

# 2018 Year-end & 2019 Plans Capital Program Status City of Greater Sudbury

Finance & Administration Committee  
April 2019

# Overview

- Asset Management and Capital Budget Policy
- Prioritization
- Change Learnings
- 2018 Capital Project Investments and 2019 Plans
  - Roads Infrastructure
  - Linear Infrastructure
  - Water/Wastewater Plants
  - Facilities and Buildings
  - Vehicles
  - Equipment
  - Land Improvements

# Asset Management and Capital Budget Policy

- Best possible long term decision making
- Ensure acceptable levels of service over the long term
- Enterprise – wide approach
- Single prioritization tool
- Better project reporting, monitoring and input for future decisions

# Prioritization

- Operational Risk Impact (probability x consequence of failure)
- Master Plan / Asset Management Plan Compatibility
- Regulatory Compliance
- Health & Safety
- Cost Reduction Potential
- CGS Strategic Alignment
- Coordination required
- Project Feasibility

Project Name	PROJECT DESCRIPTION/SCOPE						
Description/Scope	<ul style="list-style-type: none"> <li>What will this project accomplish? Clearly identify project objectives and project limitations including items that are out of scope and will not be accomplished.</li> <li>Identify the stakeholders that will be affected by this project.</li> <li>Give adequate details on the project to assist the committee in their review of the scoring.</li> </ul>						
Year	2019	2020	2021	2022	2023	Beyond	Total
Cost							\$0
Criteria	Result	Score	Max				
Strategic Priority	Strategic Priority: Council will provide direction of strategic service areas that they would like focus placed.	0	3				
Strategic Plan	No Link to Strategic Plan	0	3				
Project Integration	Directly named in Council Strategic Plan Score 3 Moderately linked to Council Strategic Plan Score 2 Indirect Link to Council Strategic Plan Score 1	0	1				
Shared Vision	This is a City exclusive project Score 0	0	1				
Qualitative ROI	Increase in quality of life, perception, population health or pride Score 1	1	1				
Strategic Priority Summary		1	9				

# Change Learnings

- New tools need to be calibrated
- Project management standards and process
- Need visibility of projects in the 5-10 year horizon
- Discussions about how to measure and communicate our progress
- We're transitioning and managing an ever increasing capital program



# Growth and Infrastructure Capital

- 2018 Achievements and Investments
- 2019 Priority Project Needs
- Challenges and Opportunities

# Growth and Infrastructure Capital

## Challenges and Opportunities

- Early Tenders – numerous “design only” projects for 2019
- Project Communications – Status Updates and Use of Web Interface (RATR, “Over to You”)
- Available Resources – Project Engineer and Project Managers

# 2018 Road Program

Spend - \$50M

Maley Drive	Road expansion; Construction in progress; Improve traffic congestion & asset condition
MR 35	Road widening; Design & construction in progress; Improve traffic congestion
Sidewalks, Pedestrian Crossings & Bike Lanes	Design & construction in progress; Improve asset condition; Expand active transportation & safety
Spreader Laid Patches	Construction complete; Improve asset condition
Surface Treatment	Construction complete; Improve asset condition
Pavement Rehabilitation	Construction complete; Improve asset condition

