

Expansion of the Leaf Vacuum Program Referred Matter 83/2024

Public Works and Engineering



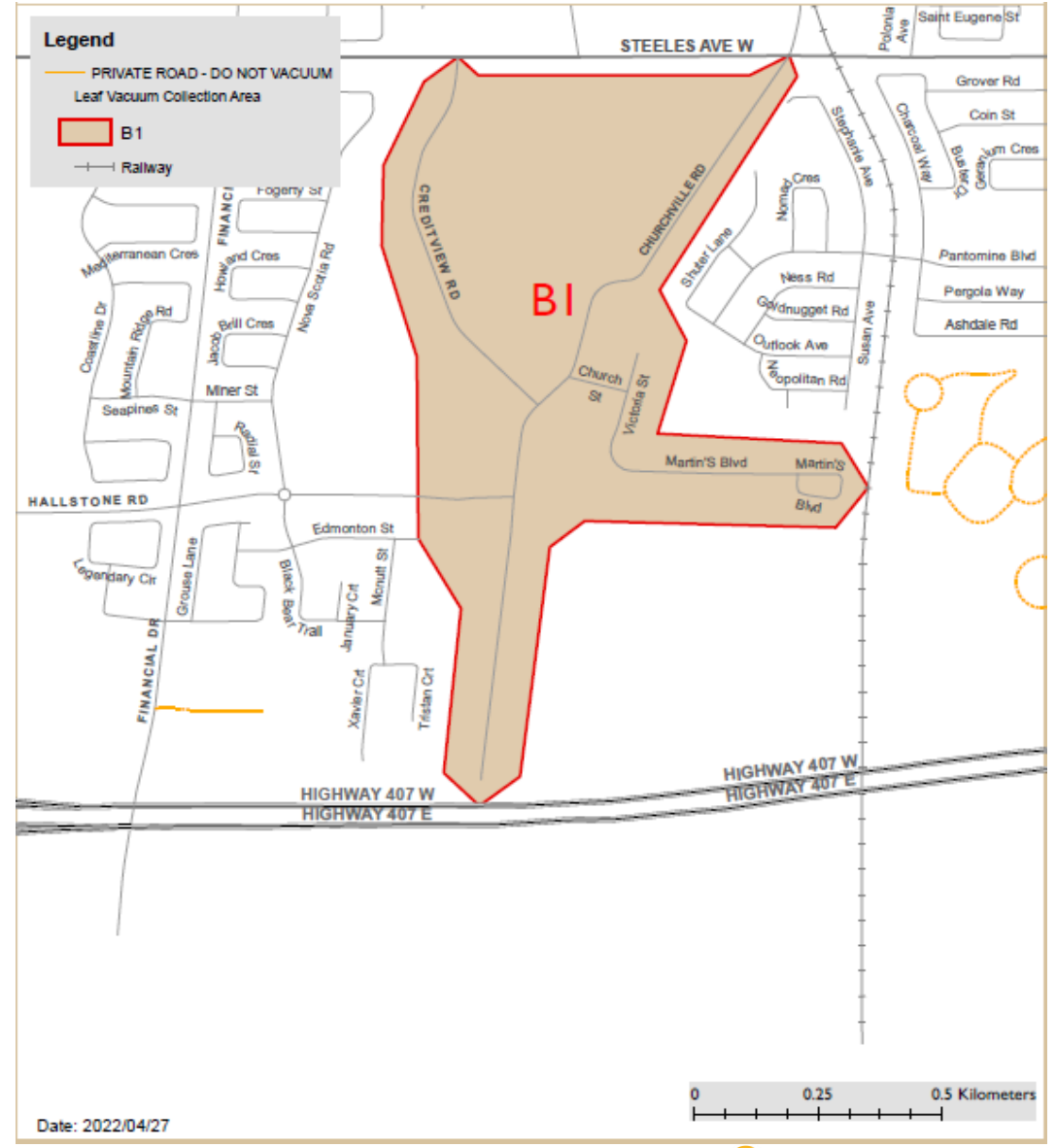
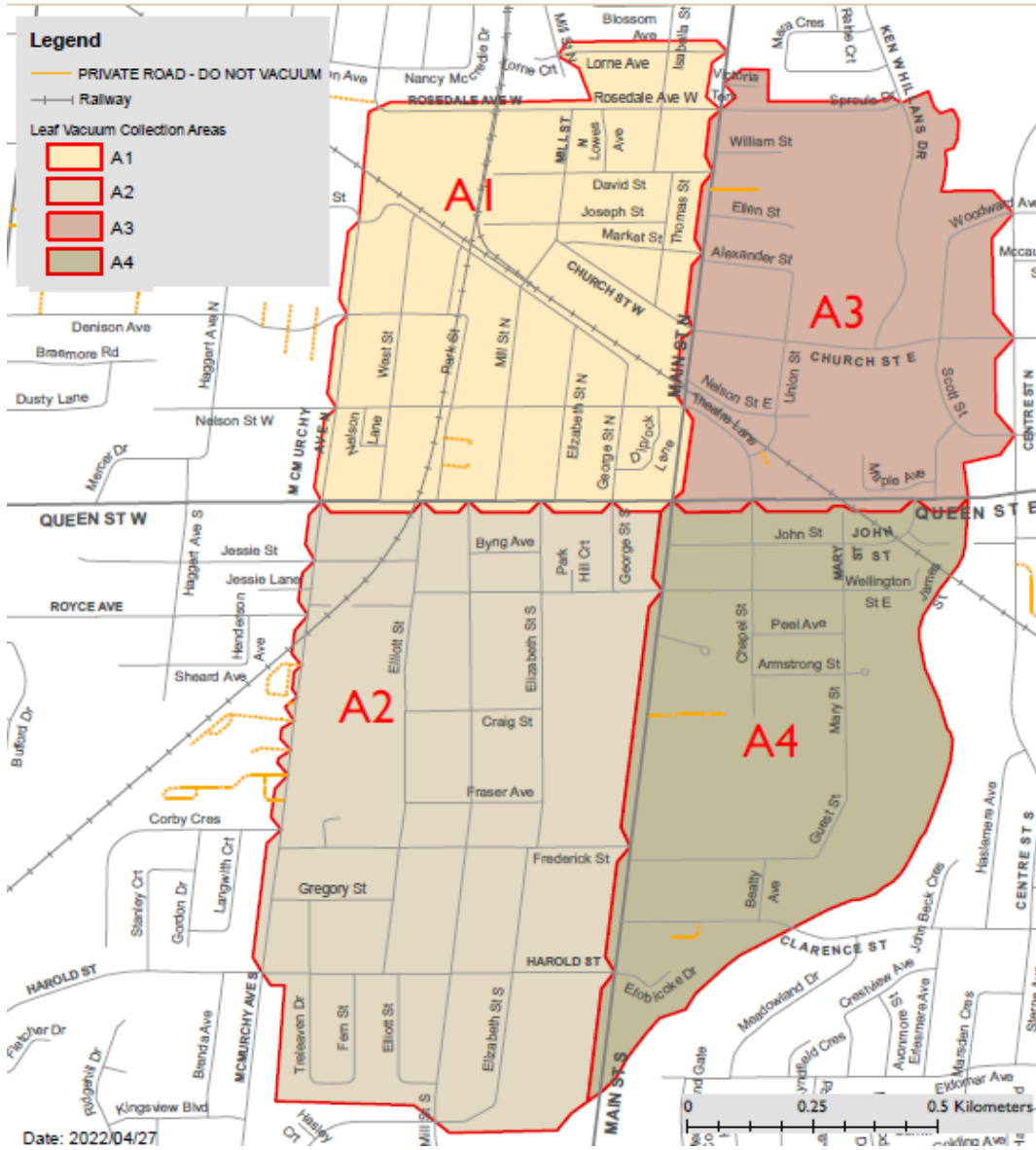
Overview

