



Public Works

2021 YEAR IN REVIEW



Our Mission

Public Works provides essential services in a professional, co-operative, safe, efficient, and cost-effective manner.

Through our dedicated employees, Public Works Services strives to plan, design, build, maintain, and operate public infrastructure to enhance the quality of life for all residents, businesses, and visitors to provide an exceptional small-town experience in a big way.

Engineering Services



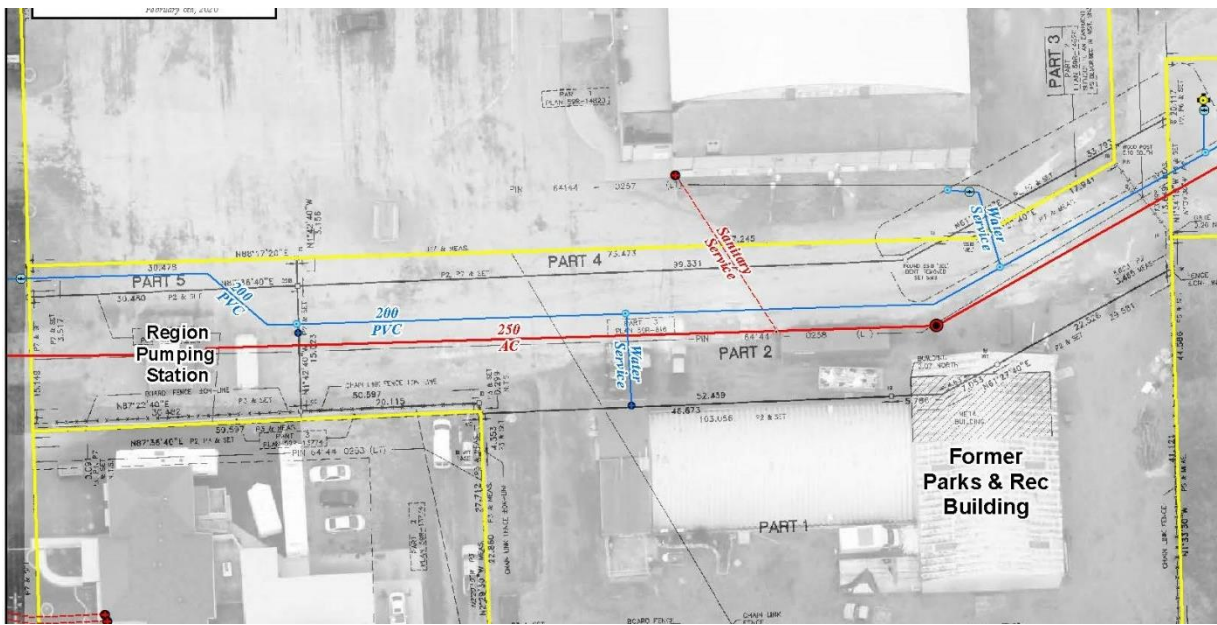
DEVELOPMENT AND
ASSETS



CAPITAL PROJECTS



FACILITIES
MAINTENANCE



Development & Assets



Development & Assets

2021 Achievements

- Speed Radar Signs Implemented
- Annual Infrastructure Assessments Completed for Sidewalks & Street Lights
- 133 Mapping Requests (12 to date in 2022)
- 120 Municipal Consent Permits Issued (43 to date in 2022)
- 39 Street Lights Repaired (4 to date in 2022)
- 17 Site Plan/Subdivision Design Reviews (11 to date in 2022)
- 70 Lot Grading Plan Reviews (8 to date in 2022)
- 79 Pre-Consultation Applications Reviewed (21 to date in 2022)
- 46 Committee of Adjustment Applications Reviewed (12 to date in 2022)

Development & Assets

2022 Initiatives



Online Asset
Mapping



Launch of New
Permit Software



Engineering
Design Standards



New Regulatory
Traffic Sign
Database and
Condition
Assessments



Streamlining
Development
Review



Capital Projects 2021 Achievements & Projects Underway in 2022

Public Works has \$20.91 M of Capital Projects

102 Different Capital Projects

The Largest Capital Budget in Port Colborne's History!

