City of Greater Sudbury Operations Committee Presentation

Water / Wastewater Capital Projects Overview 2019

Presented By: Wendi Mannerow, P. Eng.

Water / Wastewater Engineer

Date: April 15, 2019



Introduction

Prioritization and Selection of the 2019 Water / Wastewater Capital projects







Guiding Principles

Council's Strategic Priorities: Sustainable Infrastructure, Quality of Life and Place & Growth and Development



The City of Greater Sudbury's Growth & Infrastructure Department is committed to providing its community with safe, reliable and environmentally responsible municipal water and wastewater services, through a sustainable, cost effective approach.



Information Sources & Planning Tools

Water / Wastewater Capital Budget includes facilities, linear and strategic funding:

- ► Regulatory Requirements
- ▶ Drinking Water Quality Management System Risk Assessment
- ▶ WWW Master Plan
- ► WWW Asset Management Plan
- ► Operational Priorities & Condition Assessments
- ► Coordination with internal & external stakeholders (ie. roads project planning, cost sharing proposals)



Prioritization

Projects are prioritized based on several risk based parameters, including:

- Regulatory Compliance
- ► Health & Safety
- Operational Risk Impact
- ► Master Plan / Asset Management Plan Compatibility
- Cost Reduction Potential
- ► CGS Strategic Alignment
- Coordination with and impact on Internal / External Stakeholders
- Project Feasibility



Wastewater Treatment Facility Capital Projects

- ► Sudbury Wastewater Treatment Plant Upgrades
- ► Levesque Lift Station Upgrades
- ► Nickel Lift Station & Forcemain Upgrades
- ▶ St. Charles Lift Station & Forcemain Replacement





Water Treatment Facility Capital Projects

- ► Wanapitei Water Treatment Plant Upgrades
- ► Valley Wells Buildings Upgrades
- ▶ Well Process Upgrades
- ► Garson Wells Upgrades







Water / Wastewater Challenges: Aging Linear Infrastructure



Larch Street Watermain Break December 25, 2018





Water & Wastewater Linear Capital Projects

Coordination with Major Roads Projects

- ► MR35
- ► Maley Drive (Barrydowne to Falconbridge)
- ▶ Dean Avenue (Lorne to Landsend) & Jane Street (Dean to Logan)
- ► St. Brendan Street (Homewood to Marion) & St. Nicholas Street (road repairs)
- ► O'Neil Drive East, Garson (Penman to Margaret South)

Water & Sewer with Bridges / Culverts

- ► Junction Creek Bridge at Douglas & Brady
- ► Allan Street Bridge (Coniston)



Water & Wastewater Linear

Water & Sewer Condition Based Priorities (includes roadwork as required)

- ► Tudor Court (Windsor to end)
- ► Fairburn Street (Barrydowne to East End)
- ► Ash Street, Lively (Maple to South End)
- ► Henry Street, Garson (MacDougall to East end)



Future Water & Wastewater Linear

Coordination with Major Roads Projects

- ► Barry Downe Road (Kingsway to Westmount)
- ► Lorne Street (Power to Elm)

Water & Sewer with Bridges / Culverts

► Vermilion River Bridge



Future Water & Wastewater Linear

W/WW Master Plan Recommendations

- ► Lively Sanitary Sewer Upgrades, Phase II
- ► Wanapitei Alternate Trunk Watermain

Cost Sharing Policy

► Coniston Industrial Park Watermain



Future Water & Wastewater Linear

Water & Sewer Condition Based Priorities

- ► Gatchell Outfall Sewer

 (at Junction Creek & Kelly Lake Road)
- ► MR24 Lively Trunk Watermain Rehabilitation (watermain adjacent to road)
- ► MR80 Trunk Watermain Valve Replacement



Thank You!

