

REPORT

Parks & Recreation

To: Mayor Johnstone and Members of Council
Date: August 28, 2023

From: Dean Gibson
Director of Parks and Recreation
File: 2294960

Item #: 2023-531

Subject: 12 K de K Court Boulevard Trees

RECOMMENDATION

THAT staff be directed to revert the current three-year esplanade boulevard tree maintenance cycle to the seven-year cycle standard and objectives as applied to street and boulevard trees in other areas of the City.

PURPOSE

This report provides background information on an ongoing boulevard tree management issue on the Quayside esplanade adjacent to the Strata at 12 K de K Court, and recommends a course of action going forward.

SUMMARY

Commencing with the installation of additional trees along the Quayside esplanade boulevard in 2007, residents of the Dockside Strata at 12 K de K Court have expressed concern regarding the impact of the trees on matters pertaining to light and river views. A compromise approach was supported by Council in 2016-17 that resulted in a higher standard of tree maintenance along the esplanade with particular emphasis on pruning trees adjacent to 12 K de K Court with the intent of improving light penetration into the river facing residences and re-establishing views to the river.

Concurrent with addressing the issues pertaining to esplanade boulevard trees and the Strata at 12 K de K Court, the City has adopted its [Urban Forest Management Strategy](#) (UFMS) and its Seven Bold Steps towards climate action (of which Bold Step #6 addresses the preservation and development of a robust urban forest). These actions have heightened awareness of the value and importance of trees to the community and

have resulted in prioritizing the City's efforts towards preserving and growing the urban forest.

Five years later, staff have assessed that the current tree maintenance program at the esplanade is not fully achieving the intended outcomes and is not sustainable with current staffing resources. This report outlines a series of options to address the current situation and recommends reverting the current three-year esplanade boulevard tree maintenance cycle to the seven-year cycle standard and objectives as applied to street and boulevard trees in other areas of the City.

BACKGROUND

Historical Context

In early 2007, the City undertook to plant additional trees along the length of the grass city boulevard adjacent to the Quayside esplanade. This work was performed in anticipation of the future removal of the large Linden trees along the esplanade as part of a program to repair the head wall running beneath the length of the esplanade. The Quayside Community Board was consulted in the lead up to the tree installation program. Subsequent to the installation of the trees, 32 residents from the Dockside Strata at 12 K de K Court (the "Strata") petitioned the City to have the esplanade boulevard trees fronting their property removed. At its April 16, 2007 meeting, City Council supported this request, save for the retention of one tree. In the ensuing weeks following this decision, the City received considerable feedback regarding the decision to remove the trees and after undertaking its own survey of the residents from the Strata, on March 6, 2008 Council elected to reverse its previous motion and retain the trees at 12 K de K Court.

Over the ensuing years, the Strata had proposed to the City to undertake, through the Strata's landscape contractors, the maintenance pruning of the subject boulevard trees. The City has long-standing practice of not permitting independent parties to prune trees on City land.

On October 3, 2016 a delegation from the Strata appeared before City Council requesting removal of three of the city esplanade boulevard trees fronting their property as installed in 2007, and annual pruning of an additional two trees that were installed in this same period. The basis of this request was rooted in the concern that the trees were not performing as described by the City prior to the trees' installation in 2007. After nine years of growth, three of the five trees were displaying more vigorous development than anticipated resulting in impacts to view corridors to the river at some of the Strata residences and restriction of natural light to some condominium units. The Strata, informed by a consulting arborist and their own research of related resources, assessed that, at maturity, the trees would be almost double the size from that initially forecasted by the City in 2007. In response, Council passed the following motion:

MOVED and SECONDED THAT the submission by Dockside Strata dated August 4, 2016 be referred to staff with a report back to Council with options.

