Roads and Storm Water Capital Program

Infrastructure Assets

- Roads (1000 km)
- Bridges & Major Culverts (147)
- Storm Sewers, Storm Channels and Storm Ponds
- Sidewalks & Street lighting
- Guiderail
- Trails
- Retaining walls

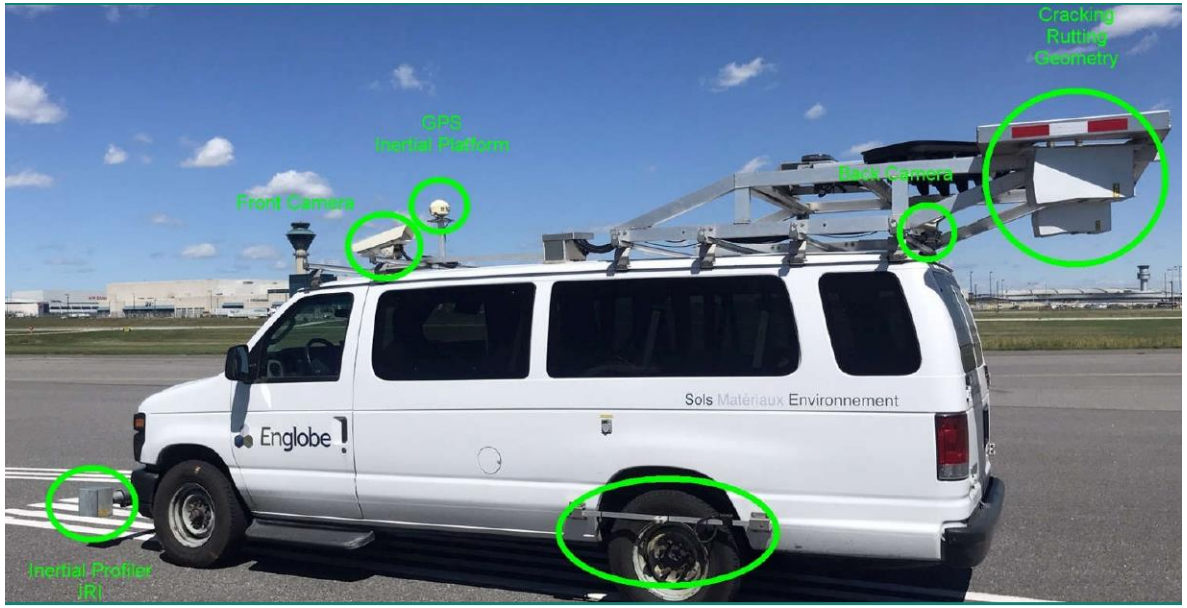
Typical Funding Sources

- Tax Base
- Debt
- Gas Tax
- Ontario Community Infrastructure Fund (OCIF)
- Development Charges (DC)
- Aggregate Levy

McLaughlin Road post reconstruction

How we develop the capital plan

- Road and bridge condition assessments are completed every two years
- Roads are assessed using a pavement data collection vehicle
- Bridges and larger culverts are visually inspected as per O.Reg 104/97 following the Ontario Structures Inspection Manual (OSIM)
- This data is incorporated in the Town's Asset Management Program



Selecting Projects

The 5-year capital plan is developed based on the following considerations:

- Road and Bridge Condition Assessments
- Remaining service life
- Growth needs – Transportation Master Plan
- Specific recommendations from OSIM bridge inspections
- Unexpected deterioration or failure of an asset
- Coordination with other agencies (Region of Peel, MTO, etc.)
- Operational or maintenance needs
- Community Improvement Plan

What are the different types of capital projects

Roads

- Road preservation measures
- Urban Rehabilitation
- Rural Rehabilitation
- Urban Reconstruction & widenings
- Rural Reconstruction & widenings
- Sidewalk, streetlighting and trails

Stormwater Management

- Storm water Pond Cleanout & Retro-fits
- Storm sewer replacements & lining

Bridges and Major Culverts

- Rehabilitation
- Replacement

Road Preservation Measures

- Gravel road grading and top-up
- Surface Treatment (“Tar & Chip” or “Chip Seal”)
- Asphalt Overlay & Patching
- Micro-seal
- Shoulder repair (edge of pavement)
- Generally completed in one construction season

Gravel Road (Escarpment SR)

Surface Treatment (Boston Mills Rd)

