



**SUBJECT: Private Tree By-law Program Update**

**TO: Environment, Infrastructure & Community Services Cttee.**

**FROM: Roads, Parks and Forestry Department**

Report Number: RPF-04-23

Wards Affected: All

File Numbers: 802-11

Date to Committee: June 1, 2023

Date to Council: June 13, 2023

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**Recommendation:**

Receive and file the roads, parks and forestry department report RPF-04-23 which provides a program update with respect to the Private Tree By-Law and related activities.

**PURPOSE:**

The purpose of this report is to provide a program update to Council on the status of the current City of Burlington private tree by-law 40-2022 within the urban boundary since it was repealed and replaced in April 2022. In addition, this report serves to identify proposed future improvements and recommendations for consideration and further discussion.

**Vision to Focus Alignment:**

The City's private tree by-law 40-2022 was initiated as part of the Vision to Focus Plan and the City's declared climate emergency. As part of the plan, the implementation of a private tree by-law falls within the following focus area:

- Focus Area 3: Supporting sustainable infrastructure and resilient environment

Key actions under this focus area are the development of Burlington's Climate Action Plan and the Urban Forest Management Plan. The plan's goals of increasing the City's tree canopy and protection of trees, aligns, and is enabled through implementation of the City's private tree by-law.

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## **Executive Summary:**

The public and private tree by-laws are administered by the Forest Protection branch of the Forestry section. In addition, this team provides inter-departmental support as subject matter experts for other tree related matters.

With the changes implemented in 2022 as a result of the repeal and replace initiative for the private tree by-law, staff noted some improvement in the administration of the program with a reduction in the maintenance related permit requests (affirming the two (2) metre exemption was not being utilized correctly), a better understanding and planning ability for customers relative to replacement requirements, and the achievement in the council approved cost recovery of 30%. Further improvements are expected in 2023, as many of the process changes (e.g., new online e-form) made to the program were implemented late 2022 and into spring 2023.

There was a reduction (21%) in applications received across all three permit streams (pre-building, pools, and general trees), and a slight decrease (4%) in other file types reviewed (e.g., property standard support) compared to that observed in 2021.

However, although there was a reduction in applications received in 2022, a number of files received in 2021 that were either on hold or under review were also processed and this will continue the more years the program operates. This combined with the broadening of the scope of this program to more than what was initially intended, along with further changes either on a corporate level or legislatively (e.g., *Planning Act*), it is expected that the number of files requiring review in 2023 and beyond will increase.

Staff intend to continue implementing process related improvements to the program to better the overall customer experience while maintaining the corporate initiatives and meeting the goals for canopy targets, however to do so, additional resources to support the delivery may be required.

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## **Background and Discussion:**

Following a series of discussions with Council through 2021 and 2022, the private tree by-law was repealed and replaced on April 19, 2022 to streamline the process while still ensuring the original intent of the by-law was captured. This report serves to provide an update on the by-law program and related activities since that time frame.

### **Purpose:**

When the private tree by-law was first passed in 2020, it was done so without the foundation of a corporate policy on tree protection for public and private lands. The development of the City's Tree Protection and Canopy Enhancement Policy established a clear and consistent corporate position on tree protection that informs not only the

development and refinement of several by-laws (including both the public and private tree by-laws), but also provides a path forward to improving other guideline documents, and specifications. The City's Tree Protection and Canopy Enhancement Policy was established on February 3, 2022, and fulfills the legislated requirement as identified in Section 270 (1) of the *Municipal Act*, which requires a municipality to adopt and maintain a policy to protect and enhance tree canopy and natural vegetation. As one of the guiding principles within the City's corporate policy is to preserve and protect, the City's private tree by-law is a means to facilitate that principle through the regulation of the removal of trees and the possible tree-related impacts where work is to occur around them.

### **Incentive & Regulation Based Strategies**

A combination of incentive and regulation-based strategies are required to achieve the goal of 35% canopy cover by 2040 in Vision 2040. Although the private tree by-law is considered a regulation-based strategy, it helps to fund several incentive-based strategies including but not limited to free tree giveaways, community planting events, and more (e.g., potential maintenance subsidies).

The cash-in-lieu of replacement tree funds collected as part of the private tree by-law provided the funding for three (3) free tree giveaway events that the City ran in the spring and fall of 2022 and again in spring 2023. A total of 1,225 trees have been given away to Burlington residents to help support canopy growth city-wide.

