10 Year Utility RMR Capital Plan

Charter No.	Charter Name	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
STORM											
STORM-001	Utility Master Plan*	-	-	-	-	-	-	262,000	-	-	-
STORM-004	Stormwater Collection and Operational Asset RMR Prgm	4,667,000	2,060,700	5,477,300	2,001,200	6,850,400	3,477,700	3,519,700	3,562,500	3,606,200	3,650,800
STORM-007	Stormwater Management Program	2,892,500	3,196,200	3,151,000	3,180,300	1,885,200	1,673,700	2,520,600	1,673,700	2,520,600	1,673,700
STORM-020	Lift Station RMR Prgm*	-	-	-	43,000	56,900	341,700	341,700	-	-	-
STORM Total		**7,559,500**	**5,256,900**	**8,628,300**	**5,224,500**	**8,792,500**	**5,493,100**	**6,644,000**	**5,236,200**	**6,126,800**	**5,324,500**
WASTEWTR											
WASWT-001	Wastewater Operational Asset RMR Prgm	335,000	345,000	355,000	365,200	376,100	387,500	399,100	411,000	423,400	444,500
WASWT-002	Wastewater Household Sewer Service Replace Prgm	622,800	653,900	686,600	720,900	756,900	794,700	834,600	876,200	920,000	966,100
WASWT-004	Wastewater Collection RMR Prgm	4,211,700	1,770,700	4,794,000	2,620,600	4,314,300	2,684,600	2,520,100	1,583,500	2,542,000	2,542,000
WASWT-010	Utility Master Plan*	-	-	-	-	-	-	262,000	-	-	-
WASWT-020	Lift Station RMR Prgm*	-	-	369,000	464,900	1,845,500	1,876,100	-	-	-	-
WASTEWTR Total		**5,169,500**	**2,769,600**	**6,204,600**	**4,171,600**	**7,292,800**	**5,742,900**	**4,015,800**	**2,870,700**	**3,885,400**	**3,952,600**
WATER											
WATER-002	Utility Master Plan*	-	-	-	-	-	-	262,000	-	-	-
WATER-003	Water Operational Asset RMR Prgm	652,000	684,500	718,700	754,700	792,400	832,000	873,600	917,300	963,000	982,200
WATER-004	Water Distribution RMR Pgm	4,655,500	2,851,500	2,851,500	2,193,900	2,920,500	3,072,300	2,970,200	3,025,300	3,155,400	3,155,400
WATER-006	Pump Station and Reservoir Rehab Prgm	380,100	710,700	5,415,800	-	-	-	-	-	-	-
WATER Total		**5,687,600**	**4,246,700**	**8,986,000**	**2,948,600**	**3,712,900**	**3,904,300**	**4,105,800**	**3,942,600**	**4,118,400**	**4,137,600**
SOLIDW											
SOLWA-001	Recycling Depot Upgrades	32,500	32,500	32,500	32,500	32,500	32,500	32,500	32,500	32,500	32,500
SOLIDW Total		**32,500**	**32,500**	**32,500**	**32,500**	**32,500**	**32,500**	**32,500**	**32,500**	**32,500**	**32,500**
RMR Total		**18,449,100**	**12,305,700**	**23,851,400**	**12,377,200**	**19,830,700**	**15,172,800**	**14,798,100**	**12,082,000**	**14,163,100**	**13,447,200**

Note: * costs are broken out by Utility, but detailed in one charter (WATER-002 & WASWT-020 respectively)

CAPITAL PROJECT CHARTER

Year: 2026

Charter Number: STORM-004

Charter Name: Stormwater Collection and Operational Asset RMR Program

Lead Department: Storm

Type: RMR

Explanation (RMR or Growth): This program addresses the need to upgrade storm infrastructure and drainage to improve the level of service and the ongoing assessment, rehabilitation, and replacement of existing stormwater infrastructure.

Asset Category: Roads & Other Engineered Structures

Scope Statement: To enhance the City's storm drainage system by improving the level of service, conducting condition assessments, and ensuring the rehabilitation, maintenance, and replacement of stormwater infrastructure.

PROJECT CHARTER JUSTIFICATION

This program includes capital upgrades to enhance the level of service (LOS) in the City's stormwater system. Large capital storm projects were identified in the 2013 and 2021 Utility Master Plan (UMP) updates, highlighting undersized pipes that do not meet current LOS standards.

Additionally, the program includes a public-driven component, where the administration prioritizes localized storm drainage issues identified by residents. Once the Utilities Branch and Engineering Services verify concerns, they are incorporated into the program.

Approximately 10 locations have been selected for annual storm flow monitoring. Additional sites may be added each year to enhance data collection and improve the City's understanding of stormwater system performance. This ongoing monitoring ensures proactive management, early detection of potential issues, and informed decision-making for system improvements.

Infrastructure Rehabilitation, Storm Flow Monitoring Program, and CCTV Inspection Program

Key Components of the Program

1. Stormwater Infrastructure Condition Assessments
    - Conducted through closed-circuit television (CCTV) inspections and physical assessments.
2. Storm Infrastructure Rehabilitation
    - Pipe replacement using appropriate rehabilitation methods.
3. Infrastructure Upgrades & New Installations

    - Includes swales, manholes, swales and catch basin repairs.

The 2008, 2013, and 2020 UMP updates recommended ongoing storm flow monitoring to:

- Capture storm event data
- Quantify storm runoff
- Support accurate stormwater system modeling

Current State - Stormwater infrastructure upgrades and redesigns are prioritized based on:

- Inspection data & historical maintenance records
- Risk assessment for public safety & City assets
- Operational needs in aging neighborhoods

Many older neighborhoods in St. Albert experience drainage issues, requiring stormwater infrastructure improvements to prevent private property damage.

Work under this program focuses on rehabilitation and replacement of:

- Storm mains (280 km)
- Catch basins (4100)
- Manholes (3400)
- Services (5000)
- Swales
- Culverts

Key Issues - The UMP has identified a need for LOS improvements throughout the storm drainage system. This program will address priority locations, ensuring additional capacity through redesign and enhancement of existing infrastructure.

Major projects identified include:

- Deer Ridge Surge Pond
- Lacombe Park
- Braeside Minor System
- Mission Minor System
- Sturgeon & Grandin Subdivision Minor/Major System Upgrades

Some locations require upgrades due to aging infrastructure and soil conditions, affecting structural integrity and increasing failure risk.

Opportunities

- Annual budget for flow monitoring: Ensures accurate data collection for stormwater modeling & system optimization.
- Stormwater Asset Management: Supports proactive pipe rehabilitation and system capacity upgrades as outlined in the 2020 Water UMP.
- Continuous assessment & program updates: Each year, new needs are identified, ensuring the program remains aligned with service level demands.

Risks

- Availability of qualified consultants & contractors
- Unpredictable scope changes due to hidden issues uncovered during construction or design
- Disruptions to residential areas during work
- Supply chain challenges impacting material & equipment availability

Lifecycle Planning

- Underground utilities typically have a lifespan of 50+ years.
- Regular assessments & proactive rehabilitation extend system longevity and ensure long-term service reliability.

STRATEGIC PLAN & CORPORATE BUSINESS PLAN ALIGNMENT

Council Strategic Priority: N/A

Initiatives: N / A

Operational Excellence Priority Area: 4. Operational Performance

Initiatives: N / A

Stakeholder Identification:

Name & Role	Responsibility/Contribution
Utilities Primary	Project Sponsor/Owner
Utilities Branch PM	Project Management
Utilities Branch Engineers & Construction Supervisors	Input on capacity requirements, maintenance schedules, and replacement timelines that could affect the design
Environment Branch	Information and consulting, as required
Community Relations	Consult and inform as required
Other Internal Departments (Engineering (Transportation), Recreation & Parks, PW, Corporate Comms, etc.)	Consult and inform as required

External Stakeholders (residents, school boards, businesses, Indigenous Community, etc.)	Consult and inform as required.

Timeline:

This is an ongoing program in which year 1 stormwater infrastructure design is completed and year 2-3 construction occurs annually at various locations throughout the City. Project locations are determined based on challenges within the storm network, including:

- System capacity constraints
- Aging infrastructure
- Publicly identified drainage concerns
- Operational and maintenance requirements

The schedule and project prioritization are subject to annual review and adjustments to align with:

- Optimization with other infrastructure projects
- Development growth and demand
- Risk assessment and emergent issues
- Targeted level of service (LOS) improvements

This flexible, data-driven approach ensures efficient resource allocation and continuous improvement of the City's stormwater infrastructure.

2025-2034 Planned Projects

- Flow Monitoring
- CCTV inspections
- Condition assessments
- Localized Small Sites (swales, catch basins, SWMF improvements)
- Braeside Minor System – 2024 design completed, construction 2025
- Mission Minor System – feasibility study completed 2024, design 2025, land acquisition 2026, construction 2026
- Sheridan Drive Major System - Major system improvements – Design Completed, Construction 2025
- Grosvenor Blvd. Surface Drainage – design 2024, construction 2025
- Grandin Minor System Phase 1
- Grandin Minor System Phase 2
- Grandin Minor System Phase 3
- Deer Ridge Phase 1
- Deer Ridge Phase 2
- Lacombe Park

- Other emergent repairs and/or rehabilitation

Investment Year	**2026**	$	4,667,000
	2027		2,060,700
	2028		5,477,300
	2029		2,001,200
	2030		6,850,400
	2031		3,477,700
	2032		3,519,700
	2033		3,562,500
	2034		3,606,200
	2035		3,650,800
	Total	**$**	**38,873,500**
		See Capital Project Worksheet for details.	

