Other Comments
12. Board Member Comments
13. Executive Sessions
14. Adjournment

UPCOMING BOARD MEETINGS		
July 24, 2023	August 14, 2023	August 28, 2023

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.

LCA Strategic Plan (2022-2027)

2023 Quarterly Progress Report: July 2023

Overview

Lehigh County Authority (LCA) adopted an updated Strategic Plan in December 2021, which included a refreshed look at our Mission, Vision, Values and Priorities. An ambitious list of strategies, activities, and tasks were developed to support the achievement of LCA's plan over the next five years. This progress report was developed to help our employees and Board of Directors keep a sharp focus on the plan and, specifically, the work we plan to achieve in the current year. While not all inclusive, milestones outlined in this report describe the breadth of activities LCA will focus on in 2022 and 2023. A dashboard of key performance indicators is included on the last page of this report. Any questions about this report should be directed to LCA's Chief Executive Officer, Liesel Gross.

Asset Management

2022-2023 Focus:

1. Develop multi-year approach / roadmap to developing LCA's Asset Management (AM) program
2. Track all maintenance activities in a standard Computerized Maintenance Management System (CMMS) platform

2022 Milestones & Activities (completed):

- ✓ Conduct staffing assessment & develop organization structure for AM
- ✓ Define consultant work scope for the development of an AM roadmap
- ✓ Recruit and hire a Director of Engineering & Asset Management
- ✓ Conduct trial period for capital project management using MS Project
- ✓ Kick-off identification and definition of Preventive Maintenance (PM) and Corrective Maintenance (CM) programs within CMMS

2023 Milestones & Activities:

- **Develop new Board report on capital program progress (on time / on budget)**
 - 1st Quarter 2023 Status: Capital plan development process reviewed and recommendations provided by Hazen & Sawyer. Preliminary review of project management software system completed.
 - 2nd Quarter 2023 Status: RFP for project management software is under development. An interim project performance metrics report to be presented to the Board in Q3.
- **Strategic AM Plan (SAMP) documented including multi-year AM program roadmap**
 - 1st Quarter 2023 Status: AM Maturity Assessment and draft LCA AM Policy completed.
 - 2nd Quarter 2023 Status: Project is on schedule with AM roadmap drafted and lifecycle workshops conducted.
- **Identify and define all critical / key Preventive Maintenance (PM) and Corrective Maintenance (CM) programs within CMMS**
 - 1st Quarter 2023 Status: Ongoing progress by maintenance staff, with additional support expected following full AM Technology staff transition (see below).
 - 2nd Quarter 2023 Status: Hazen & Sawyer conducting review of LCA use of CMMS and developing recommendations for PM strategies by asset class.

- **Complete staffing transition for new AM Technology group, with refinements made to AM technology roadmap**
 - 1st Quarter 2023 Status: Two AM Technology Analysts hired in January with strong experience in geographic information systems (GIS). Additional program definition required to address CMMS and other AM technology needs.
 - 2nd Quarter 2023 Status: Actively recruiting for additional analyst to build team's CMMS capabilities. RFP being developed to secure additional CMMS implementation support.

Process Improvement

2022-2023 Focus:

1. Evaluate long-term viability of current Enterprise Resource Planning (ERP), Munis, and implement next steps for enhancement
2. Process improvements in Customer Care and Finance/Accounting areas

2022 Milestones & Activities (completed):

- ✓ Conduct ERP needs assessment & road map, and initiate next steps as determined
- ✓ Review and document current processes for capturing various delinquency types (e.g. waste haulers, sewer-only customers)
- ✓ Upgrade to Munis version 2021.3 if/when all technical barriers are removed

2023 Milestones & Activities:

- **Munis Reimplementation Project milestones achieved**
 - 1st Quarter 2023 Status: Draft new General Ledger string and chart of accounts developed by LCA staff. Tyler Technologies engaged, partial completion of investment analysis sessions to support scoping of implementation project. Full project schedule under development, dependent on Tyler resource availability in 2023/2024.
 - 2nd Quarter 2023 Status: Significant challenges encountered in developing implementation sequence and schedule. Direct engagement with Tyler has improved understanding of project scope. Anticipate go-live date will move to mid- to late-2024.
- **Implement Paymentus upgrade to improve secure account access & add real time API**
 - 1st Quarter 2023 Status: Not started.
 - 2nd Quarter 2023 Status: Implementation plan developed for security improvements including two-factor authentication for customer account access. Awaiting scheduling support from Paymentus.
- **Adopt updated Board resolution for delegation of duties and purchasing authorizations**
 - 1st Quarter 2023 Status: Board discussion under way regarding committee structure to support additional discussion of delegated responsibilities.
 - 2nd Quarter 2023 Status: Board discussions continuing on committee structure and assignments.
- **Implement universal ACH payments for accounts payable**
 - 1st Quarter 2023 Status: Vendor communication to collect ACH data prepared, with final data security measures being reviewed prior to release.
 - 2nd Quarter 2023 Status: No update – lower priority for team members who are also actively engaged in Munis Reimplementation Project.

Water & Wastewater Capacity

2022-2023 Focus:

1. Advancing regional Act 537 Plan development for regulatory submission in 2025
2. Improve water supply resiliency for Central Lehigh Division (CLD) & North Whitehall Division (NWD)

2022 Milestones & Activities (completed):

- ✓ Kickoff of specific water projects (system interconnection, storage evaluation)
- ✓ Complete Water Filtration Plant master plan update
- ✓ Complete Pretreatment Plant (PTP) master plan (presented Q1 2023)
- ✓ Develop inflow & infiltration source removal plan for the Allentown Division collection system, the Western Lehigh Interceptor, and three collection systems owned and operated by LCA (Upper Milford, Weisenberg, and Lowhill Township)
- ✓ Complete preliminary design of pumping improvement projects at KIWWTP
- ✓ Initiate financial / institutional evaluation required for Act 537 Plan

2023 Milestones & Activities:

- **Commence construction phase of Upper Western Lehigh Pump Station & Force Main project**
 - 1st Quarter 2023 Status: Project design at >60%, with permits submitted to Pa. Department of Environmental Protection (DEP). Easement acquisition process ongoing.
 - 2nd Quarter 2023 Status: DEP permit received, and easement acquisition is ongoing. Construction bid package under development.
- **Initiate additional CLD / NWD water supply evaluations and/or projects (scope TBD)**
 - 1st Quarter 2023 Status: CLD / NWD water master plan in final stage of completion, to be presented to LCA Board in May.
 - 2nd Quarter 2023 Status: Plan summary presented to Board in May. Selected alternatives to increase emergency supply resiliency are under review.
- **Complete design phase of pumping improvement projects at KIWWTP**
 - 1st Quarter 2023 Status: Design work ongoing. Initial evaluation of KIWWTP main pump station configuration complete.
 - 2nd Quarter 2023 Status: Pump modeling and first phase of preliminary design completed. Conceptual Design phase expected to be complete in Q3.
- **Act 537 Plan analysis narrowed down to three final alternatives**
 - 1st Quarter 2023 Status: Preliminary Screening of Alternatives (PSOA) stage complete with results presented to municipalities and LCA Board in March. Authorization for Final Alternatives Analysis (FAA) phase to be requested in April.
 - 2nd Quarter 2023 Status: FAA initiated in April with three primary alternatives selected for deeper review. DEP meeting conducted in May to solicit regulatory feedback on progress to date. Key decision point relates to finalizing municipal sewer rehab programs. Stakeholder engagement program kicked off in June.

