

# CAPITAL PROJECT CHARTER

**Year:** 2026

**Charter Number:** ENGS-088

**Charter Name:** Firehall 4 Off-site Wastewater Servicing

**Lead Department:** Engineering Services

**Type:** Growth

**Explanation (RMR or Growth):** This project will provide sanitary sewer servicing of the City owned parcel which the Fire Hall #4 site is located in addition to the surrounding parcels owned by others.

**Asset Category:** Roads & Other Engineered Structures

**Scope Statement:** Scope will include engineering, design, and construction of sanitary sewer trunk across St. Albert Trail to service the Firehall #4 development and to provide a connection point for the future development basin west of St. Albert Trail. A portion of this project falls under Offsite Levy Sanitary Project 1, which would extend the trunk line across St. Albert Trail. The remaining scope includes extending a local sanitary line to the Firehall with capacity to accommodate additional City lands in the future.

## PROJECT CHARTER JUSTIFICATION

**Current State** - Firehall #4 was approved as a capital project (FIRE-005) at a location that does not have water, sanitary or stormwater servicing. Existing sanitary system infrastructure is located on the east side of St. Albert Trail within the Erin Ridge North neighbourhood. A deep 750mm trunk main currently extends to the west end of Ernest Boulevard. The growth areas that are located west of St. Albert Trail have servicing plans to connect to this existing sanitary system. However, the extension of these services was intended to be completed in conjunction with development. Firehall #4 is the first development in the area that requires these services.

The project budget for Firehall #4 does not include budget to extend all of these services to the development limits. The budget for Firehall #4 only included sufficient off-site funding to accommodate the extension of the water (permanent piped system). Temporary rural/private sanitary system (onsite storage and disposal) was contemplated at that time to service Firehall #4 and was considered in the project budget.

Piped storm servicing of the site is planned to be deferred in conjunction with future St. Albert Trail improvements and development of the surrounding lands by other developers. In the interim, this site is proposed to include on-site storage of stormwater and the Firehall # 4 project budget accounts for the estimated cost to build this.

**Issue** - Municipal sanitary servicing does not currently extend to the west side of St. Albert Trail to accommodate the new growth area where the proposed Firehall #4 is located. In addition, all available capacity downstream within the Erin Ridge and Oakmont has been allocated to either existing or planned developments. Rural/private sanitary servicing of the Firehall#4 site will cost

approximately \$112,000 in capital costs, about \$5,000 per year in operating costs (with sewage truck-hauled away for disposal) and would require an exemption from the City's Sanitary Sewer Bylaw and variance from the City's Engineering Standards. It would be preferable to extend sanitary services across St. Albert Trail to accommodate Firehall #4 at this time to enable this development to proceed with urban sanitary sewer (permanent piped) servicing. In addition, capacity needs to be added to the system to accommodate this additional development.

**Opportunities** - The Firehall #4 development will have the opportunity to meet current urban municipal standards for sanitary servicing. This project will also allow additional development on the west side of St. Albert Trail to connect to the municipal sanitary sewer system in the future. The design of the sanitary sewer extension will be sized for ultimate growth needs for this future growth area.

The estimated \$1.5M crossing of St. Albert Trail with a 750mm sanitary trunk is an Off-site Levy project (OSL Sanitary Project 1). As developer of the site, the City would front-end this construction and recover the majority of costs associated with this project over time.

The proposed service connection of the sanitary sewer extension from St. Albert Trail to Firehall #4 site boundary has an estimated cost of \$400k. This cost would not be recoverable through the off-site levy program.

The construction of both the large diameter sanitary trunk crossing and the extension to the Firehall #4 property requires additional funding in order to proceed.

Firehall #4 is not a large development and there are several options explored to add downstream capacity to the sanitary system to accommodate it. These options are not dependent on the ultimate northeast servicing project proceeding but are needed to service the fire hall site in accordance with current policies and processes.

Option 1: The first option is in-pipe storage on Everett Drive (developer front ended) which would add storage to the overall downstream system capacity.

Option 2: The second option is to release the requested capacity from the downstream sewer system by waterproofing sag manholes upstream of the lift station within Erin Ridge to remove the Infiltration & Inflow (I&I) entering the sewer system and thereby making use of the existing infrastructure. This approach has been applied in land development practice. The cost of waterproofing an existing sag manhole is approximately \$25,000–\$30,000 and based on the Fire Hall #4 requested flow rate, two sag manholes would be required. This option would be funded from the contingency budget for the project if Options 1 does not proceed. There is no O&M cost for this option.

