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Corporate Report

NO: R185

COUNCIL DATE: July 25, 2005

REGULAR COUNCIL

TO: Mayor & Council DATE: July 19, 2005

FROM: General Manager, Planning FILE: 3900-20-

and Development 12880

SUBJECT: Review of Surrey Tree Preservation By-law, 1996, No.

12880 -

Results of Public Consultation and Recommendations

RECOMMENDATION

The Planning and Development Department recommends that Council:

- 1. Receive this report as information;
- 2. Approve the establishment of a Tree Administrator position in the Planning and Development Department, the incumbent of which will be responsible for the on going administration of the Surrey Tree Preservation Bylaw, 1996, No. 12880 (the "By-law") with the assistance of an existing Arborist position;
- 3. Approve the addition of a By-law Enforcement Officer position to the By-law Enforcement and Licensing Section that will provide additional resources for the on-going enforcement of the By-law, focusing more particularly on evening and weekend enforcement;
- 4. Approve the following amendments to the By-law:
 - (a) Update and augment the List of Significant Trees appended to the By-law;
 - (b) Include in the By-law, a new standard definition for "tree survey" and a standardized report format for arborists' reports that are required under the provisions of the By-law;
 - (c) Require that any arborist report submitted as a requirement of the By-law, be submitted by an arborist that is independent of the individual or tree service firm to which a tree cutting permit is issued in relation to the subject arborist report;
 - (d) Add a revised definition and design standard for "protective tree barrier", add a requirement that the owner monitor and maintain each such barrier throughout the demolition, land clearing and construction process, including security to the City to ensure such monitoring and maintenance;
 - (e) Require that tree pruning be performed in accordance with the American National Standards Institute;
 - (f) Require the planting of replacement trees on each lot from which any protected tree is removed, including the requirement for replacement trees for any hazardous tree that is within the size and species definition of "protected trees", at a ratio of two replacement trees for each protected tree that is removed, except that only one replacement tree is required for each protected alder or cottonwood tree that is removed;

- (g) Require that replacement trees be planted on the same lot as the trees that are removed, to the extent that the lot will accommodate such replacement trees in a sustainable manner, in accordance with good arboriculture practice and authorize the collection by the City of cash-in-lieu for any replacement trees that are required by the By-law, but which cannot be accommodated on the same lot as the trees that are removed, due to the size or other characteristics of the lot;
- (h) Provide flexibility within the By-law for the owner of a tree to remove a tree if the tree is deemed by the City's Arborist to be inappropriate for its location by virtue of its size, species and subject to replacement trees being planted or cash-in-lieu being provided, as referenced above;
- (i) Revise the definition of "protected tree" to include multi-stemmed species;
- (j) Require the posting of a security by the owner for each tree on a lot that is to be preserved through the development of a lot, which security will be held by the City for a minimum of one year after the completion of the development to ensure that the tree is properly preserved and healthy after the development of the lot and, further, provide for the forfeiture to the City of the security if the tree for which the security is taken is not properly preserved through the development process, as revealed through an inspection by the Tree Administrator or City Arborist one year after the development of the lot is completed. This forfeiture will not restrict the City from taking other actions in relation to the unauthorized tree removal. The security will be based on a doubling of the value of replacement trees that would be required by the By-law for the subject protected trees:
- (k) Require, where an owner makes application to remove trees for agricultural purposes on a lot in the Agricultural Land Reserve, that a Restrictive Covenant be registered on the title to the property that documents that such tree removal is for agricultural purposes only and wherein the owner agrees that, for a minimum of five years from the date of permit issuance, the owner will not make application for, nor will the City give consideration to, subdivision or development of the lot other than for the construction of buildings and other improvements in relation to the use of the lot for agricultural purposes;
- (l) Require that tree surveys be undertaken as one of the initial requirements of the development application review process, along with preliminary grading and servicing plans, so that the design of each development can be evaluated comprehensively by staff and the developer in relation to the potential to preserve protected trees on the development site;
- (m) Increase the fees and charges payable under the By-law by 10% to reflect changes in other City fees since 2001, the last year a fee and charge rate adjustment was made to the By-law. In addition, introduce a permit amendment fee of \$60 to reflect the resources required to amend an approved tree cutting permit after it is issued; and
- (n) Establish in the By-law, a re-inspection fee that is payable to the City, where City staff need to perform a re-inspection of replacement trees, due to deficiencies at the stage of the first inspection;
- 5. Establish as a policy, a rate of \$300 per tree as the amount that will be collected by the City as cash-in-lieu for replacement trees required by the By-law;
- 6. Establish a maximum per acre rate for cash-in-lieu contributions for replacement trees of \$15,000 per acre, representing 50 replacement trees per acre;
- 7. Work with the Heritage Advisory Commission and others to establish a recognition and award program for individuals and organizations demonstrating exemplary tree preservation and stewardship efforts in the City of Surrey;
- 8. Amend the Surrey Municipal Ticket Information Utilization By-law, 1994, No. 12508 to provide for the use of MTI tickets for infractions under the By-law, in addition to other means of enforcement already available;
- 9. Direct staff to bring forward amendments to Surrey Zoning By-law, 1993, No. 12000 and other relevant by-

laws that will allow flexibility in the design of subdivisions and developments for the purpose of increasing the number of mature trees that are preserved through the development of land in the City and to enhance the probability of survival of protected trees that are preserved through the development of land;