Employee Engagement & Safety

2022 & 2023 Focus:

1. Employee & supervisory onboarding and ongoing development
2. Safety program enhancements

2022 Milestones & Activities (completed):

- ✓ Develop remote work / flexible work arrangements policy and procedures
- ✓ Hire human resources staff member to support employee development / succession planning
- ✓ Create Environmental, Health & Safety (EHS) Steering Committee

2023 Milestones & Activities:

Employee Engagement Milestones:

- 2023 Status:
Previously established goals are listed below but will be evaluated / refined following full onboarding of new Human Resources (HR) staff.
 - Standardize employee onboarding: develop standard human resources processes, work with managers on department-specific processes
 - Standardize onboarding process for new supervisors
 - Roll out stay interview and new-employee check-in / mentoring processes
 - Update LCA retirement risk profile / near-term succession planAdditional work completed in 2023 while HR staffing transition is under way, including:
 - Expansion of internal “LCA Academy” program
 - Employee surveys conducted on key engagement topics
 - Managers workshop conducted on employee engagement topics

Employee Safety Milestones:

- **Evaluate needs for external support for standardizing / improvement of EHS program**
 - 1st Quarter 2023 Status: Staffing needs, external resources, and staff succession planning needs to be reviewed by EHS Steering Committee.
 - 2nd Quarter 2023 Status: This milestone will be a Q3 focus area.
- **Improve root cause analysis process to enhance understanding and tracking of safety incidents**
 - 1st Quarter 2023 Status: Existing process for conducting root cause analysis and incident investigations reviewed by EHS Steering Committee.
 - 2nd Quarter 2023 Status: EHS Steering Committee is reviewing new forms and examples from other agencies to support more robust incident investigation.
- **Enhance safety metrics**
 - 1st Quarter 2023 Status: Initial draft of new incident reporting metrics reviewed by EHS Steering Committee.
 - 2nd Quarter 2023 Status: Draft of safety metrics to be presented to Board in July, with additional metrics to be developed as improved incident reporting is implemented.
- **Create standardized safety training requirements for new employees**
 - 1st Quarter 2023 Status: Not started.
 - 2nd Quarter 2023 Status: Not started. Initial EHS Steering Committee review has revealed other high-priority training areas (confined space).

Operational Excellence

2022-2023 Focus:

1. Completion of specific operational projects/programs that support Operational Excellence goals
2. Small systems compliance review and operational enhancements to achieve compliance

2022 Milestones & Activities (completed):

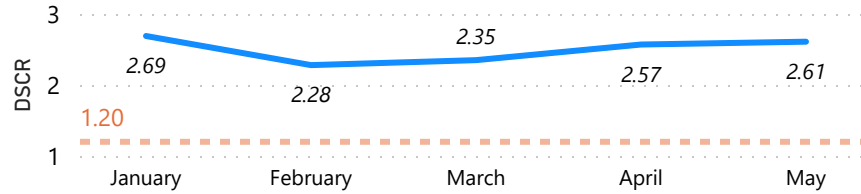
- ✓ Large diameter valve maintenance & replacement program development
- ✓ Suburban Water Supervisory Control and Data Acquisition (SCADA) upgrade, 2022 work scope (3:4 completed)
- ✓ Small systems process control & instrumentation plan development
- ✓ Develop root cause analysis and reporting process for compliance excursion events
- ✓ Regulatory and water quality monitoring program for PFAS (will be ongoing)
- ✓ Standardize Field Services resource sharing protocols (equipment, emergency response, other)
- ✓ Kline's Island Wastewater Treatment Plant (KIWWTP) belt filter press optimization program
- ✓ Initiate Heidelberg Heights private-side sewer system inspection program (will be ongoing into 2023)

2023 Milestones & Activities:

- **Begin implementation of Sand Spring WWTP permit compliance plan**
 - 1st Quarter 2023 Status: External engineering support retained to assist with evaluation. Compliance plan being drafted for submission to DEP in April.
 - 2nd Quarter 2023 Status: Compliance plan submitted to DEP, awaiting feedback. Review of potential treatment system enhancements for piloting is complete.
- **Implement small systems process control & instrumentation plan**
 - 1st Quarter 2023 Status: Compliance Technician job description drafted and standard operating procedures (SOP) developed to support plan.
 - 2nd Quarter 2023 Status: Actively recruiting for Compliance Technician. Additional instrumentation being installed to improve process monitoring at remote stations.
- **Lead service line replacement program kickoff & compliance planning for lead and copper rule revision (LCRR)**
 - 1st Quarter 2023 Status: Draft SOP prepared to address customer risk mitigation measures required following lead service line disruption. Pennvest grant application on track for May submission deadline. Lead service line inventory work slowed due to AM Technology staff transition period.
 - 2nd Quarter 2023 Status: Pennvest grant application submitted in May with award decision and project kickoff expected in July. External support for lead service line inventory will be required, with consultant engaged in Q3.
- **Other operational projects as determined by staff**
 - 1st Quarter 2023 Status: Design for phase 1 large diameter valve replacement project authorized in March. Supervisory Control and Data Acquisition (SCADA) upgrade for Suburban Water on track to complete 2022/2023 work scope – 6 stations upgraded.
 - 2nd Quarter 2023 Status: Two additional stations upgraded via SCADA program, and standards developed for future installations. Reservoir 1 and South Mountain Reservoir rehab projects complete. Significant activity related to PFAS: regulatory and legislative comments prepared, litigation counsel selected, RFP for water treatment issued.

Financial

2022 Debt Service Coverage Ratio - Total LCA



Debt Service Coverage Ratio - Current

City Division	Suburban Wastewater	Suburban Water
2.37	10.45	1.99

Unrestricted Days Cash On Hand

City Division	Suburban Wastewater	Suburban Water
298	298	349

* Target of 180 days.