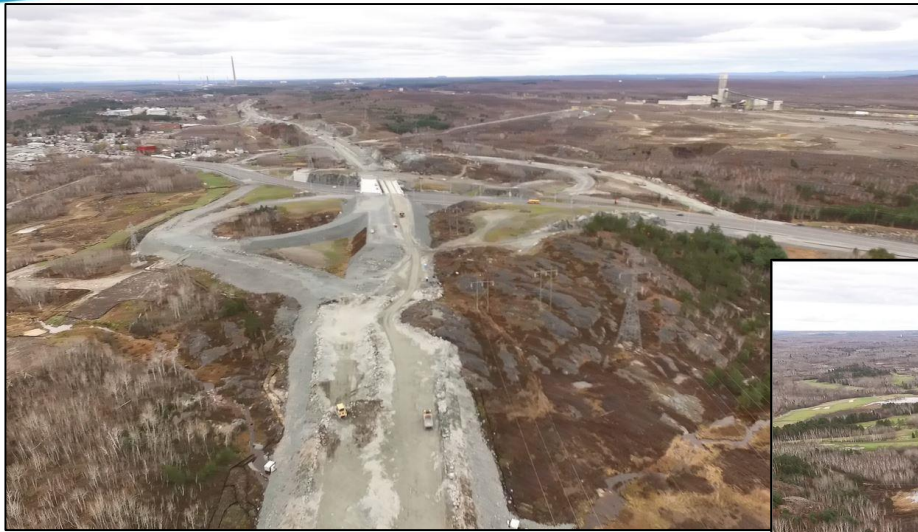


# 2018 Roads Program

## Achievements

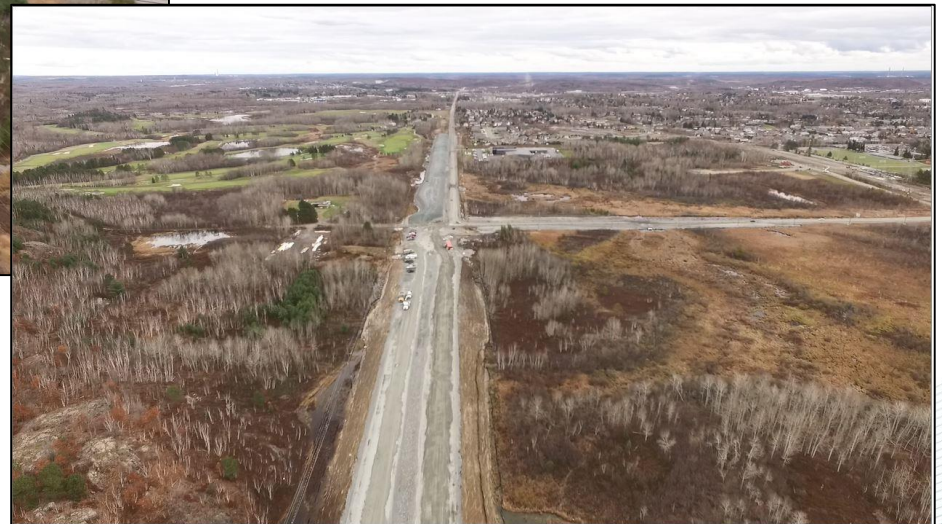
• Roads (Reconstruct, Rehab, Resurface)	25 lane km
• Surface treatment	22 lane km
• Crack sealing	71 km of cracks
• Bridge reconstruction	4
• Culverts	11
• Sidewalks, trails & bike lanes	6.4 km
• Pedestrian crosswalks	4
• Storm Sewers	909 metres

# Maley Drive



Looking West

Looking East



Improve traffic congestion & economic development

# 2018 Bridge & Drainage Program

## **BRIDGE & CULVERT PROGRAM - 2018 Spend - \$5.3M**

Bowlands Bay Road	Construction in progress; Improve asset condition
William Avenue	Construction in progress; Improve asset condition
Various culverts	Construction complete; Improve asset condition

## **DRAINAGE - 2018 Spend - \$4.6M**

Countryside Stormwater Improvements	Construction in progress; Economic Development
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# Bridge & Drainage Program



**Countryside Stormwater Management**  
- Economic development

**Culvert Replacement**  
- Improve asset condition



# 2018 W/WW Linear Program

Spend - \$13.3M

Watermain Lining	Rehabilitation; Construction in progress; Improve asset condition
Sanitary Lining	Rehabilitation; Construction in progress; Improve asset condition
Leslie Street	W/M replacement; Sewer repair; Road reconstruction; Construction in progress; Improve asset condition & alignment with W/WW
Avalon Road	W/M replacement; Sewer repair; Road reconstruction; Construction in progress; Improve asset condition & alignment with W/WW
Tarneaud Street	W/M replacement; Sewer repair; Road reconstruction; Construction in progress; Improve asset condition & alignment with W/WW
Jacob Street	W/M & sewer replacement; Sewer ; Road reconstruction; Construction in progress; Economic development, improve asset condition & alignment with W/WW
Barry Downe Road Valve Chamber	Install water valve; Construction in progress; Economic development & improve water system serviceability