### **Private Tree By-law Program Statistics**

As the private tree by-law was repealed and replaced in April 2022, statistics presented herein represent the old and new by-law requirements, as all permits received prior to April 2022 were still subject to the older by-law. Additionally, some process related improvements moved tracking into the City's app-based information tracking software AMANDA, and as a result, statistics for specific tree related details normally captured were incomplete during this transitional period.

### ***Pre-building Tree Permit Applications***

Tree permits associated with building permits are received through the consolidated pre-building permit application process (currently identified as the pre-building approval process). These applications are taken in by the Community Planning Department and circulated to Forestry for review and comment.

As of December 31, 2022, staff received a total of 269 pre-building related tree permit applications. Out of the 269 applications, staff issued 155 tree permits as of May 1, 2023. The remaining files are either on hold (98), were withdrawn (10), or received a declaration (5). A comparison of application and permit status of 2022 files to those in 2021 is illustrated in **Figure 1**, showing an overall reduction in total number of

applications received, understanding that staff were still also closing out files on hold/under review received in 2021 throughout the 2022 year **Error! Reference source not found..**

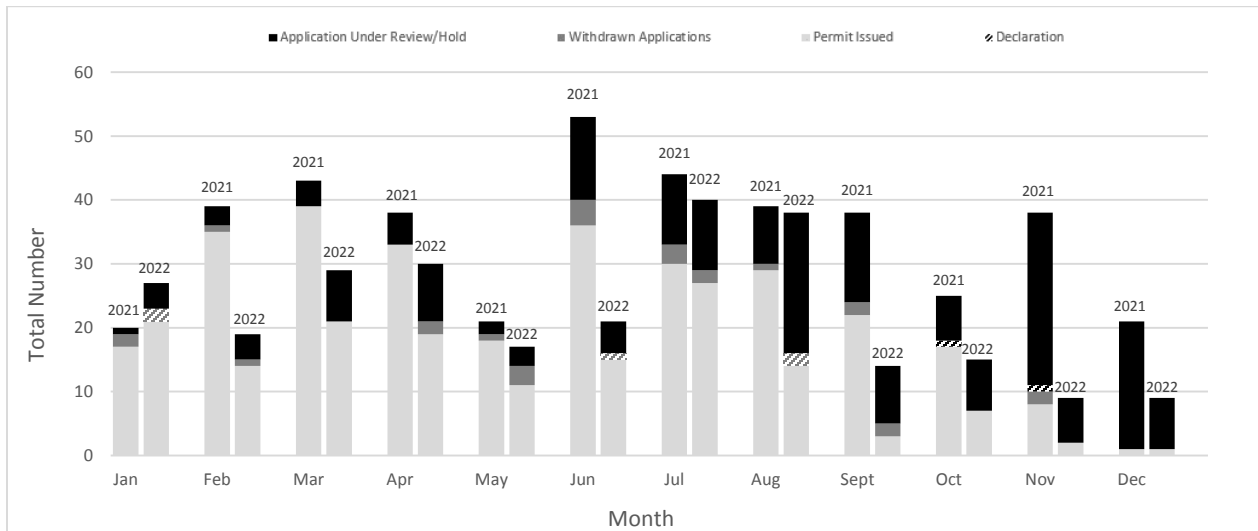


Figure 1: 2021 and 2022 building related tree permit application and issuance comparison

### Pool Tree Permit Applications

Tree permits associated with pool permits are received through a combined residential swimming pool application process. These applications are taken in by the Community Planning Department and circulated to Forestry for review and comment.

As of December 31, 2022, staff received a total of 209 pool related tree permit applications. Out of the 209 applications, staff issued 193 tree permits as of May 1, 2023. The remaining files are either on hold (11) or were withdrawn (5). When comparing the number of pool applications received between 2021 and 2022, there was roughly a 20% decrease in the number of applications received in 2022, however this reduction was spread across several months, again with the understanding that some files received in 2021 that were under review or on hold, were also part of the 2022 workload review. A comparison of 2022 application and permit statuses to those in 2021 is illustrated in **Figure 2Error! Reference source not found..**