- 10. Direct that 2% of all building permit revenues, along with all cash-in-lieu of replacement tree funds, be placed in a Green City Reserve Fund for use by the City for tree management and to plant trees on City property and street boulevards throughout the City (a one time contribution of \$500, 000 to the Green City Reserve Fund is also being requested as part of another Corporate Report);
- 11. Direct that the new provisions of the amended By-law and policies take effect for all new applications received after the date of adoption of the amended By-law and that complete in-stream applications be subject to the current By-law, provided that these applications are approved within 12 months of the date of adoption of the amended By-law.
- 12. Authorize the City Clerk to forward a copy of this report to each of the Environmental Advisory Committee, the Heritage Advisory Commission, the Development Advisory Committee and the Agricultural Advisory Committee for review and comments; and
- 13. Subject to recommendation 11, authorize the City Clerk to bring forward the necessary by-laws for the required readings.

INTENT

The purpose of this report is to:

- Provide an overview of the current By-law, which regulates certain trees on private property;
- Provide a summary of comments, concerns and suggestions received through a public consultation process that was undertaken by staff in relation to the City's tree retention and replacement regulations and policies; and
- Provide recommendations for Council's consideration in relation to enhancing tree preservation and tree replacement throughout the City.

BACKGROUND

At a Regular Council Meeting on November 1, 2004, Council considered Corporate Report No. R270 entitled "Tree Preservation in the City of Surrey" (copy attached as Appendix I) and adopted the recommendation of that report that Council:

"Authorize staff to proceed with a public consultation program, as documented in this report, to allow the public an opportunity to provide input regarding changes to the City's Tree Preservation By-law and other by-laws and policies related to trees and the preservation of trees in the City".

Staff has undertaken an extensive public consultation process over the course of the last seven months, including the holding of public open houses and communication with a broad cross-section of resident, community and environmental associations and other interest groups and individual citizens from across the City, Council advisory committees, the Development Advisory Committee and others. This process will be described in more detail in the following paragraphs.

Three Public Open Houses were held, as follows:

- On January 11, 2005 in South Surrey at the White Rock Christian Academy on 152 Street (44 people attended);
- On January 12, 2005 at the Guildford Recreation Centre (32 people attended); and
- On January 25, 2005 at Shannon Hall in Cloverdale (100 people attended).

Information on Surrey's current approach to tree preservation, tree replacement and enforcement was presented, along with a summary of existing conditions, answers to frequently-asked questions about the City's approach to tree preservation, replacement and enforcement, and information about the approaches to tree preservation taken in other municipalities. Also displayed at these open houses, were some suggestions for possible amendments to the current By-law. A comment sheet was distributed to each person attending each open house and was also available on the City's website. Individuals were invited to provide written advice and suggestions on the possible amendments to the City's current approach to preserving and/or replacing trees. The comment sheet also gave respondents the opportunity to identify trees that should be considered for addition to the Significant Tree List which forms part of the By-law. Approximately 110 comment sheets were submitted to the City. A copy of the display boards and all material presented at the open houses is contained on the City's website.

A letter, together with a copy of Corporate Report No. R270, was sent to all known resident and community associations in the City and to other groups that were considered to have an interest in tree preservation in the City. A copy of the standard letter is attached as Appendix II. Over 40 groups and associations were contacted in this manner and were invited to meet with staff to discuss any issues, concerns and/or ideas that they may have in respect to tree preservation or replacement within the City.

As a result of these letters, on February 1, 2005 staff met with representatives from Surrey Environmental Partners, the Surrey Association for Sustainable Communities, the Green Timbers Heritage Society, the Port Kells Community Association, the Elgin Ratepayers, the Serpentine Enhancement Society and other interested citizens. Comments and ideas received through this meeting are documented in Appendix III.

A separate meeting was held on February 11, 2005, with representatives of Friends of the Semiahmoo Trail and correspondence was received from that group, which is attached as Appendix IV.

Information contained in Corporate Report No. R270 (Appendix I) was presented to the Surrey Development Advisory Committee on January 27, 2005, and the Environmental Advisory Committee and the Heritage Advisory Commission on November 24, 2004, and each of these Committees was requested to provide advice and suggestions regarding the enhancement of tree preservation and replacement in the City. The Heritage Advisory Commission established a sub-committee on the matter. The Heritage Advisory Commission sub committee's report is contained in Appendix V to this report.

Staff has also received numerous letters and e-mails from interested citizens on tree preservation and tree replacement in the City.