Operational Impacts: No

Associated Operating Business Case: NA

CAPITAL PROJECT WORKSHEET

PROJECT COMPONENT	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Land Determined Costs	1,000,000									
Flow Monitoring/CCTV	556,800	558,500	558,500	60,200	60,200	60,200	60,200	60,200	60,200	60,200
Detailed Planning and Design	351,500	415,000	55,100	865,000	405,100	725,000	725,000	725,000	725,000	725,000
Site Servicing										
Strucure/Building Construction	2,000,000	755,400	4,000,000	765,000	5,111,200	2,100,000	2,142,000	2,184,800	2,228,500	2,273,100
Landscaping										
Construction Management	150,000	50,000	150,000	50,000	250,000	150,000	150,000	150,000	150,000	150,000
Commissioning and QA/QC										
Contingency	608,700	281,800	713,700	261,000	1,023,900	442,500	442,500	442,500	442,500	442,500
Public Participation Activities										
Equipment										
Other										
TOTAL	**4,667,000**	**2,060,700**	**5,477,300**	**2,001,200**	**6,850,400**	**3,477,700**	**3,519,700**	**3,562,500**	**3,606,200**	**3,650,800**

Comments: The update includes consideration of projected inflation and changes in scope between years. Scope and costs are better defined for earlier years including a minimum 2% annual inflation adjustment.

APPROVAL

Author:	Micah Seon King	February 25, 2025
	Project Charter Developer (Print Name)	Date
Director:	Tim Saunders	March 13, 2025
	Print Name	Date

CAPITAL PROJECT CHARTER

Year: 2026

Charter Number: STORM-007

Charter Name: Stormwater Management Program

Lead Department: Storm

Type: RMR

Explanation (RMR or Growth): This program prioritizes erosion control as a primary strategy to prevent the degradation of downstream aquatic resources, including the Sturgeon River. Sediment control measures aim to prevent soil and other sediments from entering waterways, thereby preserving water quality. Effective erosion and sediment management supports a healthy Sturgeon River, minimizes the loss of aquatic resources, and enhances the overall health of St. Albert's waterways.

The purpose of the RMR program is to reduce sediment accumulation and minimize erosion within local stormwater management facilities, Carrot Creek, and the Sturgeon River. These enhancements help maintain water quality, protect aquatic ecosystems, and ensure the long-term sustainability of the city's stormwater infrastructure.

Asset Category: Roads & Other Engineered Structures

Scope Statement: To effectively control erosion and sedimentation, safeguard water quality, protect habitats, and maintain the ecological balance of surrounding ecosystems in St. Albert. This program focuses on implementing proactive measures to reduce sediment accumulation, enhance stormwater management infrastructure, and mitigate erosion impacts on local water bodies, including Carrot Creek and the Sturgeon River.

PROJECT CHARTER JUSTIFICATION

Erosion and sediment control are essential for maintaining water quality, protecting habitats, and reducing environmental impacts on surrounding ecosystems. In construction, land development, and conservation efforts, erosion often leads to significant soil displacement, negatively affecting local communities, vegetation, and wildlife. Increased sediment in rivers, lakes, and streams can degrade water quality and disrupt aquatic ecosystems.

Alberta Environment's Stormwater Water Quality Guidelines mandate that 85% of sediment particles (75 microns or larger) must be removed before stormwater is discharged into natural water bodies. The City is responsible for minimizing environmental impacts by implementing erosion and sediment control measures at stormwater outfalls.

This program focuses on the repair, replacement, and maintenance of:

- 48 stormwater outfalls along the Sturgeon River
- 44 oil grit separators

- 43 stormwater management facilities including 129 inlets and 82 outlets (with 5 additional facilities under construction)
- 21,000 cleanouts

Current State - The program has been extended due to city growth and findings from recent condition assessments. These assessments helped determine the required study, design, and construction of sediment control measures to minimize sediment accumulation in the Sturgeon River.

Issue - The 2014 Sedimentation and Erosion Control Program Update identified and prioritized several outfalls for sedimentation control facilities based on:

- Basin size and land use
- Magnitude of observed sediment deposits at various outfalls throughout the City

Several outfalls require immediate attention to comply with environmental regulations and to prevent further degradation of the watershed.

Opportunities -

- Comprehensive Condition Assessments:
    - Outfall assessments were completed in 2021
    - Stormwater management facility assessments were completed in 2022
    - A priority ranking system was established based on these assessments
- The program will align with previous updates to identify necessary rehabilitation, upgrades, and expansion efforts of outfalls, SWMF, etc.
- High-priority outfalls will be addressed first, followed by a long-term strategy for environmental stewardship and watershed protection.

Risks -

- The current engineering standard for SWMF is outdated and requires review and redevelopment
- Regulatory Changes:
    - Alberta Environment's stormwater quality guidelines could become more restrictive.
- Environmental and Regulatory Approvals:
    - Projects in floodplains may require approval from:
        - Environment Canada
        - Department of Fisheries and Oceans
        - Alberta Environment & Protected Areas

        - Alberta Public Lands
        - Transport Canada
        - First Nations Consultation
        - Alberta Historical Resources Act (heritage site assessments)
    - Recent changes to regulatory agencies could lead to longer permit processing times and higher costs.
- Land Availability:
    - Space must be secured for grit interceptors, sedimentation ponds, and erosion control measures at each outfall or ravine.
- Construction Challenges:
    - Weather constraints—fall construction is preferred to mitigate flooding risks.
    - Variable water levels in the Sturgeon River.
    - Soil conditions may affect construction feasibility.
    - Contractor availability—qualified contractors must be secured.
    - Infrastructure conflicts

Lifecycle Planning -

- Implement an annual condition assessment program to monitor erosion control effectiveness and update maintenance plans accordingly.

STRATEGIC PLAN & CORPORATE BUSINESS PLAN ALIGNMENT

Council Strategic Priority: N/A

Initiatives: N / A

Operational Excellence Priority Area: 4. Operational Performance

Initiatives: N / A

Stakeholder Identification:

Stakeholder Identification:

Name & Role	Responsibility/Contribution
Utilities Primary	Project Sponsor/Owner
Utilities Branch PM	Project Management
Utilities Branch Engineers	Input on capacity requirements, maintenance schedules, replacement timelines that could affect design

Environment Branch	Information and consulting, as required
Community Relations	Consult and inform as required.
City of St. Albert Risk & Insurance Department	Consulted on all projects to determine if insurance required
Other Internal Departments (Engineering (CPO & Transportation), Recreation & Parks, PW, Corporate Comms, etc.)	Consult and inform as required
External Stakeholders (residents, school boards, businesses, etc.)	Consult and inform as required.
Indigenous Community	Consult and inform as required
Environmental Regulators (DFO, AEP, etc.)	Consult, collaborate, submit applications, permits, etc.

Timeline:

This is an ongoing program where every year design or construction takes place in various locations throughout the city based on challenges in the storm network. Funds will also be utilized to ensure that any maintenance activities outside of regular operations are addressed to all high-priority and rehabilitated outfalls.

Schedule and project prioritization may change from year to year depending on optimization with other projects, emergent issues, development, demand, risk, and targeted level of service.

2026 – 2035 Planned Projects

Condition Assessment, Detailed Design & Construction

- DLO Registration & Renewals – 202& 2025
- Design 2024 & 2025-2026 Construction Outfalls 11A, 15A, 4B,11C, 7A, 11B
- SWMF – Standards Development - 2025
- SWMF Condition Assessment – 2025 & 2026
- SWMF Sludge Surveys - 2025 & 2026
- Grandin Ravine Condition Assessment, Design & Improvements
- Existing OGS(I) Condition Assessment
- SWMF Desludging Program
- Replacement of Solids Dewatering Facility (at Badger site)
- Emergent repairs to outlets, inlets, culverts, banks

FINANCIAL INFORMATION:	Investment Year	2026	$	2,892,500
		2027		3,196,200
		2028		3,151,000
		2029		3,180,300
		2030		1,885,200
		2031		1,673,700
		2032		2,520,600
		2033		1,673,700
		2034		2,520,600
		2035		1,673,700
		Total	**$**	**24,367,500**
			See Capital Project Worksheet for details.	

