



Watson
& Associates
ECONOMISTS LTD.

Town of Caledon Growth Management Phasing Plan and Financial Impact Assessment

Planning and Development Committee

October 15, 2024

In association with:



Introduction



- Watson & Associates (Watson), GEI Consultants Inc. (GEI), and HDR were retained to conduct a Growth Management and Phasing Plan (GMPP).
- Given Caledon's immense growth pressures, a sound growth management plan is needed to be prepared for this growth in a strategic, responsible, and logical way.
- Plan will prioritize and phase the growth optimally to ensure for a 'Made in Caledon' solution, guided by a set of phasing plan criteria.
- The plan includes analysis/modelling of infrastructure considerations related to water/wastewater and transportation/transit, including costing.
- A financial impact assessment is forthcoming.
- Final GMPP to be implemented into the Official Plan as appropriate.

Phasing of Population and Employment Growth in Caledon

Town of Caledon Population, Housing, and Employment Forecast, 2021 to 2051



Population:
220,000

Households:
67,000

Employment:
93,000

Town of Caledon Settlement Area Boundary Expansion (S.A.B.E.) Phasing



S.A.B.E. Population

Period	Region of Peel	Town of Caledon Adjusted
2021 to 2031	6%	7% ↑
2031 to 2041	45%	59% ↑
2041 to 2051	49%	34% ↓

S.A.B.E. Employment

Period	Region of Peel	Town of Caledon Adjusted
2021 to 2031	9%	16% ↑
2031 to 2041	36%	44% ↑
2041 to 2051	57%	40% ↓

Phasing Plan Criteria

Draft Phasing Criteria



- 1. Is the development area a logical extension to the current built-up area?**
 - Logical means – lands *within 800 metres* of already developed lands – lands under development could be considered.
- 2. Will the selection of the development area provide for the completion of an existing urban area in the Town of Caledon?**
 - Completing existing communities in Caledon has been a long-standing planning principle.
- 3. Will the selection of the development area make the most efficient use of existing and planned water and wastewater infrastructure?**

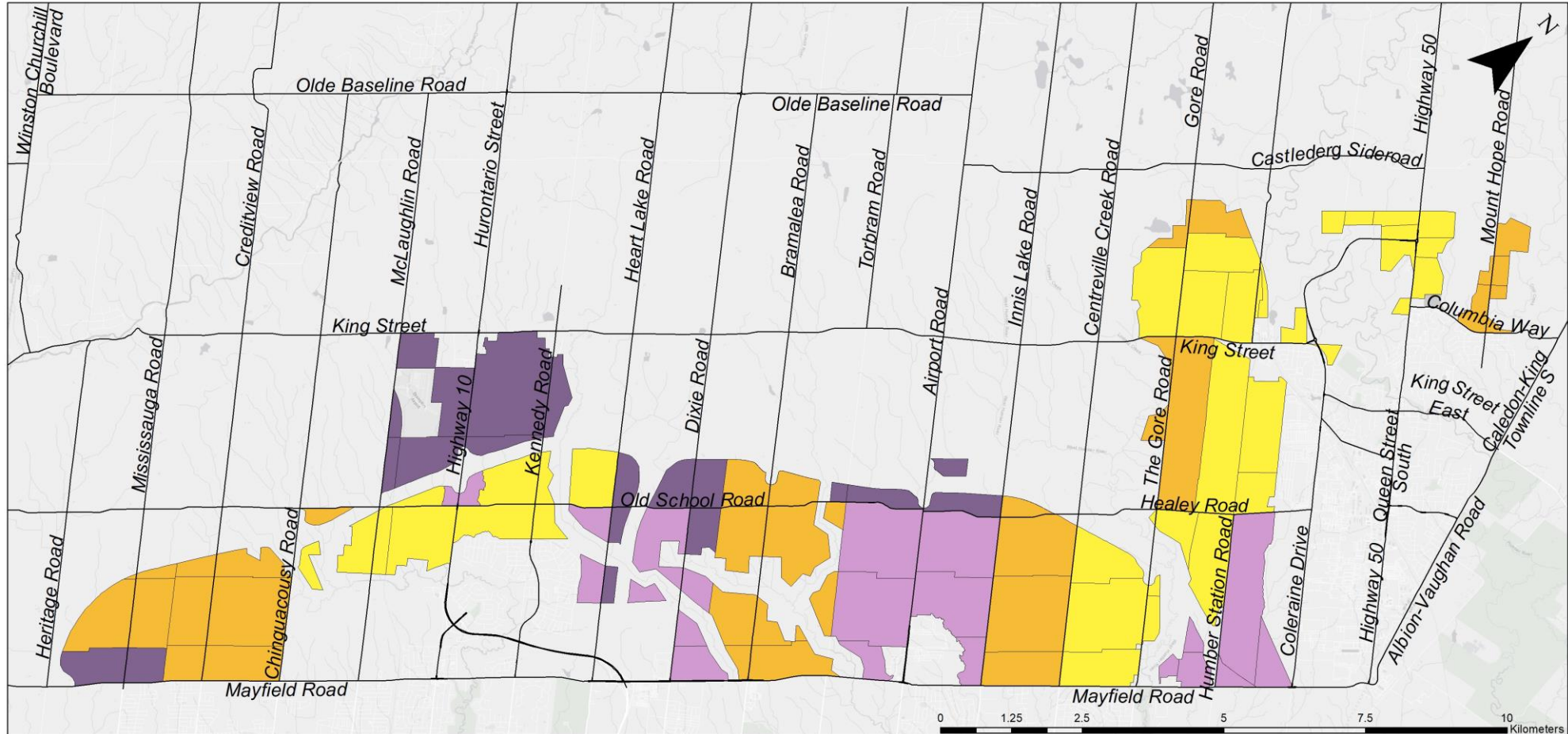
Draft Phasing Criteria



- 4. Will the selection of the development area make the most efficient use of the existing and planned Regional and Town transportation network?**
- 5. Does the location of early phases support the early establishment of the Caledon GO Station?**
- 6. Does the location of the expansion area minimize impacts on active agriculture?**
- 7. Is it feasible for new employment uses to develop in the short term?**

