



LEHIGH COUNTY AUTHORITY
ALLENTOWN, PA

FINAL 5-YEAR CAPITAL PLAN

ADMINISTRATION

2020-2024

APPROVED MARCH 25, 2019

**LEHIGH COUNTY AUTHORITY
5-YEAR CAPITAL PLAN
2020-2024**

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2020-2024 Capital Plan

Glossary of Acronyms & Terms

The following is a listing of acronyms and terms used in the Capital Plan Summary and Project Detail Sheets.

LCA Water and/or Wastewater Divisions/Systems

LCA Water and/or Wastewater Divisions/Systems		Water	Wastewater
<i>AD</i>	Allentown Division	X	X
<i>AWD</i>	Arcadia West Division	X	X
<i>BHD</i>	Beverly Hills Division	X	
<i>CLD</i>	Central Lehigh Division	X	
<i>CFD</i>	Clear View Farms Division	X	
<i>ECD</i>	Emmaus Consecutive Division	X	
<i>HHD</i>	Heidelberg Heights Division	X	X
<i>LLRI-1</i>	Little Lehigh Relief Interceptor, Phase 1		X
<i>LLRI-2</i>	Little Lehigh Relief Interceptor, Phase 2		X
<i>LTD</i>	Lynn Township Division		X
<i>MCD</i>	Mill Creek Division	X	
<i>MND</i>	Madison Park Division	X	
<i>NWD</i>	North Whitehall Division	X	
<i>PLD</i>	Pine Lakes Division	X	
<i>SSD</i>	Sands Spring Division		X
<i>UMD</i>	Upper Milford Division	X	X
<i>UMCD</i>	Upper Central Milford Division (Buss Acres)	X	
<i>WLI</i>	Western Lehigh Interceptor		X
<i>WTD</i>	Washington Township Division	X	X
<i>WWD</i>	Wynnewood Division		X

Project Type

Project Type	Description
<i>AO</i>	Administrative Order
<i>UW</i>	Uncompleted Work ⁽¹⁾
<i>S-7-MCI</i>	Schedule-7 (<i>Lease Required</i>) Major Capital Improvement ⁽²⁾
<i>LCA-MCI</i>	LCA Developed Major Capital Improvement ⁽²⁾
<i>COL</i>	Change of Law ⁽³⁾
<i>Regular</i>	A project that does not fit in any of the aforementioned special categories

(1) Uncompleted Work: City Projects that were supposed to be complete by the time of settlement. The City and LCA have reached an agreement for LCA to execute them.

(2) Major Capital Improvement: In accordance with the Lease, all Major Capital Improvements must be approved by the City.

(3) Change of Law: In accordance with the Change of Law Memorandum of Understanding

Project Funding

Project Funding	Description
<i>LCA</i>	Funded by LCA
<i>100% Reimb</i>	All costs are 100% reimbursable by fees charged
<i>Fees & LCA</i>	Costs partly recovered through fees charged and partly funded by LCA
<i>Allentown</i>	Funded by the City of Allentown
<i>CCRC</i>	Capital Cost Recovery Charge ⁽¹⁾ ; Applies only to City approved MCI

(1) Capital Cost Recovery Charge: An on-going user fee that is above the rate caps set forth in the Lease to allow the recovery of the cost of an MCI. Rate payers are charged based upon usage.

Project Category

Projects have been categorized to identify the primary and secondary reasons for the need. In some cases there is no secondary reason that would be applicable.

Project Category	Description
<i>Regulatory</i>	Required to meet Regulatory requirements
<i>New Cust</i>	New Customers
<i>CA/OS</i>	Concession Lease/Operating Standards
<i>Master Plan</i>	Master Plan
<i>AM - Low</i>	Asset Management - Low Risk
<i>AM - Med</i>	Asset Management - Medium Risk
<i>AM - High</i>	Asset Management - High Risk
<i>AM - Varies</i>	Asset Management - Varies ⁽¹⁾
<i>Efficiency</i>	Efficiency
<i>Sys Imp</i>	System Improvement
<i>Rev Opprt</i>	Revenue Opportunity
<i>Planning</i>	Planning
<i>N/A</i>	Not Applicable

(1) Applies to Asset Management Projects, where there are multiple standalone sub-projects of varied levels of "risk".