- On Nov 27, 2024, a public delegation appeared before City Council and requested consideration of being added to the program through expansion of the current limits.
- This report provides three (3) options for Council's consideration;
 - I. Maintaining the limits of the existing service area
 - II. Expanded Area based on Service Request Data (Wards 1 & 3)
 - III. "Mature" Areas 25+ Years Old (All Wards)
- Meetings were held with Councillors from each Ward pairing to provide an overview of what staff were to be reporting back on. Feedback was accepted and options within the report were updated.
- The majority of Downtown and Churchville are located within the floodplain, making them significantly more vulnerable to flooding.
- The Leaf Vacuum program ensures that high risk areas like downtown and Churchville are not impacted further by a clogged drainage system during high intensity rain events.
- The Churchville area was added to the service area in 2022, after flooding in the area. The Leaf Vacuum Program was expanded to assist in mitigating the chances of any future flooding.

Current Program

- The City of Brampton, Public Works and Engineering Department, provides a Leaf Collection Program to specific city streets of the downtown core and the residential area of the city known as Churchville. The remainder of the city is serviced by the Region of Peel's Waste Collection Program.
- Property owners gather fallen leaves and place them along the roadside boulevard in front of their homes. The leaves are subsequently mechanically collected via vacuum units from the boulevard. The vacuum unit places the collected leaves into the back of an accompanying receptacle vehicle.
- Leaves that may fall onto the roadway are not collected through the leaf vacuum program, rather they are swept up by street sweeping machines through the City's Street Sweeping Program, which is intended to remove debris and potential blockages from storm catch basins.
- Each street within the designated vacuum area receives three passes within the six-week period (weather dependent).
- The 2024 Leaf Collection Program covers approximately 65 kms of curb line and collected and recycled approximately 275 tons of leaves between late October and early December.