DISCUSSION

The majority of comments received and issues raised by the public through the above described public consultation process, focused on trees on private property, the clearing of properties for new development and on the enforcement of the By-law.

An Overview of the Current Tree Preservation By-law

Surrey's current By-law is intended to limit the unnecessary removal of existing trees, and to ensure that replacement trees are planted wherever possible. In general, the By law:

- Defines a "protected tree" as trees that are "Replacement Trees", trees in environmentally sensitive areas, certain identified species (Arbutus, Garry Oak, Pacific Dogwood, Pacific Yew, Western White Pine, Grand Fir, Coast Redwood, Dawn Redwood, Giant Sequoia, Ginko and Monkey Puzzle Tree) or any tree in good health and form with a diameter at breast height (DBA) of 30 centimetres (12 inches) or more;
- Requires that "Replacement Trees" be planted whenever a protected tree is removed. The By-law requires the replacement of "protected trees" at ratio of two replacement trees for each protected tree that is removed or as many replacement trees as can reasonably be replanted onto the lot from which the protected trees were removed in the context of the completed development of the lot. The By-law provides for the City to collect permit fees,

tree surveys and tree assessments as part of tree cutting permit application process, to collect securities of \$200 for each replacement tree required under the By-law and to seek fines of up to \$10,000 for illegal tree removal;

- Lists as a Schedule in the By-law, specific individual "Significant Trees" which are protected and cannot be pruned or removed without specific approval from City Council;
- Allows the City to require that a property owner retain healthy trees on their property if the density and permitted use can be achieved without the removal of such trees. The By-law provides that the City can require that proposed building footprints, driveways, services, etc., be located or altered to accommodate the retention of trees. However, the By-law cannot, under the provisions of the *Local Government Act*, R.S.B.C., 1996, c. 323, allow the City to prevent the use of land or the development density on a lot that is otherwise permitted under the lot's current zoning;
- Allows trees to be removed with a permit if they are hazardous or damaging a public utility or foundation or are within two metres of a building foundation;
- BC Hydro is exempted from the provisions of the By-law, in relation to the provision of hydro service throughout the City;
- Allows removal of trees on a lot for agricultural uses, subject to a declaration that the trees are being removed for agricultural purposes;
- Requires a fine of \$55 plus \$20 per tree damaged or removed without a permit and requires that the property owner plant two replacement tress for each protected tree removed without a permit. The By-law also requires that the property owner post a security for each of the replacement trees required;
- Requires the erection of tree protection barriers around every tree to be preserved on a lot whenever demolition, excavation or construction occurs on that lot and specifies how the barriers are to be constructed; and
- Gives By-law Enforcement Officers the right to enter onto private property to investigate suspected illegal tree removal or cutting without the required permit.

Comments Received through the Public Consultation Process

Appendix VI provides a listing of the responses received from all questionnaires, grouped by subject area.

Input received through the public open houses, meetings with interest groups and citizens and related correspondence, indicates that the main concern of Surrey residents in relation to tree preservation is the significant loss of trees associated with new land development. New land development often results in a concentrated loss of trees on specific sites, often in highly visible locations. Concerns focused on the removal of mature trees and on the complete clearing of sites to provide for new land development.

While some people expressed the need to amend and strengthen the By law, others focused on the issue of adequate enforcement and strict penalties for infractions of the current By-law.

As noted previously in this report, the information displayed at the open houses posed a number of questions, issue areas and possible solutions in order to stimulate thought and discussion. The various potential solutions were generally supported. In addition, the 110 comment sheets submitted to the City provided other suggestions for both amending the By-law and changing the City's procedures in relation to addressing the matter of tree preservation and by-law enforcement. The comments may be grouped into the following categories:

- 1. **Incentives** to encourage the retention and replacement of trees;
- 2. **Flexibility** to better facilitate retention and replacement of trees;
- 3. **Definitions** to clarify the range of trees to be retained/replaced;
- 4. **Security Provisions** to increase incentives for successful tree retention/replacement;

- 5. **Administrative, Enforcement, and Penalty Provisions** to clarify and improve the administration and enforcement of the By-law;
- 6. **Improve Success Rate** to identify achievable standards; and
- 7. **Significant Trees list** to add specifically identified trees to the List of Significant Trees contained within the By-law.

The following is a summary of the common comments received under these general categories. The *italics* denote suggestions made by staff that were presented and generally supported at the public open houses. New suggestions by the public are in regular type.