Approval Stage

Approval Stage	Description
<i>A</i>	Annual Project, no approvals required
<i>S</i>	Study/Planning Phase
<i>D</i>	Design Phase
<i>C</i>	Construction/Implementation Phase
<i>E</i>	Entire Project
<i>V</i>	Various Phases
<i>P</i>	Pending Board approval

ADMINISTRATION

**ADMINISTRATION
5-YEAR CAPITAL PLAN
2020-2024**

CAPITAL FINANCING JUSTIFICATION

The Administrative projects of the Authority are funded through charge-backs to the various operating and capital budgets.

The Administrative projects are either a strictly Suburban Division (SD) project or a project which benefits both the City and Suburban Division (CON). In the case of the multi-division projects, the total costs have been apportioned 100% to the Suburban Division.

Project SD-A-1 is an Information Technology (IT) project to upgrade the Suburban SCADA capabilities. Water fund operating reserves will be used to finance the projects with partial recovery through charge-backs to Authority wastewater funds.

Project CON-A-1 is an organization-wide project related to the annual upgrades of computer hardware and software.

Project CON-A-2 is an organizational-wide upgrade to the Geographic Information System (GIS).

Project CON-A-3 is an organization-wide update and implementation of the LCA IT Master Plan.

Project CON-A-4 is an organization-wide project to develop an electronic document management system.

Project CON-A-5 is an organization-wide project to add additional security and disaster recovery tools to the existing IT system.

Project CON-A-6 is an organization-wide project to upgrade the existing CMMS system.

Funding Sources for each project are shown below.

ADMINISTRATION	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>TOTAL</u>
Project Costs	<u>\$700,000</u>	<u>\$500,000</u>	<u>\$450,000</u>	<u>\$375,000</u>	<u>\$275,000</u>	<u>\$2,300,000</u>
Funding Sources:						
Operating/Capital Reserves	\$700,000	\$500,000	\$450,000	\$375,000	\$275,000	\$2,300,000
New Borrowing	-	-	-	-	-	-
Total Funding	<u>\$700,000</u>	<u>\$500,000</u>	<u>\$450,000</u>	<u>\$375,000</u>	<u>\$275,000</u>	<u>\$2,300,000</u>

**LEHIGH COUNTY AUTHORITY
ADMINISTRATION
2020-2024 CAPITAL PROGRAM**

Project #	Name or Title of Proposal	(1) Pri. Type	Approvals Stage (1)	Project Total Cost	This Capital Program							Project Category (1)	
					2019 Budget Approved	2020 Year 1	2021 Year 2	2022 Year 3	2023 Year 4	2024 Year 5	2020-2024 Total	Primary	Secondary
Operating/Capital Reserve Funds													
SD-A-1	SCADA Programming, Hardware Upgrades, Software & Training	Regular	A	\$ 850,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 100,000	\$ 700,000	AM - Varies	Efficiency
CON-A-1*	Computer System Hardware & Software Upgrades	Regular	A	\$ 375,000	\$ 100,000	\$ 75,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 275,000	AM - High	Efficiency
CON-A-2*	GIS Upgrades & Application Development	Regular	V	\$ 400,000	\$ 100,000	\$ 50,000	\$ 75,000	\$ 50,000	\$ 50,000	\$ 75,000	\$ 300,000	Efficiency	Sys Imp
CON-A-3*	Information Technology Master Plan Update	Regular	P	\$ 425,000	\$ 50,000	\$ 125,000	\$ 100,000	\$ 100,000	\$ 50,000	\$ -	\$ 375,000	Planning	Sys Imp
CON-A-4*	Document Management	Regular	P	\$ 475,000	\$ 200,000	\$ 200,000	\$ 75,000	\$ -	\$ -	\$ -	\$ 275,000	Efficiency	Sys Imp
CON-A-5*	Disaster Recovery/Security Upgrades	Regular	P	\$ 300,000	\$ 125,000	\$ 50,000	\$ 25,000	\$ 25,000	\$ 50,000	\$ 25,000	\$ 175,000	Sys Imp	Efficiency
CON-A-6*	CMMS Upgrades	Regular	P	\$ 325,000	\$ 125,000	\$ 50,000	\$ 25,000	\$ 75,000	\$ 25,000	\$ 25,000	\$ 200,000	Sys Imp	Efficiency
GRAND TOTAL				\$ 3,150,000	\$ 850,000	\$ 700,000	\$ 500,000	\$ 450,000	\$ 375,000	\$ 275,000	\$ 2,300,000		