Operational Impacts: No

Associated Operating Business Case: NA

CAPITAL PROJECT WORKSHEET

PROJECT COMPONENT	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Land Determined Costs										
Condition Assessment	500,000	350,000	65,000		66,900		66,900		66,900	
Detailed Planning and Design		350,000	350,000	374,500	400,700					
Site Servicing										
Strucure/Building Construction	2,000,000	2,000,000	2,200,000	2,266,000	1,200,000	1,200,000	2,000,000	1,200,000	2,000,000	1,200,000
Landscaping										
Construction Management	100,000	125,000	125,000	125,000	50,000	125,000	125,000	125,000	125,000	125,000
Commissioning and QA/QC										
Contingency	292,500	371,200	411,000	414,800	167,600	348,700	328,700	348,700	328,700	348,700
Public Participation Activities										
Equipment										
Other										
TOTAL	**2,892,500**	**3,196,200**	**3,151,000**	**3,180,300**	**1,885,200**	**1,673,700**	**2,520,600**	**1,673,700**	**2,520,600**	**1,673,700**

Comments: Increased condition assessment funds to include sludge survey in 2026, and detailed design for improvements in 2027**.** Includes consideration of projected inflation and changes in scope between years. Scope and costs are better defined for earlier years and include a minimum 2% annual inflation adjustment.

APPROVAL

Author:	Micah Seon King	February 24, 2025
	Project Charter Developer (Print Name)	Date
Director:	Timothy Saunders	March 13, 2025
	Print Name	Date

CAPITAL PROJECT CHARTER

Year: 2026

Charter Number: WASWT-001

Charter Name: Wastewater Operational Asset RMR Program

Lead Department: Wastewater

Type: RMR

Explanation (RMR or Growth): This program supports Utilities Operations with ongoing rehabilitation, maintenance, and replacement of existing wastewater systems infrastructure.

Asset Category: Roads & Other Engineered Structures

Scope Statement: To plan and implement capacity improvements and timely rehabilitation and replacement of wastewater collection system infrastructure through proactive programs and projects.

PROJECT CHARTER JUSTIFICATION

This program focuses on the reduction of Inflow and Infiltration (I&I) and the rehabilitation, maintenance, and replacement of wastewater infrastructure that is nearing, at, or beyond its estimated useful life. Key components of this program include:

- Manholes and control structures
- Sewer main spot replacements
- Pumps and ancillary equipment

These elements are critical for maintaining a safe, reliable, and environmentally compliant wastewater conveyance system, ensuring efficient flow to the Arrow Utilities Primary Pump Station.

Current State - The City's wastewater infrastructure inventory consists of:

- 325 km of network: force main, gravity main, and trunk sewers
- 20,000 sewer services
- 4100 manholes
- 20 wastewater lift stations

Issue - This project is designed to reduce the risk of sewer service disruptions and backups, which can occur due to planned, unplanned, or emergent shutdowns. Failure to maintain the system can lead to:

- Property damage (both public and private)
- Environmental hazards from system failures

- Increased operational costs due to emergency repairs

Opportunities - This program provides essential funding for wastewater infrastructure that is deteriorating, beyond its expected lifespan, or has failed. Infrastructure needs are identified through:

- Operations and maintenance activities
- Wastewater system studies
- Asset condition assessments and prioritization
- Supporting data analytics

Additionally, this program helps to:

- Enhance wastewater system capacity
- Reduce risks associated with peak flow events and wastewater surcharge
- Improve system efficiency and reliability

Risks - Several factors may impact the successful execution of this program, including:

- Limited availability of qualified engineering consultants and contractors
- Constraints on City resources
- Inclement weather conditions affecting project timelines
- Conflicting underground infrastructure complicating construction efforts
- Material supply chain disruptions

By proactively investing in wastewater infrastructure renewal, the City can mitigate risks, optimize system performance, and ensure long-term service reliability for residents.

STRATEGIC PLAN & CORPORATE BUSINESS PLAN ALIGNMENT

Council Strategic Priority: N/A

Initiatives: N / A

Operational Excellence Priority Area: 4. Operational Performance

Initiatives: N / A

Stakeholder Identification:

Name & Role	Responsibility/Contribution
Utilities Primary	Project Sponsor/owner
Project Manager	Procurement, Contract Administration
Utilities Branch Engineers	Input on capacity requirements, maintenance schedules, and replacement timelines that could affect the design
Utilities Supervisor (Construction & Maintenance)	Input on capacity requirements, maintenance schedules, and replacement timelines that could affect design and project management
Environment Branch	Environmental regulatory requirements
Community Relations	Consult and inform as required

City of St. Albert Risk & Insurance Department	Consulted on all projects to determine if insurance required
Other Internal Departments (Engineering, Planning & Development, Recreation & Parks, PW, Corporate Comms, etc.)	Consult and inform as required
External Stakeholders (Indigenous Community, schools, businesses, residents, users, etc.)	Consult and inform as required.

Timeline:

This is an ongoing program where every year inspection, condition assessments, or construction occurs in various locations throughout the city based on the current physical condition of the wastewater collection system.

Q3 – Q4 prior year

- Inspections and identification of infrastructure for repair or replacement for the coming year. Development of scope of work. Other work may be conducted throughout the year pending emergencies or other priorities as applicable.

Q1

- Procurement of services.

Q2-Q4

- Construction and CCTV inspection program.

Investment Year	**2026**	$	335,000
	2027		345,000
	2028		355,000
	2029		365,200
	2030		376,100
	2031		387,500
	2032		399,100
	2033		411,000
	2034		423,400
	2035		444,500
	Total	**$**	**3,841,800**
		See Capital Project Worksheet for details.	

Operational Impacts: No

Associated Operating Business Case: NA

CAPITAL PROJECT WORKSHEET

PROJECT COMPONENT	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Land Determined Costs										
Concept Planning										
Detailed Planning and Design										
Site Servicing										
Strucure/Building Construction	335,000	345,000	355,000	365,200	376,100	387,500	399,100	411,000	423,400	444,500
Landscaping										
Construction Management										
Commissioning and QA/QC										
Contingency										
Public Participation Activities										
Equipment										
Other										
TOTAL	**335,000**	**345,000**	**355,000**	**365,200**	**376,100**	**387,500**	**399,100**	**411,000**	**423,400**	**444,500**

Comments: Updated annual cost by 5% for inflation.

APPROVAL

Author:	Micah Seon King	February 18, 2025
	Project Charter Developer (Print Name)	Date
Director:	Timothy Saunders	March 13, 2025
	Print Name	Date

CAPITAL PROJECT CHARTER

Year: 2026

Charter Number: WASWT-002

Charter Name: Wastewater Household Sewer Service Replacement

Lead Department: Wastewater

Type: RMR

Explanation (RMR or Growth): This program supports Utilities Operations with ongoing replacement/rehabilitation of existing wastewater household services and the inclusion of infill service installation.

Asset Category: Roads & Other Engineered Structures

Scope Statement: To facilitate the timely and cost-effective replacement or rehabilitation of the City's deficient wastewater infrastructure, enhancing system reliability and ensuring long-term service sustainability.

PROJECT CHARTER JUSTIFICATION

This program is designed to proactively mitigate the risk of sewer backups by facilitating the replacement or rehabilitation of the City's portion of deficient wastewater household services.

Program Scope

Part 1: Proactive Replacement and Rehabilitation

The program targets wastewater service lines that are at or beyond their estimated useful life or exhibit structural deficiencies. Selection for replacement or rehabilitation is based on:

- Age and condition of the asset
- Observed deficiencies, including root intrusion, cracks, fractures, sags, and material degradation
- Integration with adjacent wastewater improvement projects to maximize efficiency

Part 2: Infill Service Installations

The program also supports the City’s portion of household service installations for infill lot redevelopment. Based on recent trends, approximately 8 to 10 new infill service installations are completed annually, with this number expected to rise.

Current State

- The City manages approximately 20,000 residential sanitary service laterals.
- Service conditions range from extremely poor (exhibiting cracks, root intrusion, and structural failure) to good condition.

Issue - Many older sewer services were constructed using materials such as:

- Clay tile
- Concrete
- No-corrode (bituminized fiber)

These materials are prone to degradation or failure due to their composition, inadequate bedding conditions, and outdated installation practices. The availability of modern PVC pipes has significantly improved service life and durability.

This ongoing program allows the City to address deteriorating service lines before catastrophic failures occur, preventing costly emergency repairs and sewer backups.

Opportunities

- The annual program ensures the City maintains responsibility for sewer service lines from the main to the property line.
- Homeowners are responsible for their portion of the wastewater service from the property line to their home.
- Cost savings may be available to homeowners who choose to coordinate with the City's contractor for simultaneous replacement of their private portion of the service line.

Risks - Several factors may impact project execution:

- Failure to complete recommended work increases risk to residential properties.
- Construction in established areas may disrupt traffic, driveways, boulevards, and public access.
- Soil conditions, service depth, and site constraints affect construction methods (trenchless vs. open cut), costs, and contractor availability.
- Conflicting underground infrastructure may require design modifications.
- Service continuity must be maintained during construction for residents and businesses.
- Inclement weather can impact project schedules and construction methods.
- Unknown utility conflicts at the planning stage could affect budget and timeline.
- Material supply chain challenges may lead to delays.

This proactive, structured approach ensures the continued reliability, efficiency, and sustainability of the City's wastewater infrastructure while reducing long-term maintenance and emergency repair costs.