# W/WW Linear Program

## Achievements

### **WATER**

- Watermains 3,915 m
- Watermain lining 2,311 m

### **WASTEWATER**

- Sanitary Sewers 3,267 m
- Sanitary Sewer lining 5,532 m

# W/WW with Roads



## Leslie Street

- Improve asset conditions



## Tarneaud Street

- Improve asset conditions



# Water / Wastewater Challenges:

## Aging Linear Infrastructure



Larch Street Watermain Break  
December 25, 2018



# 2018 W/WW Facilities Program

Spend - \$14.3M

Copper Cliff Forcemain	Forcemain installation; Construction in progress; expand system capacity
Nickel Lift Station	Rehabilitation; Construction in progress; improve asset condition & expand capacity
Chelmsford WWTP	Upgrades; Construction in progress; improve asset condition
Water Wells	Inspection & rehabilitation; Construction in progress; improve asset condition
Generator Upgrades	Upgrades; Construction in progress; improve asset condition

# 2018 W/WW Facilities Program

## Achievements

### **WATER**

- Water Infrastructure 3 Booster Stations
- WTP 1 Backup Generator
- Well Facilities 12 Backup Generators

### **WASTEWATER**

- Wastewater Infrastructure 1 Lift Stations  
31 Backup Generators
- WWTP upgrades Chelmsford WWTP  
7 Backup Generators



# Nickel Lift Station & Forcemain Upgrades



**Sanitary System Expansion & Improvement**

# Roads Infrastructure

## 2019 Capital Project Prioritization

- CGS Strategic Alignment (Sustainable Infrastructure, Growth and Development)
- Transportation Master Plan
- Coordination with Internal and External Stakeholders (i.e. Water/Wastewater, cost sharing proposals)
- Roads Condition and Pavement Management Analysis
- Safety Improvements
- External Funding Opportunities



# Roads Infrastructure

## 2019 Major Roads Projects

- MR 35 – road, W/WW asset renewal & improve traffic congestion
  - Total Project Budget \$37.5 Million
  - 2019 expenditure of approximately \$15 Million
- Bridges & Culverts Replacement & Rehabilitation – asset renewal
  - 2019 expenditure of approximately \$15.0 million on 6 bridges
- Lorne St / MR55 – roads and water/wastewater asset renewal
  - Preliminary project estimate - \$40 Million
  - Current approved project budget \$9.6 Million
  - Design complete in 2020
- Whitson Paquette Drain Project - Improve existing drainage and allow development to proceed
  - Total Project Budget - \$7 Million
  - Construction commences in 2019 (2020 completion)
- Arterial/Collector Roads Rehabilitation & Resurfacing
  - Total Project Budget - \$12.2 Million
  - Asset renewal
  - Program includes carry over projects from 2018.

# Water/Wastewater Infrastructure

## 2019 Capital Project Prioritization

- CGS Strategic Alignment (Sustainable Infrastructure, Growth and Development)
- WWW Master Plan and Asset Management Plan
- Regulatory Requirements
- Health and Safety
- Operational Priorities and Risk Impact
- Coordination with Internal and External Stakeholders (i.e. Water/Wastewater, cost sharing proposals)
- Safety Improvements
- External Funding Opportunities
- Cost Reduction Potential

# W/WW Linear Infrastructure

## 2019 Major W/WW Linear Projects

- Gatchell Outfall Sewer - Project Cost \$8.0 Million
  - Condition based replacement
  - Construction commence in 2020
- Coniston Industrial Park – Project Cost \$2 Million
  - Cost sharing opportunity
  - Design complete and shovel ready in 2019
- Barry Downe Westmount – Project Cost \$1.5 Million
  - Condition based asset renewal coordinate with roads projects
  - Design completion in 2019
- Maley Drive Watermain - Project Cost \$2.8 Million
  - Condition based replacement
  - Construction in 2019