1. Incentives

- Replace trees pursuant to the size of trees being removed. For example, larger trees are given more credit than smaller trees;
- The number of replacement trees required could be based on the value of trees retained, as defined by species and function;
- Achieve the 2:1 replacement tree ratio by collecting cash from developers when the ratio cannot be met on the development site and use the cash to plant trees in City parks and street boulevards;
- Include a broader range of species of trees that can be used as replacement trees, to ensure that the replacement trees are suitable to their location (i.e. dwarf varieties and ornamental fruit trees);
- Encourage the use of cluster zoning to preserve significant stands of trees;
- Provide a variable schedule of incentives (fees or fines) based on the height/size of trees being saved or removed;
- Reduce the number of replacement trees based on the size of trees being preserved, giving larger trees more credit;
- Provide some form of tax relief or fee reduction to owners and developers who preserve trees on their properties;
- Provide parkland acquisition credits for significant trees saved and allow higher density development in exchange for the retention of significant natural features; and
- Set up an award or appreciation system to recognize sustainable and "green" development as well as tree retention and replacement.

2. Flexibility

- Allow tree removal permits for non-hazardous trees that are not suitable for their location and require replacement trees when such trees are removed;
- Modify the Zoning By-law to allow for lot configuration, building setbacks and building envelope flexibility to increase the potential for preservation of protected trees;
- Staff should work with developers through the planning process to ensure a vision is achieved. Improve development practices;
- When mature trees are identified, the developer/architect needs to plan around them and work within the context of natural systems. Consider cluster-housing options to work around trees;
- Should be no flexibility in enforcing the provisions of the By-law and requiring replacement ratios;
- Consider Development Permit areas for the protection of the natural environment; and
- Should provide some flexibility for private homeowners who wish to thin out vegetation, provide sunlight on their property.

3. Tree Retention and Replacement

- Expand the list of Significant Trees appended to the By-law in response to community suggestions;
- Define significant trees to allow for their identification as part of a development application. Do not

rezone property until is has been determined how trees can be conserved;

- Reduce the minimum size of a protected tree from 30 centimetres to 20 centimetres;
- 2:1 replacement ratio of trees of adequate size and high quality should be achieved. If such a ratio cannot be met, require cash from the developer for planting elsewhere, purchasing of habitat. Need to preserve a percentage of forested area and targets for a minimum canopy cover and ensure protection of overall biomass;
- Concern that one significant tree is replaced by two "small twigs";
- Stop bad pruning practices and topping by verifying competency of tree service firms;
- Exclude problematic species from the list of protected trees, such as Cottonwood and Alder trees;
- Allow compensation at a 1:1 ratio for trees protected on properties elsewhere in the City where tree and habitat conservation is sought;
- The size and value of replacement trees should adequately compensate for large and significant trees removed;
- Replacement trees should be native species;
- City should plant more trees on boulevards and in parks;
- The City should update the inventory of Environmentally Sensitive Areas to be used in areas that have stands of mature trees:
- Consider the role of trees in wildlife preservation and habitat; and
- There should be public education on the value of trees such as school programs as well as education of the building and development industry.

4. Increase Securities

- Increase the securities collected from applicants at the time of issuance of a tree cutting permit for replacement trees to encourage compliance with the Tree Preservation By-law;
- Collect higher securities for valuable specimen trees or for trees that are significant in their context (i.e. trees along Semiahmoo Trail) to ensure that they are not damaged during clearing/construction activities; and
- Expand the time period that land cleared for agricultural use cannot be developed and register a covenant on the subject land to ensure that the commitment to agriculture runs with the land.

5. Enhance Administration, Enforcement and Penalty Provisions

- Simplify the Tree Preservation By-law to improve comprehension and administration (i.e., remove the vagueness and inconsistencies in some of the definitions and clauses that are making effective administration of the by-law difficult);
- Allow the City or its contractors and/or agents to enter private property to plant replacement trees, at the
 owner's expense, if an owner, after being given due notice, does not complete the planting of such trees.
 Allow the City to collect the costs of such action as taxes if there are insufficient securities and/or the
 owner refuses to pay the costs incurred by the City;
- Remove the potential for conflict of interest by specifying that the arborist, who assesses a tree as hazardous, cannot also be retained to remove the tree;
- Increase the penalties for illegal cutting, damaging or removal of trees;
- Amend the City's Municipal Ticket Information By-law to allow tickets to be issued for infractions of the provisions of the Tree Preservation By-law, including failure to construct and maintain tree protection barriers;
- Provide strict and consistent enforcement and monitoring of the By-law. The new by law needs to have "teeth". This includes closer monitoring during development and site preparation;
- Increase enforcement staff and have By-law Enforcement Officers enforce, including evenings and weekends. Need more than one landscape architect to review development plans;
- Provide standardized reporting formats, including a Tree Preservation Summary Form, for arborist reports
 to improve consistency in information reporting. Require photographs showing site conditions and trees
 and require a statement of qualification from the consulting arborist;
- Require "due diligence" reporting by arborists, including verification of locations and conditions of tree protection zone barriers, prior to site demolition or construction activities, monitoring by arborists of these

activities and sign-off on completed projects;