Between October 2016 and March 2017, staff looked further into the matter as presented to Council by the Strata. This review included a review of the Strata's consulting arborist report, assessment of the current state of the trees, review of the site context, and development of a series of response options. On March 27, 2017 Council considered the following options (see Attachments A and B):

1. Maintain Status Quo – noting that all boulevard trees had yet to be pruned since initial installation and were scheduled for pruning in 2017 and approximately every five to seven years thereafter.
2. Remove and replace three trees – through transplantation or tree cutting and replacement with species better suited for the unique conditions of the site.
3. Undertake thorough pruning of trees and increase tree pruning to a three year cycle

Council adopted the staff recommendation:

THAT staff be directed to undertake thorough pruning of the existing three boulevard trees at 12 K de K Court and increase the tree pruning cycle to once every three years as described in Option #3 in the report dated March 27, 2017;

Council additionally directed staff to investigate a number tree pruning and maintenance approaches brought forward by a member of Council on behalf of the Strata.

In response to Council's March 27, 2017 motion, staff drafted two documents to assist in further describing the intended maintenance program for all esplanade trees installed in 2007 and additionally those specifically fronting the Strata property at 12 K de K Court. One of these documents additionally articulated the site characteristics of the Strata property that were exacerbating the impact of the boulevard trees on the strata building. These maintenance programs were endorsed by Council on April 10, 2017 (see Council report as Attachment C and specific maintenance programs as Attachments D and E). Key to these maintenance programs are the following objectives:

- A. Maintain and enhance the overall health of boulevard trees
- B. Re-establish and maintain view corridors between trees towards the river
- C. Enhance and maintain air flow and light penetration through each tree and improve views through the trees by thinning the tree canopy
- D. Comply with applicable provisions related to tree maintenance and pruning as referenced in the City's Tree Protection and Regulation Bylaw

Urban Forest Management Strategy and Climate Action Bold Steps

Concurrent with addressing the issues pertaining to esplanade boulevard trees and the Strata at 12 K de K Court, in 2016 the City adopted an [Urban Forest Management Strategy](#) (UFMS) and in 2019 adopted the Seven Bold Steps towards climate action of

which Bold Step #6 addressed the preservation and development of a robust urban forest.

The UFMS identifies that New Westminster's urban forest is valued for its environmental quality, its beauty and naturalness, and the social and recreational opportunities it provides. These values contribute to the quality of life of New Westminster.

Implementation of the Strategy further responds to key Council priorities of:

1. Health and well being
2. Environmental health
3. Energy savings
4. Comfort/shade/microclimate (extreme heat response)

The aim of the UFMS is to increase the City's tree canopy cover from 18% to a target of 27% by 2035. To reach the tree canopy coverage goal, existing trees throughout the City are to be preserved to the extent possible and an additional 8,500 trees (maximizing large canopy trees in suitable locations) are to be planted on public land.

To support of the goal of retaining the existing inventory of trees in the City, the [Tree Protection and Regulation Bylaw, No. 7799](#) was adopted in early 2016. The Tree Protection Bylaw establishes which trees in the City are to be considered as having protected status and the conditions under which a protected tree may be considered for removal.

In 2019 the City's tree canopy coverage target was expedited to 2030 when Council declared a climate emergency and adopted the [Seven Bold Steps](#) towards climate action. Bold Step #6 (Robust Urban Forest) outlines the City's goal to increase the Urban Forest Canopy cover to 27% by 2030 to support the sequestration of carbon from the atmosphere and increase the local forest's carbon storage capacity. The value of integration of the natural environment into the public realm was also recognized in Bold Step #7 – Quality People-Centre Public Realm. Over recent summer periods, the local urban forest has played a notable role in the City's resilience to periods of extreme heat by providing outdoor spaces of refuge, shading and cooling of building structures, and in locations of sufficient tree density, a general reduction in the heat island effect.

DISCUSSION

Esplanade Boulevard Tree Maintenance Program Review

Since 2017, the City has worked towards the esplanade boulevard tree maintenance program approved by City Council. Tree pruning along the Quayside esplanade was conducted in 2017, 2018, and 2020. The work performed was undertaken in accordance with the terms of the Maintenance Program as stipulated in Attachments D and E and industry best practices. The next scheduled cycle for esplanade tree pruning is in the fall of 2023.

