

Engineering and Capital Works Department

2022 Annual Report

Engineering and Capital Works Department

Manage the County's capital replacement and major maintenance programs to ensure long term sustainability of the County's \$3.3B in infrastructure.

Departmental Structure (29 staff total):

- Administration – ECW (2 staff)
- Engineering Services – ENG (13 staff)
- Water & Wastewater Engineering – WWE (8 staff)
- Facilities Capital & Asset Management – FCA (6 staff)

GM Engineering & Capital Works
Tyson Haedrich

Administrative Coordinator
Sue Flaherty

Engineering Services

Manager
Engineering Services
Kris Franklin

Business Services Assistant
Michelle Baldin

Project Manager
Municipal Infrastructure
Danielle Fletcher

Project Manager
Municipal Infrastructure
Mark Long

Project Manager
Municipal Drains
John Van Rooy

Municipal Technologist
Jordan Higgins

Municipal Technologist
Mike Fleschhut

Municipal Technologist
Doug Reimer

Municipal Technologist
Owen Felker

Municipal Technologist
Austin Thorne

Transportation Engineering
Technologist
Judy Brown

Project Manager
Granular Conversion
Lucas Hunter

Engineering Services Student
(Mohawk Coop – 8 months)

Water & Wastewater Engineering

Manager
W&WW Engineering
Phil Wilson

Project Manager
W&WW Capital
Warren Wight

Project Manager
W&WW Infrastructure
Stephanie Nolet

W&WW Engineering Technologist
Shadi Damaj

W&WW Engineering Technologist
Jessica Davidson

SCADA Coordinator
Ben Howard

W&WW Engineering Technologist
Vacant

Project Manager
W&WW Capital
Under Recruitment

Facilities Capital & Asset Management

Manager
Facilities Capital & Asset Management
Jeff Oakes

Project Manager
Facilities Infrastructure
Ashley Schaeffer

Project Manager
Facilities Infrastructure
Jessica Ignaszak

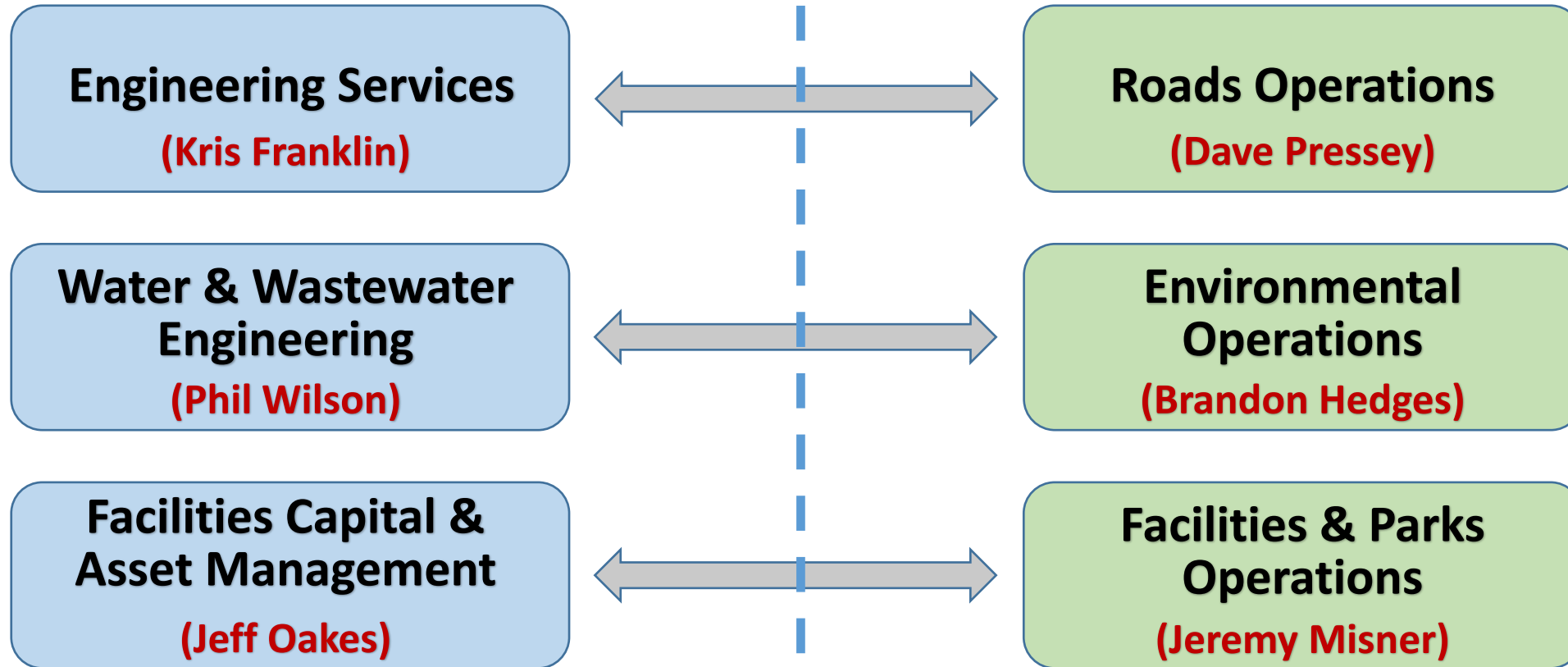
Facilities Technologist
Taylor Church-Lang