STRATEGIC PLAN & CORPORATE BUSINESS PLAN ALIGNMENT

Council Strategic Priority: N/A

Initiatives: N / A

Operational Excellence Priority Area: 5. Customers / Residents

Initiatives: N / A

Stakeholder Identification:

Name & Role	Responsibility/Contribution
Utilities Primary	Project Sponsor/Owner
Project Manager	Project Management
Utilities Supervisor (Construction & Maintenance)	Input on maintenance schedules, identification of services requiring replacement, replacement timelines, and documentation
Environment Branch	Information and consulting, as required
Community Relations	Consult and inform as required.
City of St. Albert Risk & Insurance Department	Consulted on all projects to determine if insurance required
Other Internal Departments (Engineering, Planning & Development, Recreation & Parks, PW, Corporate Comms, etc.)	Consult and inform as required
External Stakeholders - Residents	Consult and inform as required.

Timeline:

This is an ongoing program where every year condition assessments and construction take place in various locations throughout the city.

Schedule and project prioritization may change from year to year depending on optimization with other projects, development, demand, risk, emergent issues, and targeted level of service.

Q3-Q4 prior year

- inspections and identification of infrastructure for repair or replacement for the following year. Development of scope of work. However, emergencies or other prioritization of work may be conducted through the year as applicable.

Q1

- Procurement of services

Q2-Q4

- Construction
- Testing and commissioning to take place immediately after replacement is completed.

FINANCIAL INFORMATION:	Investment Year	2026	$	622,800
		2027		653,900
		2028		686,600
		2029		720,900
		2030		756,900
		2031		794,700
		2032		834,600
		2033		876,200
		2034		920,000
		2035		966,100
		Total	**$**	**7,832,700**
			See Capital Project Worksheet for details.	

Operational Impacts: No

Associated Operating Business Case: NA

CAPITAL PROJECT WORKSHEET

PROJECT COMPONENT	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Land Determined Costs										
Concept Planning										
Detailed Planning and Design										
Infill Servicing	108,200	113,600	119,300	125,200	131,500	138,000	145,000	152,200	159,800	167,800
Strucure/Building Construction	514,600	540,300	567,300	595,700	625,400	656,700	689,600	724,000	760,200	798,300
Landscaping										
Construction Management										
Commissioning and QA/QC										
Contingency										
Public Participation Activities										
Equipment										
Other										
TOTAL	**622,800**	**653,900**	**686,600**	**720,900**	**756,900**	**794,700**	**834,600**	**876,200**	**920,000**	**966,100**

Comments: *Updated annual cost with actual tender prices from 2024 and include 5%/year.*

APPROVAL

Author:	Micah Seon King	February 18, 2025
	Project Charter Developer (Print Name)	Date
Director:	Timothy Saunders	March 13, 2025
	Print Name	Date

CAPITAL PROJECT CHARTER

Year: 2026

Charter Number: WASWT-004

Charter Name: Wastewater Collection RMR Program.

Lead Department: Wastewater

Type: RMR

Explanation (RMR or Growth): This program supports our existing wastewater system by addressing the level of service limitations, increasing the capacity of our existing system, and supporting the ongoing assessment, rehabilitation, and replacement of existing wastewater system infrastructure.

Asset Category: Roads & Other Engineered Structures

Scope Statement: To provide relief to areas affected by the level of service limitations such as surcharging of mains and to increase the capacity of our existing system through the replacement and rehabilitation of wastewater infrastructure as determined through condition assessments and capital prioritization strategies identified in utility master plans.

PROJECT CHARTER JUSTIFICATION

The latest Sanitary Utility Master Plan (UMP) Update (2021) identified high-priority gravity sewer improvements and future infrastructure upgrades. This project charter reflects the UMP findings and includes updated cost estimates covering:

- 20% engineering fees
- 20% contingency
- Construction costs (e.g., site restoration, manhole replacements, excavation)

This program is designed to:

- Increase system capacity in areas affected by LOS limitations (e.g., surcharging mains with potential basement flooding risks)
- Rehabilitate and replace aging pipes based on lifecycle assessments (previously WASWT-003)
- Prioritize upgrades using Closed-Circuit Television (CCTV) inspections, flow monitoring, and operational data

Current State

- The 2021 Sanitary UMP identified several LOS deficiencies across the wastewater system.
- Efforts in recent years have focused on backlog reduction, reviewing video assessment data, and integrating findings into the asset management system.

- The focus has now shifted to condition assessments, scope development, and project prioritization.
- The program will also include manhole rehabilitation where mains are in poor condition.

Issue - This ongoing program prioritizes LOS improvements by increasing sewer capacity where needed and replacing aging infrastructure before failure occurs. As sewer mains deteriorate, additional rehabilitation needs will be identified through continuous condition assessments.

Additionally, the program will:

- Conduct studies on hydrogen sulfide (H_2S) levels and its corrosive effects on pipe materials
- Develop mitigation strategies to extend infrastructure lifespan

Opportunities -

- Annual funding allocation supports wastewater flow monitoring, enabling field verification of model results and better prioritization of identified LOS deficiencies.
- This initiative enables proactive rehabilitation of structurally deficient pipes, preventing:
    - Catastrophic failures
    - Escalating repair costs
    - Service disruptions

Risks & Challenges

- Unforeseen scope expansion in areas identified for capacity upgrades.
- Construction costs exceeding budget estimates.
- Availability of qualified contractors.
- Weather conditions affect wastewater flows, bypass pumping, costs, and scheduling.
- Soil conditions impact construction methods and timelines.
- Underground utility conflicts require design adjustments.
- Maintaining service levels during construction, including under peak flow conditions.
- Supply chain challenges affecting equipment and material availability.

This comprehensive approach ensures the long-term reliability, efficiency, and sustainability of the City's wastewater infrastructure while managing risks and optimizing investments.

STRATEGIC PLAN & CORPORATE BUSINESS PLAN ALIGNMENT

Council Strategic Priority: N/A

Initiatives: N / A

Operational Excellence Priority Area: 5. Customers / Residents

Initiatives: N / A

Stakeholder Identification:

Name & Role	Responsibility/Contribution
Utilities Primary	Project Sponsor/Owner
Project Manager	Project Management
Utilities Branch Engineer(s)	Input on capacity requirements, maintenance schedules, and replacement timelines that could affect the design
Utilities Supervisor (Construction & Maintenance)	Input on maintenance schedules, identification of services requiring replacement, replacement timelines, and documentation
Environment Branch	Information and consulting, as required
Community Relations	Consult and inform as required
City of St. Albert Risk & Insurance Department	Consulted on all projects to determine if insurance required
Other Internal Departments (Engineering, Planning & Development, Recreation & Parks, PW, Transit, Corporate Comms, etc.)	Consult and inform as required
External Stakeholders - (residents, school boards, businesses, Indigenous Relations, etc.)	Consult and inform as required.

Timeline: This is an ongoing program where every year design or construction takes place in various locations throughout the city based on challenges in the water network, both from a level of service perspective as well as from the occurrence of breaks.

The design for each location will be completed one year before construction.

Project schedules and priorities are subject to annual review and may shift based on:

- Integration with other infrastructure projects
- Development and population growth
- Service demand fluctuations
- Risk assessment and emergent issues
- Targeted service level objectives

This flexible approach ensures efficient resource allocation and optimized investment in the City's infrastructure.

2026-2035 Planned Projects (condition assessments, detailed design & construction)

- CCTV Inspections
- Flow Monitoring
- Upgrades at Riel Dr & SWCA
- Phase 2 priorities pairs condition assessment
- Grange Drive Gravity Sewer Upsizing Upgrades
- SAT and McKenney Ave and Liberton Dr Phase 1 & 2 Gravity Sewer Upsizing Upgrades
- Upgrades at Boudreau Rd
- Upgrades at St. Vital Ave
- Oakland Way & Oakland Drive Gravity Sewer Upsizing Upgrades
- Upgrades at Akins Dr.

- Upgrades at Glenview Cres.
- Upgrades at Grosvenor Blvd
- Upgrades at Riel Dr.
- Upgrades at McKenney Ave
- Other emergent priorities

FINANCIAL INFORMATION:	**Investment Year**	**2026**	$	4,211,700
		2027		1,770,700
		2028		4,794,000
		2029		2,620,600
		2030		4,314,300
		2031		2,684,600
		2032		2,520,100
		2033		1,583,500
		2034		2,542,000
		2035		2,542,000
		Total	**$**	**29,583,500**
			See Capital Project Worksheet for details.	

Operational Impacts: No

Associated Operating Business Case: NA

CAPITAL PROJECT WORKSHEET

PROJECT COMPONENT	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Land Determined Costs										
Flow Monitoring	60,000	62,500	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000
Detailed Planning and Design	350,000	755,000		257,500	312,500	257,500		592,300		
Site Servicing										
Strucure/Building Construction	3,090,000	679,800	3,905,000	1,857,600	3,275,400	1,913,300	2,027,700	721,000	2,046,800	2,046,800
Landscaping										
Construction Management	175,000	50,000	200,000	100,000	100,000	100,000	100,000		100,000	100,000
Commissioning and QA/QC										
Contingency	536,700	223,400	624,000	340,500	561,400	348,800	327,400	205,200	330,200	330,200
Public Participation Activities										
Equipment										
Other										
TOTAL	**4,211,700**	**1,770,700**	**4,794,000**	**2,620,600**	**4,314,300**	**2,684,600**	**2,520,100**	**1,583,500**	**2,542,000**	**2,542,000**

Comments: The cost estimate is based on the 2021 UMP-identified 10-year capital/prioritization plan. Cost estimates include excavation, compaction, and restoration costs to typical city road conditions and construction costs for typical 1200 mm size manholes. Costs of land acquisitions, drainage easements, and right-of-way access are not included. Engineering Services cost escalation of 7% as realized January 1, 2024. Construction cost escalation of 3% and contingency at a rate of 15% as per the previous year. Minor adjustments were made for 2026.