Customer Care

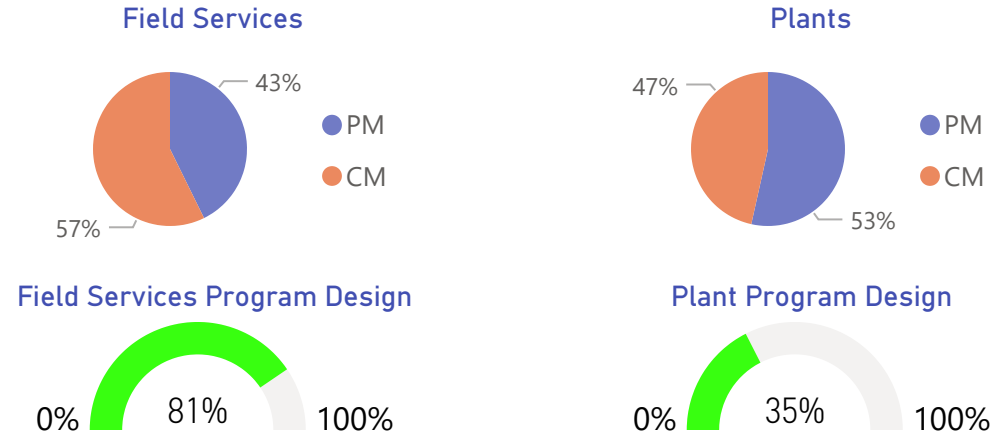
DEVELOPING
METRIC

Capital Program

DEVELOPING
METRIC

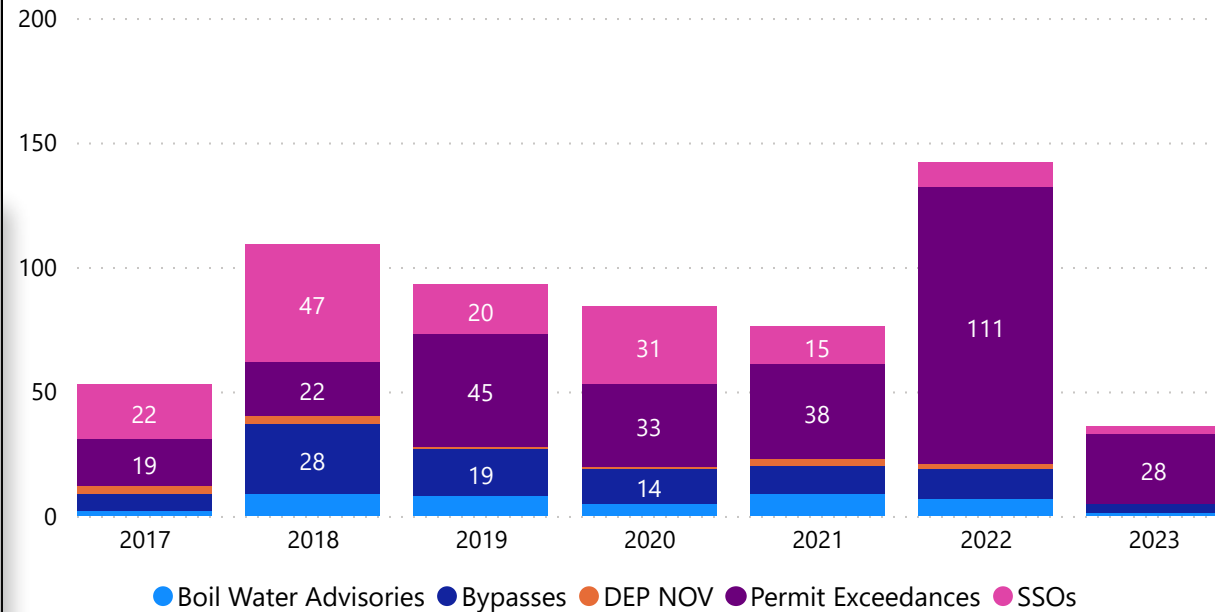
Asset Management

2022 Corrective Maintenance vs. Preventive Maintenance Hours



* Metric to show 2022 progress on preventive program redesign and implementation.

Environmental Compliance



Safety

Days No Vehicle Accident

35

Days No Lost Time

3

Of Recordable Injuries YTD

9

Employees

Total Employees

165

Average Age

46.5

Average Yrs of Service

12.0

Total Vacancies

8



Lehigh County Authority

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MEMORANDUM

Date: July 10, 2023

To: Lehigh County Authority Board of Directors

From: Amy Kunkel, Capital Works Project Engineer

Subject: Allentown Division - Large Meter Chamber Replacement Project

MOTIONS /APPROVALS REQUESTED:

No.	Item	Amount
1	<u>Capital Project Authorization – Large Meter Chamber Replacement Project – Construction Phase</u>	\$181,210
1a	<u>Contract Award – Large Meter Chamber Replacement Project:</u> Core & Main, LP Professional Service Contract <i>(included in Capital Project Authorization)</i>	\$146,210

PROJECT OVERVIEW:

The project consists of the replacement of large (3” through 8”) commercial water meter chambers. Lehigh County Authority (LCA) uses the Omni model of Sensus brand water meters for commercial metering. The Omni meter consists of two parts – the main case and the measuring chamber, which includes the electronic register. When the register reaches the end of its useful life, the chamber can be replaced without disassembling and replacing the entire meter body.

PROJECT OBJECTIVE:

The project objective is to replace and upgrade older (greater than 10 years) and non-functioning meter reading equipment within the Allentown Division to increase meter reading accuracy and efficiency. Meters have to be read manually when the register no longer functions.

FUNDING:

The project will be funded by the LCA Allentown Division.

PROJECT STATUS:

Project scope, design, and specifications were developed in-house. Meter chambers were purchased separately due to supply chain issues and long lead times. Board approval is requested for the Construction Phase.

THIS APPROVAL – CONSTRUCTION PHASE & CONTRACT AWARD – 2023 COMMERCIAL METER CHAMBER REPLACEMENT PROJECT:

Core and Main, LP, is the authorized distributor for Sensus, which is the meter manufacturer used exclusively in LCA's Allentown Division for commercial meters. They have acted as the general contractor on the last two-meter replacement/upgrade projects in the Suburban Division. They are now listed on COSTARS as an approved service provider for meter equipment installation. It is through the COSTARS program that we have received this proposal. Both the firm and its subcontractor's qualifications and experience statements indicate numerous projects of similar scope and type. The contract documents are in order and the company appears well qualified to perform the work. The proposal submitted is within the budgeted amount for this project.

SCHEDULE:

Based on contract award following the July 10, 2023 Board meeting, we anticipate construction to begin by September 2023, and substantial completion in the first quarter of 2024.

CAPITAL PROJECT AUTHORIZATION

PROJECT NO.:	AD-W-23-1	BUDGET FUND:	Allentown Div\Water\Capital
PROJECT TITLE:	Allentown Division Large Meter Chamber Replacement Project – Construction Phase -	PROJECT TYPE:	<input checked="" type="checkbox"/> Construction <input type="checkbox"/> Engineering Study <input type="checkbox"/> Equipment Purchase <input type="checkbox"/> Amendment
THIS AUTHORIZATION:	\$181,210		
TO DATE (W/ ABOVE)	\$365,165.69		

DESCRIPTION AND BENEFITS:

This Authorization is for the replacement of approximately 114 3” through 8” commercial water meter chambers and miscellaneous incidental equipment. This authorization takes the project through construction phase.