(*) CON = a Project that benefits both the Allentown and Suburban Divisions. All projects are LCA funded.

(1) Reference Glossary of Acronyms & Terms found immediately after the Table of Contents

**LEHIGH COUNTY AUTHORITY
ADMINISTRATION - CAPITAL IMPROVEMENTS PLAN
PROJECT DETAIL SHEET**

Project Name	SUPERVISORY CONTROL & DATA ACQUISITION (SCADA) PROGRAMMING, HARDWARE UPGRADES, SOFTWARE & TRAINING						
Budget Area	Administration	Department	IT	Date	1/17/2019	Project No.	SD-A-1
Location	Various LCA Divisions located in multiple municipalities			Prj. Type	Regular	Prj. Funding	LCA
Prj. Category	Primary	AM - Varies	Secondary	Efficiency	Preparer		PB

Purpose of Expenditure (check all that apply)	
<input type="checkbox"/> New Facility	Correct Known or Potential Safety Issue
<input checked="" type="checkbox"/> Existing Facility - Rehabilitation/Upgrade	<input checked="" type="checkbox"/> Equipment Obsolete
<input type="checkbox"/> Scheduled Replacement	Comply with Regulatory Requirements
<input type="checkbox"/> Improved Service	<input checked="" type="checkbox"/> Equipment/Infrastructure at End of Useful Life
<input type="checkbox"/> Study	<input checked="" type="checkbox"/> Other (explain): Improve Operational Efficiencies

Additional Information		
Expected Useful Life (Years)	5	Comments *Dependent upon the system
Approx. No. of Customers Benefitted	*Varies	
Is this System part of a Common User Rate?	Yes	
Will the Project Require Obtaining Land Rights	No	

Detailed Project Description
This annual on-going project includes both programming and hardware enhancements to the SCADA system to provide reliable telemetry and effective/proactive/flexible control of our facilities. It also includes an upgrade to SCADA & Telog communications and radio replacement of Telco lines to reduce monthly Telco charges to resolve ongoing communication problems with critical facilities. Training on the Historian software package is also included.

Purpose and Needs to be Met by the Project
The SCADA system currently provides real-time data and control for CLD water facilities and WLI related wastewater facilities and must be updated. The Telog system provides real-time data (no control) for satellite water and wastewater systems. Both are necessary to allow efficient operation of the water and wastewater system facilities.

Project Status - Describe what work, if any has been completed or underway for this project
SCADA upgrades have been completed at Pine Lakes and Crestwood in 2017 and 2018.

Annual Cost Impact	
Operating - Increase/(Decrease)	N/A
Debt Service	\$ -
Net	\$ -

Revenue Impact	
Gain/(Loss) in Annual Revenue	N/A
Assessment, Contribution in Aid-of-Construction	N/A
Other	

Borrowing Information	
Interest Rate	5.5000%
Term (Years)	30

Explanation if Necessary

Project No. SD-A-1

Project Name SUPERVISORY CONTROL & DATA ACQUISITION (SCADA) PROGRAMMING, HARDWARE UPGRADES, SOFTWARE & TRAINING

Estimated Project Costs :	
LCA Staff	\$ 100,000
Land Acquisition	\$ -
Construction/Equipment	\$ 600,000
Professional Services	\$ 100,000
Other	\$ -
Contingencies	\$ 50,000
Total Project Cost	\$ 850,000