APPROVAL

Author:	Micah Seon King	February 18, 2025
	Project Charter Developer (Print Name)	Date
Director:	Timothy Saunders	March 13, 2025
	Print Name	Date

CAPITAL PROJECT CHARTER

Year: 2026

Charter Number: WASWT-020, STORM-020

Charter Name: Lift Station RMR Program

Lead Department: Wastewater

Type: RMR

Explanation (RMR or Growth): This program is responsible for assessing the condition of the infrastructure at all City of St. Albert Sanitary and Storm Lift Stations.

Asset Category: Roads & Other Engineered Structures

Scope Statement: This program consists of an in-depth condition assessment study of all the City Lift stations (sanitary and storm) from a life cycle perspective as well as funds for upgrades or replacements of existing lift stations.

PROJECT CHARTER JUSTIFICATION

A Life-Cycle Assessment (LCA) study of the City's lift stations was conducted in 2006 and 2019 to evaluate infrastructure conditions and prioritize cost-effective upgrades, replacement, and rehabilitation programs. These recommendations ranged from minor safety repairs to full lift station reconstructions.

Since these studies, several capital upgrades have been completed, including:

- Riel Lift Station and Gate Avenue Lift Station reconstructions
- Oakmont Lift Station and Rivercrest Lift Station upgrades (2021)
- Upgrades to seven (7) lift stations (2023)
- Design of the Twilight Lift Station replacement (2024)
- Construction of Twilight Lift Station (2025)

Ongoing Asset Management & Future Planning

Life-Cycle Assessment Studies are living documents, typically updated every 10 years to:

- Allow sufficient time to implement recommendations
- Revise capital programs based on emerging needs
- Ensure funding is allocated appropriately

The next comprehensive LCA update is scheduled for 2028 to support long-term capital and maintenance planning for all lift stations.

Current State - Lift Station Inventory (as of February 2025, subject to change)

- Sanitary Lift Stations: 16
- Storm & Sanitary Lift Station: 1
- Storm Lift Stations: 3

Issues

Lift stations face deterioration in both:

- Building envelope integrity
- Pumping systems & equipment lifespan

Regular LCA studies are essential to:

- Assess structural & mechanical conditions
- Develop proactive rehabilitation & replacement plans
- Ensure operational reliability & safety

Opportunities - This initiative aligns with the City's Asset Management Strategy and the Council's priority to cultivate sustainable infrastructure, ensuring the effective management of wastewater assets and long-term service reliability.

Risks

- Outdated assessments could lead to increased operational issues and costly emergency repairs
- Escalation of construction costs beyond allocated funding
- Availability of qualified consultants & contractors
- Unforeseen delays affecting project timelines

Lifecycle Planning - With lift stations ranging in age from under 2 years to nearly 50 years, ongoing studies remain the most effective tool for evaluating asset conditions and supporting data-driven planning for maintenance and replacement.

- Building structures: ~50-year lifespan
- Mechanical & electrical systems: ~25-year lifespan
- Instrumentation & pumping components: ~7-year lifespan

STRATEGIC PLAN & CORPORATE BUSINESS PLAN ALIGNMENT

Council Strategic Priority: N/A

Initiatives: N / A

Operational Excellence Priority Area: 4. Operational Performance

Initiatives: N / A

Stakeholder Identification:

Name & Role	Responsibility/Contribution
Utilities Primary	Project Sponsor/Owner
Utilities Branch PM	Project Management
Utilities Engineers and Supervisors	Input on capacity requirements, maintenance schedules, and replacement timelines that could affect the design
Environment Branch	Information and consulting, assistance with environmental regulatory requirements, as required
City of St. Albert Risk & Insurance Department	Consulted on all projects to determine if insurance required
Other Internal Departments (Engineering, Recreation & Parks, PW, Corporate Comms, etc.)	Consult and inform as required
External Stakeholders (residents, school boards, businesses, etc.)	Consult and inform as required.

Timeline:

Studies are to be conducted every 10 years followed by engineering services and construction for any work identified in the study.

Schedule and project prioritization may change from year to year depending on optimization with other projects, development, demand, risk, emergent issues, and targeted level of service.

- 2025 Twilight LS Renewal
- 2028 Lift Station Condition Assessments
- 2029 Engineering Services of identified Work
- 2030 & 20231 Construction of identified Work

- 2038 Lift Station Condition Assessments
- 2039 Engineering Services of identified Work
- 2040 Construction of identified Work

- 2048 Lift Station Condition Assessments
- 2049 Engineering Services of identified Work
- 2050 Construction of identified Work

Wastewater Lift Station Budget (WASWT-020)

FINANCIAL INFORMATION:	Investment Year	2026	
		2027	-
		2028	369,000
		2029	464,900
		2030	1,845,500
		2031	1,876,100
		2032	
		2033	
		2034	-
		2035	-
		Total	$ 4,555,500
			See Capital Project Worksheet for details.

Stormwater Lift Stations Budget (STORM-020)

FINANCIAL INFORMATION:	Investment Year	2026	
		2027	-
		2028	-
		2029	43,000
		2030	56,900
		2031	341,700
		2032	341,700
		2033	
		2034	-
		2035	-
		Total	$ 783,300
			See Capital Project Worksheet for details.

Operational Impacts: **No**

Associated Operating Business Case: NA

Wastewater Lift Stations Worksheet (WASWT-020)

CAPITAL PROJECT WORKSHEET

PROJECT COMPONENT	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Land Determined Costs										
Study			324,000							
Detailed Planning and Design				408,200						
Site Servicing										
Strucure/Building Construction					1,530,000	1,560,600				
Landscaping										
Construction Management					78,700	78,700				
Commissioning and QA/QC										
Contingency			45,000	56,700	236,800	236,800				
Public Participation Activities										
Equipment										
Other										
TOTAL	**-**	**-**	**369,000**	**464,900**	**1,845,500**	**1,876,100**	**-**	**-**	**-**	**-**

Stormwater Lift Stations Worksheet (STORM-020)

OBJ

CAPITAL PROJECT WORKSHEET

PROJECT COMPONENT	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Land Determined Costs										
Study			35,100							
Detailed Planning and Design				50,000						
Site Servicing										
Strucure/Building Construction					267,800	267,800				
Landscaping										
Construction Management					30,000	30,000				
Commissioning and QA/QC										
Contingency			7,900	6,900	43,900	43,900				
Public Participation Activities										
Equipment										
Other										
TOTAL	-	-	**43,000**	**56,900**	**341,700**	**341,700**	-	-	-	-

Comments: The costs for 2028 and 2029 increased by 8%. For 2030 and on an increase of 2%.

APPROVAL

Author:	Micah Seon King	February 18th, 2025
	Project Charter Developer (Print Name)	Date
Director:	Timothy Saunders	March 13, 2025
	Print Name	Date

CAPITAL PROJECT CHARTER

Year: 2026

Charter Number: WATER-002, WASWT-010, and STORM-001

Charter Name: Utility Master Plan

Lead Department: Water

Type: RMR

Explanation: Utility Master Plans are required to assess our existing water, wastewater, and stormwater infrastructure to determine required upgrades, repairs, or rehabilitations and establish future infrastructure needs as per the future development growth.

Asset Category: Roads & Other Engineered Structures

Scope Statement: A complete renewal of Utility Master Plans is scheduled for 2025 through 2026 encompassing changes in environmental regulations, engineering standards, infrastructure reaching the end of intended functional use, degradation, or capacity necessary for long-term future development. Following a 5-year planning cycle, an update of these Utility Master Plans will be conducted.

PROJECT CHARTER JUSTIFICATION

The Utility Master Plans (UMPs) form a critical component of the City of St. Albert's strategic planning framework, ensuring the long-term sustainability and reliability of the City's water, wastewater, and stormwater infrastructure. These master plans provide a comprehensive, data-driven assessment of the existing utility networks and outline the necessary improvements to maintain service levels, support future growth, and optimize asset management.

By implementing the recommendations outlined in UMP, the City ensures that its utility services remain reliable, cost-effective, and environmentally responsible. These plans provide the foundation for informed decision-making, helping to prioritize infrastructure investments and ensure that utility systems continue to meet the needs of both existing residents and future generations.

Current State - The most recent Utility Master Plan (UMP) Update was completed in 2021 and has been incorporated into the City's Capital Plan. However, a comprehensive renewal of the Water, Wastewater, and Stormwater UMPs is scheduled for 2025-2026 to account for the 2022 annexation of Sturgeon County lands and recent amendments to the Municipal Development Plan (MDP). Additionally, the updated Transportation Master Plan (Mobility Choices) is expected to be completed concurrently with this UMP renewal, ensuring alignment across municipal infrastructure planning.