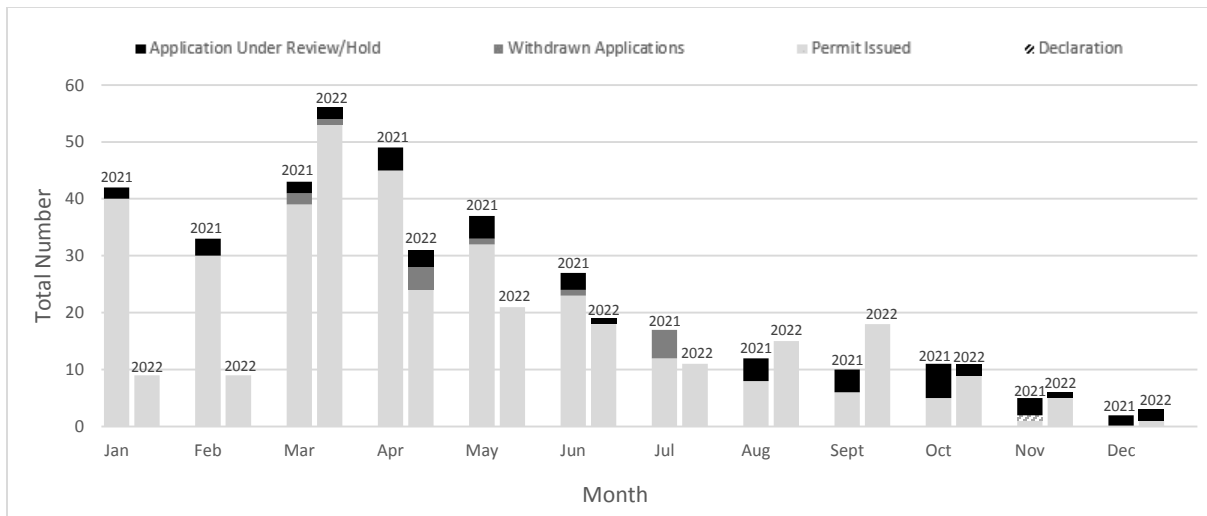
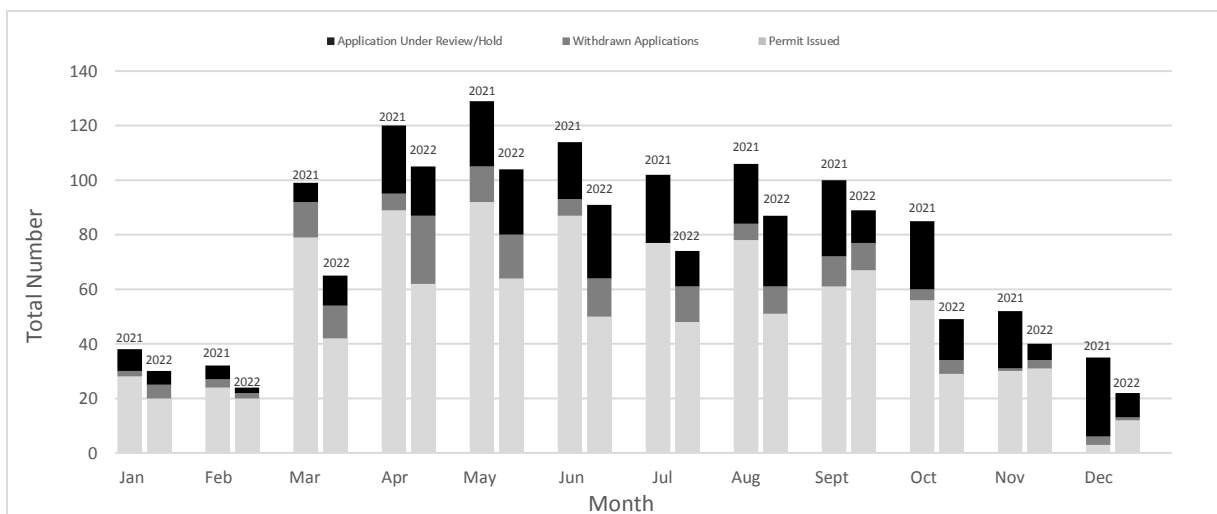


Figure 2: 2021 and 2022 pool related tree permit application and issuance comparison

### General Tree Permit Applications

Tree permit applications not pertaining to a building permit or pool permit are received through a web-based application (e-form) directly by the Forest Protection branch. These permits may pertain to projects but are not limited to general tree removals, landscaping projects, servicing, and/or driveways.