Town of Caledon Draft Priority Areas and Phasing Plan

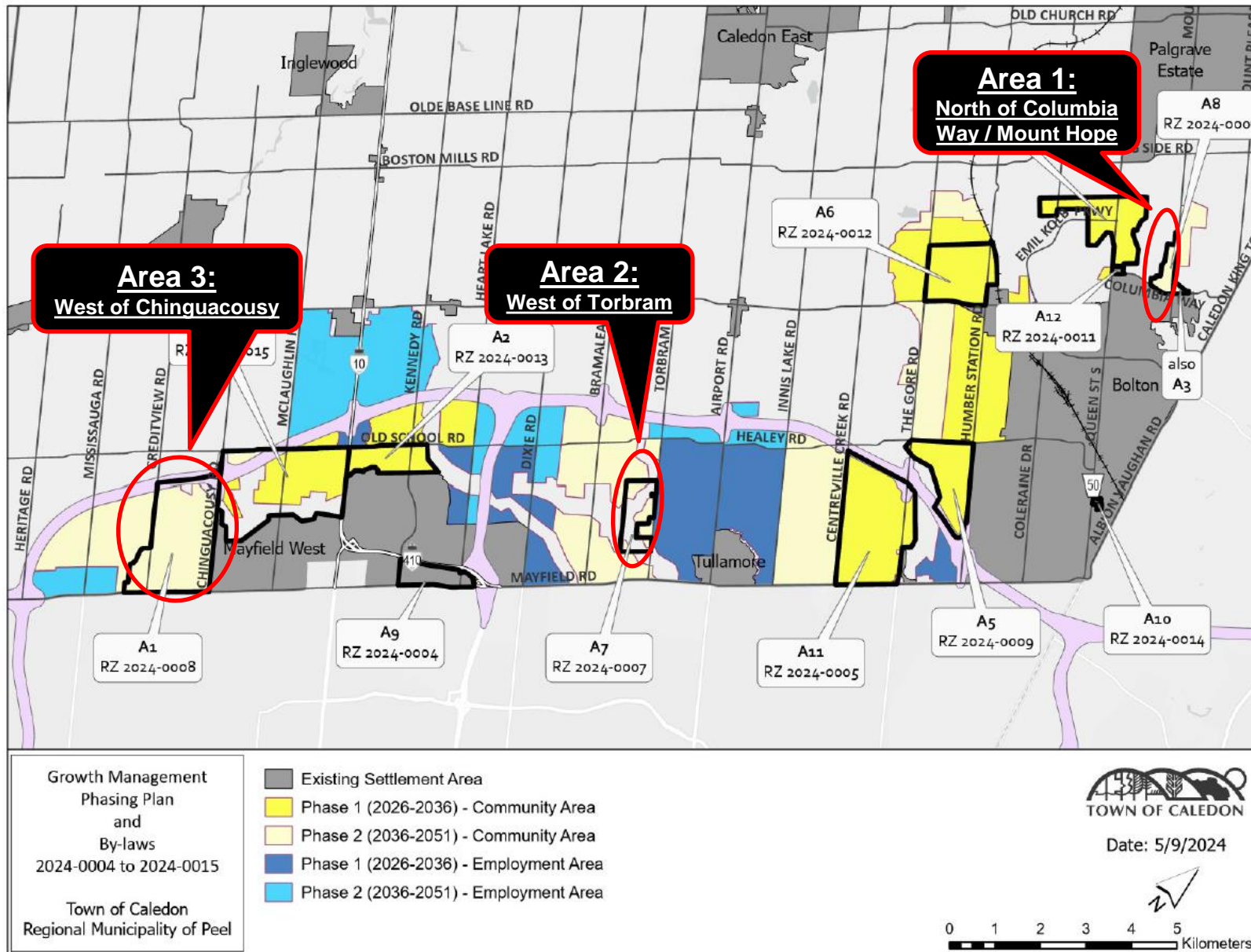
Town of Caledon - Proposed Growth Phasing: 2026 - 2051



Legend Phasing

- | | | | |
|---|--|---|---|
|  | Phase 1 (2026-2036) - New Community Area |  | Phase 1 (2026-2036) - New Employment Area |
|  | Phase 2 (2036-2051) - New Community Area |  | Phase 2 (2036-2051) - New Employment Area |