2021 Capital Works Review



PORT COLBORNE



Summary of Completed Projects

Annual Road Resurfacing Program

Annual Asphalt Patch Contract

Annual Sidewalk Repair/Clarence Street Sidewalk Construction

Multi-Use Trail Repairs

Bulk Water Station Construction


Marina Shoreline Protection

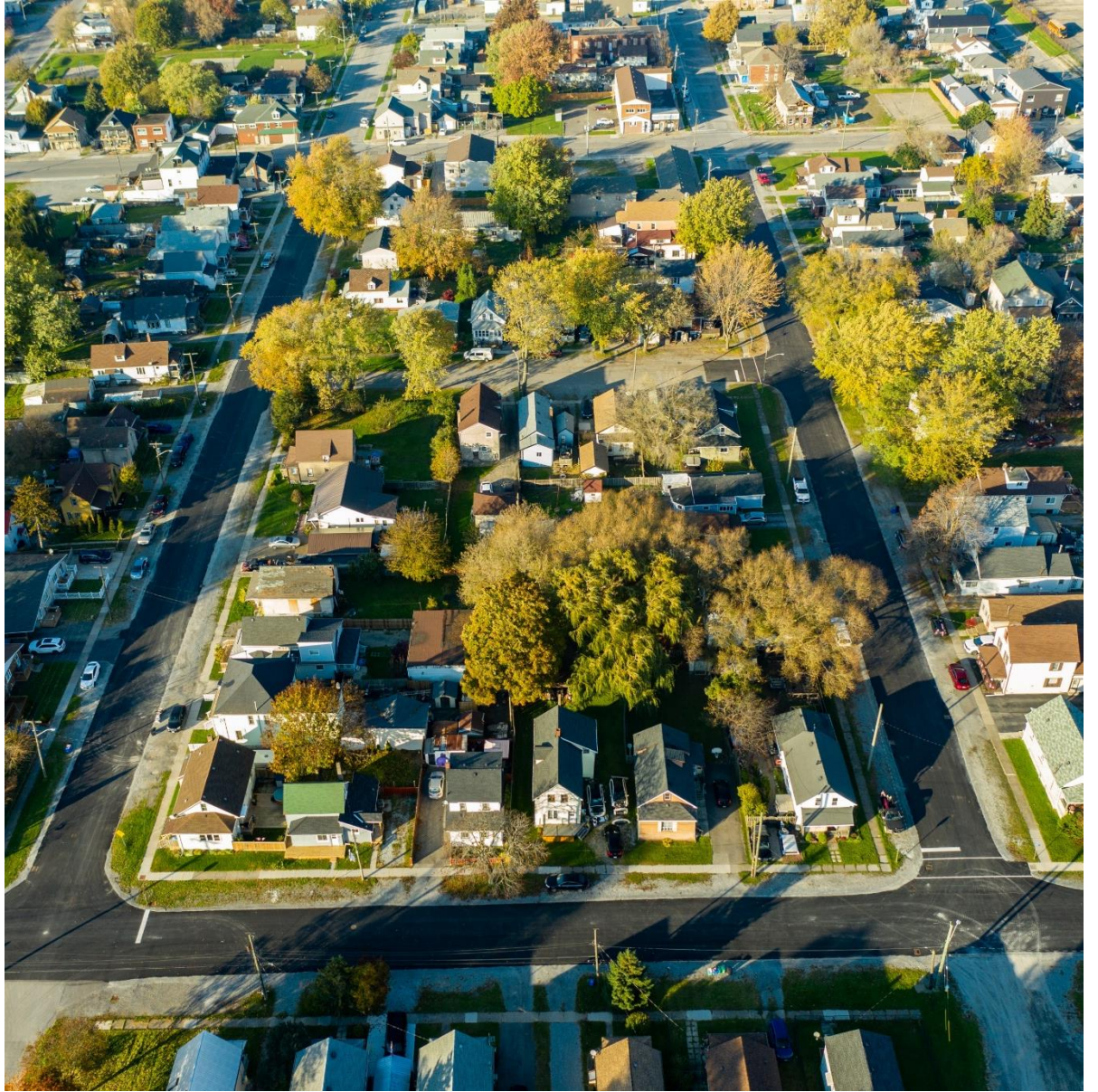
Steele Street Rail Crossing

Annual Road Resurfacing Program

- ❖ Construction Estimate: \$658,000
- ❖ Construction Actual: \$655,000
- ❖ 4.2km of asphalt resurfaced between 16 roads
- ❖ 5250 tons of asphalt used



 2021 City Wide Resurfacing List		
PORT COLBORNE		
ROAD NAME	INTERSECTION 'A'	INTERSECTION 'B'
Highland Avenue	Oakwood Street	Fielden Avenue
Omer Ave	Fielden Ave	Elm Street
Rose Avenue	Eagle Drive	Lakeshore Road West
Eagle Drive	Rose Avenue	Gaspere Drive
Gaspere Drive	Eagle Drive	Lakeshore Road West
Olga Drive	Lena Crescent	Cul De Sac
Second Avenue	Third Avenue	Sheba Crescent
Foghorn Lane	Alexandra Street	Ash Street
Kent Street	Steele Street	Fielden Avenue
Vimy Road	Pinecrest Road	50m east of Humberstone Centennial Park Entrance
Sugarloaf Street	Scholfield Ave	Cul De Sac
Sherkston Road	Empire Road	Pleasant Beach Road
Rodney Street	Welland Ave	Davis Street
Fares Street	Rodney Street	Nickel Street
Mitchell Street	Rodney Street	Nickel Street
Canal Bank Road	South Limit	Amelia Street