As of December 31, 2022, staff received a total of 781 general tree permit applications through our e-form. Out of the 781 tree permit applications, staff issued 496 tree permits as of May 1, 2023. The remaining files are either on hold (168) or were withdrawn (116). Similar to the building and pool permit related applications, there was an overall reduction in the number of general tree related permit applications in 2022 compared to 2021. An overview of this comparison provided in **Figure 3** *Error! Reference source not found.*

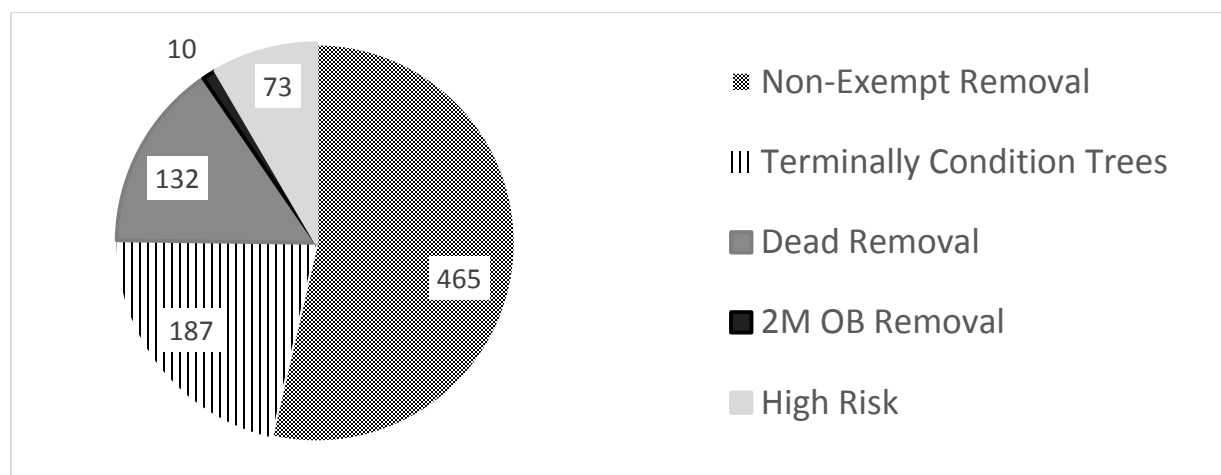


*Figure 3: 2021 and 2022 general tree permit application and issuance comparison*

Reasoning behind some of the withdrawn applications across all three (3) permit streams include: customers placing their projects on hold, or where customers applied for an exemption permit type (e.g., a dead tree) and no longer wished to pursue the permit where an exemption was not granted either due to fees and replacement requirements, or simply they changed their mind and decided to retain the tree for a few more years.

### **Tree Removals**

A summary of tree removals across the various tree permit streams is illustrated in **Figure 4**. A total of 465 trees were removed in 2022 that were not related to an exemption; 187 trees were exempted with a terminal condition, 132 were identified to be dead, 10 trees were those within two (2) metres of an occupied building (provision removed from by-law after April 19, 2022), and 73 trees were considered high-risk or imminently hazardous. Of the trees removed, the majority were recorded in the 20 to 35 cm diameter range.



*Figure 4: 2022 Tree removal data*

### **Replacement Tree Planting**

As part of the private tree by-law, trees of regulated size (20cm in diameter or greater) are required to be replaced, either through the planting of replacement trees, or by providing cash-in-lieu of replacement.

Tree replacements prior to the changes made in April 2022 were calculated based on an aggregate caliper method versus a ratio-based replacement strategy. More specifically, the total number of replacement trees was based on the size and overall health and structure of the tree with a replacement tree required for every 10 cm removed. With the changes made in 2022, replacements are now determined using a ratio-based strategy that requires, either two (2), three (3) or four (4) trees be planted based on the size of tree removed. A summary of the trees that were required to be

planted in 2022 and the success rate of those plantings is provided in **Table 1** in addition to a snapshot for 2023. Staff did observe a 5% reduction in the percentage of trees planted in 2022 compared to those planted in 2021. The result of this reduction provides greater confidence in the City’s introduction to require a replacement tree security as part of the 2022 by-law changes whereby, when a customer identifies they plan to replant trees to satisfy their replacement conditions of their tree permit, a replacement tree security deposit is collected and refunded once the trees have been planted. Staff are hoping this change will result in greater success in the years moving forward.