Previous Authorizations	
COSTARS Purchase of Equipment	\$183,955.69

REQUESTED THIS AUTHORIZATION	
Construction Phase	
Contract 1-General Construction	\$146,210
Staff	\$20,000
Contingency	\$15,000
Total This Authorization	\$181,210

Future Authorization	
None	

Total Estimated Project	\$365,165.69
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REVIEW AND APPROVALS:

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

MEMORANDUM

Date: July 3, 2023

To: LCA Board of Directors

From: Liesel Gross, CEO

Subject: KISS Act 537 Planning – Financial & Institutional Evaluation, Phase 2

MOTIONS / APPROVALS REQUESTED:

No.	Item	Amount
1	Capital Project Authorization – KISS Act 537 Plan Financial & Institutional Evaluation – Phase 2 Consultant Services	\$209,442
1A*	Professional Services Authorization: Financial & Institutional Evaluation Services – Raftelis*	\$174,442

** Included in the Capital Project Authorization*

PROGRAM OVERVIEW:

There are 15 individual municipalities and two municipal authorities that make up the Kline's Island Sewer System (KISS) in Allentown, PA, all working to meet the Pa. Department of Environmental Protection (DEP) requirement to prepare a regional Act 537 Plan by 2025. The Plan will be comprehensive, covering future service needs for all municipalities, municipal sewer system rehab programs, regional facility rehabilitation and expansion, wet-weather treatment facilities, treatment facility upgrades and potential expansion, industrial pre- treatment facility upgrades, and much more.

At this time, the KISS Act 537 Plan engineering evaluation has progressed into the Final Alternatives Analysis (FAA) phase. Through the remainder of 2023, efforts will be focused on narrowing down the technical solutions that will be effective in achieving the program's goals. The work completed to date has indicated that significant investment will be needed over the next 10-15 years to address the regional sewer service needs of the KISS municipalities. This investment will represent the largest capital program LCA will have undertaken in its history.

One of the Act 537 Plan requirements is to complete a financial evaluation of the selected alternative, including rate impacts, cost-sharing, and financing approach. Another requirement is to evaluate the institutional / governance approach to completing the projects, operating and maintaining the facilities, and monitoring performance. It is noteworthy that DEP has expressed a strong preference to see the KISS municipalities adopt a more simplified and/or regional approach as part of this Act 537 Plan development process. Achieving these non-technical goals of the program will be challenging due to the complexity of existing intermunicipal agreements and wide spectrum of political views and personal opinions among the municipal leaders involved in the process.

A phased approach to addressing the financial and institutional components of the Act 537 Plan development was developed in late 2022. Phase 1 was authorized in December 2022 to include the following tasks:

- Compile and collate financial information from each KISS municipality
- Document data sources, municipal financial processes that may impact the analysis, etc.
- Conducting a broad rate study to determine range of rates that KISS customers

- currently pay and applying broad assumptions to project future rates
- Determining overall cost to operate the KISS system today
- High-level affordability analysis to determine capacity for rate increases that may be needed to finance the Act 537 projects

This work is nearing completion and will be shared with the KISS municipalities at an upcoming meeting. To keep up with current Act 537 Plan development schedule, immediate commencement of Phase 2 work is recommended.

THIS APPROVAL – PHASE 2 FINANCIAL & INSTITUTIONAL EVALUATION SERVICES:

As a result of Phase 1 work completed to date, a preliminary financial model has been developed that can be used for deeper analysis of the Act 537 Plan project costs, how they will be financed, how the KISS municipalities will share the costs, and the rate impact to customers.

It is important to note that long-standing intermunicipal agreements are in place which dictate how costs are distributed among the KISS municipalities today. This cost-sharing methodology was previously modeled in detail by AECOM in 2021 and 2022 and will be a useful tool in completing additional analysis in this phase of work. However, the intermunicipal agreements do not provide guidance on how costs would be allocated for some of the larger projects being considered as part of the Final Alternatives Analysis. In addition, several of the KISS municipalities have expressed a desire to simplify the cost-sharing methodology to improve customer / stakeholder communication and transparency. With this in mind, the Phase 2 tasks described in this memo are designed to support an exploration of new options for equitable cost distribution, which may lead to updated intermunicipal agreements.

To achieve this, a series of “signatory engagement work sessions” are incorporated into the work scope for Phase 2, with a focus on understanding what is working well today and should be retained in the future, and what alternatives should be explored for modifying the intermunicipal agreements.

In parallel, the project will also dive more deeply into LCA’s existing financing capacity from both a financial and organizational standpoint, reviewing constraints on bonding capacity and developing strategies for consideration. These analyses will be applied to the refined scope and sequence of projects being developed by the engineering team in their FAA work.

The attached proposal provides details of the following tasks to be completed in Phase 2:

- Task 1 – Evaluate Existing Cost Sharing Arrangements
- Task 2 – Signatory Engagement Work Sessions #1: Current Arrangements
- Task 3 – Signatory Engagement Work Sessions #1 Deliverables
- Task 4 – Signatory Engagement Work Sessions #2: Visioning of Alternative Cost Sharing
- Task 5 – Financing Assessment and Implications
- Task 6 – Evaluation of Alternatives
- Task 7 – Signatory Engagement Work Sessions #3: Review and Discuss Results
- Task 8 – Current State and Alternatives Report and Individual Analyses

FINANCIAL:

The project will be funded by the City of Allentown as an Administrative Order (AO) project.

CURRENT STATUS:

Phase 1 work will be completed on July 12, 2023 when preliminary results will be presented to the KISS municipalities. Phase 2 work as described in this memo will commence immediately thereafter.

CONSULTANT SELECTION PROCESS:

Raftelis was selected from a field of three firms in December 2022 to complete Phase 1 financial data collection and analysis. Their work has been satisfactory, and the preliminary financial model Raftelis has developed will be used in the Phase 2 work described in this memo. Raftelis has also been effective in their efforts to develop good rapport with the KISS municipal managers and finance staff, which is critical for the success of this next phase of work. Raftelis has provided the attached proposal, which is responsive to LCA's and the City's requests. Their cost proposal of \$174,442 is in line with LCA's budget for this work in 2023.

SCHEDULE:

The Phase 2 Financial & Institutional Evaluation will kick off immediately following LCA Board authorization, and is expected to be completed in parallel with the FAA, with completion by January 2024.

FUTURE AUTHORIZATIONS:

A Capital Project Authorization (CPA) amendment will be brought to the Board for consideration of future phases of this work. It is expected that additional financial consultant support will be needed as we move toward completing the final selection of solutions to be included in the Act 537 Plan, and preparing plan documentation for submission to the public and to DEP. Additional legal services or other utility management support may also be required.

CAPITAL PROJECT AUTHORIZATION

PROJECT NO.:	<u>AD-S-27</u>	BUDGET FUND:	<u>Allentown Division - Sewer</u>
PROJECT TITLE:	<u>KISS Act 537 Plan Evaluations</u>	PROJECT TYPE:	
THIS AUTHORIZATION:	<u>\$209,442</u>	<input type="checkbox"/> Construction	
TO DATE (W/ ABOVE):	<u>\$300,367</u>	<input type="checkbox"/> Engineering Study	
		<input type="checkbox"/> Equipment Purchase	
		<input checked="" type="checkbox"/> Amendment	
		<input checked="" type="checkbox"/> Other	

DESCRIPTION AND BENEFITS:

One of the Act 537 Plan requirements is to complete a financial evaluation of the selected alternative, including rate impacts, cost-sharing, and financing approach. Another requirement is to evaluate the institutional / governance approach to completing the projects, operating and maintaining the facilities, and monitoring performance. A phased approach to addressing these requirements, including:

Phase 1 (complete) – Financial Data Collection & Broad Analysis (2022-2023)

Phase 2 (NOW) – Facilitated Signatory Engagement & Alternatives Review (2023)

Phase 3 – Stakeholder Involvement & Facilitated Decision-Making (2024)

Prior Related Work: Phase 1 was authorized in December 2022 and completed in July 2023.