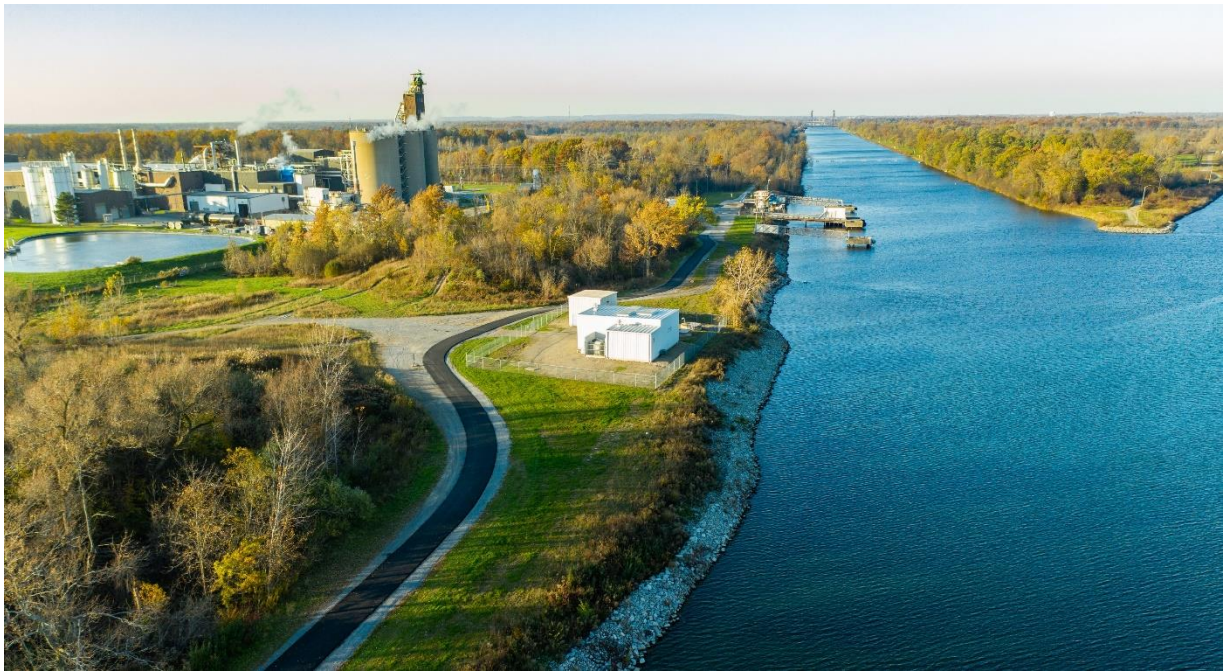
Multi-Use Trail Repairs

New Asphalt trails have been reconstructed across the City including:

- ❖ Sunset Park
- ❖ HH Knoll Park
- ❖ Helen Kinnear Park
- ❖ Welland Canal Trail

Total value of trail work completed is approx. \$370,000. Parks were all individually funded from separate accounts, all coming in below budget.





Steele Street Rail Crossing

Concrete modular “Omni-Panels” installed as shown provide a longer lasting crossing when compared to all other methods (asphalt, rubber inserts, timbers)



- ❖ Construction Budget: \$50,000
- ❖ Construction Actual: \$46,000

Elm Street Rail Crossing is expected to be completed in 2022

Asphalt Patch Contract

- ❖ Construction Estimate: \$110,000
- ❖ Construction Actual: \$80,000

These patches are used to resolve localized asphalt deterioration and trench reinstatements from underground utility installs. 129 asphalt spot repairs have been completed throughout the City in 2021.



Annual Sidewalk Repair

- ❖ Construction budget: \$150,000
- ❖ Construction Actual: \$156,000

90 Spot Repairs have been completed this year in addition to a new 500m section of sidewalk on Clarence Street, connecting the new phases of Westwood Estates to the rest of the City



Elm Street Bulk Water Station

- ❖ Construction Budget: \$170,000
- ❖ Construction Actual: \$100,000

This station replaced the unit previously attached to the animal shelter that had reached the end of its service life.



Marina Shoreline Restoration

- ❖ Construction Budget: N/A – Emergency Repair
- ❖ Construction Actual: \$48,000

Increased frequency and intensity of severe weather events caused the embankment along Marina Drive to erode.

Emergency repairs were required to ensure the safety of residents and maintain access to Marina facilities.

Staff are currently seeking funding to restore additional sections around the perimeter of the lagoon.



Construction Projects Underway in 2022

- ❖ Erie Street Watermain Construction
- ❖ Marina Fuel Tank Site
- ❖ 2022 Road Resurfacing
- ❖ 2022 Sidewalk Construction
- ❖ 2022 Roadside Ditching Program
- ❖ Implement new Crack Sealing Program
- ❖ Chippawa/Dolphin intersection design
- ❖ Line Painting Contract
- ❖ Friendship Trail Crossing Standards

Design Projects Underway in 2022

- ❖ Neff Street Outlet Rehabilitation
- ❖ Infrastructure Needs Study / Asset Management Plan
- ❖ Cruise Ship – Functional design for municipal servicing
- ❖ Recreational Trail From Clarence Street Bridge to Nickel Beach