Project Estimate Level	
	Conceptual Estimate
X	Preliminary Estimate
	Budget Estimate
	Definitive Estimate

Requested in this Capital Program	\$ 700,000
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Source of Funds						
		Need	Source			
			Operating Revenues	Borrowing	Assessment, Contr.-in-Aid	Reserves
2019 Budget		\$ 150,000				
1st Year	2020	\$ 150,000				\$ 150,000
2nd Year	2021	\$ 150,000				\$ 150,000
3rd Year	2022	\$ 150,000				\$ 150,000
4th Year	2023	\$ 150,000				\$ 150,000
5th Year	2024	\$ 100,000				\$ 100,000

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**LEHIGH COUNTY AUTHORITY
ADMINISTRATION - CAPITAL IMPROVEMENTS PLAN
PROJECT DETAIL SHEET**

Project Name	COMPUTER SYSTEM HARDWARE & SOFTWARE UPGRADES						
Budget Area	Administration	Department	IT	Date	1/17/2019	Project No.	CON-A-1
Location	Allentown & Suburban Divisions			Prj. Type	Regular	Prj. Funding	LCA
Prj. Category	Primary	AM - High	Secondary	Efficiency	Preparer		PB

Purpose of Expenditure (check all that apply)	
New Facility	Correct Known or Potential Safety Issue
Existing Facility - Rehabilitation/Upgrade	Equipment Obsolete
Scheduled Replacement	Comply with Regulatory Requirements
Improved Service	<input checked="" type="checkbox"/> Equipment/Infrastructure at End of Useful Life
Study	Other (explain):

Additional Information		
Expected Useful Life (Years)	6	Comments
Approx. No. of Customers Benefitted	N/A	
Is this System part of a Common User Rate?	N/A	
Will the Project Require Obtaining Land Rights	No	

Detailed Project Description
This project includes both hardware and software costs for server replacements for units older than 6 years.

Purpose and Needs to be Met by the Project
Improved efficiencies will assist employees in becoming more productive.

Project Status - Describe what work, if any has been completed or underway for this project
Hardware replaced annually as needed. Software upgraded annually as needed.

Annual Cost Impact	
Operating - Increase/(Decrease)	N/A
Debt Service	\$ -
Net	\$ -

Revenue Impact	
Gain/(Loss) in Annual Revenue	N/A
Assessment, Contribution in Aid-of-Construction	N/A
Other	

Borrowing Information	
Interest Rate	5.5000%
Term (Years)	30

Explanation if Necessary

Project No.	CON-A-1
Project Name	COMPUTER SYSTEM HARDWARE & SOFTWARE UPGRADES

Estimated Project Costs :	
LCA Staff	\$ 20,000
Land Acquisition	\$ -
Construction/Equipment	\$ 300,000
Professional Services	\$ 20,000
Other	\$ -
Contingencies	\$ 35,000
Total Project Cost	\$ 375,000

Project Estimate Level	
	Conceptual Estimate
<input checked="" type="checkbox"/>	Preliminary Estimate
	Budget Estimate
	Definitive Estimate

Requested in this Capital Program	\$ 275,000
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Source of Funds						
		Need	Source			Reserves
			Operating Revenues	Borrowing	Assessment, Contr.-in-Aid	
2019 Budget		\$ 100,000				
1st Year	2020	\$ 75,000				\$ 75,000
2nd Year	2021	\$ 50,000				\$ 50,000
3rd Year	2022	\$ 50,000				\$ 50,000
4th Year	2023	\$ 50,000				\$ 50,000
5th Year	2024	\$ 50,000				\$ 50,000

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**LEHIGH COUNTY AUTHORITY
ADMINISTRATION - CAPITAL IMPROVEMENTS PLAN
PROJECT DETAIL SHEET**

Project Name	GEOGRAPHIC INFORMATION SYSTEM (GIS) UPGRADES & APPLICATION DEVELOPMENT						
Budget Area	Administration	Department	IT	Date	1/17/2019	Project No.	CON-A-2
Location	Allentown & Suburban Divisions			Prj. Type	Regular	Prj. Funding	LCA
Prj. Category	Primary	Efficiency	Secondary	Sys Imp	Preparer		PB