This Authorization: During Phase 2, deeper analysis will be conducted. A series of signatory engagement workshops will be conducted to analyze the existing intermunicipal agreements, their benefits and constraints. A deeper review of financing alternatives will be conducted, and a refined scope and sequence of capital projects will be modeled to support regional decision-making.

Future Authorization: It is expected that additional financial consultant support will be needed as complete the analysis and develop additional Act 537 Plan documentation. Additional legal services or other utility management support may also be required to support the creation of updated intermunicipal agreements.

Requested This Authorization	
<i>Design Phase</i>	
Staff	\$25,000
Contractor	\$0
Consultant Services	\$174,442
Contingency	\$10,000
Total This Authorization	\$209,442

<i>Prior Authorizations</i>	<i>\$90,925</i>
<i>Future Authorizations</i>	<i>To be determined</i>

REVIEW AND APPROVALS:

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



Lehigh County Authority

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PROFESSIONAL SERVICES AUTHORIZATION

Professional: Raftelis
227 W. Trade Street, Suite 1400
Charlotte, NC 28202

Date: July 10, 2023

Requested By: Liesel Gross

Approvals

Department Head: _____

Chief Executive

Officer: _____

KISS Act 537 Planning – Financial & Institutional Evaluation, Phase 2

One of the Act 537 Plan requirements is to complete a financial evaluation of the selected alternative, including rate impacts, cost-sharing, and financing approach. Another requirement is to evaluate the institutional / governance approach to completing the projects, operating and maintaining the facilities, and monitoring performance.

A initial phase of the financial evaluation to gather baseline financial data from all Kline's Island Sewer System (KISS) municipalities and authorities was completed in Phase 1. During Phase 2, deeper analysis will be conducted. A series of signatory engagement workshops will be conducted to analyze the existing intermunicipal agreements, their benefits and constraints. A deeper review of financing alternatives will be conducted, and a refined scope and sequence of capital projects will be modeled to support regional decision-making. Raftelis will provide support for this project including the following services:

Professional Services

- Task 1 – Evaluate Existing Cost Sharing Arrangements
- Task 2 – Signatory Engagement Work Sessions #1: Current Arrangements
- Task 3 – Signatory Engagement Work Sessions #1 Deliverables
- Task 4 – Signatory Engagement Work Sessions #2: Visioning of Alternative Cost Sharing
- Task 5 – Financing Assessment and Implications
- Task 6 – Evaluation of Alternatives
- Task 7 – Signatory Engagement Work Sessions #3: Review and Discuss Results
- Task 8 – Current State and Alternatives Report and Individual Analyses

(1) Please reference the cover Memo for additional information.

Prior Approvals:

Amount: \$80,365

This Approval:

Amount: \$174,442

Time Table and Completion Deadline: Expected completion in January 2024.

(For Authority Use Only)

Authorization Completion:

Approval: _____ **Actual Cost:** _____ **Date:** _____

June 29, 2023

Liesel M. Gross
Chief Executive Officer
Lehigh County Authority
1053 Spruce Road, P.O. Box 3348
Allentown, PA 18106

Subject: Financial & Institutional Evaluation Proposal (Phase 2) to support a Regional Act 537 Plan

Dear Liesel,

The Lehigh County Authority (“LCA”) desires to transition to Phase 2 of the planned financial and institutional analysis of the Act 537 Plan. The intent of the analysis continues to be identifying the most cost-effective solution to the sewer issues in the region, as well as a simplified, fair, and equitable allocation of costs that all municipal partners (“Signatories”) will benefit from.

Raftelis was pleased to assist LCA and the Signatories in Phase 1 of the analysis and appreciates the opportunity and confidence to continue partnering with LCA. Provided herein is our proposal for Phase 2 to support the financial & institutional evaluation portion of the Regional Act 537 Plan. Raftelis is committed to bringing its full technical resources and capabilities to LCA in completing the ongoing work within LCA’s desired timeframe.

Scope of Work

Task 1 – Evaluate Existing Cost Sharing Arrangements

Raftelis will work with LCA and AECOM to gain a thorough understanding of the existing agreements and related impact to the KISS cost sharing. This will build from knowledge gained during Phase 1 but will go a level deeper to understand how the cost allocations (or rates set) based on existing agreements should be allocated more accurately across signatories based on use of the KISS system. This includes a determination of what the model can incorporate compared to what might need to be evaluated outside of the current model.

Activities Summary:

- In-depth review of existing cost sharing agreements.
- Hold a virtual meeting with LCA and AECOM on current model’s functionality and conceptual cost sharing of capital scenarios.
- Identify limitations of current agreements and AECOM model as it relates to financing, charges, and each component of the new CIP.

Meetings:

- Two Virtual Meetings.

Deliverables:

- N/A.

Task 2 – Signatory Engagement Work Sessions #1: Current Arrangements

LCA will arrange individual work sessions between Raftelis and the Signatories to discuss and assess the Signatories’ understanding and view of the existing agreements. It will be critical to the future

visioning sessions of alternatives to gauge their assessment of the advantages and disadvantages of the current arrangements.

Activities Summary:

- Hold preparatory work session with LCA and City.
- Summarize and discuss the current cost sharing practices of the existing inter-municipal agreements.
- Meet in one-on-one meetings with Signatories to identify and document what works well and what does not work well under the current arrangements.
- Discuss the advantages and disadvantages of existing cost sharing agreements and potential future opportunities for improvement.

Meetings:

- One (1) virtual meeting with LCA.
- One (1) virtual meeting with LCA and the City.
- Up to two (2) full consecutive days onsite for 1-on-1 work sessions with Signatories.

Deliverables:

- Brief presentation deck (less than eight slides) for work session facilitation.

Task 3 – Signatory Engagement Work Sessions #1 Deliverables

The feedback from the work sessions from Task 2 will be documented and used to update the financial analysis. This information will serve as the foundation for the visioning sessions to held during Task 4. A technical memorandum and PowerPoint slide deck will be developed to summarize the findings.

Activities Summary:

- Draft technical memorandum #1 documenting work session findings.
- Update analysis with project-specific impacts to only applicable signatories.
 - Refine the financial model and the dynamic community cost sharing dashboard to display options and results.
- Update Current State Presentation with revised impacts and work session findings.
 - Overview of agreement principles based on workshop feedback.
 - Summary of issues with current agreements, if any, and potential opportunities.

Meetings:

- One (1) virtual meeting with LCA.

Deliverables:

- Technical memorandum summarizing work session findings.
- Updated Phase 1 presentation deck to include findings.