- Issue fines/penalties to construction operators for damage to trees during construction;
- Require certification (i.e. ISA accreditation) as part of a business license for any tree
 cutting/maintenance/pruning firms operating in Surrey to reduce unnecessary damage to trees in Surrey.
 The by-law could also specify that all pruning/maintenance work on trees needs to be conducted in
 accordance with the "American National Standards Institute, ANSI A330 Part 1-2001";
- Require proper maintenance for replaced trees and fine property owners who do not properly maintain trees:
- Need better verification before removal of "hazardous" trees;
- Retain a replacement tree security for a longer period of time to ensure that the tree survives. Currently the tree security is retained for one year once it has been planted, where the critical time period for a recently planted tree is two years. If a tree dies of natural causes, it does not have to be replaced;
- Educate all City staff that work in the field to recognize and report on suspected tree protection violations;
- Increase fines for violations to equal the value of illegally cut trees; and
- Provide a list of approved tree cutting permits on the City website and to field staff to identify potential tree cutting infractions.

6. Tree Survival Improvements

- Be realistic about the number of trees that will survive in each type of zone and approve retention of trees and replacement trees accordingly;
- Provide better information to citizens regarding retainable trees, successful planting locations and conditions, and maintenance and watering requirements. This could be done through brochures, events (Great Tree Hunt), recognition awards for good tree preservation, replacement, maintenance, etc.; and
- Require arborists to monitor construction activity to prevent damage to retained trees;
- Focus on tree replacement in new development areas to improve their success. Properly planted cultivated species are likely to be more successful in new developments than many pre-existing retained wild species.

7. **Significant Trees**

The public was asked to identify any additional trees, by location, that should be designated as Significant Trees in the by-law. A number of trees were identified, all of which are being reviewed by staff. Recommendations will be brought forward to the HAC sub-committee, with regard to the designation of additional significant trees identified through this process and appropriate recommendations will be forwarded to Council for consideration in due course.

8. Other Comments

There were several comments from the public with regard to the desire of individual property owners to have move flexibility with regard to tree removal and thinning on their properties and the removal or topping of trees in order to maintain views.

Comments Received Through Other Meetings and Submissions

1. Meeting with Community Representatives

In follow-up to a letter that was sent by City staff to community groups and organizations, a meeting was held on February 1, 2005 involving City staff and representatives of Surrey Environmental Partners, the Surrey Association of Sustainable Communities, Elgin Ratepayers, the Port Kells Community Association and the Green Timbers Heritage Society. The notes from this meeting are attached as Appendix III.

There was general discussion regarding the value of trees to the City's environment. Many of the comments and observations made at this meeting are consistent with comments received from the public as noted in the

previous section of this report. In addition, it was noted that:

- A public hearing (or public meeting) should be held at the time that Council considers changes to By-law;
- There is a need for better monitoring of sites during site clearing and construction;
- Arborists should not be hired by the developer, but should be hired or regulated by the City. Engineers and Registered Professional Biologists should be used;
- There needs to be more incentives for property owners to maintain trees; and
- The wording of the By-law should be tightened up to say "shall" instead of "may", in many cases.

2. Heritage Advisory Commission (HAC) Heritage Trees Sub-Committee Report

A sub-committee was established by the HAC to:

"examine Corporate Report R270 and the Tree Protection By-law #12880 in order to provide a written report to the HAC, beneficial to the preservation of the City of Surrey's natural heritage, utilizing technical assistance provided by members of City staff".

The sub-committee met on several occasions and produced a report (copy attached as Appendix V) that was received by the HAC in January of this year and forwarded by HAC to the General Manager, Planning and Development.

The primary concern expressed in the HAC report relates to the cutting of mature trees, particularly as a result of clearing for new development projects. The sub—committee noted that this could be reduced through:

- Adherence to policies in the Official Community Plan, regarding following of sustainable practices in development and retaining significant trees native to the site;
- Strict adherence to the current By-law until it is amended;
- Re-examination of the City's environmentally sensitive areas, including those still containing mature tree stands for protection;
- Placing value on substantial trees based on size, visual value, so that if they must be removed adequate compensation would be provided to the City;
- The use of density transfers to protect significant trees;
- An amendment to the Zoning By-law to define "undevelopable areas" to include stands of mature trees;
- Provide clear terminology in the By-law, especially with regard to definitions of significant, substantial and protected tree and specimen tree;
- Suggested additions to the City's list of significant trees;
- Credit for the retention of healthy trees that are smaller than "Protected Trees" as defined in the By-law;
- Improved enforcement through ticketing, the right to enter property, on-site bulletin boards for each development site outlining tree protection requirements, posting of tree cutting permit sites on the web, engage additional enforcement officers; and
- Establish local programs of stewardship and encourage local residents to monitor; education of developers, consultants, and improvements to the tree location, building footprint and building servicing plans through the review of development applications.

3. Friends of the Semiahmoo Heritage Trail

Staff met with representatives of Friends of the Semiahmoo Heritage Trail and correspondence was subsequently received from this organization, dated March 31, 2005. A copy of this letter is attached as Appendix IV.

