



TO: GENERAL COMMITTEE

SUBJECT: INVESTIGATION - PARTNERSHIPS FOR FUNDING OF TREATMENT COSTS OF ASH TREES

WARD: ALL

PREPARED BY AND KEY CONTACT: K. RANKIN,
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SUBMITTED BY: D. FRIARY
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CHIEF ADMINISTRATIVE OFFICER APPROVAL: M. PROWSE, CHIEF ADMINISTRATIVE OFFICER

RECOMMENDED MOTION

1. That staff in the Roads, Parks and Fleet Department be authorized to enter into partnership agreements upon request of property owners living adjacent to healthy ash trees as identified in Appendix "A" to Staff Report RPF014-17 with one-third of the cost being funded by the City and the remaining two-thirds to be funded by the adjacent property owner.
2. That staff in the Roads, Parks and Fleet Department be directed to include the estimated additional annual cost of \$3,000 to the Parks and Forestry Operating Budget Account 01-18-4840-0000-3754 (1269-671400) to support the proposed partnership program.

PURPOSE & BACKGROUND

Report Overview

3. On July 24, 2017, City Council adopted motion 17-G-197 regarding "Investigation – Partnerships for Funding of Treatment Costs of Ash Trees" as follows:

"That staff in the Roads, Parks and Fleet Department investigate the feasibility of partnering with community associations in Barrie to provide for treatment of healthy ash trees and avoid the removal of such trees, with one-third of the cost to be funded by the City and the remaining two-thirds to be funded by the community association and/or individual residents, and report back to General Committee."
4. This situation arose as a result of the Allandale Neighbourhood Association expressing interest in cost sharing for the preventative treatment of ash trees on boulevards in their neighbourhood.
5. In 2012, the Emerald Ash Borer (EAB) Program was implemented in response to the pending impact of the EAB beetle on the greater than 5,300 ash trees on boulevards and in parks and the estimated 180,000 ash trees in public forests. It included proactive replacement of young (small) ash trees, preventative treatment of specimen trees in high profile locations (e.g. waterfront, arboretum) and public education on options for private tree owners for their ash trees.

ANALYSIS

6. By the end of 2017, 2,200 ash trees on streets and in parks will have been removed and replaced as a result of the emerald ash borer infestation. A further 3,000 are planned to be replaced with alternative species of trees not susceptible to EAB. The average cost of proactive ash removal (including tree removal and stump grinding) has ranged from \$80 to \$212 per tree. It is important to note that the reactive removal costs to remove an individual (dead) street tree are estimated to range from \$750-\$1000. Replacement trees range from \$240 to \$310 per tree depending on the species selected.
7. Currently, approximately 100 specimen ash trees throughout the city have been treated with TreeAzin, Forestry's current preferred choice of injected insecticide to provide a level of protection against EAB. There are only two approved systemic insecticide products available for use in Canada as a preventive treatment to protect healthy ash trees from EAB. The efficacy of each treatment option is widely debated and success is not guaranteed by either product. The following describes the difference between each option;
 - a) TreeAzin (derived from seeds of the neem tree) injected in the main stem, inhibits EAB larval development, prevents adult emergence, affects adult fertility and provides preventative treatments in the control of EAB. The following criteria have been developed by US and Southwestern Ontario municipalities to select trees that are candidates for insecticide injection: high value ash trees; trees must have less than 30% dead branches; and trees must be in good general health. Injections must be repeated two out of every three years for the remaining lifespan of the tree to provide continued protection against EAB.
 - b) IMA-Jet is an imidacloprid based insecticide granted approval for use in Canada specifically to protect ash trees from EAB. It is also directly injected into the sapwood of the tree and is translocated throughout the tree stem, branches and leaves. Ingestion by EAB feeding on the tree causes mortality to the larva or adult. Both treatments are similar in material costs, however IMA-Jet is significantly faster to inject and is recommended to be used annually for the lifespan of the tree. The active ingredient (imidacloprid) is considered toxic to bees, so the use of the product is recommended post-bloom to reduce the risk of residues in floral pollen and/or nectar.
8. In 2017, forty-four (44) ash trees were treated with TreeAzin, of which thirty-one (31) were identified as specimen ash trees and treated by the City and six (6) ash trees were treated by contractors hired and paid by residents to treat the ash tree on the boulevard in front of their house. An additional seven (7) city-owned ash trees were identified by the Allandale Neighbourhood Association as street trees that they would like the City to treat to protect additional mature trees in their neighbourhood. While they were not identified by city Forestry staff as being specimen ash for treatment, they were added and treated through the City program in 2017 to allow time for the Association to raise money to take over future continued treatments of the trees.
9. Since the implementation of the EAB program, thirteen (13) residents across Barrie have treated city-owned ash trees on city boulevards at their address and a further seven (7) ash have been identified by the Allandale Neighbourhood Association for a total of (20) privately funded ash tree treatments. The cost for treatment of ash trees is based on the diameter of the tree and has ranged from approximately \$150 to \$400 per tree (per treatment by licensed applicators) with a few (resident) reported costs as high as \$600 per annual treatment.