Purpose of Expenditure (check all that apply)	
<input type="checkbox"/> New Facility	Correct Known or Potential Safety Issue
<input type="checkbox"/> Existing Facility - Rehabilitation/Upgrade	Equipment Obsolete
<input type="checkbox"/> Scheduled Replacement	Comply with Regulatory Requirements
<input checked="" type="checkbox"/> Improved Service	Equipment/Infrastructure at End of Useful Life
<input type="checkbox"/> Study	Other (explain):

Additional Information		
Expected Useful Life (Years)	N/A	Comments
Approx. No. of Customers Benefitted	N/A	
Is this System part of a Common User Rate?	N/A	
Will the Project Require Obtaining Land Rights	No	

Detailed Project Description
The mobile application was deployed in 2012 with final operational staff training in 2013 and included the development of additional mobile functionality. Applications on an as-needed basis may include integration of the PA One-Call system and fire hydrant and manhole inspection databases. Mapping of water service lines is included in the project along with expanded use of GPS attributing of assets. IT Master Planning efforts may dictate some of the application work.

Purpose and Needs to be Met by the Project
The development and deployment of a mobile GIS application has provided field personnel with valuable data at their fingertips. The new applications that will be built off of the mobile platform will allow even more data to be viewed in the field and will also allow data to be collected electronically in the field. This will eliminate the need for duplicate data entry and will assist in streamlining some existing processes. The applications developed will also easily integrate into the maintenance management system that LCA deployed in early 2015.

Project Status - Describe what work, if any has been completed or underway for this project
GPS location of buried assets is progressing.

Annual Cost Impact	
Operating - Increase/(Decrease)	N/A
Debt Service	\$ -
Net	\$ -

Revenue Impact	
Gain/(Loss) in Annual Revenue	N/A
Assessment, Contribution in Aid-of-Construction	N/A
Other	

Borrowing Information	
Interest Rate	5.5000%
Term (Years)	30

Explanation if Necessary

Project No.	CON-A-2
Project Name	GEOGRAPHIC INFORMATION SYSTEM (GIS) UPGRADES & APPLICATION DEVELOPMENT

Estimated Project Costs :	
LCA Staff	\$ 50,000
Land Acquisition	
Construction/Equipment	\$ 300,000
Professional Services	\$ 25,000
Other	
Contingencies	\$ 25,000
Total Project Cost	\$ 400,000

Project Estimate Level	
	Conceptual Estimate
X	Preliminary Estimate
	Budget Estimate
	Definitive Estimate

Requested in this Capital Program	\$ 300,000
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Source of Funds						
		Need	Source			Reserves
			Operating Revenues	Borrowing	Assessment, Contr.-in-Aid	
2019 Budget		\$ 100,000				
1st Year	2020	\$ 50,000				\$ 50,000
2nd Year	2021	\$ 75,000				\$ 75,000
3rd Year	2022	\$ 50,000				\$ 50,000
4th Year	2023	\$ 50,000				\$ 50,000
5th Year	2024	\$ 75,000				\$ 75,000

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**LEHIGH COUNTY AUTHORITY
ADMINISTRATION - CAPITAL IMPROVEMENTS PLAN
PROJECT DETAIL SHEET**

Project Name	INFORMATION TECHNOLOGY MASTER PLAN UPDATE						
Budget Area	Administration	Department	IT	Date	1/17/2019	Project No.	CON-A-3
Location	Allentown & Suburban Divisions			Prj. Type	Regular	Prj. Funding	LCA
Prj. Category	Primary	Planning	Secondary	Sys Imp	Preparer		PB

Purpose of Expenditure (check all that apply)	
<input type="checkbox"/> New Facility	Correct Known or Potential Safety Issue
<input type="checkbox"/> Existing Facility - Rehabilitation/Upgrade	Equipment Obsolete
<input type="checkbox"/> Scheduled Replacement	Comply with Regulatory Requirements
<input type="checkbox"/> Improved Service	Equipment/Infrastructure at End of Useful Life
<input checked="" type="checkbox"/> Study	Other (explain):