The letter expresses concerns with the removal of substantial and protected trees, and with removal of indigenous trees and ground cover along the Trail and on setbacks adjacent to the Trail. The letter includes a request that the City, developers and builders manage the Trail and setbacks. They support the direction of the previous Corporate Report and the HAC Sub-Committee Report, and also suggest:

- Clear and understandable terminology in the by-law and policies;
- Improved knowledge of the provisions of the By-law among all parties involved in the development process to protect resources;
- Identification of environmentally sensitive areas ("ESA") on title of properties or other means to ensure the environmental importance of properties is flagged in the development process;
- Increase of fines to two times the value of building permits for work done in advance of permits;
- Encourage arborists to explore spiral pruning, "wildlifeing" and other options rather than removal of trees;
- Require larger replacement trees rather than cash-in-lieu if all replacement trees cannot be placed on site. Encourage replacement trees to be indigenous species;
- Stop work the instant violations occur during construction; and
- Ensure site plans identify protected trees, trees to be retained, ground cover and topsoil to be reused, site services and excavation corridors and grading plans.

Discussion Regarding Recommendations

A wide variety of useful comments where received through the public consultation process related to tree preservation and the administration of the By-law. Many of these comments have formed the basis for developing a series of recommendations in relation to the By-law and other City by-laws and policies, related to the on-going preservation and enhancement of the trees throughout the City. The following lists the recommendations that are being forwarded to Council for consideration and provides a brief overview of the reason for each recommendation:

1. Approve the establishment of a Tree Administrator position in the Planning and Development Department, the incumbent of which will be responsible for the on-going administration of the Bylaw with the assistance of an existing Arborist position.

Currently the City Landscape Architect, with the assistance of an Arborist, both in the Planning and Development Department, has responsibility for the on-going administration of the By-law, along with several other duties and responsibilities in relation to the review and approval of landscaping plans for new development throughout the City. To provide resources that will be exclusively dedicated to the administration, it is recommended that a Tree Administrator position be created in the Planning and Development Department. Such a change will provide for an increased level of attention to the protection of trees on private property throughout the City.

2. Approve the addition of a By-law Enforcement Officer position to the By-law Enforcement and Licensing Section that will provide additional resources for the on-going enforcement of the By-law, focusing more particularly on evening and weekend enforcement;

One of concerns voiced by the community in relation to tree preservation is the apparent lack of enforcement of the By-law, particularly during evenings and weekends. To address this concern, it is recommended that an additional By law Enforcement Officer position be established to provide additional resources for the on-going enforcement of the By-law, particularly during evenings and weekends.

3. Update and augment the List of Significant Trees appended to the By-law.

The By-law contains a "List of Significant Trees" that documents trees of special significance throughout the City, such as the Rock Tree in Kennedy Heights. A number of trees have been identified by the public for possible addition to this List. Subject to Council approval of this recommendation, staff will undertake an evaluation of each such tree and forward a further report to Council making recommendations about the addition of specific trees to the List of Significant

Trees.

4. Include in the By-law, a new standard definition for "tree survey" and a standardized report format for arborists' reports that are required under the provisions of the By-law.

A concern was raised that the reports submitted by arborists in relation to the requirements of the By-law do not follow a consistent format or content and that this complicates the review of such reports by staff and interested members of the public. On this basis, it is recommended that a standard template be developed for an arborist report in relation to the requirements of the By-law that will allow for the provision of information by arborists in a uniform and consistent manner from site to site throughout the City.

5. Require that any arborist report submitted as a requirement of the By-law, be submitted by an arborist that is independent of the individual or tree service firm to which a tree cutting permit is issued in relation to the subject arborist report.

Currently, some of the tree service firms operating in the City employ arborists who submit reports to the City in support of the removal of protected trees. Subject to the City issuing a permit, the tree service firm is hired by the owner of the lot to remove the tree. This leads to perceptions of conflict of interest or lack of objectivity by the arborist who is perceived in having a vested interest in tree removal in support of the business of the tree service firm with whom he or she is employed. It is recommended that the By-law be amended to require that any arborist submitting a report to the City in relation to the requirements of the By-law be independent of the tree service firm that is retained to remove trees that are the subject of the report. This will help to allay concerns regarding the objectivity of the arborists involved in undertaking tree assessments.

6. Add a revised definition and design standard for "protective tree barrier", add a requirement that the owner monitor and maintain each such barrier throughout the demolition, land clearing and construction process, including security to the City to ensure such monitoring and maintenance.

The current definition and standard for "protective tree barrier" are inadequate in relation to ensuring that sound tree barriers are installed around trees to protect them during construction activities on surrounding property. A new definition and standard will address this concern. In addition, staff has concerns that currently, protective tree barriers are not always being maintained through the full term of a construction process and that there needs to be additional incentive provided to assist in ensuring that owners maintain the protective tree barriers throughout the full term of construction or development projects. On this basis, it is recommended that the By-law require the posting of a security for each tree barrier and that City staff be authorized to enter property for the purpose of installing or maintaining a tree barrier and recover any costs from the security that is posted by the owner.