Additional Phase 1 Lands through Council Rezoningings

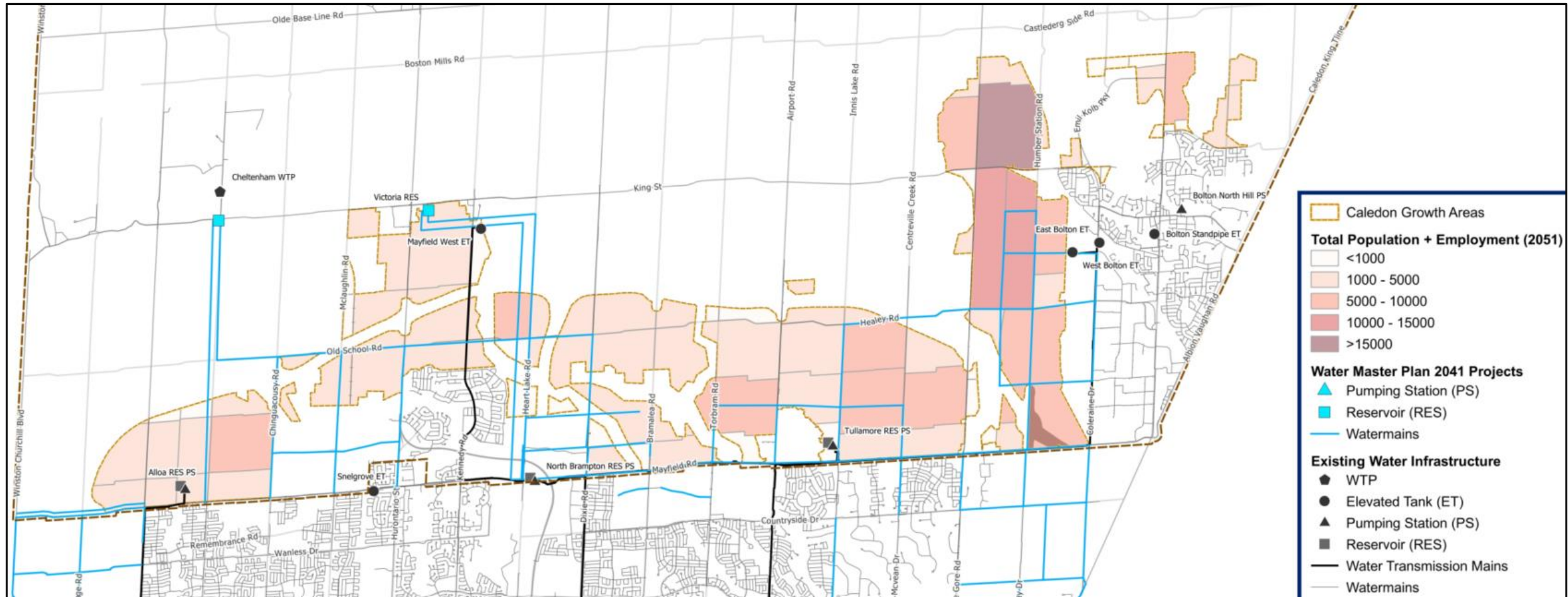


Initial Water and Wastewater Servicing Considerations

Existing Water System



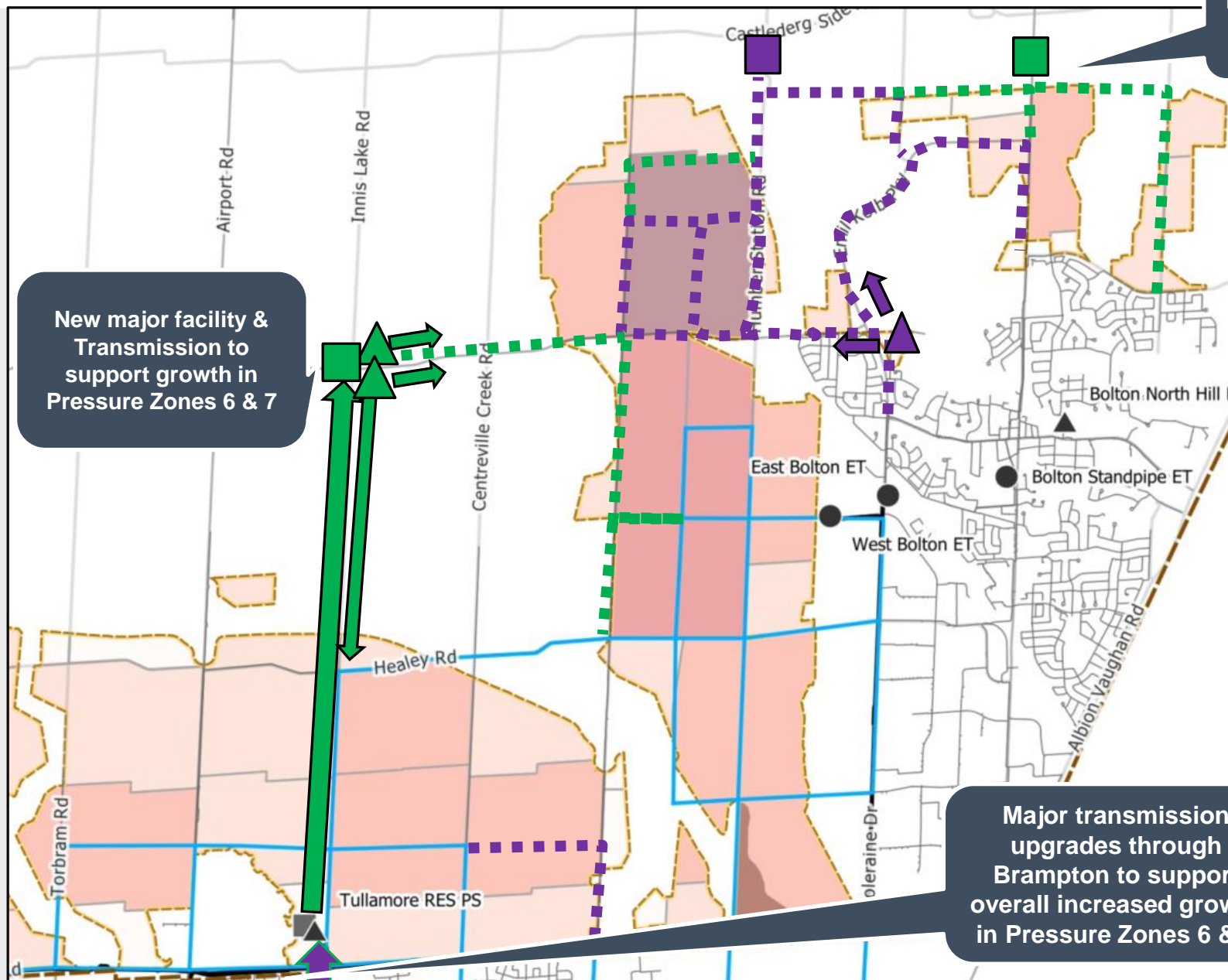
A map to show Regional Master Plan projects and updated Caledon growth areas.