Additional Information		
Expected Useful Life (Years)	10	Comments
Approx. No. of Customers Benefitted	N/A	
Is this System part of a Common User Rate?	N/A	
Will the Project Require Obtaining Land Rights	No	

Detailed Project Description
This project provides funds for the update of the 8-year old LCA IT Master Plan (completed in early 2012) and the implementation of the recommendations cited. Additionally it includes funding to investigate and implement, if applicable, (a) software to manage developer related plan review and permitting and (b) software to manage the backflow prevention and FOG programs. It may also include other work deemed beneficial to LCA.

Purpose and Needs to be Met by the Project
The 2012 update identified needs in both technology and LCA's business/organization. In addition, IT will be a strategic and significant part of LCA's transition to the future as LCA begins a major knowledge transfer to the next generation of employees.

Project Status - Describe what work, if any has been completed or underway for this project
Update for 2019 will commence.

Annual Cost Impact	
Operating - Increase/(Decrease)	N/A
Debt Service	\$ -
Net	\$ -

Revenue Impact	
Gain/(Loss) in Annual Revenue	N/A
Assessment, Contribution in Aid-of-Construction	N/A
Other	

Borrowing Information	
Interest Rate	5.5000%
Term (Years)	30

Explanation if Necessary

Project No.	CON-A-3
Project Name	INFORMATION TECHNOLOGY MASTER PLAN UPDATE

Estimated Project Costs :	
LCA Staff	\$ 225,000
Land Acquisition	\$ -
Construction/Equipment	\$ 50,000
Professional Services	\$ 100,000
Other	\$ -
Contingencies	\$ 50,000
Total Project Cost	\$ 425,000

Project Estimate Level	
<input checked="" type="checkbox"/>	Conceptual Estimate
<input type="checkbox"/>	Preliminary Estimate
<input type="checkbox"/>	Budget Estimate
<input type="checkbox"/>	Definitive Estimate

Requested in this Capital Program	\$ 375,000
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Source of Funds						
		Need	Source			
			Operating Revenues	Borrowing	Assessment, Contr.-in-Aid	Reserves
2019 Budget		\$ 50,000				
1st Year	2020	\$ 125,000				\$ 125,000
2nd Year	2021	\$ 100,000				\$ 100,000
3rd Year	2022	\$ 100,000				\$ 100,000
4th Year	2023	\$ 50,000				\$ 50,000
5th Year	2024	\$ -				\$ -

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**LEHIGH COUNTY AUTHORITY
ADMINISTRATION - CAPITAL IMPROVEMENTS PLAN
PROJECT DETAIL SHEET**

Project Name	DOCUMENT MANAGEMENT						
Budget Area	Administration	Department	IT	Date	1/17/2019	Project No.	CON-A-4
Location	Allentown & Suburban Divisions			Prj. Type	Regular	Prj. Funding	LCA
Prj. Category	Primary	Efficiency	Secondary	Sys Imp	Preparer		PB

Purpose of Expenditure (check all that apply)	
New Facility	Correct Known or Potential Safety Issue
Existing Facility - Rehabilitation/Upgrade	Equipment Obsolete
Scheduled Replacement	Comply with Regulatory Requirements
Improved Service	Equipment/Infrastructure at End of Useful Life
Study	<input checked="" type="checkbox"/> Other (explain): Increase Efficiencies

Additional Information		
Expected Useful Life (Years)	10	Comments
Approx. No. of Customers Benefitted	N/A	
Is this System part of a Common User Rate?	N/A	
Will the Project Require Obtaining Land Rights	No	

Detailed Project Description
This project provides for an Electronic Document Management System (EDMS) to store, search and share documents. This project does not plan for the imaging of existing paper documents.

Purpose and Needs to be Met by the Project
Readily available access to plans, reports and past correspondence will reduce research time. Storage space, files and cabinets for maintaining hard-copy documents will be minimized or eliminated. Digital, cross-referenced documents will improve accessibility and ease workflow.