Task 4 – Signatory Engagement Work Sessions #2: Visioning of Alternative Cost Sharing

LCA will arrange individual work sessions between Raftelis and the Signatories to discuss and develop viable alternatives to the current cost-sharing arrangements. Objectives for the alternatives will be identified, and then Raftelis will explore various approaches with the Signatories to discuss advantages and disadvantages of the approaches and how they map to the desired objectives. Raftelis will assist Signatories in understanding any constraints that exist or potential challenges of the alternatives. Raftelis will document the findings in a technical memorandum.

Activities Summary:

- Hold preparatory work session with LCA and City.
- Conduct visioning session of other alternatives to identify viable financial and governance alternatives - This could include breakout sessions to provide for better feedback.
- Discuss DEP's input on regionalization approach.
- Discuss engineering scenarios impact on financials, if any.
- Compile feedback.
- Draft technical memorandum #2 documenting work session findings.

Meetings:

- One (1) virtual meeting with LCA.
- One (1) virtual meeting with LCA and the City.
- Up to two (2) full consecutive days onsite for 1-on-1 work sessions with Signatories.

Deliverables:

- Brief presentation deck (less than eight slides) for work session facilitation
- Technical memorandum summarizing work session findings.

Task 5 – Financing Assessment and Implications

LCA and Raftelis will work together to accurately assess the future financing capacity based on current agreements and existing obligations. Raftelis will run a financial scenario with this constraint to gauge the feasibility of LCA being the primary and only holder of the financing. Raftelis will then consider other alternatives, including joint financing or creating new financing entities, to achieve the plan and maximize affordability.

Activities Summary:

- Use the dynamic dashboard to evaluate the financial alternatives.
- Prioritize top two-three alternatives.
- Document preliminary understanding on engineering scenarios' impact on financing, if any.
- Discuss lease financials and borrowing limitations.
- Project actual financing capacity for LCA and evaluate sufficiency for options.

Meetings:

- Two (2) virtual meetings with LCA.

Deliverables:

- Updated financial model.

Task 6 – Evaluation of Alternatives

During this task, Raftelis will integrate the selected engineering approach(es) with the alternatives for financing. Raftelis will run analyses and generate table and graphical representations of the results for LCA's review. Raftelis will also assist LCA in evaluating the alternatives to arrive at the best fit for LCA and the Signatories.

Activities Summary:

- Document two (2) alternatives to current financing approach and related conceptual governance implications (the breadth of this is for discussion), such as:
 - Regional alternative.
 - Community-by-community alternative.
- Prepare analysis and results.
- Assist LCA in evaluating engineering and financing alternatives.

Meetings:

- Two (2) virtual meetings with LCA.

Deliverables:

- Updated financial model.
- Updated Phase 1 presentation deck to include findings.

Task 7 – Signatory Engagement Work Sessions #3: Review and Discuss Results

LCA will arrange a work session between Raftelis and the Signatories to present and discuss the results of the evaluation. Raftelis has extensive experience in these situations and understands that the Signatories may collectively support the selected alternative but that each Signatory may not support every aspect of the approach. The goal is to achieve consensus, and Raftelis will develop presentation materials and a work session approach to work toward that goal.

Activities Summary:

- Hold preparatory work session with LCA and City.
- Hold joint Signatory Work Session to discuss results.
- Select preferred alternative.

Meetings:

- One (1) virtual meeting with LCA.
- One (1) virtual meeting with LCA and the City.
- One (1) full day for onsite joint work session with Signatories.

Deliverables:

- Updated Phase 1 presentation deck to include feedback, if applicable.
- Email summary of feedback.

Task 8 – Current State and Alternatives Report and Individual Analyses

This task's primary activities will be to generate the draft and final report of the process, analysis, and final findings of Phase 2. Additionally, the financial model will be finalized, and Raftelis will prepare a pro forma summary for each Signatory so that they have takeaway materials to review the results with their own staff and governing body.

It is important to note that the pro formas and other materials for the Signatories will be financial planning and study feasibility information only and that Raftelis will not be conducting cost of service or individual rate studies for each Signatory. Additionally, supporting the drafting of the Act 537 plan is not included in this scope but instead considered the next phase of work.

Activities Summary:

- Draft report of process, analysis, and results of assessing the current state, financial alternatives and preferred method.
- Finalize financial model.
- Develop individual analysis workbooks for all Signatories.

Meetings:

- One (1) virtual meeting with LCA.

Deliverables:

- Draft and final report.
- Final financial model.
- Individual pro formas for each Signatory.

Schedule

Raftelis will complete the scope of services within six (6) months. The proposed schedule assumes a notice to proceed by the beginning of August 2023, and that we will be able to schedule the Signatory Workshops in a timely manner without considerable delays. Project completion is estimated for January 2024.

Budget

Raftelis proposes to complete Phase 2 of the KISS Financial Evaluation project for a fixed amount of \$174,442 to be billed monthly on a percent complete basis.

The following table provides a breakdown of our proposed fee for this project. This table includes the estimated level of effort required for completing each task described and the hourly billing rates for our project team members. Expenses include costs associated with travel for the in-person work sessions with the Signatories and a \$10 per hour technology charge covering computers, networks, telephones, postage, etc.

Our proposed project team is the same team that completed the Phase 1 work and will include myself, John Mastracchio, as Project Director, Rocky Craley as Project Manager, Zachary Green as Lead Analyst, and Casey Goodwin as supporting analyst.

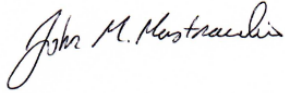
Proposed Fee:

Tasks	Web Meetings	In-person Meetings	Hours					Total Fees & Expenses
			JM	RC	ZG	CG	Total	
1. Document Existing Cost Sharing Arrangements	2	0	4	12	24	12	52	\$14,440
2. Signatory Engagement Work Sessions #1: Current Arrangements	2	1	10	20	28	10	68	\$21,391
3. Signatory Engagement Work Sessions #1: Deliverables	1	0	2	4	28	16	50	\$12,690
4. Signatory Engagement Work Sessions #2: Visioning of Alternative Cost Sharing	2	1	10	32	36	10	88	\$27,751
5. Financing Assessment and Implications	2	0	6	24	28	20	78	\$21,970
6. Evaluation of Alternatives	2	0	14	20	40	56	130	\$33,550
7. Signatory Engagement Workshop #3: Review and Discuss Results	2	1	10	18	24	10	62	\$19,611
8. Current State and Alternatives Report and Individual Analyses	1	0	4	10	42	36	92	\$23,040
Total Meetings / Hours	14	3	60	140	250	170	620	
Hourly Billing Rate			\$375	\$340	\$260	\$175		
Total Professional Fees			\$22,500	\$47,600	\$65,000	\$29,750	\$164,850	
Total Fees								\$164,850
Total Expenses								\$9,592
Total Fees & Expenses								\$174,442

JM - John Mastracchio
RC - Rocky Craley
ZG - Zach Green
CG - Casey Goodwin

Thank you for the opportunity to be one of your trusted advisors on this important project for LCA. If you have any questions or need any additional information, please do not hesitate to contact John Mastracchio at 518.391.8944 or jmastracchio@raftelis.com or Rocky Craley at 704.771.3998 or rcraley@raftelis.com.