# W/WW Facilities

## 2019 Major W/WW Facilities Projects

- St. Charles Lift Station - Project Cost \$12.5 Million
  - New lift station and new forcemain with connection to rock tunnel
  - Design complete in 2019, construction 2019 to 2021
- Sudbury WWTP (Ph3) – Project Cost \$6.2 Million
  - Installation of standby power will shave energy peaks & reduce costs.
  - Parking lot rehabilitation
  - Design completion in 2019, construction 2020.
- Walden WWTP – Project Cost \$3.8 Million
  - Decommission of Lively WWTP, expansion to Walden Plant and improvements to effluent
  - Environmental Assessment being finalized for expansion.
- Well Buildings Upgrades – Project Cost \$2.6 Million
  - Separate fluoridation system from electrical system and structural improvements
  - Design in progress, Construction commence in 2019, complete in 2020

# Facilities and Buildings

## 2018 Capital Project Investments

- Building Condition Assessments (BCA) to approximately 70 facilities
- Various Leisure and Citizen Service Facilities
  - Capreol Library & Citizen Service Centre
  - Garson Arena Repairs (roof, ext. wall, HVAC)
- Pioneer Manor Building Upgrades / Repairs
  - Completed, on budget



# Facilities and Buildings





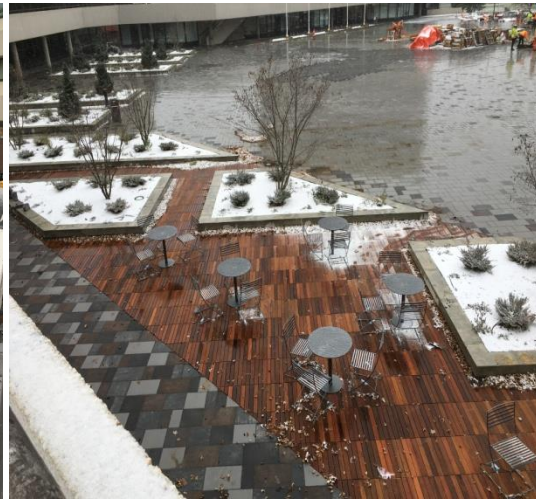
# Facilities and Buildings

## 2018 Capital Project Investments

- Tom Davies Courtyard



Courtyard facing North  
at patio Oct 2018



Courtyard facing South  
at patio Nov 2018



Courtyard facing West  
new stage Nov 2018

# Facilities and Buildings

## 2019 Capital Project Plans

- Tom Davies Square Elevator





# Facilities and Buildings

## 2019 Capital Project Plans

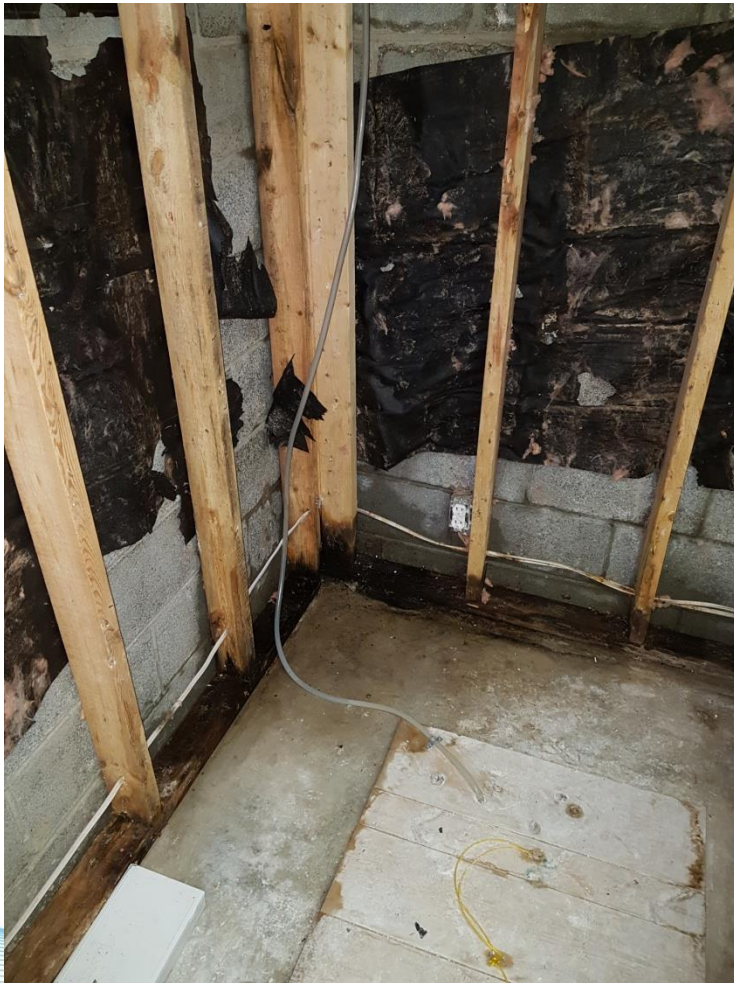
### Major Facilities and Buildings Projects

- Community Safety Station Revitalization Plan
- Public Works Depot Remediation \$5.0 Million
  - Design work continues. On budget.
- Building Automation System – Lorne St. \$465K
  - Remote facility monitoring
- Solar Panels \$455K
  - Crews to be mobilized in May. Projected to be under budget.
- Revolving Door – Main Entrance \$448K