Issue - The City of St. Albert has recently annexed lands from Sturgeon County, necessitating an updated approach to infrastructure planning. The current UMP (2021) does not reflect the

annexation, the updated MDP, or the Carrot Creek Master Drainage Plan, which were not in place during the last update. To address these gaps, a full UMP renewal will commence in early 2025, with completion anticipated in 2026. This renewal will provide a strategic utility servicing framework that accommodates future growth, including the newly annexed lands and updated policy frameworks.

Opportunities - While UMPs play a critical role in identifying growth-related infrastructure needs, they do not account for projects related to lifecycle replacement or condition assessments of existing utility assets—these are managed through the City's Asset Management Strategy and existing condition assessment programs. To ensure a comprehensive view of infrastructure requirements, UMPs must be evaluated alongside Repair, Maintenance, and Replacement (RMR) capital projects driven by Asset Management practices. The UMP renewal will integrate considerations for:

- Level of Service Programs to maintain reliable and efficient utility operations.
- Greenfield and Infill Development to support sustainable urban expansion.
- Utility System Optimization to improve efficiency and cost-effectiveness.

Risks - Failure to update the UMP will result in an outdated and ineffective infrastructure servicing strategy, leading to:

- Insufficient Utility Capacity that fails to support planned development and growth.
- Higher Servicing Costs due to reactive infrastructure expansion and redundant investments arising from inadequate planning.
- Misalignment with Growth Strategies, limiting the City’s ability to support sustainable economic and residential development.

Lifecycle Planning - UMP updates follow a structured planning cycle:

- Minor updates occur every five (5) years to reflect evolving infrastructure needs.
- Comprehensive renewals are conducted every ten (10) years to incorporate major growth, policy changes, and infrastructure overhauls.

This strategic approach ensures that utility infrastructure remains resilient, cost-effective, and aligned with the City's long-term vision for growth and development.

STRATEGIC PLAN & CORPORATE BUSINESS PLAN ALIGNMENT

Council Strategic Priority: N/A

Initiatives: N / A

Operational Excellence Priority Area: 4. Operational Performance

Initiatives: 3.2 Enterprise Maintenance Management and Asset Management (AM) Platform

Stakeholder Identification:

Name & Role	Responsibility or Contribution
Utilities, Primary	Primary Stakeholder
Engineering Services (Transportation)	Stakeholder
Planning & Development	Stakeholder
Environment Branch	Stakeholder
Other Internal Departments (Public Operations, Fire Services, Recreation & Parks, etc.	Consult and inform as required
Other external stakeholders (UDI, Sturgeon County, developers, etc.) are listed below.	Consult and inform as required.

Timeline:

2025 to 2026	Master Plan Comprehensive Assessment
2031	Master Plan Update
2036 to 2037	Master Plan Comprehensive Assessment
2042	Water Utility Master Plan Update

Water Utility Master Plan Budget (WATER-002)

FINANCIAL INFORMATION:	**Investment Year**	**2026**	$	-
		2027		-
		2028		-
		2029		-
		2030		
		2031		-
		2032		262,000
		2033		-
		2034		-
		2035		-
		Total	**$**	**262,000**
			See Capital Project Worksheet for details.	

Wastewater Utility Master Plan Budget (WASTW-010)

FINANCIAL INFORMATION:	Investment Year		
		2026	$ -
		2027	-
		2028	-
		2029	-
		2030	
		2031	-
		2032	262,000
		2033	-
		2034	-
		2035	-
		Total	**$ 262,000**
			See Capital Project Worksheet for details.

Stormwater Utility Master Plan Budget (STORM-001)

FINANCIAL INFORMATION:	Investment Year		
		2026	$ -
		2027	-
		2028	-
		2029	-
		2030	
		2031	-
		2032	262,000
		2033	-
		2034	-
		2035	-
		Total	**$ 262,000**
			See Capital Project Worksheet for details.

Operational Impacts: No If yes, refer to Operating Impacts Worksheet for details.

Associated Operating Business Case: NA

CAPITAL PROJECT WORKSHEET

PROJECT COMPONENT	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Land Determined Costs										
Master Plan							786,000			
Detailed Planning and Design										
Site Servicing										
Strucure/Building Construction										
Landscaping										
Construction Management										
Commissioning and QA/QC										
Contingency										
Public Participation Activities										
Equipment										
Other										
TOTAL	-	-	-	-	-	-	**786,000**	-	-	-

Comments: Based on an average consultant cost of $205/hr. (including disbursements) for the renewal of a master plan and approximately 2,000 hours of work. Cost to be updated in 2028 to better reflect the costs at that time.

APPROVAL

Author:	Micah Seon King	Feb 10, 2025
	Project Charter Developer (Print Name)	Date
Director:	Timothy Saunders	March 13, 2025
	Print Name	Date

CAPITAL PROJECT CHARTER

Year: 2026

Charter Number: WATER-003

Charter Name: Water Operational Asset RMR Program

Lead Department: Water

Type: RMR

Explanation (RMR or Growth): This program supports Utilities Operations through ongoing lifecycle rehabilitation, maintenance, and replacement of existing water operational assets such as valves and hydrants.

Asset Category: Roads & Other Engineered Structures

Scope Statement: To support the safe, reliable, and secure supply of water through timely rehabilitation, maintenance, and replacement of system infrastructure through proactive programs and projects.

PROJECT CHARTER JUSTIFICATION

This program encompasses the rehabilitation, maintenance, and replacement of critical water infrastructure to ensure a safe and reliable water supply throughout the City. It includes, but is not limited to:

- Fire hydrants
- Main valves
- Pressure reducing/control valves (PRVs) and air release valves
- Cathodic protection systems
- Water main spot replacements
- Pumps and ancillary equipment

These components play a vital role in maintaining system integrity, preventing failures, and ensuring continuous service to residents and businesses.

Current State

The City's water infrastructure inventory includes:

- 20,000 water service lines and valves
- 1900 fire hydrants
- 5200 mainline valves including pressure-reducing valves (PRV) and 3 pump stations

This extensive network requires ongoing assessment, maintenance, and strategic renewal to sustain service levels and operational reliability.

Issue - Aging infrastructure increases the risk of service disruptions due to planned, unplanned, and emergency shutdowns. Without proactive investment, infrastructure failures could lead to:

- Potential damage to public and private property
- Adverse environmental impacts from water main breaks or system failures
- Increased operational and maintenance costs due to emergency repairs

This project aims to mitigate these risks through a structured approach to preventative maintenance, system upgrades, and timely replacements.

Opportunities - This initiative provides critical funding to replace or rehabilitate infrastructure that is:

- Degraded due to age or environmental factors
- Nearing or beyond its intended lifespan
- Identified as high-risk through asset condition assessments, operational data, and water system studies

By integrating predictive analytics, asset prioritization, and strategic investments, the City can enhance system resilience, extend asset longevity, and reduce long-term costs.

Risks - The successful implementation of this program depends on several external and operational factors, including:

- Availability of qualified engineering consultants and contractors
- City resource capacity to support planning and execution
- Unpredictable weather conditions affecting project schedules
- Conflicting underground infrastructure that may impact construction timelines
- Material availability and supply chain disruptions

By proactively addressing these challenges, the City can minimize risks, enhance service reliability, and optimize infrastructure investments to meet current and future water supply demands.

STRATEGIC PLAN & CORPORATE BUSINESS PLAN ALIGNMENT

Council Strategic Priority: N/A

Initiatives: N / A

Operational Excellence Priority Area: 4. Operational Performance

Initiatives: 3.2 Enterprise Maintenance Management and Asset Management (AM) Platform

Name & Role	Responsibility/Contribution
Utilities Primary	Project Sponsor/Owner
Utilities Branch PM	Project Management
Utility Engineers, Supervisors	Input on capacity requirements, maintenance schedules, and replacement timelines that could affect the design

Environment Branch	Information and consulting, assistance with environmental regulatory requirements, public educational aspects, attend open houses, as required
City of St. Albert Risk & Insurance Department	Consulted on all projects to determine if insurance required
Other Internal Departments (Engineering, Recreation & Parks, PW, Corporate Comms, Community Relations, etc.)	Consult and inform as required
External Stakeholders (residents, school boards, businesses, Indigenous Community, etc.)	Consult and inform as required.

Timeline:

Q3-Q4 prior year

- Inspections and identification of infrastructure for repair or replacement for the following year. Development of scope of work. Other work is conducted on an “as-needed” basis pending emergent or other prioritized needs.

Q1/2

- Procurement of services

Q2-Q4

- Construction

FINANCIAL INFORMATION:	**Investment Year**	**2026**	$	652,000
		2027		684,500
		2028		718,700
		2029		754,700
		2030		792,400
		2031		832,000
		2032		873,600
		2033		917,300
		2034		963,000
		2035		982,200
		Total	**$**	**8,170,400**
			See Capital Project Worksheet for details.	