Sincerely,



John Mastracchio, ASA, CFA, PE
Executive Vice President and Project Director



Rocky Craley
Vice President and Project Manager

Lehigh County Authority – Monthly Report to Board of Directors

Upcoming Board Agenda Items & Project Updates – July 2023

Published: July 3, 2023

PART 1 – Upcoming Agenda Items – Action & Discussion Items

FINANCE & ADMINISTRATION

<p><u>Project Title:</u> LCA Strategic Plan - 2023 Quarterly Progress Reporting</p> <p><u>Division / Funding:</u> All Divisions</p> <p><u>Status or Action Desired:</u> Discussion</p> <p><u>Project Notes:</u> A quarterly report of staff progress on key initiatives outlined in LCA's Strategic Plan will be presented for Board review and discussion. <u>Staff Responsibility:</u> Liesel Gross</p>	<p><u>Board Action Date:</u> 7/10/2023</p> <p><u>Project Phase:</u> n/a</p>
<p><u>Project Title:</u> LCA Safety Program Review</p> <p><u>Division / Funding:</u> Suburban Division</p> <p><u>Status or Action Desired:</u> Discussion</p> <p><u>Project Notes:</u> Staff will present an update on LCA's safety programs and performance, per the Board's request. <u>Staff Responsibility:</u> Liesel Gross</p>	<p><u>Board Action Date:</u> 7/10/2023</p> <p><u>Project Phase:</u> NEW</p>
<p><u>Project Title:</u> Resolution 7-2023-1: Approval of Suburban Water Division & Suburban Wastewater Division Tapping Fees</p> <p><u>Division / Funding:</u> Suburban Division</p> <p><u>Status or Action Desired:</u> Approval</p> <p><u>Project Notes:</u> Staff will present updated Suburban Water Division and Suburban Wastewater Division Tapping Fees to the Board for approval by Resolution, effective August 1, 2023. <u>Staff Responsibility:</u> Ed Klein</p>	<p><u>Board Action Date:</u> 7/24/2023</p> <p><u>Project Phase:</u> NEW</p>
<p><u>Project Title:</u> Monthly Financial Review</p> <p><u>Division / Funding:</u> n/a</p> <p><u>Status or Action Desired:</u> Discussion</p> <p><u>Project Notes:</u> The June 2023 monthly financial report will be presented. <u>Staff Responsibility:</u> Ed Klein</p>	<p><u>Board Action Date:</u> 7/24/2023</p> <p><u>Project Phase:</u> n/a</p>

SYSTEM OPERATIONS

Project Title: Monthly Operations Report

Division / Funding: n/a

Status or Action Desired: Discussion

Board Action Date: 7/24/2023

Project Phase: n/a

Project Notes: The June 2023 monthly operations report will be presented. Staff Responsibility: Andrew Moore & Chris Moughan

WATER PROJECTS – ALLENTOWN DIVISION

Project Title: Large Meter Chamber Replacement

Division / Funding: Allentown Division

Status or Action Desired: Approval

Board Action Date: 7/10/2023

Project Phase: Construction Phase

Project Notes: Large commercial meters (3" and greater) that were installed prior to 2014 are scheduled to have their meter chambers replaced. The batteries in these meters are at the end of their expected life span and have either failed or are showing signs of failure. There are 114 meters ranging in size from 3 to 8 inch that need to be upgraded. The meter chambers have been purchased and at the 7/10/2023 Board meeting approval will be requested for an installation contract through the COSTARS program. Staff Responsibility: Amy Kunkel

Project Title: Water Filtration Plant: PFAS Compliance Study

Division / Funding: Allentown Division

Status or Action Desired: NEW

Board Action Date: 7/24/2023

Project Phase: Planning Phase

Project Notes: Earlier this year, the U.S. Environmental Protection Agency published proposed national drinking water standards for six per- and polyfluoroalkyl substances (PFAS). This follows years of evolving regulatory guidance on how water utilities should be viewing these "forever chemicals" in their water supplies. LCA has monitored for various PFAS substances over the past few years, and some water sources show low levels of PFAS that require additional study to understand whether treatment will be needed to meet the newly proposed federal standards for drinking water. In particular, the four water sources that supply the Allentown Division water filtration plant (Schantz Spring, Crystal Spring, the Little Lehigh Creek, and the Lehigh River) must be studied carefully. A variety of treatment options or operational alternatives may exist to achieve regulatory compliance. At the July 24, 2023 Board meeting, staff will be requesting approval of a study, with consultant support, to evaluate these treatment options and operational alternatives for the water filtration plant in Allentown. Staff Responsibility: Albert Capuzzi

WASTEWATER PROJECTS – KISS ACT 537

Project Title: KISS Act 537 Planning - Financial & Institutional Evaluation, Phase 2

Division / Funding: City of Allentown (AO)

Board Action Date: 7/10/2023

Status or Action Desired: Approval

Project Phase: NEW

Project Notes: One of the Act 537 Plan requirements is to complete a financial evaluation of the selected alternative, including rate impacts, cost-sharing, and financing approach. Another key requirement is to evaluate the institutional / governance approach to completing the projects, operating and maintaining the facilities, and monitoring performance. In December 2022, authorization was granted to retain a professional consultant (Raftelis) to conduct phase 1 of this work, which is a preliminary financial evaluation focused on gathering data from all municipalities and conducting preliminary analyses on system costs and user rates. This work has been completed, and phase 2 work is being scoped for a new proposal by Raftelis. Phase 2 services will include more detailed analysis of existing agreements and cost-sharing mechanisms, and workshops with the municipalities to develop updated cost-sharing methods. The results will be incorporated into a financial model for further analysis of rate impacts and system capacity to fund the projects included in the Act 537 Plan. At the July 10, 2023 meeting, Raftelis will provide a summary of their work to date, and authorization requested to move into the phase 2 financial evaluation. Staff Responsibility: Liesel Gross

PART 2 – Project Updates – Information Items

Project Title: Kline's Island WWTP: Main and Auxiliary Pump Station ImprovementsDivision / Funding: Allentown DivisionBoard Action Date: n/aStatus or Action Desired: UpdatedProject Phase: Preliminary Design

Project Notes: This project consists of mechanical and electrical upgrades of the Main and Auxiliary Pump Stations and is listed in the KIWWTP Master Plan as a “near term” project. The Main Pump Station is a critical element of the plant that conveys screened influent wastewater to the aerated grit chambers and primary clarifiers. The four (4) existing pumps are more than 50 years old and at the end of their service life. In addition to pump replacement, new Variable Frequency Drives (VFDs) will be installed along with associated piping and valves. Replacement of the pumps will reduce risk and long-term maintenance costs and maximize wet weather pumping capacity. The Auxiliary Pump Station functions with the Main Pump Station to convey screened influent wastewater to the aerated grit chambers and primary clarifiers. The pump impellers, motors and VFDs are presently undersized and require replacement in order to maximize wet weather pumping capacity and extend service life and station reliability. Kleinfelder Engineering has completed an initial phase of preliminary design work on this project. However, additional preliminary design phase engineering is required to address results of hydraulic modeling completed over the last several months and the introduction of additional project concepts that must be considered. Conceptual Design is anticipated to be finalized for submission to the City of Allentown for Major Capital Improvement consideration in the third quarter of 2023. Staff Responsibility: Chuck Volk