Despite best tree pruning efforts, over the past several years, the tree maintenance program has not been successful in achieving all of its intended objectives. Over the course of the above pruning period, the diameter of the tree canopies of the five trees fronting 12 K de K Court were periodically measured in order to assess the extent of the change in the overall size of the trees over time. This measure is relevant given the objective of maintaining view corridors between trees towards the river. Attachment F outlines the findings of each tree measurement period. In general terms, each of the five trees has continued to grow and increase in overall size albeit in varying degrees. Most notably is one of the American Yellowwoods where the width of the tree canopy has increased by almost 100%. In contrast though, the second Yellowwood has increased by 25%. Beyond the relative size of the trees is the density of the canopy of both Yellowwood trees. When fully leafed-out, the canopies of these two trees largely obscure any view through the trees and very little light penetrates through the canopy. Finally, as the width of the tree canopies has increased over the years, so too have the view corridors between the trees gradually narrowed.

When assessed against the objectives of the tree maintenance program, the following general results are noted specific to the trees fronting 12 K de K Court:

Objective	Five Year Result
A. Maintain and enhance the overall health of boulevard trees	<ul style="list-style-type: none"> • Trees are in good health and are expected to remain so into the foreseeable future. There is ample soil volume, sufficient sunlight and water, good air movement, and abundant space for each tree to develop.
B. Re-establish and maintain view corridors between trees towards the river	<ul style="list-style-type: none"> • View corridors are narrower today than prior to 2017. The extent of narrowing is inconsistent between various tree species.
C. Enhance and maintain air flow and light penetration through each tree and improve views through the trees by thinning the tree canopy	<p>Results vary across tree species:</p> <ul style="list-style-type: none"> • Paperbark Maples have good airflow and light penetration, and low view impact. • Tupelo has moderate airflow and light penetration and moderate view impact. • American Yellowwoods have low airflow, very low light penetration and high view impact.
D. Comply with applicable provisions related to tree maintenance and pruning as referenced in the City’s Tree Protection and Regulation Bylaw	<ul style="list-style-type: none"> • Tree care and maintenance standards have been sustained in accordance with industry best practices and the City’s Tree Protection Bylaw.

Attachment G includes reference images of the subject trees as of May 29, 2023.

The current three year esplanade boulevard tree pruning cycle is shorter than the standard pruning cycle target of seven years for most other semi-mature and mature trees in street and boulevard settings across the city. The net effect of this cycle has resulted in a disproportionate allocation of City resources (staff and equipment time) to the esplanade area resulting in delayed core tree maintenance work in other areas of the City.

The past several years of effort have yielded mixed results in achieving the objectives of the esplanade boulevard tree maintenance program, most notably the objectives related to enhancing and maintaining air flow and light penetration through each tree, improving views through the trees, and re-establishing view corridors. As result, the value of continuing to pursue the esplanade boulevard tree maintenance program objectives as part of the current esplanade boulevard tree maintenance regime has come into question given that these objectives are not well aligned with the priorities of the City's Urban Forest Management Strategy or Climate Action Bold Steps. In addition, the esplanade boulevard tree pruning objectives are not aligned with city-wide tree pruning objectives that prioritize pathway, roadway and understory clearances and developing a sound structural form to support sustainable tree growth. In 2007, the impacts of new tree planting on views to the river along the esplanade was a factor that was considered in the selection and installation of the new trees. In the ensuing years, the City has learned more about the critical nature of the urban forest in supporting the health and well-being of local residents, sustaining a healthy environment, saving energy, and increasing resilience in extreme heat events. Accordingly, the City's urban forest management practices have shifted towards growing and sustaining a more robust and resilient urban forest in order to maximize the benefits that trees bring to the urban community.

Respecting the specific interests of the Strata at 12 K de K Court, based on recent years' tree pruning outcomes, the only practical means to address the wishes of the Strata is through the removal of the most prolific and impactful trees and replacement with alternate species that are better suited to the specific priorities of Strata residents. This response though, is incongruent with the priorities of the UFMS and would not be supported if considered strictly through the lens of the City's Tree Protection Bylaw. As noted earlier in this report, in 2016-17 Council acknowledged the preference of the Strata by endorsing the three-year esplanade boulevard tree maintenance regime and letter of understanding with the Strata. This approach attempted to strike a balance between the priorities of the UFMS and the Strata residents.