10. Approximately half of the large ash street trees have been replaced between 2014 and 2017. Assuming the same extent of interest as per above by city residents in treating ash trees on boulevards in the remaining inventory (not already being treated by the City), there could be the potential for an additional twenty (20) requests for partnering with the City for a total of forty (40) ash street trees being treated by residents. Forty (40) mature ash trees would be an estimated total treatment cost of \$12,000 (\$300/tree), for 2 out of every 3 years. Based on the proposed one-third cost sharing scenario, the annualized operating budget impact of the City treating the additional trees once every four years would be \$3,000 per year.
11. Based on the proposed one-third cost sharing scenario, staff recommends a treatment schedule for each individual tree, whereas the City would complete one out of every three required treatments. This would ensure that the first treatment is completed at the correct time of year and dosage and provides the individual/community association time to raise funds. The following table is an example of an individual tree's treatment schedule:

Year	Treatment Responsibility
1	City of Barrie
2	Individual or Community Association
3	- No treatment, tree recovery year
4	Individual or Community Association
5	City of Barrie
6	- No treatment, tree recovery year
7	Individual or Community Association
8	Individual or Community Association
9	- No treatment, tree recovery year
10+	Continue treatment timing pattern for natural lifespan of tree

12. Assuming the lifespan of each tree is extended by twenty (20) years using this treatment program, the total cost of the program to the city would be an estimated \$104,000 (includes five (5) treatments by the city, two (2) standard prunes, the future removal of a larger tree and replanting). This compares to the proactive removal and replanting otherwise scheduled for the estimated forty (40) trees at a total cost of \$20,000.

ENVIRONMENTAL MATTERS

13. The following environmental matters have been considered in the development of the recommendation:
- a) Mature trees provide many benefits to the City of Barrie, including but not limited to:
- Water conservation;
 - Energy conservation;
 - Reducing summer air temperature by providing shade
 - Reducing cold winter winds by acting as a wind break
 - Economic benefits;
 - Increasing tourism opportunities
 - Increasing property values
 - Increasing community profile (e.g. Communities in Bloom)
 - Improving community health;
 - Reducing air pollution
 - Reducing harmful ultra-violet light exposure
 - Reducing noise pollution
 - Reducing greenhouse gases

- Reducing soil erosion;
 - Providing wildlife habitat; and
 - Increasing the beauty of the urban landscape.
- b) TreeAzin is the preferred choice of treatment for systemic injection into ash trees due to the unconfirmed potential impacts of systemic injection of imidacloprid to pollinators (bees).

ALTERNATIVES

14. The following alternatives are available for consideration by General Committee:

Alternative #1

General Committee could maintain the existing procedure with respect to individuals or community associations providing all of the funding to treat additional ash trees beyond those specimens identified by Forestry for protection (i.e. Status Quo).

This alternative is not recommended as it does not leverage community partnerships to assist with the funding for protection of city ash trees.

Alternative #2

General Committee could alter the proposed recommendation by including partnering with private land owners in Barrie to provide for treatment of healthy ash trees on private lands and avoid the removal of such trees.

This alternative is not recommended as it is estimated that there are 13,000 private ash trees in Barrie (not including privately owned woodlots). If only 10% of those trees were to be considered for treatment using the one-third funding scenario the estimated total cost to the city tax base would be \$97,500 per year.

FINANCIAL

15. The costs associated with the existing Emerald Ash Borer Program have been included in the 2018 Business Plan. However, additional operating expenditures of an anticipated \$3,000 per year related to the recommendation would be required to be added to account 01-18-4840-0000-3754 (1269-671400). This recommendation may also extend the EAB program significantly beyond its anticipated completion in 2026.
16. Forestry staff resources will be required to implement the recommendation (for administration and tracking of agreements, treatment every four years and additional tree health assessments). Should requests be received to treat more than the estimated additional 40 trees, future Operating Budget requests will be submitted for review and approval each year by EMT and Council.