Option 3: The third option is the interim use of the trunk sanitary main proposed as part of this project to be used as interim storage with the inclusion of an orifice plate. The installation of an orifice plate would be an additional cost of \$50k. This item would require regular inspection and cleaning by City Utilities (less than \$1,000 per year Operations and Maintenance (O&M) cost until downstream capacity is made available). The cost for an orifice plate would be funded from the contingency budget for the project and would not be recoverable through the off-site levy

program. This option is not recommended due to operational concerns over sediment accumulation and minimum flow expected of FH4 land. This option becomes feasible with more development flows beyond FH4.

Therefore, depending on the timing and availability of the options 1 and 2 presented, Fire Hall 4 would be expected to be serviced within the existing downstream capacity constraint.

This project would be delivered in conjunction with the already approved Firehall #4 project as an Owner's Directive through the Integrated Project Delivery Model.

Proceeding with this project in conjunction with Firehall #4 scope is anticipated to result in cost savings to the Fire Hall 4 project budget (\$200,000 reduction in Wastewater Off-site Levies as an offset and \$112,000 reduction in private sewer infrastructure). These cost reductions will increase the contingency budget for Fire Hall #4.

The majority of costs associated with this project will be recovered from the Off-site Levy Program:

- \$0.4M is the on-site sanitary sewer (includes wastewater capacity for development of additional lands owned by the City). This portion is non-offsite leviable and non-recoverable.
- \$0.2M is the share of the OSL project that is attributed to the site and non-recoverable.
- \$1.3M will be recovered over time from future developers (including the adjacent City-owned lands) through the Off-Site Levy program.

**Risks** - Without providing municipal sanitary servicing to the west side of St. Albert Trail, development (including Firehall #4) will have limited options to meet current municipal design standards.

This construction has a tight timeline in order to accommodate the planned occupancy of Firehall #4. (currently planned for late 2027)

## STRATEGIC PLAN & CORPORATE BUSINESS PLAN ALIGNMENT

**Council Strategic Priority:** N/A

**Initiatives:** N / A

**Operational Excellence Priority Area:** N / A

**Initiatives:** N / A

**Stakeholder Identification:** Capital Projects Office, Utilities, Fire Services, Engineering-AMLIIS

**Timeline:**

- Detailed Design Completion: Q2 2026
- Construction start: 2026
- Construction end: 2027-2028

**FINANCIAL INFORMATION**

<b>Investment Year</b>	<b>2026</b>	\$	1,900,000
	<b>2027</b>		-
	<b>2028</b>		-
	<b>2029</b>		-
	<b>2030</b>		-
	<b>2031</b>		-
	<b>2032</b>		-
	<b>2033</b>		-
	<b>2034</b>		-
	<b>2035</b>		-
	<b>Total</b>	<b>\$</b>	<b>1,900,000</b>
See Capital Project Worksheet for details.			

**Operational Impacts: Yes** If yes, refer to Operating Impacts Worksheet for details.

**Associated Operating Business Case &/or Capital Project Charters:**

- FIRE-005 – Firehall #4
- TRAN-024 - North Transit Center

## CAPITAL PROJECT WORKSHEET

Land Determined Costs										
Concept Planning										
Detailed Planning and Design	95,000									
Site Servicing										
Structure/Building Construction	1,425,000									
Landscaping										
Construction Management	190,000									
Commissioning and QA/QC										
Contingency	190,000									
Public Participation Activities										
Equipment										
<b>TOTAL</b>	<b>1,900,000</b>	-	-	-	-	-	-	-	-	-

**Comments:** \$1.3M is Offsite Levy recoverable, \$0.2M is off-site levy non-recoverable and \$0.4M is non-offsite levy and non-recoverable.

## OPERATING IMPACTS WORKSHEET

Timeframe: Ongoing

If Option # 3 downstream capacity choice is made, there will be an operational cost of \$1,000 per year to maintain the orifice plate until an ultimate downstream capacity is constructed. (this option is not recommended)

*Round amounts to the nearest \$100.00*

OPERATING IMPACTS (Description)	2027	2028	2029
Orifice Plate maintenance until decommissioned		1,000	1,000
(Option 3 only)			
<b>TOTAL</b>	-	<b>1,000</b>	<b>1,000</b>

**Supplementary detail/ maps of charter focus areas:**

None.