FCA Summer Student
(Mohawk Coop – 4 months)

Asset Management Analyst
Cindy King

(ECW) Plan/Construct

(PWO) Operate/Maintain



Engineering Services – Responsibilities

- Road Reconstruction Program
- Hot Mix Resurfacing Program (500 km of paved rural/urban roads)
- Urban Paving Program (150 km of urban local roads)
- Surface Treatment (Tar and Chip) Program (860 km)
- Gravel Road Conversion Program (16 km remaining)
- Structures Program (267 bridges/culverts with 3+ metre span)
- Municipal Drains Program (84 municipal drains on ten year cycle)
- Development Related Infrastructure

Engineering Services – 2022 Highlights

- Caledonia Urban Paving
- Haldimand Road 20/Haldimand Road 54 Resurfacing
- Cayuga Cast Iron Watermain Replacement
- Subdivision Infrastructure Inspection and Approvals
- Pedestrian Crossover Program – Year 1
- Highway 54 Railway Bridge Removal
- Highway 3 (Jarvis) Connecting Link Grant Funding Application
- Broadband Municipal ROW Approvals (Metro Loop/Rogers)

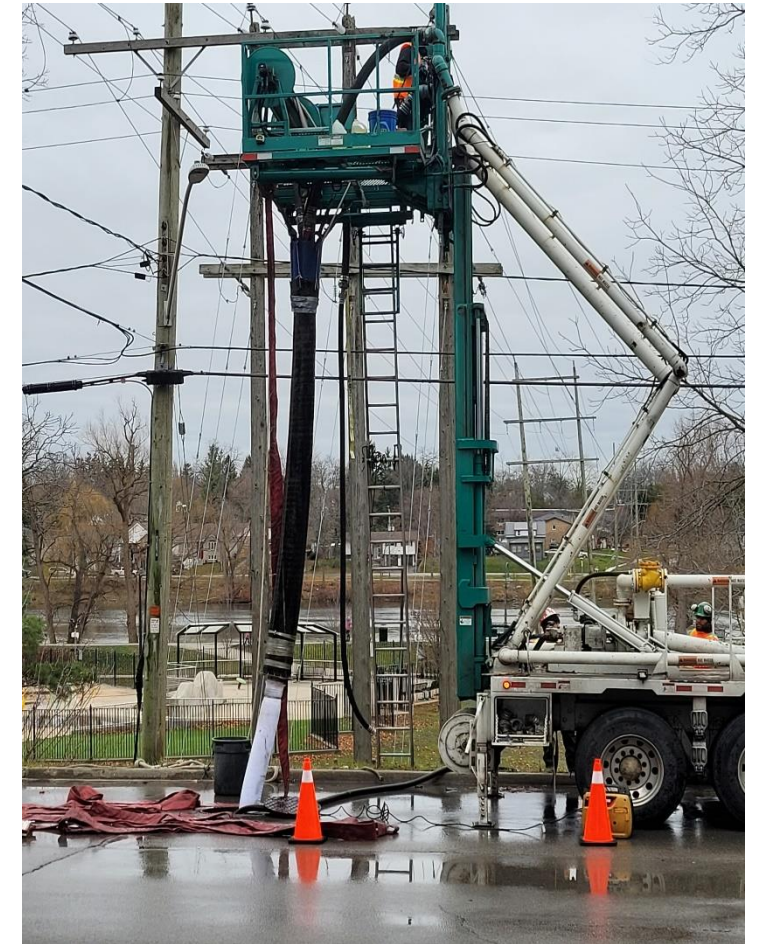














Engineering Services – 2023 Priorities

- Complete Granular Road Conversion
- Highway 54 Resurfacing – Caledonia to York
- Caledonia/Hagersville/Dunnville – Cast Iron Watermain Replacement
- Frank Marshall Business Park SWM Pond Expansion
- Pedestrian Crossover Program – Year 2 of 2
- Harrop Drain Reassessment
- Ward Specific Funding Program
- Design Criteria Review (Planning)

W&WW Engineering - Responsibilities

- Water Treatment Systems (2 Plants, 5 Standpipes, 3 Booster Stations)
- Wastewater Treatment Systems (4 Plants, 4 Lagoons, 21 Pumping Stations)
- SCADA Network
- Optimization Program (with Environmental Operations)
- Long Term Servicing Plans (with Planning)
- Liaison with Industry (with Environmental Operations)
- Regional Servicing Plans
- Technical Support to other County Divisions

W&WW Engineering – 2022 Highlights

- Dunnville Water Treatment Plant Upgrades