East System - Water



WEST/CENTRAL SYSTEM ↑



New major facility & Transmission to support growth in Pressure Zones 6 & 7

Major additional upgrades necessitated to support two new Pressure Zone 7 areas north of King Street / Columbia Way.

Major transmission upgrades through Brampton to support overall increased growth in Pressure Zones 6 & 7

Planned Region of Peel Master Plan Projects are shown in Blue. All required by 2036.

“Phase 1” Projects to 2036: Shown in purple.

“Phase 2” Projects (2036 to 2051): Shown in green.

- Overall, the impacts are **significant** on the east system.

West/Central System - Water



Planned Region of Peel Master Plan
Projects are shown in Blue.
All required by 2036.

“Phase 1” Projects to 2036:
None required.

“Phase 2” Projects (2036 to 2051):
Shown in green.



- Overall, the impacts are **moderate** on the west/central system.

Cost Estimate – Water



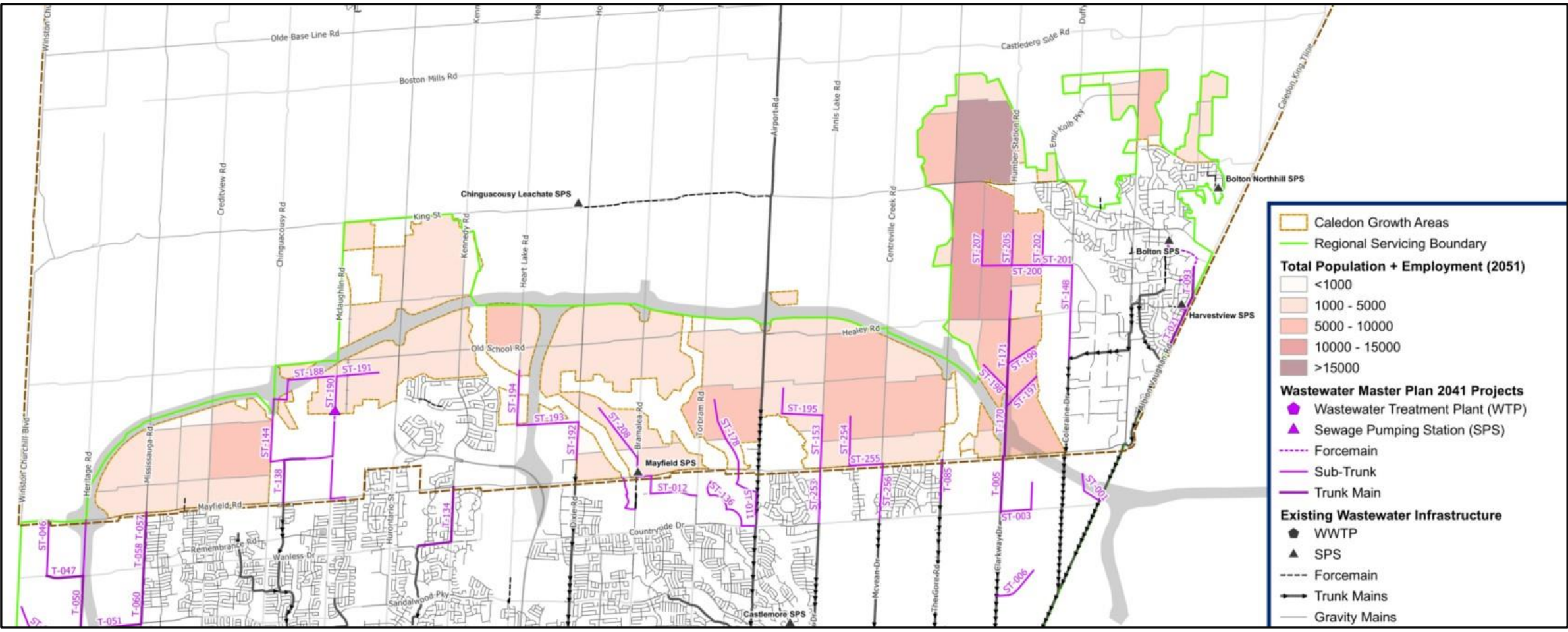
Category	Cost (\$ 2024 Dollars)
Phase 1 (Before 2036)	\$285M
West/Central: Additional Distribution Upgrades	-
West/Central: Additional Pumping, Storage & Transmission Upgrades	-
East: Additional Distribution Upgrades	\$19M
East: Additional Pumping, Storage & Transmission Upgrades	\$78M
East: Major Upgrades south of Caledon to support overall growth	\$188M
Phase 2 (2036 to 2051)	\$508M
West/Central: Additional Distribution Upgrades	\$42M
West/Central: Additional Pumping, Storage & Sub-Transmission Upgrades	\$40M
East: Additional Distribution Upgrades	\$18M
East: Additional Pumping, Storage & Transmission Upgrades	\$256M
East: Major Upgrades south of Caledon to support overall growth	\$152M
Phase 1 & Phase 2 Total	\$793M

Note: Table does not include projects previously identified in 2020 MP. Remaining MP projects, within Caledon, are expected to be an additional \$200M to 2036.