  - Tender for construction on schedule and on budget.



# Facilities and Buildings

## 2019 Capital Project Plans – Anderson Farm





# Facilities and Buildings

## Building Condition Assessments





# Vehicles

## 2018 Capital Project Investments

- Ambulances (3)
- Emergency Response Vehicles (2)
- Training Vehicle
- Aerial Truck
- Tanker Trucks (2)
- Multi – Function Plows (4)
- Garbage Packers (2)
- Light and Medium Duty (13)
- Sidewalk Plows (2)
- Delivery of 3 new buses



# Vehicles

## 2019 Capital Project Plans

### Major Vehicle Projects

- Ladder Truck \$1.5 Million
  - Vehicle is in production to be delivered in November, on budget.
- Front Line Response Vehicles \$962K
  - Tender is in production – on time and on budget.
- Tanker Trucks \$301K
  - Vehicles are in production to be delivered in November, on budget.
- Single Axle Dump Truck \$235K
  - Purchase Order Issued, Delivery in August – on budget
- Heavy, Medium and Light Duty Trucks (\$1,130, \$350, \$280)
  - Snow Plows , MTs ordered, lighter duties preparing purchase and lease tenders

# Equipment Capital Project Investments

2018

- Power Stairs Chairs
- Auto-medication Cabinets
- Toughbooks
- Mobile Data Terminals (5)
- Auto Extrication Tools
- Nurse Call System

2019

- Bunker Gear Replacement
- Rigid Hull Inflatable Boat
- Various Parks Equipment



# IT and Digitization

## 2019 Capital Plans

- Telecom PBX Upgrade; to replace end of life system \$135k (2019)
- Metering Management Solution \$10k (2019)
- Customer Relationship Management System \$1.5 Million (2019)
- Land & Property Management System - Phase 1 \$334K

# Land Improvements

## 2018 Capital Project Investments

### LEISURE SERVICES

- Playground Revitalization
- Splash Pads
- Pickleball Courts



# Land Improvements

## 2018 Capital Project Investments

### CHILDREN & CITIZEN SERVICES

- Civic Cemetery Entrance Road Realignment





# Land Improvements 2019 Capital Project Plans

- Playground Revitalization



- Terry Fox Sports Complex Improvements





# Thank You

Questions?