- Jarvis to Townsend Pumping Station Construction
- Grand River Assimilative Capacity Study (Caledonia WWTP)
- Norfolk/Six Nations Water Supply
- Nanticoke Wastewater Treatment Plant EA Addendum
- Servicing Strategy for North Caledonia Employment Lands
- Port Maitland (Innophos) Dedicated Pumps
- Optimization Program







W&WW Engineering – 2023 Priorities

- Norfolk Water Supply Agreement
- Nanticoke Water Treatment Plant Environmental Assessment
- Caledonia Wastewater Treatment Plant Environmental Assessment
- Nairne Street Grand River Crossing
- Jarvis Pumping Station Commissioning
- Hagersville/Dunnville Master Servicing Plans (Planning)
- Nanticoke Industrial Pumping Station Upgrades (Industry)
- Imperial Oil Raw Water Line Replacement (Industry)

FCA – Responsibilities

- Facilities Capital Program
 - Fire Halls
 - Roads Yards
 - Community Halls
 - Arenas
 - Recreation Centres
 - Libraries
- Asset Management Program
- Energy Management Program

FCA – 2022 Highlights

- Cayuga Administration Building Demolition
- Kohler Fleet Facility – Addition and Renovations
- Caledonia EMS Station Design
- Hagersville Library and Active Living Centre – Architect Selection
- Townsend Washroom Replacement
- Building Condition Assessments (BCA's)
- Asset Management Plan – Council Approval
- Ten Year Capital Budget Buildout







FCA – 2023 Priorities

- Caledonia EMS Station – Construction
- Kohler Fleet Facility – Addition and Renovations
- Hagersville Library and Active Living Centre – Design and Tender
- Dunnville Library Elevator Refurbishment
- Asset Management – Level of Service Plan
- Energy Conservation and Demand Management Plan
- Priority Work identified through Building Condition Assessments

Engineering & Capital Works – 2023 Themes

- Staff Recruitment
- Contract Pricing
- Communications
- Strategic/Sustainable Infrastructure Planning
- Staff Development and Mentorship
- Succession Planning

Thank You