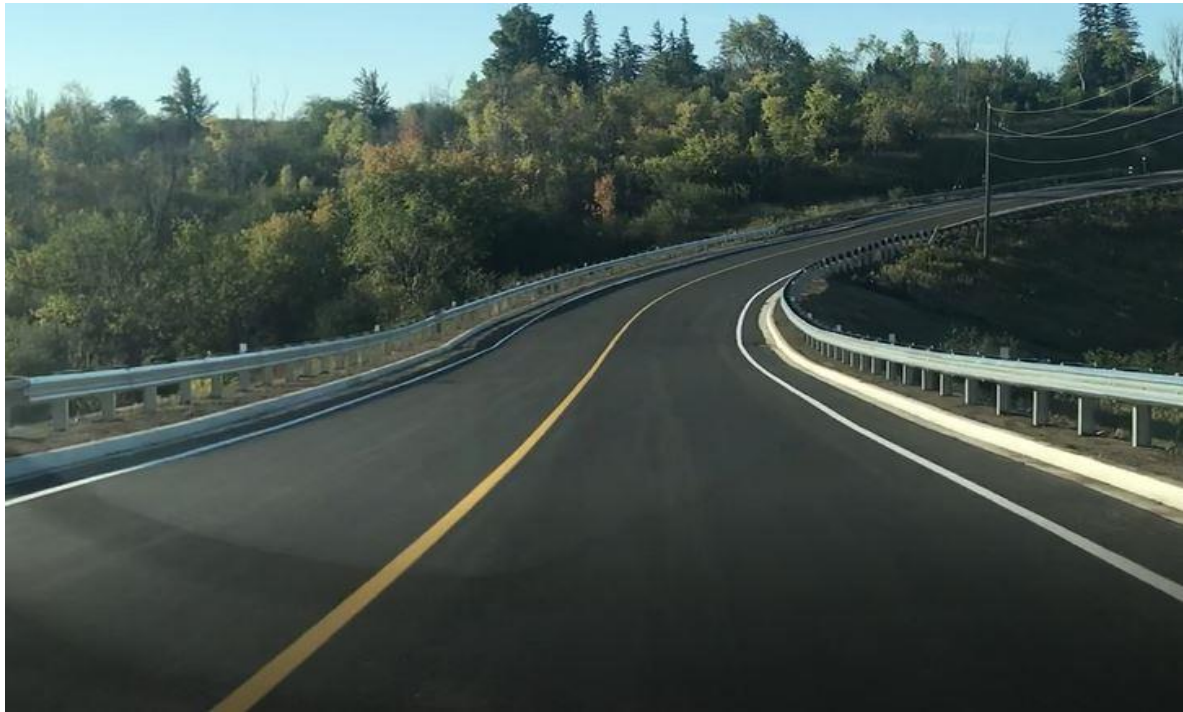
Micro-seal (example)

Urban & Rural Rehabilitation

- The scope of the road work is chosen based on underlying base conditions
- Road width is maintained
- Usually “Pulverize and pave” or “shave and pave”
- These types of projects generally take two years to deliver from Environmental Assessment (EA), detailed design, permitting through to construction

Healey Rd Before Rehabilitation

Healey Rd After Rehabilitation



Urban Reconstruction & Expansion

- Typically, a more complex project involving utility relocations, sewer installation, and full road structure removal and replacement
- Takes longer to build resulting in greater construction related impacts on residents
- These types of projects take between 3-5 years to deliver from Environmental Assessment (EA), detailed design, land acquisition, permitting through to construction

Albert Street Before Reconstruction

Albert Street After Reconstruction

Rural Reconstruction & Expansion

- Generally, the number of lanes are maintained but pavement is widened to accommodate cycling facility
- Work includes drainage and road safety improvements
- Depending on complexity, these types of projects take between 3-5 years to deliver from Environmental Assessment (EA), detailed design, land acquisition, permitting through to construction

Old Church Rd Before Reconstruction

Old Church Rd After Reconstruction

Bridge and Culvert Rehabilitation & Replacement

- Bridge condition assessments identify structures in need of repair within the 5-year horizon
- Method of repair is chosen based on many factors including stream hydrology, safety, condition and age of the structure and best value (lifespan)
- Depending on complexity, these types of projects take between 2-4 years to deliver from Environmental Assessment (EA), detailed design, land acquisition, permitting through to construction

