



MEMORANDUM

To: Mayor and Members of Council

From: Morgan Jones, Director of Operations

Prepared by: David Plant, Sr. Manager, Parks, Horticulture and Forestry, Operations Department

Date: January 18, 2021

Re: Emerald Ash Borer (EAB) Program Completion Summary

RECOMMENDATIONS:

1. That the memorandum entitled “Emerald Ash Borer (EAB) Program Completion Summary” dated January 18, 2021 be received; and,
2. That at project completion, the remaining funds in project #16165 – Emerald Ash Borer, in the amount of \$111,682 be returned to the Life Cycle Replacement and Capital Reserve; and,
3. That staff be authorized and directed to do all things necessary to give effect to this resolution.

BACKGROUND:

The City of Markham EAB Program completed the removal and replacement of 17,000 Ash trees City-wide from 2014 to 2017. Following the completion of the 5-year EAB capital project, a portion of the remaining budget was allocated to the **EAB Next Steps Program** to provide for the inspection, warranty administration and watering of newly planted trees in the years 2018 to 2020. The purpose of this memorandum is to provide an overview of the EAB Next Steps Program.

PROGRAM BUDGET ALLOCATED AND EXPENDED:

Operations staff were effective in delivering the desired outcomes of the program. Following the completion of the EAB Program in February 2018, the \$1,569,036 remaining budget from the capital project (16165 – Emerald Ash Borer Project) was approved by Council to be utilized for the EAB Next Steps Program as follows:

- \$970,229 (62%) – returned to the Life Cycle Replacement and Capital Reserve Fund
- EAB Next Steps Program
 - \$489,732 (31%) – inspection, monitoring, and warranty administration work from 2018 to 2020
 - \$50,800 (3%) – tree watering resources
 - \$58,275 (4%) – treatment of remaining ash trees in the City’s inventory

The table below provides a summary of expenditures following the completion of this program in December 2020:

	EAB Next Steps Budget (A)	2018 Actuals (B)	2019 Actuals (C)	2020 Actuals (D)	Total 2018-2020 (E) = (B) + (C) + (D)	Variance (F) = (A) - (E)
Warranty Inspections	\$ 489,732	\$ 127,650	\$ 164,186	\$ 127,831	\$ 419,667	\$ 70,065
Watering	\$ 50,800	\$ -	\$ -	\$ 22,424	\$ 22,424	\$ 28,376
Injections/Removals	\$ 58,275	\$ -	\$ -	\$ 45,034	\$ 45,034	\$ 13,241
Total	\$ 598,807	\$ 127,650	\$ 164,186	\$ 195,289	\$ 487,125	\$ 111,682

The **EAB Next Steps** program concluded with a budget surplus of \$111,682, which staff recommend be returned back to the Life Cycle Replacement and Capital Reserve.

KEY PROGRAM ACCOMPLISHMENTS:

2018: 10,919 site inspections completed and 278 warranty replacements identified

2019: 4,866 site inspections completed and 408 warranty replacements identified

2020: 4,476 site inspections completed. The number of warranty replacements not currently available.

Due to relatively high precipitation in 2018 and 2019, provisional watering was not required. EAB injections of remaining ash trees were deferred until 2020 following a review of the program. Approximately 130 trees are scheduled for treatment in 2020. The remaining funds from this budget line are to be used for the removal of Ash trees identified by staff as being in poor condition.

FUTURE CONSIDERATIONS – BEYOND EAB:

Markham lost 17,000 mature trees during the period 2014-2017 due to the EAB infestation and replaced them with 17,000 infant trees. Staff recommend the following maintenance strategy for future years:

- Approximately 130 Ash Trees to receive final EAB injection in 2020
- Approximately 330 remaining Ash trees to be removed (*unfit candidates for injections)

- Monitor the 17,000 off-warranty young trees for pruning, mulching, and watering to protect \$6.1 million in investment **
- Maintain the GIS-based Tree Inventory; optimal planning for a proactive strategy to develop an Urban Forest Plan
- Integrate young trees into the newly created Neighborhood Tree Maintenance Program
- Maintain the level of records and work requirements

Notes: * Re-allocating remaining injection budget
 ** Cost of trees planted

The EAB and EAB Next Step Programs have been a resounding success in the City of Markham. Operations staff are proud to have developed and implemented these programs on time and within budget. The EAB Next Steps program will conclude at the end of 2020 having utilized funds from the original EAB capital project with no future budget required at this time.

RECOMMENDATION:

Staff recommend that as at project completion, the remaining funds in project #16165 – Emerald Ash Borer, in the amount of \$111,682 be returned to the Life Cycle Replacement and Capital Reserve.