7. Require that tree pruning be performed in accordance with the American National Standards Institute.

Except for trees contained on the List of Significant Trees, the By-law does not require that owners receive permits from the City for tree pruning. Concerns were raised by the public and the City Arborist that in some instances, tree pruning appears to be undertaken in a manner that is intended

to be injurious to the tree or which will significantly reduce its expected life. To assist in ensuring that the owners of trees undertake tree care and pruning in a reasonable manner, it is recommended that the By-law reference the pruning standards developed by the American National Standards Institute, a well regarded standard. For example, these standards do not endorse tree topping or crown lifting as reasonable tree pruning practices. It would be an offence for an owner to deviate from this standard and the City could take enforcement action in cases where inappropriate tree pruning occurs.

8. Require the planting of replacement trees on each lot from which any protected tree is removed, including the requirement for replacement trees for any hazardous tree that is within the size and species definition of "protected trees", at a ratio of two replacement trees for each protected tree that is removed, except that only one replacement tree is required for each protected alder or cottonwood tree that is removed:

Currently, the By-law requires the planting of two replacement trees for each healthy protected tree that is authorized for removal under the By-law, but only to the extent that replacement trees can be accommodated in a sustainable manner on the lot on which the protected trees are removed. Some species of trees are viewed by the public as less valuable from the perspective of character and life span than other species of trees. Typically, alder and cottonwood trees are considered less valuable from a tree preservation perspective than other species, by virtue of their relatively short life span, their lack of resistance to common disease and their growth characteristics. As such, it is recommended that the By-law recognize alders and cottonwoods separately from other types of trees in relation to replacement tree requirements.

9. Require that replacement trees be planted on the same lot as the trees that are removed, to the extent that the lot will accommodate such replacement trees in a sustainable manner, in accordance with good arboriculture practice and authorize the collection by the City of cash-in-lieu for any replacement trees that are required by the By-law, but which cannot be accommodated on the same lot as the trees that are removed, due to the size or other characteristics of the lot.

The By-law currently requires that replacement trees by planted on the lot from which protected trees are removed, but only to the extent that the lot can sustain the healthy growth of the replacement trees. This has led, in many circumstances over the years, to a situation where fewer replacement trees are planted on the lot than a two to one replacement ratio would require. The current By-law makes no provision for planting replacement trees away from the lot from which protected trees are removed or for the owner of the lot making a cash-in-lieu payment for replacement trees that could not be planted on the lot from which trees were removed. It is recommended that that a cash-in-lieu provision be incorporated in the By-law that would require an owner to pay to the City an amount equal to the value of replacement trees that are required by the above-described ratios, but which could not be planted in a sustainable manner on the lot from which protected trees are removed, due to the size or other physical limitations of the lot. The City will place such funds in a Tree Planting Reserve account and will include in its annual budget the use of such funds to plant trees on public property throughout the City.

10. Provide flexibility within the By-law for the owner of a tree to remove a tree if the tree is deemed by the City's Arborist to be inappropriate for its location by virtue of its size, species and subject to replacement trees being planted or cash in lieu being provided as referenced above.

There have been circumstances where an existing protected tree is either located and/or has dimensions that severely impact the owner's utility of the lot. It is recommended that some flexibility be provided within the By-law for staff to issue tree removal permits in such circumstances, subject to the above referenced replacement tree or cash-in-lieu requirements.

11. Revise the definition of "protected tree" to include multi-stemmed species.

A "protected tree" is defined in the By-law as a tree with a minimum diameter at breast height of 30 centimetres (12 inches). Some species of trees, such as birch trees grow in clumps of stems from a common root system, where each individual stem is less than 30 centimetres in diameter, but where the clump clearly forms a large tree canopy and is worthy of protection. To address this anomaly, it is recommended that an adjustment be made to the definition to address multi stemmed species of trees.

12. Require the posting of a security by the owner for each tree on a lot that is to be preserved through the development of the lot, which security will be held by the City for a minimum of one year after the completion of the development to ensure that the tree is properly preserved and healthy after the development of the lot and, further, provide for the forfeiture to the City of the security if the tree for which the security is taken is not properly preserved through the development process, as revealed through an inspection by the Tree Administrator or City Arborist one year after the development of the lot is completed. This forfeiture will not restrict the City from taking other actions in relation to the unauthorized tree removal. The security will be based on a doubling of the value of replacement trees that would be required by the By-law for the subject protected trees.

The public raised concerns that trees identified for preservation during the development approval process are sometimes damaged or removed during or soon after the related development. To address this concern it is recommended that where a tree cutting permit is issued to allow development of a lot, that the developer be required to provide, prior to the issuance of such a permit, a security to the City for all protected trees on the lot that are to be preserved through the development process. The security will be based on double the value of replacement trees that would be required if the subject protected trees were removed. This security will be released one year after the development on the lot is completed or, alternatively, will be forfeited to the City if the trees to which the security relates are damaged or removed during the development process or soon thereafter.