Credit St Bridge Before Replacement

Credit St Bridge During Replacement

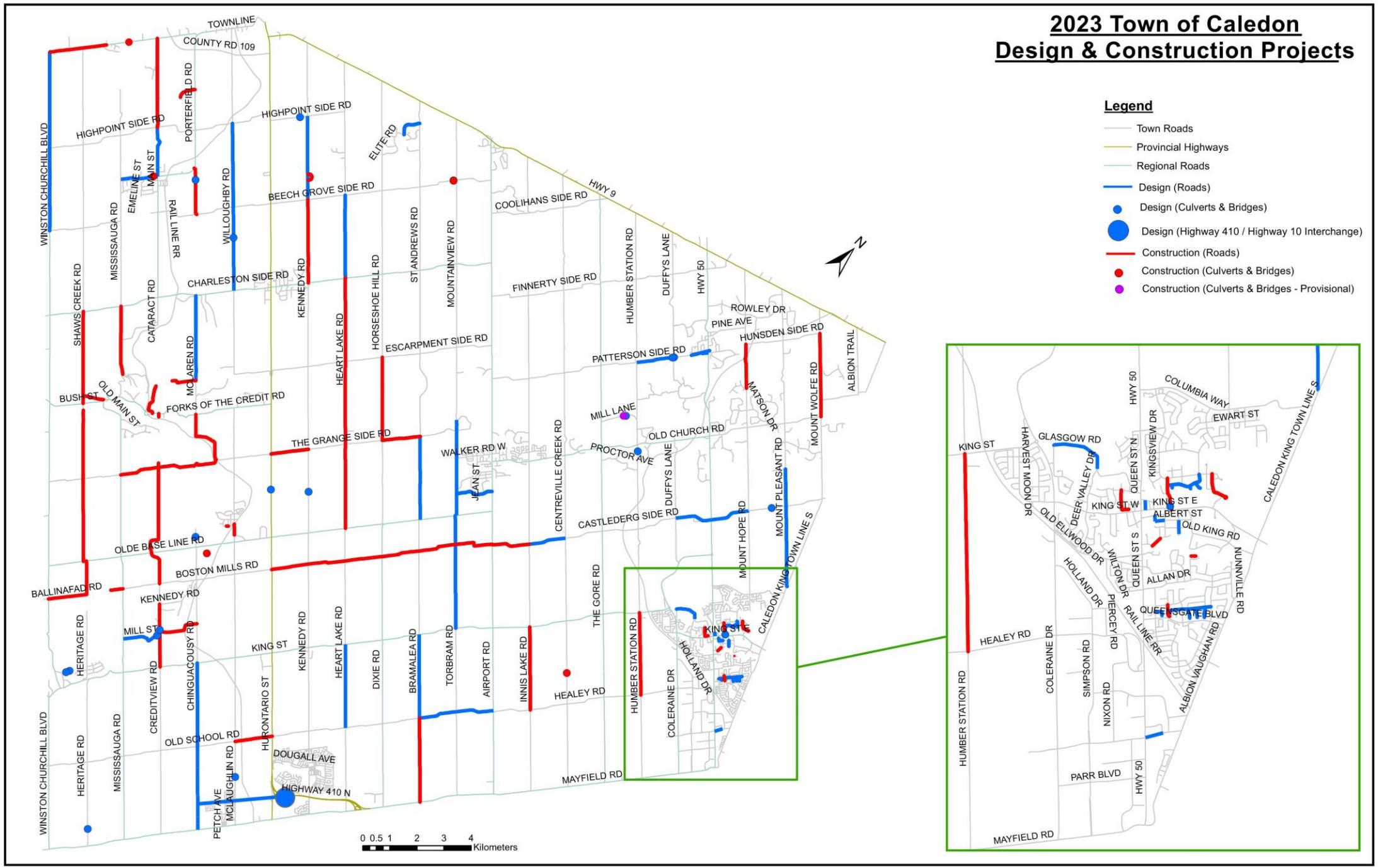
Credit St Bridge After Replacement

Major Culvert Rehabilitation & Replacement

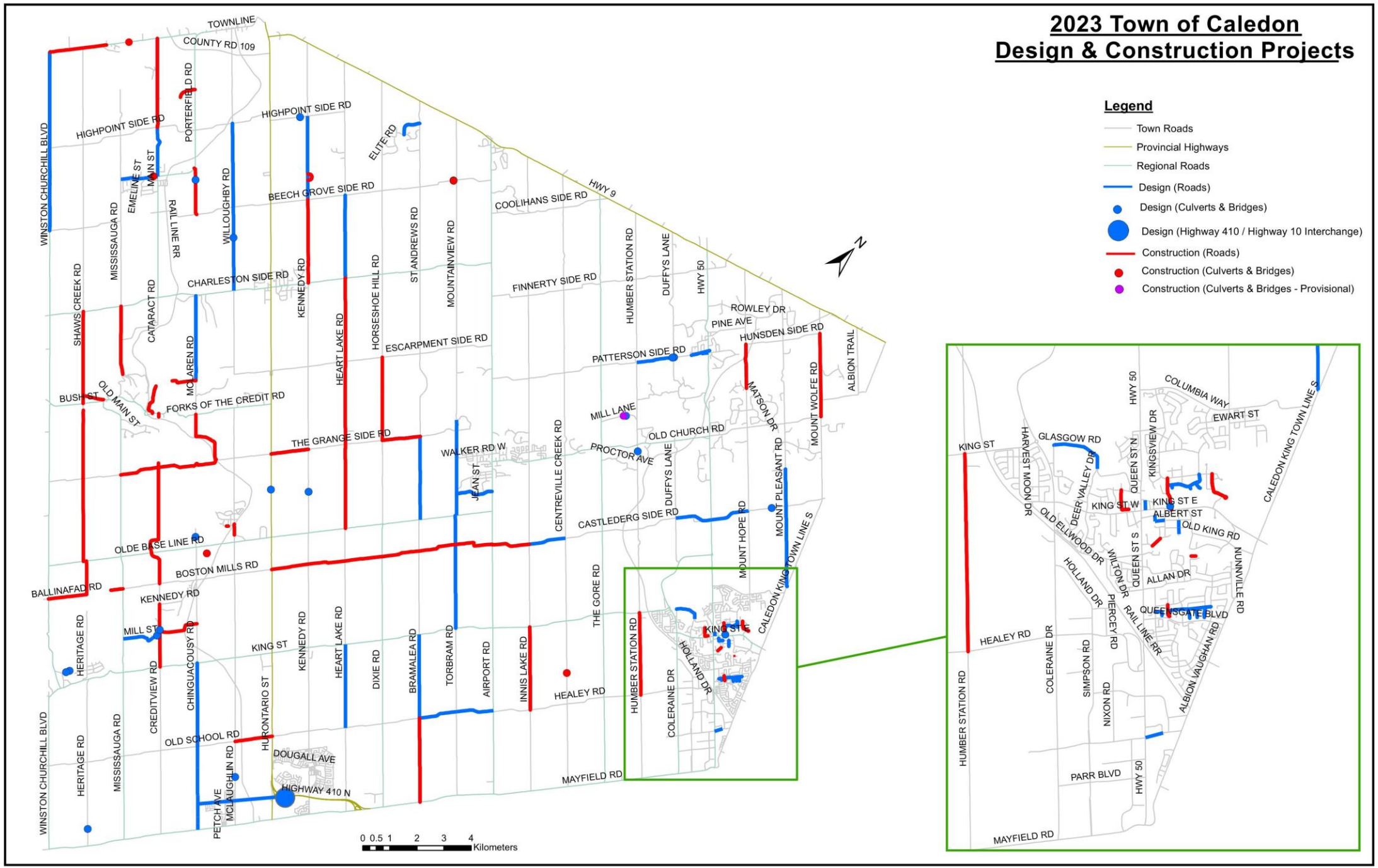
The Grange SR Culvert During Replacement

The Grange SR Culvert After Replacement

2023 Town of Caledon
Design & Construction Projects



2023 Town of Caledon
Design & Construction Projects



Capital Planning Process for SWM

- The Town is currently responsible for a drainage system that comprise of approx. 1,100 km of roadside ditches, 250 km of storm sewer including catchbasins and maintenance holes, and 85 storm water management ponds
- Annual capital budget submission are developed based on a $2.0 million funding envelope
- Specific storm water related projects are prioritized based on:
  - Review past and current reports and other information (e.g., 2016 Stormwater Management Master Plan, stormwater pond inspection information, storm sewer inspection/CCTV reports, historic and current complaints by residents or community groups)
  - asset condition, regulatory compliance requirements (e.g., CLI-ECA), service level expectations, etc.

2023 Capital Storm Water Projects

- Storm water capital, operation, maintenance and monitoring Plan as required by the Town's Environmental Compliance Approval agreement (CLI-ECA)
- Pond #17 and Pond #33 sediment removal and restoration
- Top-up funding for Pond #7 sediment removal and restoration and Pond #16 retro-fit
- Storm sewer inspection (CCTV) and condition assessments for capital planning and asset management