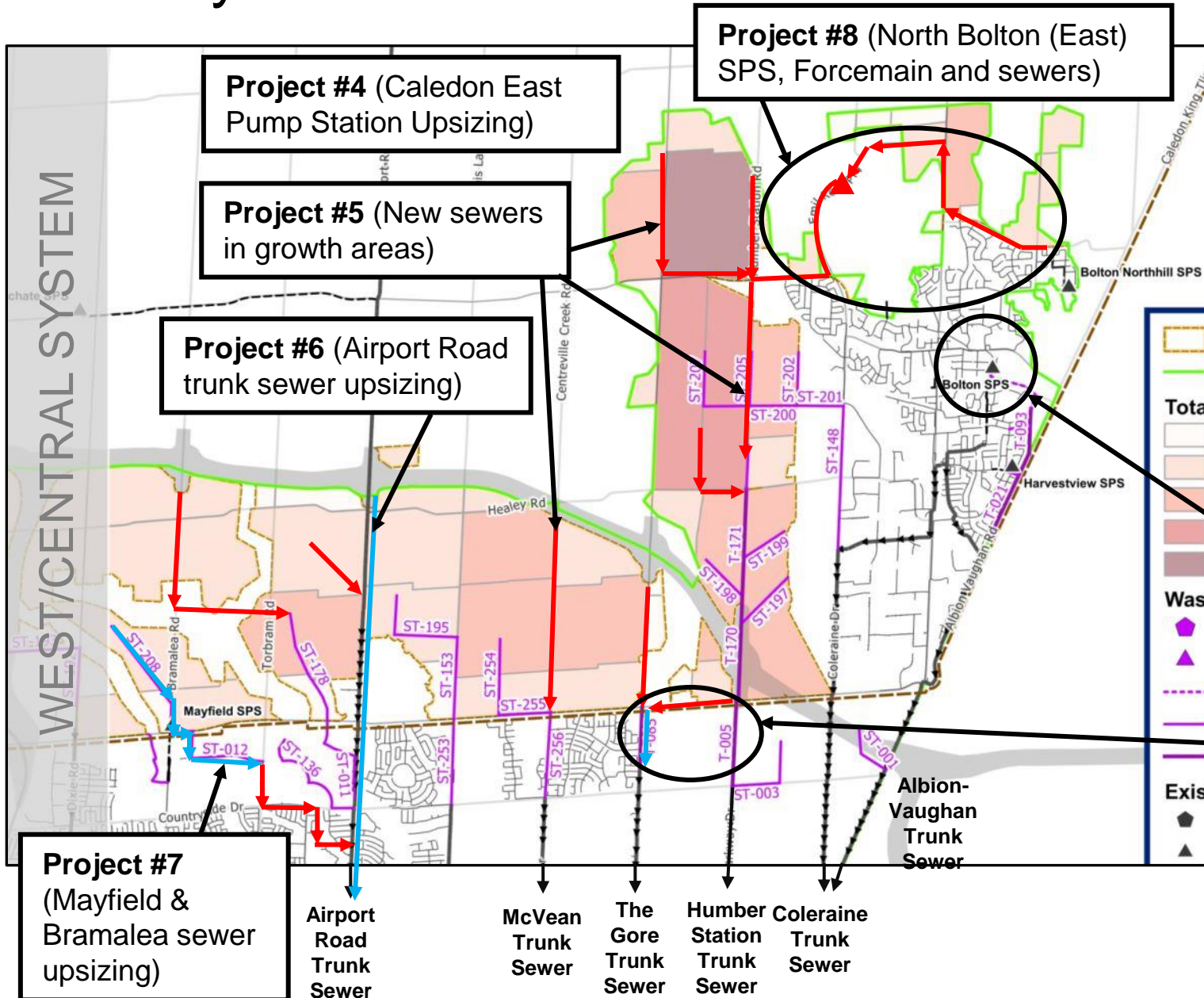
Existing Wastewater System



A map to show Regional Master Plan projects and updated Caledon growth areas.