*Table 1: Summary of tree replacement success in 2022*

	Replacement trees required	% Planted	%Outstanding	Replacement trees provided as cash-in-lieu
2022	1,142	65%	35%	570
2023	736	8%	92%	507

### **Forest Protection Workload and Evolution**

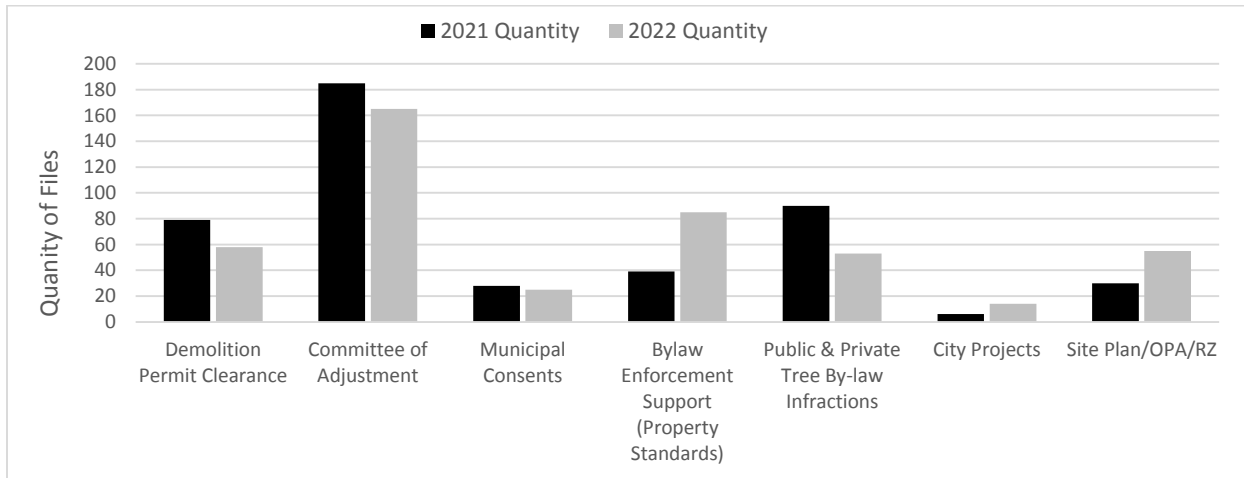
Prior to the creation of the Forest Protection branch, the administration of the public tree by-law was completed by staff in the Forest Planning and Health branch. This work was done when time allowed due to lack of staff capacity. This led to inconsistencies in its administration, with numerous contraventions taking place without corrective action, and no compensation for any canopy impact. At the time, partner departments, more specifically Development Engineering, provided additional support with respect to the review of site plan and other planning related applications, and compliance efforts for the City’s public tree by-law was minimal for all project related works adjacent to public trees.

The original intent of the Forest Protection branch was primarily to administer the private tree by-law. Since that time, the scope of support of this team has expanded significantly to include review of files relating to demolitions, property standards support for our City’s by-law department, committee of adjustment application review, projects run by other City departments such as design and construction of parks and linear infrastructure and facilities and the integration with municipal consents for access in the public right of way for utility companies to perform standard maintenance or upgrades existing services.

Staff have also been involved in planning application reviews (e.g., site plans, and official plan amendment and rezoning applications) to support Development Engineering in the review of private and public tree removals as part of the overall landscape component, with staff preparing the necessary documentation for council permissions, and permit issuance where public tree permits are required. As the City

continues to expand, and the intensity of these reviews increase with the introduction of Bill 109 and 23, more impacts to trees are likely to occur, and a consistent approach to the review of these files by a subject matter expert is critical. As such, the Forest Protection branch may require additional resources to support improvements in the delivery of these applications relative to applicable law (i.e., the public tree by-law).

To provide an overview of the various file types reviewed in addition to the three (3) permit streams identified previously, a snapshot of quantities over the past two years is illustrated in **Figure 5**.



*Figure 5: Quantity of additional file types reviewed by Forest Protection in 2021 and 2022*

In most instances the number of files was relatively steady across both years with an increase in support for property standard service requests, city design and construction projects and files following the planning process. Numbers in many of these streams are expected to increase with changes to the municipal consent process, pre-building approval process, and legislative changes to planning related files.

All this work is critical in supporting the protection and preservation of trees on both public and private properties to ensure alignment with the City’s corporate policies, however, the majority of this support has gone on without recoverable fees for administrative time and without the necessary resources to complete tasks in a manner that is both efficient and effective, yielding a negative customer experience.

The enforcement side of this program also requires review and attention. Since implementation of the private tree by-law, staff have been investigating process improvements to help streamline the process related to applications and permit issuance. Items such as standard operating procedures associated with enforcement, and tools and education to support enforcement related inquiries require refinement and alignment with the other sections of enforcement at the City. This will ensure the efficacy of the by-law’s are met as Council originally intended. As legislative changes

continue to put pressure for development to occur, the City needs to be equipped with proper resources to react accordingly, but more importantly to identify and develop strategies to be as proactive as possible.