Erie Street Watermain Construction

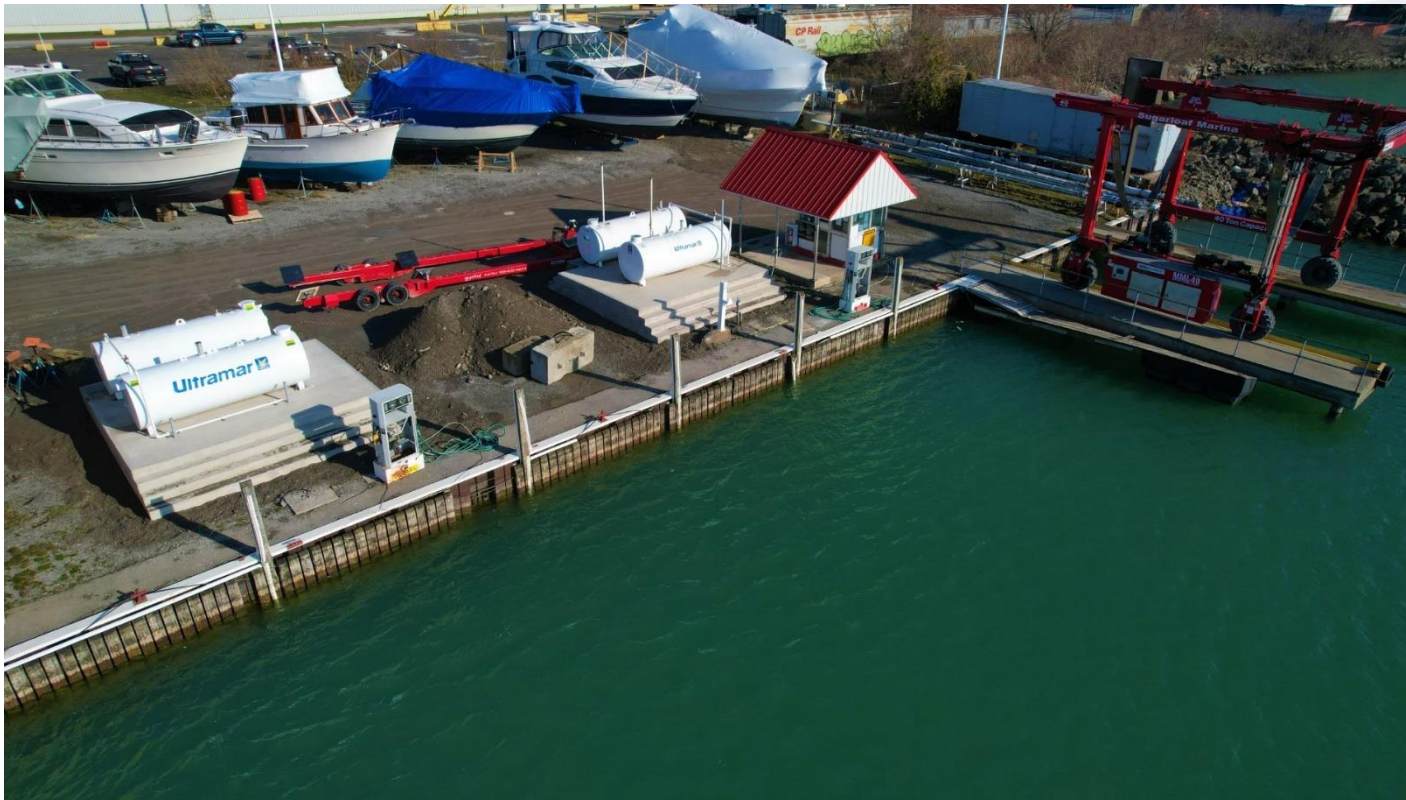
- ❖ Construction Budget: \$1,800,000
- ❖ Construction Actual: In progress, tracking to be under budget

Approx. 740m of watermain is to be replaced on Erie Street, from Neff Street to Killaly Street East. Tentative construction complete date is late Spring/Early Summer



Marina Fuel Pad Construction

- ❖ Construction Budget: \$110,000
- ❖ Construction Actual: Approx. \$85,000 – Contract nearing completion



Severe weather events risked causing damage to the fuel tanks and pumps at the Marina. New elevated pads have been constructed to raise the equipment above expected lake levels during severe storms.

2022 Road Resurfacing Contract

- ❖ Construction Budget: \$1,200,000
- ❖ Construction Actual: In Progress



Contracts To Be Issued

2022 Asphalt Patch Contract

- Construction Budget - \$100,000
- Maintenance Contracts such as this are completed throughout the year as reinstatement requests are received

2022 Sidewalk and Curb Repair Contract

- Construction Budget - \$150,000
- Maintenance Contracts such as this are completed throughout the year as reinstatement requests are received

2022 Crack Sealing Program

- Construction Budget - \$100,000
- The 2021-2022 winter season proved particularly harsh on our roads. Crack sealing will prevent water from penetrating the sub-base and undergoing a freeze/thaw cycle which results in potholes/deterioration.