East System - Wastewater

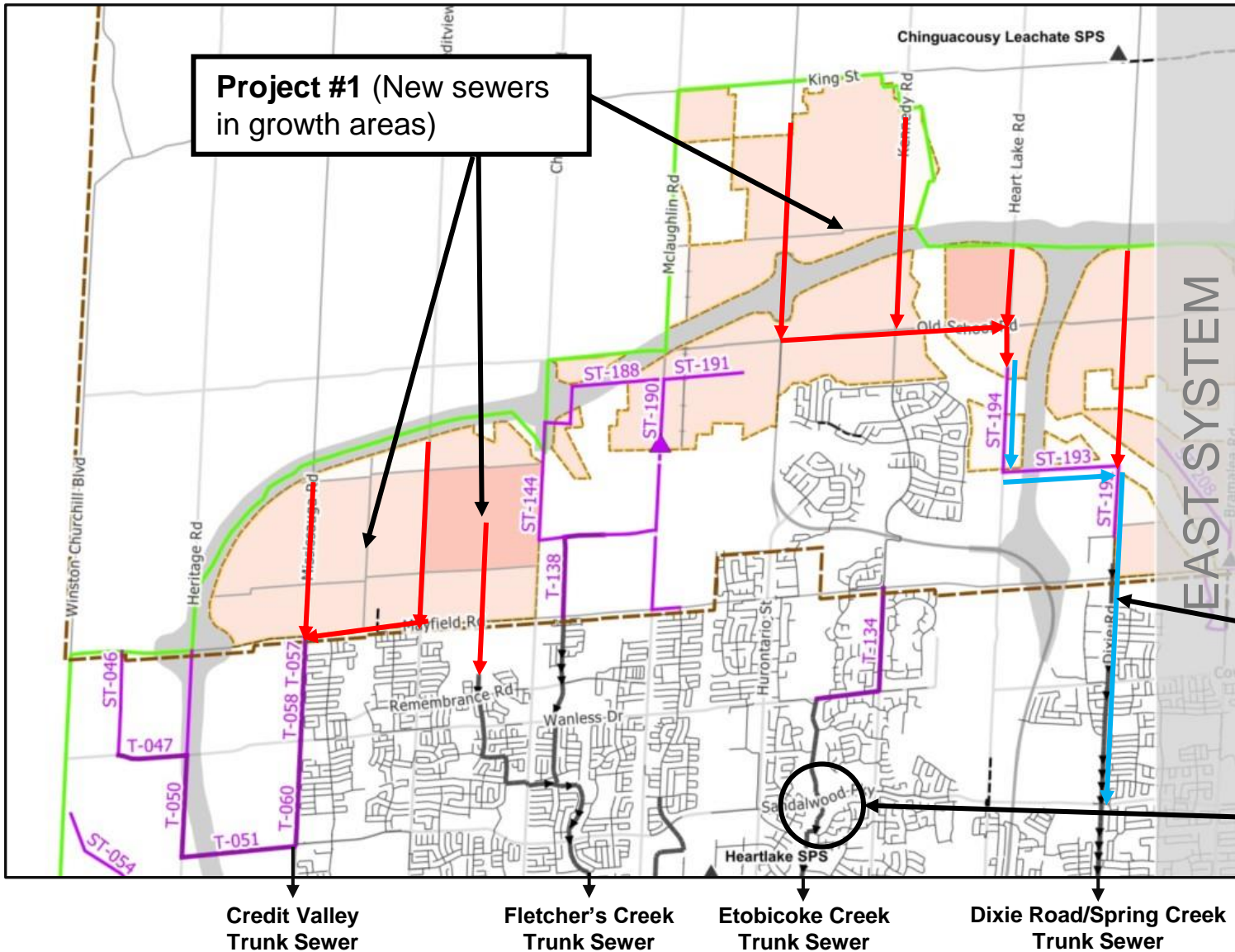


- Overall, the impacts are **significant** on the east system.
- Required upgrades total ~**\$612M**

Project #9 (Bolton local sewer upsizing)

Project #10 (Diversion sewer to The Gore trunk sewer)

West/Central System - Wastewater



Project #1 (New sewers in growth areas)

- Overall, the impacts are **moderate** on the west/central system.
- Required upgrades total **~\$217M**.

Project #2 (Dixie/Heart Lake pipe upsizing)

Project #3 (Etobicoke Creek Trunk Sewer upsizing)