The Forest Protection branch has been utilizing staff from other sections of forestry and the Roads Parks and Forestry department at the expense of other programs to help assist with this program delivery due to the increasing demands to ensure proper compliance of both by-laws. This utilization of outside staff has mainly been to assist in administrative duties such as payment processing, email inquiries, and to help support planning related applications. This is done in a manner where time allows, leading to time delays and missed opportunities. In addition to the utilization of other staff, the staff currently in the Forest Protection branch have been working overtime during extended periods of time each year since the program’s implementation in 2020 to keep up with the increase in application and review intake and expanding program demands with the overtime expenditures in 2022 equal to 0.5 FTE. The use of other staff, and the need for overtime is not a sustainable practice. It leads to burnout and does not contribute to an effective and healthy organization.

With a resourcing gap in 2022, the average review time for the three (3) existing permit application streams increased compared to 2021 (**Table 2**). The gap in staff resulted in an increase in backlog that was unable to be cleared until the end of the year. This further demonstrates the shortcomings within the program, whereby the short-term loss of one staff member could result in the inability to maintain service at manageable levels.

*Table 2: Average time for tree permit issuance from time of application*

Tree Permit Application Type	2021	2022
Pre-building	9 Weeks	17 Weeks
Pools	11 weeks	10 Weeks
General	7 Weeks	9 Weeks

It is generally understood that programs evolve over time. This program, however, has evolved at a rapid pace due to the gap that existed prior to the branch’s existence for public trees, and the support and requirements needed to oversee both by-law streams. This is partially due to the unprecedented circumstances and rise in “at-home” projects due to the COVID-19 pandemic, but also due to programs that have evolved and expanded to meet the needs of a growing City, and the increasing pressures placed by legislative changes. As such, to continue to service the City and advance the existing progress made to date, the Forest Protection branch requires additional resources. Staff will provide an update to the Strategy and Risk Team on resource requirements in preparation for the 2024 budget deliberations.

## **Procedural/Process Improvements**

Since the implementation of the current private tree by-law in April 2022, staff have implemented some process and procedural improvements that are summarized in the following sections.

### **2022 By-law amendments**

Although the by-law was repealed and replaced in 2022, a number of permits issued last year were still following the 20-2020 by-law provisions up to April 19, 2022.

However, with the changes implemented, staff note these key observations:

- A reduction (0 permits issued) for maintenance related permit requests, affirming that the two (2) metre exemption was not being utilized correctly;
- More individuals opting for cash-in-lieu of replacements versus planting trees (91 in 2022 compared to 76 in 2021), likely as a result in the reduction in number of replacement trees required, and the reduction in the replacement tree cost;
- Few (less than 3) instances where an individual has requested to plant on an alternate lot;
- A more in-depth review provided for significant tree removal requests allowing for additional discussions to take place and education;
- Achievement in the council approved cost recovery of 30% with the implementation of the modified permit fee structure; and
- A simplified understanding of replacement tree requirements; with a ratio-based approach allowing customers to plan accordingly.

### **Tree Permit Application Form and Integration with AMANDA**

An online application form was launched in December of 2022 and became fully integrated into AMANDA for general tree permit applications. The direct integration into the AMANDA system reduces the manual entry by staff when permit applications are received for general tree-related permit types.

The portal system where the tree permit application is made allows the customer to view the status of all their current tree permit applications and pay any non-refundable fees directly with a credit card. The new e-form is designed to provide clear information about the trees associated with the application and provides the ability to upload photographs as well as other documentation. This change in the design of the e-form has resulted in a reduction of correspondence between staff and applicants following their initial application submission. The ability to upload photographs has also provided the capability for staff to review some applications from their desk without the need for a site visit. Although the e-form went live in December 2022, following the launch of the

by-law and to tie into process related improvements, staff did begin to issue tree permits from their desk where photographs were provided by the customer. A total of 123 tree permits were issued from desk in 2022, with that number expected to increase in 2023 as a result of the e-form changes.

Tree permit applications as part of pool permits or the pre-building process are not collected as part of this form and are not currently integrated in AMANDA. However, as part of the City's Streamline Development Approval Fund (SDAF) project that started in 2022, a new visibility tool for pre-building approval applications went live in May 2023. This tool is integrated with AMANDA and allows the customer to follow along with their tree permit application associated with these project types along with their approvals from other departments such as Zoning and Development Engineering. Within the portal, customers will also have the ability to add others to follow along with their application (e.g., a contractor can add a homeowner) which provides transparency across all parties.