Option #1 – (Current) Service Area



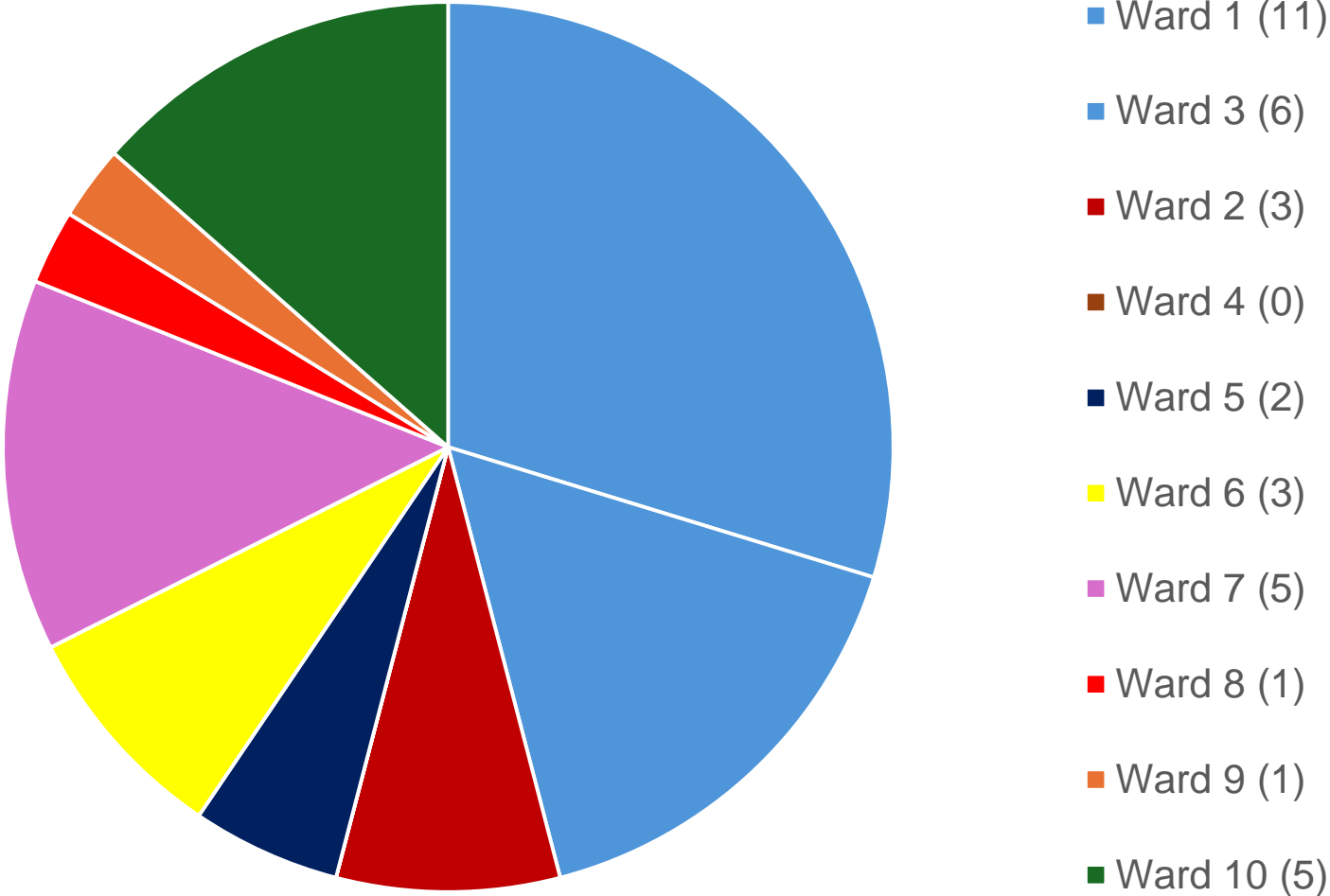
Option #1 – (Current) Cost

Option	Description	Curb-Line Length	Contracted Cost (2024)	Total In-House Cost (Estimated)
1	Status Quo (Current)	TOTAL = 65 kms	TOTAL = \$170K	~\$730K (upfront Capital equipment costs) + ~\$170K/year in Operating costs (fuel, parts, and labour*)