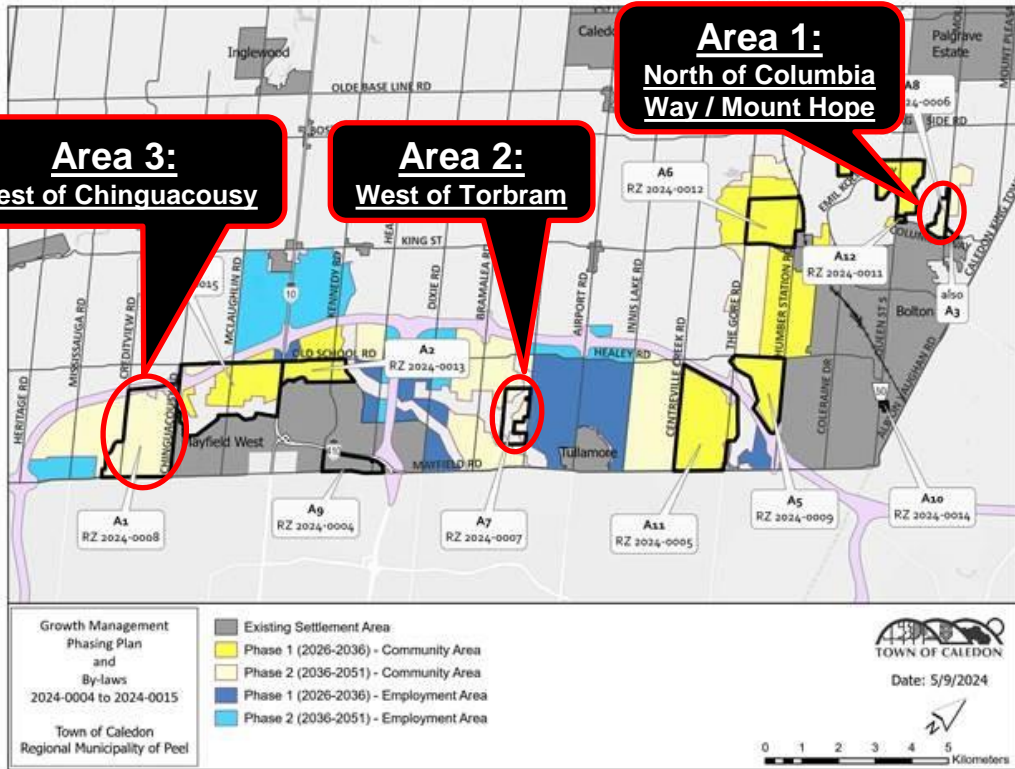
Cost Estimate – Wastewater



No.	DESCRIPTION	Cost (\$2024)
WEST / CENTRAL		
1	New Sewers Required (West of Kennedy Rd)	\$94M
2	Dixie Road & Heart Lake Road Pipe Upsize on Dixie Rd from Old School & Heart Lake Rd (450 mm existing) to Dixie & Sandalwood Pkwy E (750mm existing)	\$126M (~\$2M of project in 2020 MP)
3	Etobicoke Creek Trunk Sewer Upsizing Pipe upsize required on Etobicoke Creek, from Tremont Ct to Sandalwood Parkway East (750mm existing)	\$7M
West/Central Total:		\$227M
EAST		
4	Caledon East Sewage Pumping Station (SPS)	\$2M
5	New Sewers Required (East of Kennedy Rd)	\$105M
6	Airport Road Pipe upsize on Airport Rd from Sandhill (600 mm existing) to Sun Pac Blvd & Ward Rd intersection (1050mm existing)	\$283M
7	Mayfield Road & Bramalea Road Pipe upsize required from 500 metres east of Dixie Rd & 1,475 metres south of Old School Rd (450mm existing) to intersection of Airport Road & Eagle Plain Dr (525mm existing).	\$94M (~\$10M of project in 2020 MP)
8	North Bolton SPS, Forcemain, & Gravity Sewers New North Bolton SPS, 1.4 km length 300mmø forcemain to Humber Station trunk sewer, and 3.1 km length of 525mmø sewer.	\$78M
9	Bolton Local Sewer Upsizing	\$32M
10	Humber Station Road Divert flow from Humber Station Rd to The Gore Rd trunk sewer with new 1200mm pipes along Mayfield Rd	\$47M
East Total:		\$641M
TOTAL:		\$868M

Note: Table does not include projects previously identified in 2020 MP. Remaining MP projects, within Caledon, are expected to be an additional \$130M to 2041.

Map of Areas that are advanced from Phase 2 to Phase 1



	WATER	WASTEWATER
Area 1*	<p>"Phase 2" project that would advance to "Phase 1" - shown in red.</p> <p>\$10M from Phase 2 to Phase 1</p>	<p>"Phase 2" project that would advance to "Phase 1" - shown in blue.</p> <p>\$9M from Phase 2 to Phase 1</p>
Area 2	None	<p>\$13M from Phase 2 to Phase 1</p>
Area 3	<p>\$8M from Phase 2 to Phase 1</p>	<p>\$31M from Phase 2 to Phase 1</p>

Updated Cost Estimate

	WATER	WASTEWATER	TOTAL
Phase 1	\$303M	\$259M	\$562M
Phase 2	\$490M	\$609M	\$1,099M
TOTAL	\$793M	\$868M	\$1,661M

* Peel Region is advancing the work required to service Area 1 and current infrastructure planning studies indicate servicing of these lands will be available by the latter part of Phase 1 (i.e. 2036)

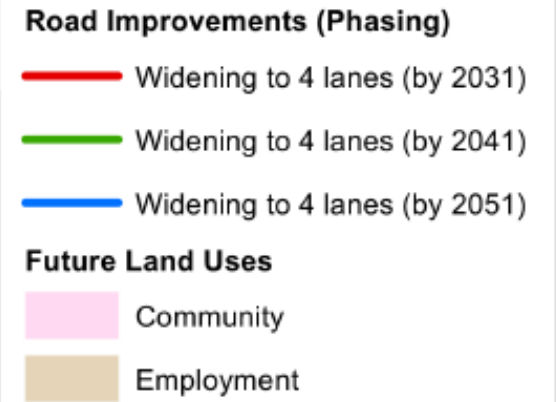
Transportation Assessment for GMP Land Use

Transportation Analysis



- Review of the Land Use forecasts for 2031, 2041 and 2051 to identify transportation network improvements.
- The road widening needs were identified using the Region's strategic travel demand model.
- The Capital Cost of road widening assumes a complete street cross-section for major corridors, which are under Town's jurisdiction. The capital costs for local and collector roads are not included in the capital costs, as those would be constructed by developers under Secondary Plans.

Road Improvement Phasing





Capital Costs for Road Network Improvements (\$ 2024)

Item	Phasing Plan			Total
	2024 - 2031	2032 - 2041	2042 - 2051	
Proposed Length of Road network improvement (km)*	21.75	45.9	15.5	83.15
Construction Costs (\$ million)	\$ 159M	\$ 386M	\$ 113M	\$ 658M
Soft/Design Cost (15%) (\$-million)	\$ 24M	\$ 58M	\$ 17M	\$ 99M
Total Capital Costs (\$ million)	\$ 182M	\$ 444M	\$ 131M	\$ 756.8M

Note: *- Road widening/road extension with urban cross-section with sidewalk or MUP