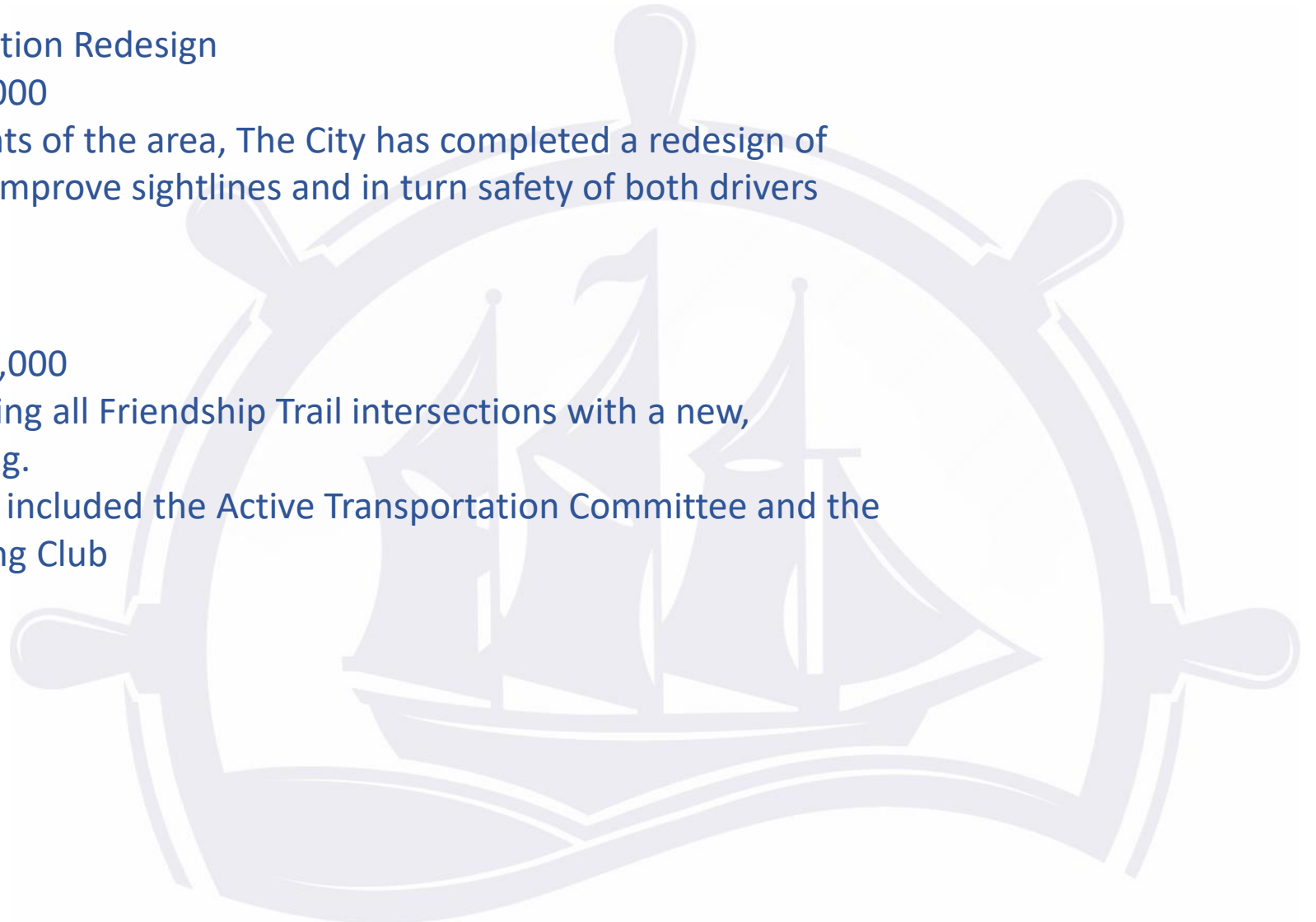
Contracts To Be Issued

Chippawa/Dolphin/Berkley Intersection Redesign

- Construction Budget - \$50,000
- In consultation with residents of the area, The City has completed a redesign of the intersection which will improve sightlines and in turn safety of both drivers and pedestrians

Friendship Trail Crossing Standards

- Construction Budget - \$100,000
- The City will be reconstructing all Friendship Trail intersections with a new, consistent, standard crossing.
- Consultation for this design included the Active Transportation Committee and the Niagara Freewheelers Cycling Club



Projects in Design

Infrastructure Needs Study / Asset Management Plan

- Project Budget: \$750,000
- An INS/AMP Report provides the City with information to prioritize future construction projects through condition ratings of all infrastructure.