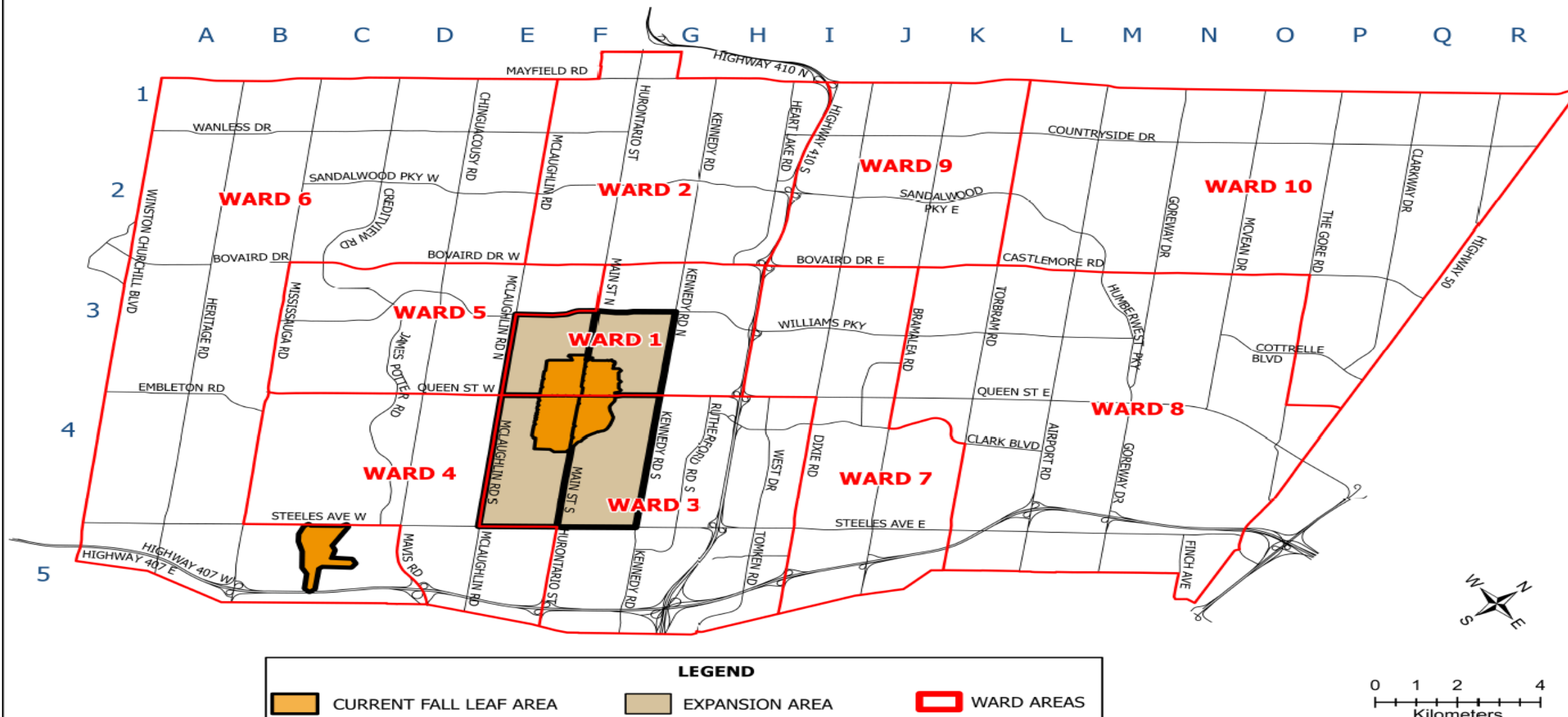
The Region of Peel provides a recycling recovery rate per tonne. The average budgeted recovery amount is approximately \$50K.