Operational Impacts: No

Associated Operating Business Case: NA

CAPITAL PROJECT WORKSHEET

CAPITAL PROJECT WORKSHEET

PROJECT COMPONENT	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Land Determined Costs										
Concept Planning										
Detailed Planning and Design										
Site Servicing										
Strucure/Building Construction	652,000	684,500	718,700	754,700	792,400	832,000	873,600	917,300	963,000	982,200
Landscaping										
Construction Management										
Commissioning and QA/QC										
Contingency										
Public Participation Activities										
Equipment										
Other										
TOTAL	**652,000**	**684,500**	**718,700**	**754,700**	**792,400**	**832,000**	**873,600**	**917,300**	**963,000**	**982,200**

Comments: Includes cost escalation of 5% per year until 2034 and 2% for 2035.

APPROVAL

Author:	Micah Seon King	Feb 18, 2025
	Project Charter Developer (Print Name)	Date
Director:	Timothy Saunders	March 13, 2025
	Print Name	Date

CAPITAL PROJECT CHARTER

Year: 2026

Charter Number: WATER-004

Charter Name: Water Distribution RMR Program

Lead Department: Water

Type: RMR

Explanation (RMR or Growth): This program will prioritize Level of Service (LOS) locations across the city, enhancing capacity, reliability, and redundancy within the water network. It will achieve this by strategically constructing, upgrading, and upsizing water mains to improve overall network performance. Additionally, replacing aging water mains—prone to leaks, breaks, and failures—will enhance system reliability, reduce non-revenue water, and improve water quality. These improvements will significantly strengthen the city's water network and service delivery.

Asset Category: Roads & Other Engineered Structures

Scope Statement: To construct, upgrade, rehabilitate, or upsize water mains to enhance and sustain network performance.

PROJECT CHARTER JUSTIFICATION

This program encompasses the rehabilitation, replacement, expansion, and upsizing of water mains and associated water system infrastructure to enhance service reliability, accommodate growth, and mitigate risks associated with aging assets. Strategic investments in these upgrades are essential to maintaining a resilient and high-performing municipal water network.

Current State - In 2026, an assessment will be conducted to prioritize locations previously identified in the 2021 Water Master Plan Update. This evaluation will incorporate field-level fire flow testing to verify system performance requirements and pinpoint areas experiencing frequent water main breaks. The integration of empirical field data will ensure that planned improvements align with both service-level objectives and long-term infrastructure sustainability. The current inventory of the City’s water system infrastructure consists of approximately:

- 345 km of water supply, transmission, and distribution mains
- 20,000 water services
- 1900 fire hydrants
- 5200 main line valves including 4 pressure-reducing valves (PRVs) and 3 reservoir pump Stations

Issue - Beyond improving the level of service (LOS), several locations have been identified where aging infrastructure or challenging soil conditions pose concerns regarding structural integrity. Without intervention, these vulnerabilities could lead to water main failures, increased

maintenance costs, and service disruptions. Addressing these issues proactively is critical to ensuring network reliability, regulatory compliance, and public safety.

Opportunities - The 2021 Water Master Plan Update highlights priority locations where network looping, pipe capacity upgrades, and system reinforcements are necessary to enhance water distribution efficiency and fire protection capabilities. Additionally, new infrastructure needs emerge annually through fire flow assessments, water quality testing, and operational data analysis. This program will be continuously updated to reflect evolving priorities, ensuring alignment with master planning objectives and ongoing infrastructure evaluations.

Risks - Several key challenges must be considered in the execution of this program:

1. Failure to implement necessary upgrades will elevate risks to surrounding properties, compromise fire protection capacity, and potentially reduce LOS below municipal standards.
2. Work in established neighborhoods and along arterial/collector roads will likely disrupt traffic, public access, and residential areas, requiring careful planning and mitigation strategies.
3. Geotechnical factors may necessitate specific construction methods (trenchless vs. open cut), impacting project budgets, timelines, and contractor availability.
4. Ensuring uninterrupted water service and fire protection reliability during construction is paramount, requiring contingency planning and phased implementation strategies.
5. Inclement weather could affect construction schedules, with varying degrees of impact depending on the selected construction techniques.
6. At the high-level planning stage, unforeseen utility conflicts pose risks to both budgetary allocations and project timelines, necessitating early investigative work and adaptive scheduling.
7. Market fluctuations in the availability and cost of materials may affect procurement timelines, requiring proactive sourcing strategies and contingency budgeting.

STRATEGIC PLAN & CORPORATE BUSINESS PLAN ALIGNMENT

Council Strategic Priority: N/A

Initiatives: N / A

Operational Excellence Priority Area: 4. Operational Performance

Initiatives: 3.2 Enterprise Maintenance Management and Asset Management (AM) Platform

Stakeholder Identification:

Name & Role	Responsibility/Contribution
Utilities Primary	Project Sponsor/Owner
Utilities PM	Project Management
Utility Engineers, Supervisors	Input on capacity requirements, maintenance schedules, and replacement timelines that could affect the design

Environment Branch	Information and consulting, assistance with environmental regulatory requirements, public educational aspects, attending open houses, as required
City of St. Albert Risk & Insurance Department	Consulted on all projects to determine if insurance required
Other Internal Departments (Engineering, Recreation & Parks, PW, Corporate Comms, Community Relations, etc.)	Consult and inform as required
External Stakeholders (residents, school boards, businesses, Indigenous Community, etc.)	Consult and inform as required.

Timeline:

This is an ongoing infrastructure renewal program in which design and construction are carried out annually at different locations across the City. Project selection is based on identified challenges within the water network, considering both level of service (LOS) improvements and historical occurrences of water main breaks.

To ensure efficient project execution, design work for each location is typically completed one year before construction. However, the schedule and project prioritization are subject to annual adjustments based on:

- Coordination with other infrastructure projects
- Resource availability and budget allocations
- Development trends and demand fluctuations
- Risk assessments and emergent issues
- Targeted level of service objectives

2026 – 2034 Planned Projects (condition assessments, feasibility studies, detailed design, construction)

- PRV Improvements Program
- Upgrade to existing water mains at St. Thomas St. and Alpine Place
- Upgrade to existing water mains at Boudreau Rd
- High-priority water main repairs/replacements
- Upgrade to existing water main Mission Ave East and West
- Upgrades to the existing water main at Ecole Hillgrove School and Glenview Crescent
- Other emergent priorities

FINANCIAL INFORMATION:	Investment Year	2026	$	4,655,500
		2027		2,851,500
		2028		2,851,500
		2029		2,193,900
		2030		2,920,500
		2031		3,072,300
		2032		2,970,200
		2033		3,025,300
		2034		3,155,400
		2035		3,155,400
		Total	**$**	**30,851,500**
			See Capital Project Worksheet for details.	

Operational Impacts: No

Associated Operating Business Case: NA

CAPITAL PROJECT WORKSHEET

PROJECT COMPONENT	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Land Determined Costs										
Concept Planning										
Detailed Planning and Design	315,000	230,000	230,000	400,700	290,000	315,000	295,000	303,600	325,300	325,300
Site Servicing										
Strucure/Building Construction	3,938,500	2,273,000	2,273,000	1,530,500	2,273,000	2,380,000	2,311,200	2,350,500	2,442,000	2,442,000
Landscaping										
Construction Management	107,000	107,000	107,000	107,000	107,000	107,000	107,000	107,000	107,000	107,000
Commissioning and QA/QC										
Contingency	295,000	241,500	241,500	155,700	250,500	270,300	257,000	264,200	281,100	281,100
Public Participation Activities										
Equipment										
Other										
TOTAL	**4,655,500**	**2,851,500**	**2,851,500**	**2,193,900**	**2,920,500**	**3,072,300**	**2,970,200**	**3,025,300**	**3,155,400**	**3,155,400**

Comments: No major cost increase except for 2026 as we are still working through priorities and detailed design. Includes consideration of projected inflation and changes in scope between years. Scope and costs are better defined for earlier years including a minimum 2% annual inflation adjustment.

APPROVAL

Author:	Micah Seon King	February 18, 2025
	Project Charter Developer (Print Name)	Date
Director:	Timothy Saunders	March 12, 2025
	Print Name	Date

CAPITAL PROJECT CHARTER

Year: 2026

Charter Number: WATER-006

Charter Name: Pump Station and Reservoir RMR Program

Lead Department: Water

Type: RMR

Explanation (RMR or Growth): This program supports the ongoing rehabilitation of existing Pump Station and Reservoir infrastructure.

Asset Category: Roads & Other Engineered Structures

Scope Statement: To undertake condition assessment, design work, and rehabilitation for the City's three (3) Reservoir and Pumphouses.

PROJECT CHARTER JUSTIFICATION

This comprehensive capital program funds the condition assessments and lifecycle rehabilitation of the City's three reservoirs and pump stations. The program ensures that these critical assets are regularly evaluated for operational integrity and long-term sustainability, enabling proactive maintenance, repairs, and upgrades to maintain a reliable water supply for the City.

Current State

- Lacombe Park Reservoir & Pump Station: Originally built in 1980, this facility underwent substantial rehabilitation in 2005. A comprehensive condition assessment is planned for 2026-2027, with rehabilitation scheduled to begin in 2028.
- Sturgeon Reservoir and Pump Station: The replacement project for this facility is nearing completion. This ongoing project is fully funded through previously approved funds for the 2022 and 2023 fiscal years, and no additional funding is expected to be required for 2023-2032.
- Oakmont Reservoir: Built-in 1996, the Oakmont Reservoir is currently undergoing lifecycle upgrades, with upgrades scheduled for completion in 2026.