Municipal Servicing for Cruise Ship Landing

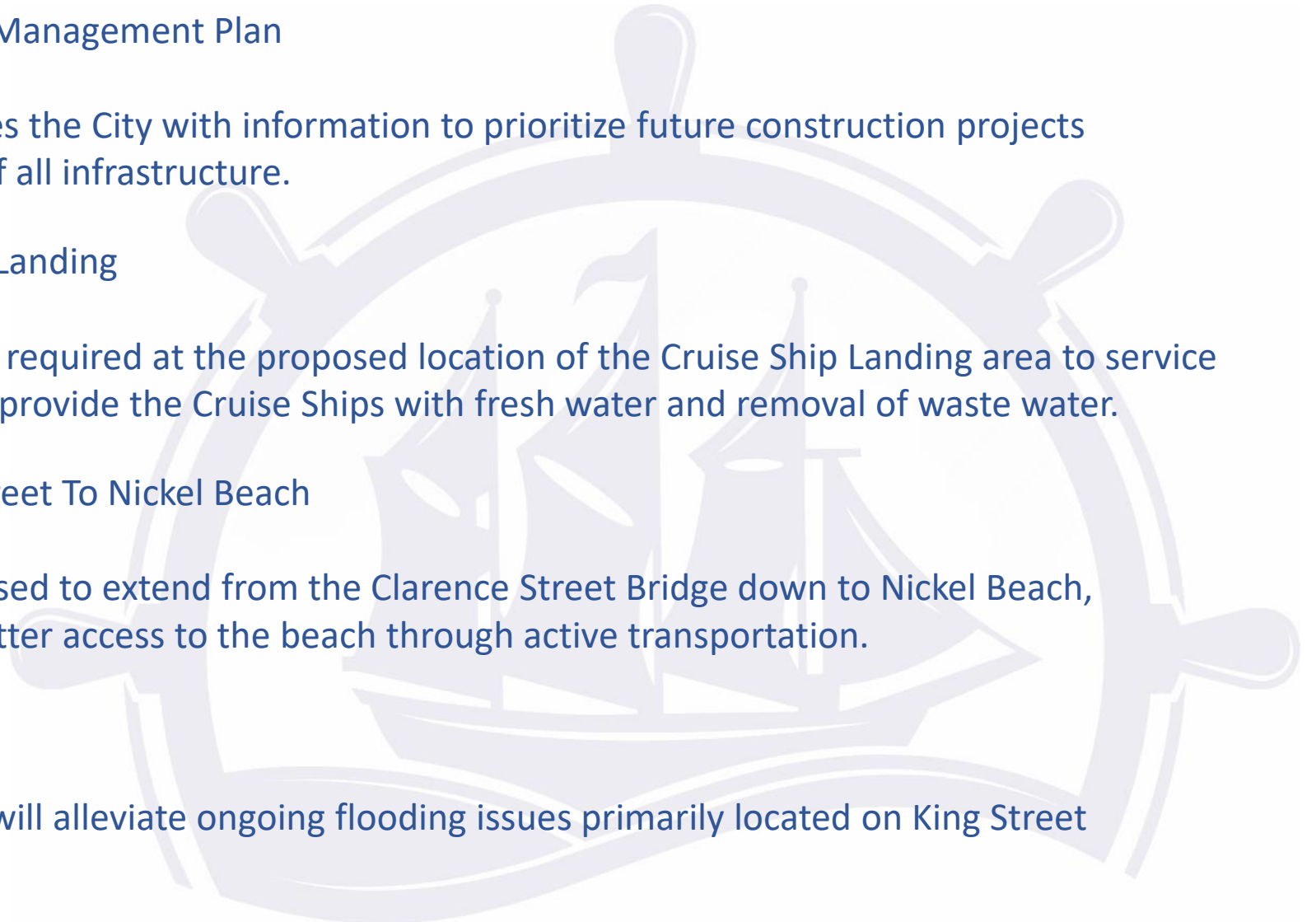
- Project Budget: TBD
- Infrastructure upgrades are required at the proposed location of the Cruise Ship Landing area to service the new building as well as provide the Cruise Ships with fresh water and removal of waste water.

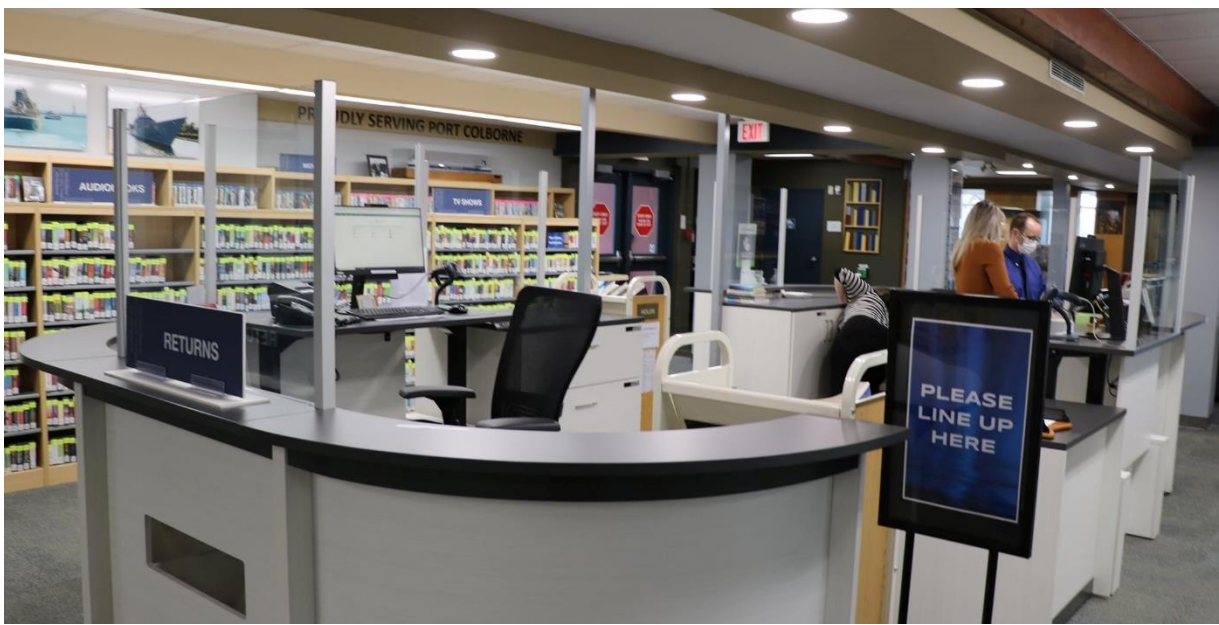
Recreational Trail From Clarence Street To Nickel Beach

- Project Budget: TBD
- A recreational trail is proposed to extend from the Clarence Street Bridge down to Nickel Beach, providing residents with better access to the beach through active transportation.