Project Status - Describe what work, if any has been completed or underway for this project
Preliminary stages of this project began in 2018.

Annual Cost Impact	
Operating - Increase/(Decrease)	N/A
Debt Service	\$ -
Net	\$ -

Revenue Impact	
Gain/(Loss) in Annual Revenue	N/A
Assessment, Contribution in Aid-of-Construction	N/A
Other	

Borrowing Information	
Interest Rate	5.5000%
Term (Years)	30

Explanation if Necessary

Project No.	CON-A-4
Project Name	DOCUMENT MANAGEMENT

Estimated Project Costs :	
LCA Staff	\$ 125,000
Land Acquisition	\$ -
Construction/Equipment	\$ 30,000
Professional Services	\$ 300,000
Other	\$ -
Contingencies	\$ 20,000
Total Project Cost	\$ 475,000

Project Estimate Level	
<input checked="" type="checkbox"/>	Conceptual Estimate
<input type="checkbox"/>	Preliminary Estimate
<input type="checkbox"/>	Budget Estimate
<input type="checkbox"/>	Definitive Estimate

Requested in this Capital Program	\$ 275,000
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Source of Funds						
		Need	Source			Reserves
			Operating Revenues	Borrowing	Assessment, Contr.-in-Aid	
2019 Budget		\$ 200,000				
1st Year	2020	\$ 200,000				\$ 200,000
2nd Year	2021	\$ 75,000				\$ 75,000
3rd Year	2022	\$ -				\$ -
4th Year	2023	\$ -				\$ -
5th Year	2024	\$ -				\$ -

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**LEHIGH COUNTY AUTHORITY
ADMINISTRATION - CAPITAL IMPROVEMENTS PLAN
PROJECT DETAIL SHEET**

Project Name	DISASTER RECOVERY/SECURITY UPGRADES						
Budget Area	Administration	Department	IT	Date	1/17/2019	Project No.	CON-A-5
Location	Allentown & Suburban Divisions			Prj. Type	Regular	Prj. Funding	LCA
Prj. Category	Primary	Sys Imp	Secondary	Efficiency	Preparer		CWM

Purpose of Expenditure (check all that apply)	
<input type="checkbox"/> New Facility	<input checked="" type="checkbox"/> Correct Known or Potential Safety Issue
<input checked="" type="checkbox"/> Existing Facility - Rehabilitation/Upgrade	Equipment Obsolete
<input type="checkbox"/> Scheduled Replacement	Comply with Regulatory Requirements
<input checked="" type="checkbox"/> Improved Service	Equipment/Infrastructure at End of Useful Life
<input type="checkbox"/> Study	Other (explain):

Additional Information		
Expected Useful Life (Years)	5	Comments
Approx. No. of Customers Benefitted	N/A	
Is this System part of a Common User Rate?	N/A	
Will the Project Require Obtaining Land Rights	NO	

Detailed Project Description
This project will cover several areas to increase or add security, as well as improve our disaster recovery options for catastrophic failure.

Purpose and Needs to be Met by the Project
This project will provide on-site back up as well as unlimited cloud storage of all back-ups. It will also encompass spam filters, real time anti virus scanning, as well as Exchange backup. As part of the disaster recovery, a large room scaled UPS system to ensure server uptime will be incorporated.

Project Status - Describe what work, if any has been completed or underway for this project
Project will commence in 2019.

Annual Cost Impact	
Operating - Increase/(Decrease)	N/A
Debt Service	\$ -
Net	\$ -

Revenue Impact	
Gain/(Loss) in Annual Revenue	N/A
Assessment, Contribution in Aid-of-Construction	N/A
Other	

Borrowing Information	
Interest Rate	5.5000%
Term (Years)	30

Explanation if Necessary

Project No.	CON-A-5
Project Name	DISASTER RECOVERY/SECURITY UPGRADES

Estimated Project Costs :	
LCA Staff	\$ 25,000
Land Acquisition	\$ -
Construction/Equipment	\$ 200,000
Professional Services	\$ 25,000
Other	\$ -
Contingencies	\$ 50,000
Total Project Cost	\$ 300,000