FINANCIAL & RESOURCING IMPLICATIONS

The current tree maintenance level of service for the esplanade boulevard trees is approximately double that allocated to other areas of the city. This imbalance, when combined with very limited arboriculture staffing resources is resulting in challenges in

achieving the industry best practice of seven-year pruning cycles in many areas of the City.

As outlined in the potential options below, the scenario of removing and replacing the more prolific esplanade boulevard trees adjacent to the Strata has a direct financial impact of between \$3,000 - \$4,500 per tree and is not currently accounted for in the arboriculture budget.

OPTIONS

In consideration of the issues addressed in the discussion section of this report, several options exist for Council's consideration:

1. Maintain the status quo three year esplanade boulevard tree maintenance cycle with ongoing priority to towards the related maintenance objectives developed in 2017 as per Attachments D and E.
2. Maintain the status quo three year esplanade boulevard tree maintenance cycle shifting priority towards tree maintenance objectives primarily focused on promoting the health of trees and public safety and access.
3. Revert the current three year esplanade boulevard tree maintenance cycle to the seven-year cycle standard and objectives as applied to street and boulevard trees in other areas of the City.¹
- 4a. Option #3 plus, remove and replace the two American Yellowwood trees from the esplanade boulevard fronting 12 K de K Court.
- 4b. Option #3 plus, remove and replace the two American Yellowwood trees and single Tupelo tree from the esplanade boulevard fronting 12 K de K Court.
- 5a. Option #3 plus, remove and do not replace the two American Yellowwood trees from the esplanade boulevard fronting 12 K de K Court.
- 5b. Option #3 plus, remove and do not replace the two American Yellowwood trees and single Tupelo tree from the esplanade boulevard fronting 12 K de K Court.

Staff recommend Option #3. This option is most closely aligned with the priorities of the Urban Forest Management Strategy and can most readily be implemented within the available resources of the Parks and Recreation Department. This recommended option is not consistent with the esplanade boulevard tree maintenance plan (Attachment D) as adopted in 2017 and is a departure from the letter of understanding between the City and Dockside Strata (Attachment E).

Options #1 and #4a - #5b are not aligned with the priorities of the Urban Forest Management Strategy. Options #1 & #2 will continue to place a strain on existing resources allocated towards tree maintenance across the city. Options #4a & #4b have a direct financial impact of approximately \$3,000-\$4,500 per tree. The option of transplanting the existing trees has been considered and determined not to be a viable

¹ With the esplanade seven year tree maintenance cycle comes an annual tree inspection program to ensure sufficient clearances for pedestrians, emergency, and service vehicle passage. Minor tree pruning is applied as needed to support this objective.

solution for this location and for the particular species of trees. Options #5a & #5b can be accommodated within existing staff and equipment resources.

CONCLUSION

Efforts to achieve a middle ground between the Strata residents' priorities associated with light and river views, and the City's current priorities towards caring for and growing the urban forest have not fully addressed stated objectives. Continuing with the current maintenance regime and priorities for the esplanade boulevard trees is not consistent with the corporate priorities established in the City's Urban Forest Management Strategy or Climate Action Bold Steps. Options have been identified to further respond to the Strata residents' issues. These options represent a compromise to the present day priorities related to the management of the City's urban forest. Staff's recommended option is a departure from the 2017 letter of understanding between the City and Dockside Strata.

ATTACHMENTS

Attachment A: March 27, 2017 Council Report "12 K de K Court Boulevard Trees"

Attachment B: March 27, 2017 Council Meeting Minutes Excerpt

Attachment C: April 10, 2017 Council Report "12 K de K Court Boulevard Trees"

Attachment D: April 2017 Quayside Esplanade Boulevard – Maintenance Program for Trees on Upland Side of Esplanade

Attachment E: April 10, 2017 Letter of Understanding for Esplanade Boulevard Trees Fronting 12 K de K Court

Attachment F: Boulevard Tree Growth Tracking Chart

Attachment G: 12 K de K Court Esplanade Boulevard Tree Images (May 29, 2023)

APPROVALS

This report was prepared by:

Dean Gibson, Director of Parks and Recreation

This report was approved by:

Lisa Spitale, Chief Administrative Officer