Neff Street Outlet Rehabilitation

- Project Budget: TBD
- The redesign of this outlet will alleviate ongoing flooding issues primarily located on King Street





Facilities Maintenance



Facilities Maintenance 2021 Accomplishments

- Facility Renovations
- HVAC Systems Replacements
- Cultural Block Projects
- Building Condition Assessments
- Roof Replacements
- 11 King Street Demolition →
- Vale Health & Wellness Centre Sign
- Automation of PCOC Car Wash



Facilities Maintenance 2022 Initiatives

- City Hall Elevator Modernization
- HVAC and Air Quality Upgrades
- City Hall Service Desk Renovation →
- VHWC Roof and Gutter Remediation
- EV Charging Station Installations
- Office Space and Washroom Renovations
- BCA/FCI Assessments (Phase 2)
- Roof Replacements
- Electrical Upgrade Projects
- Fire System Replacements



Roads and Parks Operations



ROADS



PARKS



FLEET & STORES



LET'S 
Re-connect
PORT COLBORNE

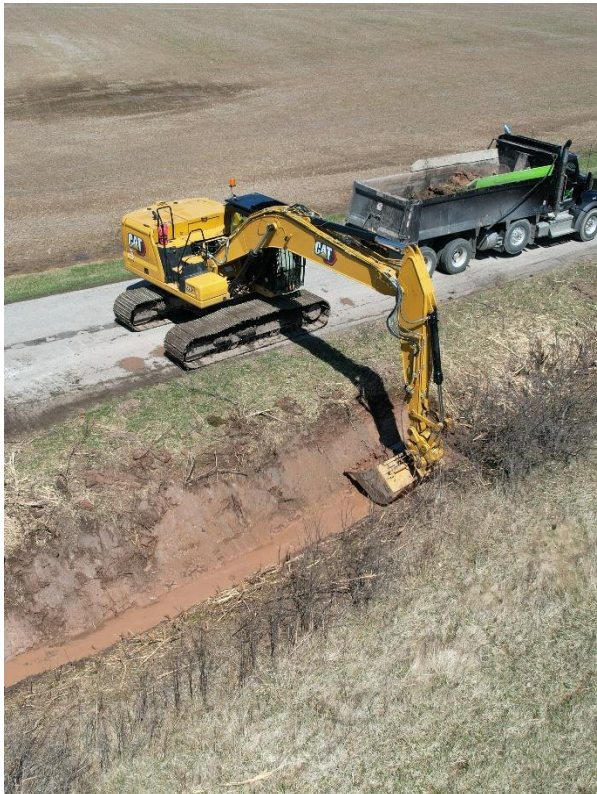
Roads



WHAT'S IN THE WORKS
WITH PUBLIC WORKS



IAN ROBERTS



Road Services

2021 Achievements

- 690 Service Requests
- Roadside Ditching Program (10km Ditching, 2km Brushing)
- Roadside Shouldering Program (13,000 SM)
- Street Sweeping (500 Lane Kilometers Maintained)
- Downtown Sidewalk Cleaning Program
- Forestry Services (196 Work Orders)
- Road Grading Program (28km)
- Grass Mowing Program (Rough Cut - 1,700 Swath Kilometers, Fine Cut - 70 Acres)
- Downtown Snow Removal Operation
- Asphalt Patching, Sod Repair, Guiderail Repair, Line Painting, Traffic Signs, Sidewalk Maintenance



Road Services 2022 Initiatives

- Service Club Signs
- Rosemount Fence Install
- Annual Programs Have Started
- Regional/Municipal Collaborations
- Events are back!
- Winter Control Plan Review
- Educational Campaigns - Our First Information Video





Parks

Park Services

2021 Achievements

- 129 Service Requests
- 154 Playground Inspections
- Parkland & Trail Grass Mowing (3,500 Acres Cut)
- Multi-use Trails Maintained (26km)
- Commemorative Program Installations (25 items)
- Tree Planting Program (30 planted)
- Flower Planting Program (7,000 planted)
- Lions Field Improvements
- Promenade Repairs
- Garden & Hanging Basket Maintenance, Municipal Waste Collection, Cemetery Improvements, Sports Field Maintenance, Public Washroom Maintenance, General Cleanliness of the Park & Trail Systems



Park Services 2022 Initiatives

- Tree Giveaway
- Lions Field Grant Application
- Commemorative Program
- Bee City
- Solar Lighting Trial
- Earth Bins
- Lock 8 Park Improvements - Design
- Educational Campaigns





Fleet and Stores

Fleet & Stores 2021 Achievements

- New Fleet Team
 - Supervisor & Two Mechanics
- Fleet Condition Ratings
- New AVL Provider
- Implemented Snowplow Operator & Defensive Driving Training
- Masks & Disinfectant Distributed
- New Purchases: Pictured to the Right ➡

Forklift for the
Operations Centre



Multi-Use Articulated
Tractor for the Road
Services Team



Excavator for the
Municipal Drain Team



Fleet & Stores 2022 Initiatives

Equipment Purchases:

- Two - 6" Trash Pumps (W/WW)
- Two - Mobile Column Lifts (Fleet)
- Electric Pallet Jack (Stores)
- Trailer Mounted Hot Box (Road Services)
- Cube Truck (W/WW)
- Haul-all Waste Truck (Park Services)
- Material Handler (Marina)
- Backhoe (Road Services)
- Street Sweeper (Road Services)
- Two – Dump Trucks (Road Services)
- Two - Equipment Trailers (Road Services & Municipal Drains)
- Multiple Passenger Vehicles for various Departments

Initiatives:

- Fleet Replacement Plan
 - Inventory Completed
 - Creating an Assessment Tool for End of Life
 - Interviewing Divisions for Short- and Long-Term Needs
- Fleet Software
- Public Facing Website
- Exploring Electric



Water/Wastewater



MUNICIPAL DRAINS



ENVIRONMENTAL
COMPLIANCE



WATER/WASTEWATER

Now working with a complete staff complement!