Additional improvements to AMANDA are still needed to optimize process efficiencies for the Forest Protection branch, however several of them were made in April 2023. Any further improvements will be dependent on resource capability within digital services and staff will continue to work with those teams.

### **Creation of a Guide to Tree Protection**

Staff launched a guide to tree protection in December 2022. The guide was developed to provide general information about tree protection with a focus on how to navigate the City's private tree by-law. Various processes, requirements and terms are provided in the document along with a series of illustrations to help explain the importance of trees and how to work around them. The guide uses plain language to help customers understand requirements.

### **Yellow belt Training & Certification**

As part of the City's continuous improvement strategy, the Forest Protection branch participated in yellow belt training under lean six sigma and achieved their yellow belt certification. Participation in this training was designed to review the current processes across multiple tree permit related streams and to identify efficiencies to be implemented with a focus on the pre-building approval process. Pilots are currently planned to be implemented in summer 2023.

### **Streamline Development Approval Fund Project (SDAF)**

Forest protection took part in the SDAF project that was initiated in 2022. Through the participation in this project, staff took part in identifying process improvements to the City's consolidated pre-building permit process (now known as the pre-building approval

process). Process improvements resulted in modification to an existing application form, introduction of a pre-screen process and the creation of the new visibility tool.

### **Webpage Updates & Other Supporting Documents**

Staff continue to update the existing Forest Protection & Tree Permits webpage to provide information for customers. Additionally, the Forest Protection branch has prepared and updated several other resource documents over the past year to clarify permit related requirements and provide frequently asked questions and responses to tree permit application streams associated with pools and pre-building approvals.

Staff will continue to update the webpage along with guides, forms, and templates through consultation with our communication and engagement teams to support the overall customer experience.

### **Future Improvements**

As part of the City's continuous improvement, the Forest Protection branch will continue to utilize the training achieved through lean six sigma and look for ways to improve processes and delivery of the program.

### **KBAs and additional requests in CRM**

The Forest Protection branch entered into the CRM system with the entire Roads Parks and Forestry Department in September 2021. At that time, knowledge-based articles (KBAs) were prepared to assist Service Burlington staff in their support for information and service based requests from customers. Throughout the past year, staff have reviewed the requests that have been received and plan to update the existing KBAs and create new articles to better support staff and the customer in their understanding of forest protection related services. A summary of the number of requests received since its implementation is provided in **Figure 6** with most months seeing on average over 100 requests. Service through the CRM portal is one method of communication provided by the Forest Protection branch, as a general mailbox for certain permit types and communication is also monitored with an average of 200 monthly requests, in addition to staff's personal mailbox, which also receive general inquiries pertaining to the delivery of the program.