PART 3 – Open Project List – No Updates

Project Category	Project Title	Division / Funding	Project Phase	Staff Responsibility
Finance & Administration	Asset Management Roadmap & Strategic Asset Management Plan (SAMP)	All Divisions	Planning Phase	Albert Capuzzi
Finance & Administration	LCA Munis ERP System Planning & Re-Implementation	All Divisions	Planning Phase	Brooke Neve
System Operations	Suburban Water Facilities - SCADA System Upgrade	Suburban Division	Construction Phase	Chris Moughan
System Operations	Watershed Monitoring Program	Suburban Division	Ongoing	Andrew Moore
Water - Suburban	Central Lehigh and North Whitehall Systems – Water Supply Study	Suburban Division	Planning Phase	Phil DePoe
Water - Suburban	2022 Commercial Meter Replacement Project	Suburban Division	Construction Phase	Amy Kunkel
Water - Suburban	Water Main Replacement Program Cycle 6	Suburban Division	Construction Phase	Jason Peters
Water - Suburban	Fixed Base Meter Reading Stations	Suburban Division	Planning Phase	Amy Kunkel
Water - Suburban	Upper System Pump Station and Main Extension	Suburban Division	Design Phase	Amy Kunkel
Water - Suburban	Water Main Replacement Program Cycle 7 & 8	Suburban Division	Design Phase	Jason Peters
Water - Allentown	Water Main Replacement Program Cycles 7 & 8	Allentown Division	Design Phase	Jason Peters
Water - Allentown	Large Diameter Valve Rehabilitation & Replacement Program	Allentown Division	Design Phase	Chuck Volk
Water - Allentown	Lead Service Line Replacement Program Planning	Allentown Division	Planning Phase	Andrew Moore
Water - Allentown	Water Main Replacement Program Cycle 6	Allentown Division	Construction Phase	Jason Peters
Water - Allentown	Water Filtration Plant: Filter Upgrade Project	Allentown Division	Design Phase	Chuck Volk

Project Category	Project Title	Division / Funding	Project Phase	Staff Responsibility
Water - Allentown	Water Filtration Plant: 2022-2023 Indenture Upgrades	Allentown Division	Construction Phase	Chuck Volk
Sewer - Act 537	Sanitary Sewer Collection System: City of Allentown Manhole Inspections	Allentown Division	Planning Phase	Phil DePoe
Sewer - Act 537	Kline's Island WWTP - High-Rate Wet-Weather Treatment Pilot Study	Allentown Division	Planning Phase	Phil DePoe
Sewer - Act 537	KISS System Modeling - Final Alternatives Analysis (FAA)	City of Allentown (AO)	Planning Phase	Phil DePoe
Sewer - Act 537	KISS System Modeling - Preliminary Screening of Alternatives (PSOA)	City of Allentown (AO)	Planning Phase	Phil DePoe
Sewer - Act 537	Sanitary Sewer Collection System: City of Allentown Interceptor Inspections	City of Allentown (AO)	Planning Phase	Phil DePoe
Sewer - Act 537	KISS Act 537 Planning - Financial & Institutional Evaluation, Phase 1	City of Allentown (AO)	Project Closeout	Liesel Gross
Sewer - Act 537	Regional Sewer Capacity & Wet-Weather Planning - Regional Act 537 Plan Preparation	City of Allentown (AO)	Planning Phase	Phil DePoe
Sewer - Act 537	Kline's Island WWTP: Phase 1 AO Design Improvements	City of Allentown (AO)	On Hold	Phil DePoe
Sewer - Act 537	KISS System Modeling - Sewage Billing Meter QA/QC Data Analytics and 2021 Flow Metering Preparation	City of Allentown (AO)	Planning Phase	Phil DePoe
Sewer - Act 537	Regional Sewer Capacity & Wet-Weather Planning: Engineering & Program Support	Suburban Division	Planning Phase	Phil DePoe
Sewer - Act 537	Industrial Pretreatment Plant Master Plan	Suburban Division	Planning Phase	Phil DePoe
Sewer - Act 537	Western Lehigh Interceptor Municipalities Test & Seal Lateral Grouting Project	Suburban Division	Construction Phase	Jason Peters
Sewer - Act 537	Upper Western Lehigh Pump Station and Force Main	Suburban Division	Design Phase	Amy Kunkel
Sewer - Act 537	Western Lehigh Service Area - Engineering & Program Support	Suburban Division	Planning Phase	Phil DePoe
Sewer - Suburban	Spring Creek Pump Station Upgrades	Suburban Division	Design Phase	Amy Kunkel

Project Category	Project Title	Division / Funding	Project Phase	Staff Responsibility
Sewer - Suburban	Pretreatment Plant (PTP) Electrical Study	Suburban Division	Planning Phase	Albert Capuzzi
Sewer - Suburban	Heidelberg Heights Sanitary Sewer Consent Order & Agreement	Suburban Division	Planning Phase	Chuck Volk
Sewer - Suburban	Heidelberg Heights Wastewater Treatment Plant - Mechanical Screen Project	Suburban Division	Construction Phase	Chuck Volk
Sewer - Suburban	Spring Creek Force Main Relocation - PA Turnpike Commission	Suburban Division	Design Phase	Amy Kunkel
Sewer - Suburban	Lynn Township Corrective Action Plan	Suburban Division	Ongoing	Jason Peters
Sewer - Suburban	Park Pump Station Phase 2 Upgrade	Suburban Division	Construction Phase	Amy Kunkel
Sewer - Allentown	Kline's Island WWTP: Primary Digester No. 2 Cleaning and Rehabilitation Project	Allentown Division	Construction Phase	Chuck Volk
Sewer - Allentown	Sanitary Sewer Collection System: I&I Source Reduction Program (LCA Year 1)	Allentown Division	Design Phase	Albert Capuzzi
Sewer - Allentown	Kline's Island WWTP: Substation No. 1 and Switchgear Replacement	Allentown Division	Design Phase	Chuck Volk
Sewer - Allentown	Kline's Island WWTP: Effluent Disinfection and Dechlorination System Improvements	Allentown Division	Construction Phase	Chuck Volk
Sewer - Allentown	Kline's Island WWTP: Solids Process Boiler and HVAC System Upgrade Project	Allentown Division	Construction Phase	Chuck Volk
Sewer - Allentown	Kline's Island WWTP: Wet Weather Capacity Enhancements	Allentown Division	Preliminary Design	Chuck Volk
Sewer - Allentown	Kline's Island WWTP: Intermediate Pump Station Improvements	Allentown Division	Preliminary Design	Chuck Volk
Sewer - Allentown	Lehigh Street (Rte. 145) Water and Sewer Main Relocation Project	Allentown Division	Construction Phase	Jason Peters
Sewer - Allentown	Sanitary Sewer Collection System: I&I Source Reduction Program (City Year 4)	City of Allentown (AO)	Construction Phase	Phil DePoe