O&M + Life Cycle Costs for Road Network

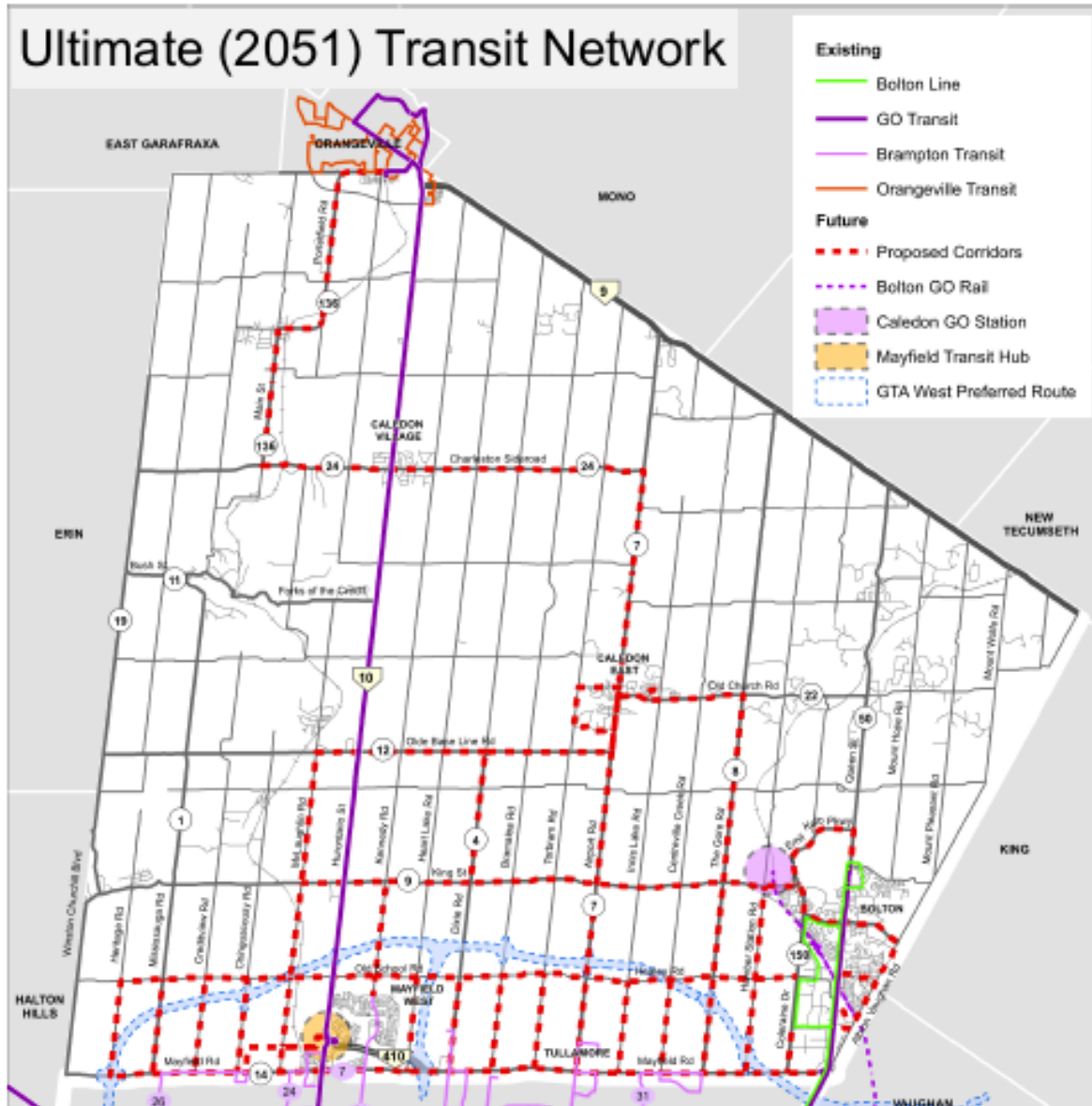
- The Operating and Maintenance costs for transportation infrastructure were estimated based on the current costing provided by the Town for routine maintenance, yard maintenance, and traffic signals.
- The annual life-cycle costs for roads and structures were estimated based on the Town's Asset Management Study. The life-cycle costs are expected to increase from \$34.99 million in 2024 to about \$38.20 million in 2051 (estimated in 2024 \$ value). This results in total requirements of about \$1,030.1 million (from 2024 to 2051).



Fiscal Requirements for Road Network from 2024 to 2051 (in \$ 2024 value)

Road Infrastructure	Total (\$-million)
Capital Costs	\$756.8 M
Operations and Maintenance Costs	\$732.5 M
Life Cycle Costs	\$1,030.1 M
Total Costs (in 2023 \$ value)	\$2,519.3 M

Fiscal Requirements for Transit



Based on the current service levels, with about 12 hours of service on weekdays and 6 hours of service on weekends with an average of 45 minutes of headway, providing transit services on key corridors as identified in the Town's recent MMTMP.



Fiscal Requirements for Transit

- Transit capital and operating costs were estimated based on the current costs paid by the Town for the Brampton transit service. Buses were assumed, at a cost of \$760,000/vehicle, with an average life span of 12 years (source: Brampton Transit).
- Based on the current service levels, the Town is assumed to operate 18 buses by 2049.
- The total capital costs and operating costs are expected to gradually increase from ~1M in 2024 to \$16M in 2051. The total fiscal requirement for Transit is about \$236M from 2024 to 2051.



Total Fiscal Requirements for Transit from 2024 to 2051 (in \$ 2024 value)

Road Infrastructure	Total (\$-million)
Capital & Life-Cycle Costs	\$18.62 M
Operations and Maintenance Costs	\$217.82 M
Total Costs (in 2024 \$ value)	\$236.44 M

Potential Impacts with Rezoning



- Based on the Caledon Council's rezoning and the original G.M.P.P., there are additional lands that can begin development before 2036. The rezoning will require growth to begin development simultaneously across Caledon's S.A.B.E. (Settlement Area Boundary Expansion) lands than previously identified in the core G.M.P.P.
- Permitting growth in various secondary plans under S.A.B.E. lands could require changes to the road widening program and phasing identified in this study (as additional modelling was not conducted for the rezoning). With these revisions of the phasing plan, it could be possible that some of the road network may need to be widened earlier than what is identified.
- With the proposed development planned in the Town, the major arterials under the Peel Region's jurisdiction may need additional improvements. Hence, the Town needs to coordinate these arterial network improvements with the Peel Region.
- The study assumes a gradual transit expansion in the Town. However, with the rezoning, nine buses estimated by 2036 may be insufficient to serve the various secondary plans across the Town. Permitting growth in various secondary plans could require changes in the transit expansion program, and additional funding in the early years for transit services.

Fiscal Impact Analysis

Fiscal Impact Analysis Work Plan



- Assess the financial impacts of growth incurred by the Town of Caledon to determine how the growth-related development costs will be funded (e.g., through development charges, community benefit charges, parkland charges, property taxes, debt funding, etc.).
- The analysis will include an assessment of operating impacts, in combination with the capital financing forecast to determine the financial impacts of growth on property taxes, user rates, and debt capacity.
- As an outcome of this study, the Town will be provided with a working model that will allow Caledon staff the ability to update the underlying assumptions utilizing actual growth patterns, annual budgets, and other financial policies.

Next Steps

Process & Timelines