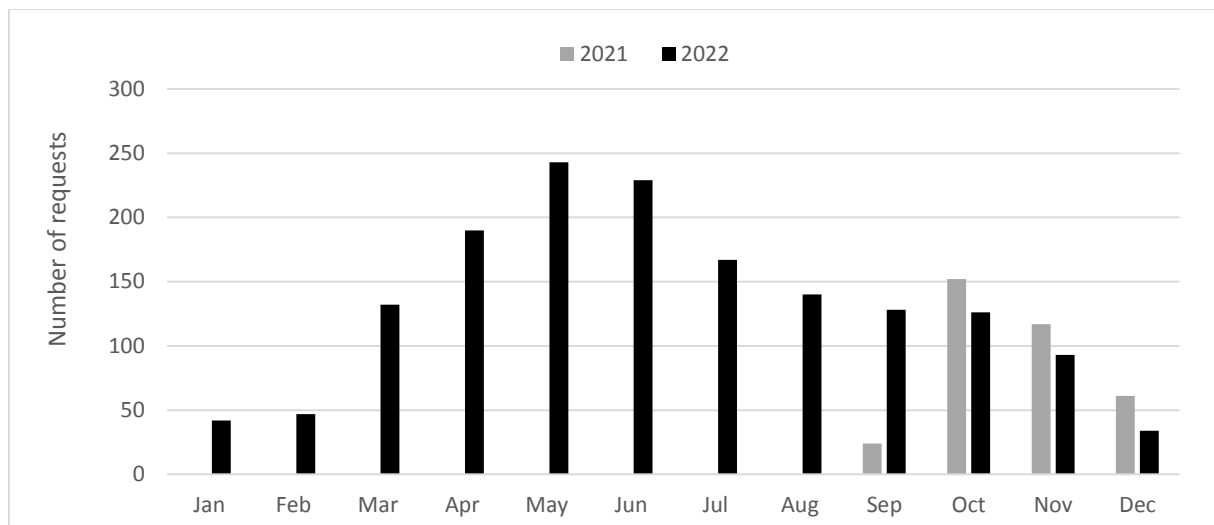


Figure 6: CRM information and service-related requests received in 2021 and 2022

### Specification Document

The City's tree protection and preservation specification was first implemented with the public tree by-law. When the private tree by-law was enacted in 2020, methods were made to add the private tree by-law into the specification document. As construction processes are ever changing and to better assist contractors, staff plan to review the current specification document.

### Enhanced utilization of tree planting reserve fund

The City's current Tree Planting Initiative Reserve Fund provides for the ability of the cash-in-lieu of replacement tree funds to fund tree planting and/or replacement on city and privately owned properties. As part of the City's Tree Protection and Canopy Enhancement Policy, maintain and monitor is one of the four (4) guiding principles. Staff would like to investigate the ability to utilize the funds to support both canopy establishment, as well as enhancement initiatives. This strategy will help to incentivize residents to retain trees on private property by leveraging the use of fixed maintenance subsidies, to offset costs of pruning, cabling, fertilizing, and other practices related to tree maintenance. Further comments and proposed changes with respect to the reserve fund by-law have been provided through staff report RPF-05-23 Tree Planting Initiatives on the same agenda.

### Investigation of Replacement Tree Backyard Planting Program

The replacement trees that are required as part of the tree permit process are designed to help maintain and increase the canopy over time. More investment is needed to monitor the replacement trees installed as part of the permit process, as well as possibly oversee their installation (where required). Staff are investigating the feasibility of a replacement tree backyard planting program with a third-party non-profit organization that will assist in the replacement tree program by installing trees and

monitoring them overtime. This will allow the City the ability to track the success of the plantings and to better manage the canopy over time. The establishment of a backyard tree planting program can also assist customers in planting new trees to ensure the right tree is planted in the right place; ensuring long-term success.

### Financial Matters:

For 2023, the total expenditures to administer the Forest Protection branch within the Forestry section is budgeted at \$625,864. Revenues were budgeted at \$190,000 for a 30% recovery ratio with the balance of \$435,864 (70%) being tax supported.

### Total Financial Impact

The following is a summary of the 2022 Forest Protection program as it relates to the 2023 budget:

*Table 3: 2022 and 2023 Budgeted Expenditures with Recoveries*

	2022 Budget	Actual 2022	Budget 2023
Total Program Expenditures	\$ 612,750	\$ 648,206	\$ 625,864
Permit Fee Recoveries	\$ 186,250*	\$200,666	\$190,000
<b>Total Tax Levy Support</b>	<b>\$ 426,500 (70% tax levy supported)</b>	<b>\$447,540 (69% tax levy supported)</b>	<b>\$435,864 (70% tax levy supported)</b>

*\*Budgeted recoveries as approved by council in RPF-03-22 (Option 3)*

### Source of Funding

The source of funding for the private tree by-law program is through both permit fee recoveries (30%) and tax levy support (70%).

### Other Resource Impacts

Not applicable.

### Climate Implications

Trees contribute towards the City's climate change goals both through their role in climate mitigation, sequestering carbon, adaptation by reducing the heat island effect, promoting infiltration and interception of rainwater, and improving air quality. Trees also

improve the overall environment through their aesthetic qualities, providing habitat, reducing noise pollution, contributing to stress reduction, as well as screening and privacy. These benefits accrue to both private properties and the community at large.

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### **Engagement Matters:**

Not applicable.

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### **Conclusion:**

Through the comprehensive review and refinement of the current by-law, applicable processes, and associated permit fee structure, staff have taken measures to improve and streamline the administration of the private tree by-law. As the population in the City continues to rise, so does the demand for services provided by the Forest Protection branch. Additional resources may be required to support further program improvements in the administration of both the private and public tree by-laws to ensure the City's achieves its goals in canopy targets, as well as aligns with corporate policies all while maintaining a level of service that is acceptable.

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Respectfully submitted,

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### **Report Approval:**

All reports are reviewed and/or approved by Department Director, the Chief Financial Officer and the Executive Director of Legal Services & Corporation Counsel.