LINKAGE TO 2014-2018 STRATEGIC PLAN

17. The recommendation(s) included in this Staff Report support the following goals identified in the 2014-2018 Strategic Plan:
- Responsible Spending
 - Inclusive Community



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18. The City would be demonstrating responsible spending by leveraging interested community members to fund two-thirds of the costs to treat additional ash trees for protection against EAB and embracing innovation to improve how we do business.
 19. By protecting additional healthy, mature ash trees in the city we are providing great public spaces and partnering with residents will also promote and facilitate community connections.



APPENDIX "A"

Agreement to Perform TreeAzin™ Injections on City-owned Ash Trees

APPLICANT AGREEMENT

In consideration of the permission granted herein by the City of Barrie for the undersigned to employ a qualified contractor to undertake work on City ash trees as set out in Schedule "A" attached hereto, the undersigned property owner (hereafter referred to as the 'Applicant') acknowledge and agree as follows:

The Applicant(s) signing the agreement is/are the registered owner(s) of the property municipally known as

(Please insert address)

The Applicant acknowledges and agrees that all work is to be undertaken and completed at the Applicant's sole risk and expense and that there shall be no compensation, remuneration or reimbursement by the City of Barrie whatsoever. All Contractors must be licensed Pesticide Applicators, as per the Pesticides Act.

Notification must be provided to the Parks & Forestry Supervisor (or designate) at least ten (10) business days prior to the commencement of work by email or regular mail to:

City of Barrie, R.A. Operations Centre
165 Ferndale Drive North, Barrie, ON L4M 4T5
Phone: 705-726-4220

TreeAzin™ injections must be authorized by the Parks & Forestry Supervisor (or designate). Inspection of candidate tree(s) by Forestry staff must be made prior to the commencement of the approved work by calling Service Barrie at the telephone number listed above to initiate a work order for the inspection.

The City of Barrie assumes no liability for any damages or injury that may occur during, as a result of, or in connection with, the work undertaken by the Contractor. The Applicant will indemnify and save harmless the City of Barrie from all claims for damages or injuries that may occur during this work.

The Applicant hereby waives any claim whatsoever that the Applicant may have against the City of Barrie that may arise as a result of the permission being granted for the work herein described to be undertaken on the tree adjacent to the Applicant's property and the Applicant hereby agrees to indemnify and save harmless the City of Barrie against all actions, suits, claims and demands whatsoever, which may be brought against or made upon the City and from and against all loss, costs, damages, charges and expenses whatsoever which may be incurred, sustained or paid by the City for or by reason of or on account of the permission hereby granted.

Name of Property Owner(s): _____
(Please print)

Signature(s): _____

SCHEDULE A

Roads, Parks and Fleet Department – Parks & Forestry Section

Agreement to Perform TreeAzin™ Injections on City Property

The City of Barrie's Public Tree By-law authorizes and regulates the planting, care, maintenance and removal of trees on City property in an effort to ensure the sustainability of the urban forest and to increase and maintain the City's tree canopy.

Purpose of the Agreement

Upon receipt of a request to inject a City-owned ash tree, on the City's road allowance by an adjacent property owner (the "Applicant"), the Parks & Forestry Supervisor (or designate) will confirm if the tree is on the City's current treatment list; determine if the tree is an ash tree, and determine the health of the tree and confirm this with the Applicant.

The "Agreement to Perform TreeAzin™ Injections on City Property" enables the Applicant, at their expense, to contract tree injection of TreeAzin™ work to a licensed and qualified tree service company ("Contractor"). This option is made available in the event that the property owner wishes to inject a City-owned ash tree that is not currently on the City's list for treatment. To facilitate the start of the process, as well as share in the costs with the Applicant, the Forestry staff will complete the first (year one) injection, and every third treatment thereafter following the prescribed 10-year schedule below:

Treatment #	YEAR (fill out)	Treatment Responsibility
1		City of Barrie
2		Applicant
		- No treatment, tree recovery year
3		Applicant
4		City of Barrie
		- No treatment, tree recovery year
5		Applicant
6		Applicant
		- No treatment, tree recovery year
		Reassess Tree and Resign Partnership Agreement

The Process

If, at the Applicant's expense, an Applicant wishes to have a contractor perform TreeAzin™ Injection(s) on a City-owned ash tree, the Applicant is required to submit a completed "Agreement to Perform TreeAzin™ Injections on City Property". In the case of ash (*Fraxinus* spp.) trees only, qualified contractors who are licensed and trained may perform tree injections of TreeAzin™ using approved injection techniques against the Emerald Ash Borer (EAB) subject to regulatory requirements, recommended practice and prior inspection of tree(s) by Forestry staff.