Issue - Lacombe Park Reservoir & Pump Station: Although no immediate improvements have been identified, the facility will be 21 years old in 2026, which is approaching the typical asset lifespan for major pumping and electrical systems (estimated at 20-25 years). A lifecycle assessment of critical equipment and systems, as well as a building assessment, is scheduled for 2026-2027.

Opportunities - As part of a continuing asset management strategy, a comprehensive assessment of the City's reservoirs and pump stations will inform the update of the capital and maintenance plans for the entire Utilities Branch portfolio. This will ensure that infrastructure

upgrades are aligned with evolving needs and will enhance the long-term reliability of these critical assets.

Risks

- Potential delays due to limited availability of qualified contractors.
- Adverse weather conditions may impact on construction timelines and the availability of resources.
- Existing utilities may complicate construction or upgrade efforts, potentially causing project delays or increased costs.
- Pandemic-related impacts on material supply and demand could affect project schedules and budgets.

Lifecycle Planning- To ensure long-term operational sustainability, condition assessments of all reservoirs and pump stations should occur every 10 years to identify maintenance, repairs, and replacements. Electrical, process mechanical, and mechanical systems typically have a lifespan of 20-25 years, necessitating regular evaluations and upgrades to avoid system failures and ensure continued reliability.

STRATEGIC PLAN & CORPORATE BUSINESS PLAN ALIGNMENT

Council Strategic Priority: N/A

Initiatives: N / A

Operational Excellence Priority Area: 4. Operational Performance

Initiatives: 3.2 Enterprise Maintenance Management and Asset Management (AM) Platform

Stakeholder Identification:

Name & Role	Responsibility/Contribution
Utilities Branch Primary	Project Sponsor/Owner
Utilities Branch PM	Project Management
Utilities Engineers, Operations, Team Leads	Input on capacity requirements, maintenance schedules, and replacement timelines that could affect the design
Environment Branch	Information and consulting, assistance with environmental regulatory requirements, public educational aspects, attending open houses
City of St. Albert Risk & Insurance Department	Consulted on all projects to determine if insurance required
Community Relations	Consult and inform as required
Other Internal Departments (Engineering, Development, Recreation & Parks, PO, Corporate Comms, etc.)	Consult and inform as required
External Stakeholders (Residents, businesses, schools, Indigenous Community. etc.)	Consult and inform as required

Timeline: This is an ongoing program where design and construction are carried out annually at different locations across the City. Projects are selected based on challenges within the water network, considering both level of service (LOS) requirements and the occurrence of water main breaks. The design for each location is typically completed one year before construction to ensure adequate planning and resource allocation.

Schedule and project prioritization are flexible and may adjust each year based on factors such as:

- Coordination with other ongoing projects
- Lifecycle condition assessments of existing infrastructure
- Operational and maintenance needs
- Development patterns and fluctuating demand
- Risk mitigation and emerging issues
- Alignment with the targeted level of service goals

This adaptive approach allows for the effective management of resources, ensuring timely responses to both planned and unforeseen needs across the City's water network.

FINANCIAL INFORMATION:	**Investment Year**	**2026**	$	380,100
		2027		710,700
		2028		5,415,800
		2029		-
		2030		-
		2031		-
		2032		-
		2033		-
		2034		-
		2035		-
		Total	**$**	**6,506,600**
			See Capital Project Worksheet for details.	

Operational Impacts: No

Associated Operating Business Case: NA

CAPITAL PROJECT WORKSHEET

CAPITAL PROJECT WORKSHEET

PROJECT COMPONENT	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Land Determined Costs										
Condition Assessment	330,600									
Detailed Planning and Design		618,000								
Site Servicing										
Strucure/Building Construction			4,554,400							
Landscaping										
Construction Management			155,000							
Commissioning and QA/QC										
Contingency	49,500	92,700	706,400							
Public Participation Activities										
Equipment										
Other										
TOTAL	**380,100**	**710,700**	**5,415,800**	-	-	-	-	-	-	-

Comments: n/a

APPROVAL

Author:	Micah Seon King	February 18, 2025
	Project Charter Developer (Print Name)	Date
Director:	Timothy Saunders	March 13, 2025
	Print Name	Date

CAPITAL PROJECT CHARTER

Year: 2026-2035

Charter Number: SOLWA-001

Charter Name: Recycling Depot Upgrades

Lead Department: Solid Waste Management

Type: RMR

Explanation (RMR or Growth): This is for the ongoing maintenance of the existing Recycling Depot

Asset Category: Civic Facilities

Scope Statement: Lifecyle replacement of equipment/infrastructure and maintaining of service levels for the existing Mike Mitchell Recycling Depot at 7 Chevigny Street.

PROJECT CHARTER JUSTIFICATION

Repair and replacement of existing infrastructure at the Mike Mitchell Recycling Depot (such as railing, platforms, storage for materials, install security equipment such as camera and lights, as well as paving, additional storage buildings, and the cardboard compactor rental, etc.) will be required due to the end of their life cycle and to increase site safety for both staff and residents. Additionally, upgrades to the depot are required maintain service delivery and to comply with environmental requirements.

Current State – The existing Recycling Depot was built in 2000 and is directly adjacent to the Jack Kraft Public Works facility at 7 Chevigny Street. The Depot is approximately 50 X 80 meters with an asphalt surface and is fenced and gated. There is external and internal signage which provides patrons with information on hours and site restrictions, traffic safety, waste and recycling instructions.

The area includes skid pads for 14 – 40 cubic yard metal bins with stairs and 10 platforms for patron access to bins. There is also a stand-alone bin for glass collection and two 2 cubic yard containers for Styrofoam collection.

In 2011, additional areas for household hazardous waste and electronics collection were added. A fenced cardboard compactor and small shed for staff were also added. In 2015, the household hazardous waste area was improved with a covered structure and secondary containment to address environmental concerns.

The north area of the Recycling Depot also includes an area with concrete block walls for bulk compost giveaway and bike collection for donating to non-profit organizations.

Previous upgrades include an additional 40-yard bin for diseased branch disposal

Issue –An additional stand-alone glass bin is required as current disposal volumes exceed our storage capacity with existing infrastructure. Special attention must be paid to infrastructure that is needed to ensure staff and patron safety such as the compactor, platforms and stairs, lighting and signage. The lighting in the Depot is currently insufficient to ensure the safety of our staff, contractors, and patrons. Improvements to infrastructure may also be required to manage environmental risks identified through regular EMS inspections and/or changes to environmental regulations or guidelines. Due to ongoing vandalism at the site, a Safety consultant visited site in 2023 and had a number of suggestions to increase site safety including lighting, fence modifications, site configuration and cameras.

Opportunities – As opportunities for additional recycling or waste diversion streams become available, there may be the need to add or modify existing infrastructure. A covered structure, like the hazardous waste structure may be needed over the area for storing Styrofoam to ensure these items are clean and dry to be recycled. Additional measures can also be added for security, to reduce theft and property damage, including fencing upgrades and security cameras.

Risks – Special attention must be paid to infrastructure that is needed to ensure staff and patron safety such as the compactor, platforms and stairs, lighting and signage. Improvements to infrastructure may also be required to manage environmental risks identified through regular EMS inspections and/or changes to environmental regulations or guidelines. Should the level of service change or additional business ventures be contemplated through this site additional capital expenditures may be required. The impacts of the provincial implementation of EPR remain unknown.

STRATEGIC PLAN & CORPORATE BUSINESS PLAN ALIGNMENT

Council Strategic Priority: 4. Adapting to a Changing Environment

Initiatives: N / A

Operational Excellence Priority Area: N / A

Initiatives: N / A

Timeline: Varies, depending on replacement and required upgrades. It is anticipated that in any given year the projects will be completed in the year identified.

FINANCIAL INFORMATION:	Investment Year	2026	$	32,500
		2027		32,500
		2028		32,500
		2029		32,500
		2030		32,500
		2031		32,500
		2032		32,500
		2033		32,500
		2034		32,500
		2035		32,500
		Total	**$**	**325,000**
			See Capital Project Worksheet for details.	

Operational Impacts: No If yes, refer to Operating Impacts Worksheet for details.

Associated Operating Business Case: N/A

CAPITAL PROJECT WORKSHEET

CAPITAL PROJECT WORKSHEET

PROJECT COMPONENT	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Land Determined Costs										
Concept Planning										
Detailed Planning and Design										
Site Servicing										
Strucure/Building Construction										
Landscaping										
Construction Management										
Commissioning and QA/QC										
Contingency										
Public Participation Activities										
Equipment										
Other	32,500	32,500	32,500	32,500	32,500	32,500	32,500	32,500	32,500	32,500
TOTAL	-	-	-	-	-	-	-	-	-	-

Comments: Monies unused will be carried over to complete larger projects.

OPERATING IMPACTS WORKSHEET

Timeframe: *N/A*

OPERATING IMPACTS	Department	2025	2026	2027
None known				
TOTAL		-	-	-

APPROVAL

Author:	John Potter	April 28, 2025
	Project Charter Developer (Print Name)	Date
Director:	Tim Saunders	
	Print Name	Date