Municipal Drains

Municipal Drains 2021 Achievements

New Drainage Technician

Received new excavator

Full maintenance of two drains (5.8km)

Partial maintenance/nuisance removals on seven drains

Construction continued on Young Drain (370m)

Completed Michener Drain report

Billed two drains

Applied for construction grant

Municipal Drains 2022 Initiatives

Transition outlet/gate structure responsibility from Roads to W-WW

8 reports in progress

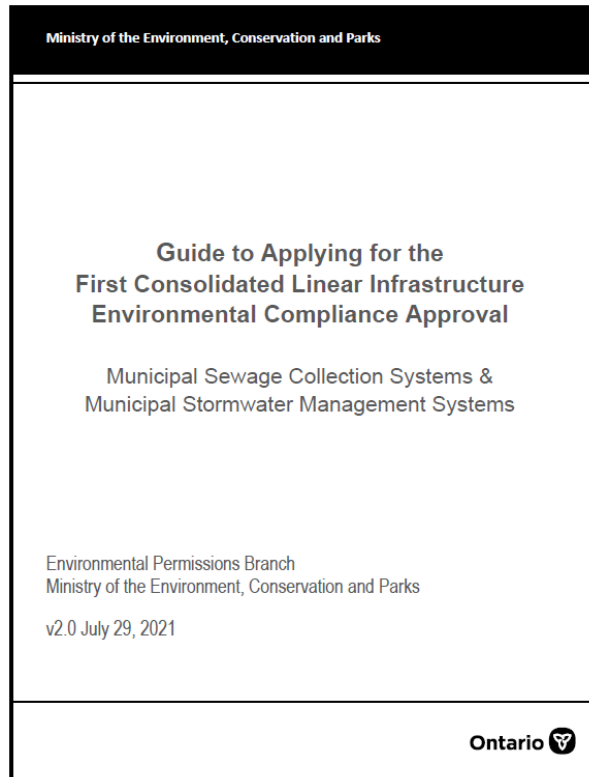
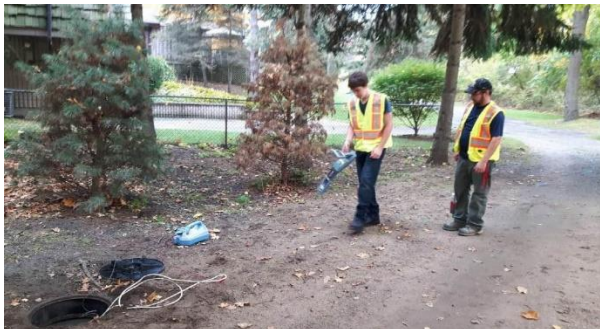
Complete Biederman Drain report, start construction

Full maintenance of: Marsh, Henry and Howie drains

Brushing of: Fred Pietz and John Pietz drains

Annual outlet maintenance

Creation of annual maintenance plans for all municipal drains



Environmental Compliance

Environmental Compliance

2021 Achievements

- All new staff (Environmental Compliance Supervisor, Climate Change Coordinator and Utilities Technician)
- Continued COVID response
- Internal and external DWQMS audits
- 100% rating on Ministry's drinking water system inspection
- 8 hazardous waste shipments
- 1,420 locates
- 6,100 monthly water meter reads
- 451 final reads
- Completed energy audits at VHWC and Fire Hall

Environmental Compliance

2022 Initiatives



Consolidated Linear Infrastructure Environmental Compliance Approval (CLI-ECA) applications



Direct-current fast charger funding opportunities



Re-accreditation of the DWQMS



Update Energy Conservation and Demand Management Plan



Water/ Wastewater

Water/Wastewater 2021 Achievements

- Five new staff (W-WW Supervisor, W-WW Crew Leader, W-WW Operator, 2 Operators-in-Training)
- Successful COVID strategies
- Lowest total water purchases ever
- Accounted for water increased for 4th straight year – water loss declined to 31%
- Completed 670 work orders
- Repaired 11 watermain breaks
- Responded to 19 water quality complaints
- Hydrant flushing and winterization
- Wastewater flows lowest in 4 years
- Refinement of urban stormwater boundary and municipal drains in the urban area
- Inspected 512 maintenance holes
- \$450K funding for Inflow & Infiltration projects

Water/Wastewater 2022 Initiatives

- Omer Area I&I studies/disconnects
- Johnston Street Pumping Station retrofits and Stormwater Pond maintenance
- Received Investing in Canada Infrastructure Program – Green Infrastructure Funding Stream funding to replace watermain on:
 - Davis Street (660m)
 - Berkley Avenue (450m)
 - Homewood Avenue (650m)
 - Sugarloaf Street (275m)
- To-date: 15 watermain breaks, 4 complaints
- Clarke Area
 - I&I Study - Regional funding - approved
 - Remediation – Federal funding – in progress
- Standby pumps ordered for Neff and emergency bypass pumping
- Creation of annual maintenance programs for the W and WW systems
- Inflow and infiltration public education campaign

The Public Works Services Team is excited about the future, and we are committed to serving our residents, business partners, and internal staff with excellence!

Thank you

QUESTIONS?