How Approval for Injections will be Granted

The agreement, which includes Schedule "A", must be completed in its entirety by the Applicant and the Contractor, as applicable. Each tree must be identified by size and location.

Upon receipt of a completed agreement, Parks & Forestry may grant approval for the contractor to undertake the work. The Parks & Forestry Supervisor (or designate) will approve the work by signing and dating the agreement in the space provided. The Applicant will be provided with a copy of the approved agreement as proof of permission to undertake the described work. The Applicant and/or Contractor must provide ten (10) business days' notice to Forestry prior to undertaking the approved work.



Agreement to Perform TreeAzin™ Injections on City-owned Ash Trees

CONTRACTOR AGREEMENT

- To be forwarded ten (10) business days prior to work -

Date: _____ Anticipated Date of Work: _____

Name of Property
Owner(s): _____
(Please print)

Address: _____
(Include postal code)

Phone: () _____

Name of Contractor (Company): _____
(Please print)

Address: _____
(Include postal code)

Phone: () _____

Pesticide Applicator's License Number: _____

Worker's Safety and Insurance Board No.: _____
(Worker's Compensation Number)

Description of Each Tree(s) (Condition & Diameter in cm):

Name of Signing Officer: _____

I/We have authority to bind the corporation/company and have read and understand the Conditions stated on the reverse of this form.

Signature: _____ Witness: _____
(if Contractor is not incorporated)

FOR OFFICE USE ONLY:

Date: _____ Approved by Forestry Section – RPF Department:

Name (print): _____ Signature: _____

CONDITIONS OF CONTRACTOR AGREEMENT

Contractor Responsibilities

The Contractor shall be qualified to perform all work and shall carry out all work in a good and professional manner in accordance with the City of Barrie's latest standards and requirements, and all other legislative requirements including, without limitation, the: 1. Electrical Utility Safety Association Rules from The Infrastructure Health and Safety Association; 2. Ontario Occupational Health and Safety Act; 3. Ontario Ministry of Transportation Highway Traffic Act; 4. Workers Compensation Act, the Ontario Ministry of Environment Pesticides Act; and 5. Pest Control Products Act (PCPA), as administered by the Pest Management Regulatory Agency (PMRA) on behalf of the Minister of Health. The Contractor shall obtain all necessary permits and licenses and pay all required fees and shall also provide all notices as required by law or policy prior to commencement of the work. The Contractor is responsible for all site clean-up, appropriate disposal of any and all waste material, and leaving the tree(s) and work site in a safe state.

Applicant / Contractor Agreements

The Contractor acknowledges and agrees that all work is to be undertaken and completed at the sole expense of the Applicant. All agreements for payment shall be as between the Contractor and the Applicant and the Contractor shall receive no compensation, remuneration or reimbursement by the City of Barrie whatsoever.

Insurance Declaration

The Contractor must provide the City of Barrie with a certificate of general liability insurance, valid for the work period with an available limit of liability of not less than Two Million Dollars (\$2,000,000.00) in which the City of Barrie has been added as an additional insured.

Without limiting the generality of the foregoing, such liability insurance shall contain provisions for cross liability and severability of interests and further that the policy will not be changed or amended in any way or cancelled until thirty (30) days after written notice of such change or cancellation shall have been given to the city.

The Contractor must provide the City of Barrie with a Certificate of Insurance evidencing Standard Automobile Liability, provided that the policy is in the amount of at least One Million Dollars (\$1,000,000.00) for each occurrence.

The Contractor agrees to waive any claim whatsoever that it may have against the City of Barrie that may arise as a result of permission granted for work on city property adjacent to the above property. The Contractor also agrees to fully indemnify and save harmless the City of Barrie against all actions, suits, and claims and demands whatsoever which may be brought against or made upon the city and from and against all loss, costs, damages, charges and expenses whatsoever which may be incurred, sustained or paid by the city for or by reason of or on account of the permissions hereby granted.