Project Estimate Level	
<input checked="" type="checkbox"/>	Conceptual Estimate
<input type="checkbox"/>	Preliminary Estimate
<input type="checkbox"/>	Budget Estimate
<input type="checkbox"/>	Definitive Estimate

Requested in this Capital Program	\$ 175,000
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Source of Funds						
		Need	Source			
			Operating Revenues	Borrowing	Assessment, Contr.-in-Aid	Reserves
2019 Budget		\$ 125,000				
1st Year	2020	\$ 50,000				\$ 50,000
2nd Year	2021	\$ 25,000				\$ 25,000
3rd Year	2022	\$ 25,000				\$ 25,000
4th Year	2023	\$ 50,000				\$ 50,000
5th Year	2024	\$ 25,000				\$ 25,000

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**LEHIGH COUNTY AUTHORITY
ADMINISTRATION - CAPITAL IMPROVEMENTS PLAN
PROJECT DETAIL SHEET**

Project Name	CMMS UPGRADES						
Budget Area	Administration	Department	IT	Date	1/17/2019	Project No.	CON-A-6
Location	Allentown & Suburban Divisions			Prj. Type	Regular	Prj. Funding	LCA
Prj. Category	Primary	Sys Imp	Secondary	Efficiency	Preparer		CWM

Purpose of Expenditure (check all that apply)	
<input type="checkbox"/> New Facility	Correct Known or Potential Safety Issue
<input type="checkbox"/> Existing Facility - Rehabilitation/Upgrade	Equipment Obsolete
<input checked="" type="checkbox"/> Scheduled Replacement	Comply with Regulatory Requirements
<input checked="" type="checkbox"/> Improved Service	<input checked="" type="checkbox"/> Equipment/Infrastructure at End of Useful Life
<input type="checkbox"/> Study	Other (explain):

Additional Information		
Expected Useful Life (Years)	5	Comments
Approx. No. of Customers Benefitted	N/A	
Is this System part of a Common User Rate?	N/A	
Will the Project Require Obtaining Land Rights	NO	

Detailed Project Description
This project will affect several portions of the CMMS system, including server upgrade, API integration with external consulting firms, and a rack mounted NAS unit to ensure proper data storage.

Purpose and Needs to be Met by the Project
Server currently installed is running on minimum specifications and performance issues are being experienced. This project will increase storage, security, and performance.

Project Status - Describe what work, if any has been completed or underway for this project
Project will commence in 2019.

Annual Cost Impact	
Operating - Increase/(Decrease)	N/A
Debt Service	\$ -
Net	\$ -

Revenue Impact	
Gain/(Loss) in Annual Revenue	N/A
Assessment, Contribution in Aid-of-Construction	N/A
Other	

Borrowing Information	
Interest Rate	5.5000%
Term (Years)	30

Explanation if Necessary

Project No.	CON-A-6
Project Name	CMMS UPGRADES

Estimated Project Costs :	
LCA Staff	\$ 25,000
Land Acquisition	\$ -
Construction/Equipment	\$ 200,000
Professional Services	\$ 50,000
Other	\$ -
Contingencies	\$ 50,000
Total Project Cost	\$ 325,000

Project Estimate Level	
<input checked="" type="checkbox"/>	Conceptual Estimate
<input type="checkbox"/>	Preliminary Estimate
<input type="checkbox"/>	Budget Estimate
<input type="checkbox"/>	Definitive Estimate

Requested in this Capital Program	\$ 200,000
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Source of Funds						
		Need	Source			Reserves
			Operating Revenues	Borrowing	Assessment, Contr.-in-Aid	
2019 Budget		\$ 125,000				
1st Year	2020	\$ 50,000				\$ 50,000
2nd Year	2021	\$ 25,000				\$ 25,000
3rd Year	2022	\$ 75,000				\$ 75,000
4th Year	2023	\$ 25,000				\$ 25,000
5th Year	2024	\$ 25,000				\$ 25,000

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