Option #2 - Considerations

Leaf Vacuum Service Requests - 2022-2024



Option Two Proposed Fall Leaf Expansion

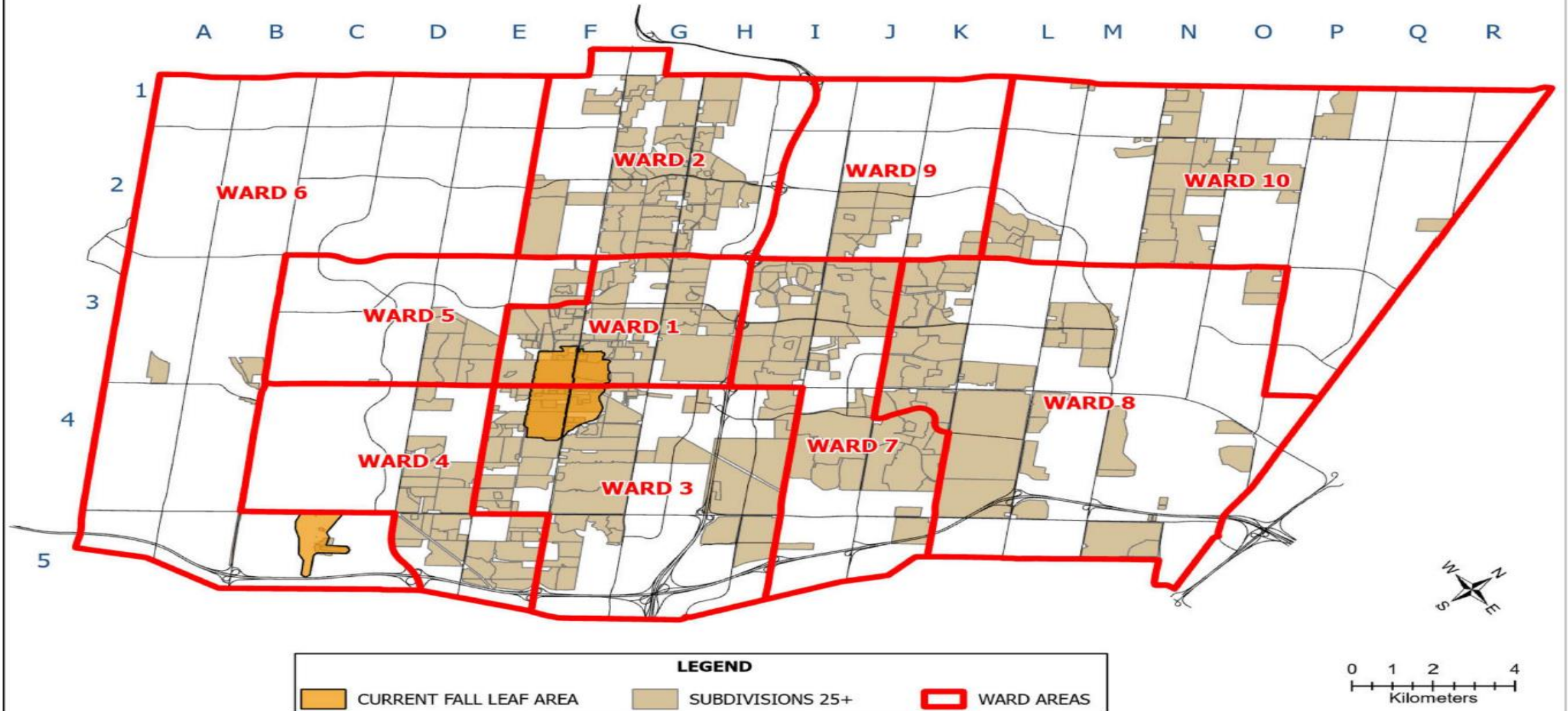


Option #2 – Expanded Area

Option	Description	Curb-Line Length	Contracted Cost (Estimated)	Total In-House Cost (Estimated)
2	Expanded Area (Wards 1 & 3)	Current ~65 km + Additional ~145 km TOTAL = 210 km	Current \$170K + Additional \$380K TOTAL = \$550K	~\$2.4M (upfront Capital equipment costs) + ~\$550K/year in Operating costs (fuel, parts, and labour*)

The Region of Peel provides a recycling recovery rate per tonne. The average budgeted recovery amount is approximately \$50K.

Possible Expansion of City Leaf Collection Program



Option #3 – All Mature Areas

Option	Description	Curb-Line Length	Contracted Cost (Estimated)	Total In-House Cost (Estimated)
3	“Mature” Areas (25+ Years Old)	Current ~65 km + Additional ~1,385 km TOTAL = 1450 km	Current \$170K + Additional ~\$3.6M TOTAL = \$3.8M	~\$16.3M (upfront Capital equipment costs) + ~\$3.8M/year in Operating costs (fuel, parts, and labour*)

The Region of Peel provides a recycling recovery rate per tonne. The average budgeted recovery amount is approximately \$50K.

Option #3 – Cost per Ward

WARD	KMS	COST (\$'000's)
1	185	\$481
2	240	\$624
3	200	\$520
4	185	\$481
5	100	\$260
6	5	\$13
7	260	\$676
8	130	\$338
9	70	\$182
10	95	\$247
TOTAL	1470*	\$3,822

*1470 kms indicated due to compounded rounding from each Ward

Option Summary

Option	Description	Curb-Line Length	Contracted Cost (Estimated)	In-House Cost (Estimated)
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Staff are recommending that Council proceed with Option 1 as the current areas are located within the floodplain, these areas also feature aging infrastructure and a mature tree canopy.

Thank you!