13. Require, where an owner makes application to remove trees for agricultural purposes on a lot in the Agricultural Land Reserve, that a Restrictive Covenant be registered on the title to the property that documents that such tree removal is for agricultural purposes only and wherein the owner agrees that, for a minimum of five years from the date of permit issuance, the owner will not make application for, nor will the City give consideration to, subdivision or development of the lot other than for the construction of buildings and other improvements in relation to the use of the lot for agricultural purposes.

Currently, the By-law requires that the owner of a lot provide a sworn affidavit where tree clearing is being proposed of agricultural purposes. This process is deficient in that such a commitment does not run with the land. It is recommended that the commitment be registered on title as a Restrictive Covenant, which will cause the commitment to run with the land regardless of changes in lot ownership.

14. Require that tree surveys be undertaken as one of the initial requirements of the development application review process, along with preliminary grading and servicing plans, so that the design of each development can be evaluated comprehensively by staff and the developer in relation to the potential to preserve protected trees on the development site.

Applicants do not currently, in all circumstances, submit information early in the review process, regarding trees on a development site and this leads to difficulties later in the process, relative to making changes to the development proposal in an attempt to preserve trees on the development site. To ensure that trees are addressed as a priority by applicants in the development review process, it is recommended that Council adopt, as policy, a requirement that a tree survey be submitted as part of the initial information requirements for every development application.

15. Increase the fees and charges payable under the By-law by 10% to reflect changes in other City fees since 2001, the last year a fee and charge rate adjustment was made to the By-law. In addition, introduce a permit amendment fee of \$60 to reflect the resources required to amend an approved tree cutting permit after it is issued.

The City adjusts fees and charges on an annual basis to reflect inflation in the City's costs of doing business. Increases to the fees and charges related to the By law have inadvertently not been made since 2001. Other City by-law fees and charges have been increase by approximately 10% since 2001. Amendments to approved tree cutting permits are occasionally requested after the permit is issued. Resources are expended in this process that should be recovered. A permit amendment application fee is considered to be reasonable in this regard.

16. Establish in the By-law a re-inspection fee that is payable to the City, similar to the Building By-law, where City staff need to perform a re-inspection of a site or replacement trees due to deficiencies at the stage of the first inspection.

Staff occasionally performs re-inspections of the same site where tree barriers or replacement trees are not installed correctly at the time of the initial inspection. This results in the loss of staff time and in delays in the processing of other tree cutting applications and tree requests. To encourage permit holders to be fully prepared for an inspection, prior to calling for an inspection, it is recommended that the By-law be amended to include a re-inspection fee. This is a standard provision in the Building By-law, the Electrical Inspections By-law and the Plumbing By-law.

17. Establish as a policy, a rate of \$300 per tree as the amount that will be collected by the City as cash-in-lieu for replacement trees required by the By law.

Based on City experience, it costs approximately \$300 to acquire, plant and water a typical replacement tree for the first two years after its planting. As specified in the By-law, replacement trees are either five centimetre diameter deciduous trees or three metres in height coniferous trees.

18. Establish a maximum per acre rate for cash-in-lieu contributions for replacement trees of \$15,000 per acre, representing 50 replacement trees per acre.

An upset limit on the cash in lieu contribution for replacement trees will provide for a level of certainty in relation to encouraging investment in the City without the need for prospective purchasers of development sites to undertake detailed tree surveys in advance of land purchase decisions. At the same time, this level of contribution will allow for significant additional tree planting to take place within the City on an annual basis.

19. Work with the Heritage Advisory Commission and others to establish a recognition and award program for individuals and organizations demonstrating exemplary tree preservation and stewardship efforts in the City of Surrey.

As a means to highlight the efforts made by individuals and organizations toward the objectives of the City, in respect of trees in the City, it is recommended that the City, through the Heritage Advisory Commission and

others, establish a program of recognition.

20. Amend the Surrey Municipal Ticket Information By-law, 1994, No. 12508 to provide for the use of MTI tickets for infractions under the By-law in addition to other means of enforcement already available

Penalties in relation to actions under the By-law are now only available through a process of the City pressing long form charges through the Courts. This is a cumbersome, expensive and time-consuming process. It is often not considered cost effective for relatively minor offences committed under the By-law. To add an additional, more effective and efficient approach to penalizing offenders for infractions under the By-law, it is recommended that the Municipal Ticket Information By-law be amended to allow MTI tickets to be issued for offences to the By-law. MTI tickets are relative easy to issue and administer and are recognized by the Courts as "deemed convictions".

21. Direct staff to bring forward amendments to Surrey Zoning By-law, 1993, No. 12000 and other relevant by-laws that, will allow flexibility in the design of subdivisions and developments for the purpose of increasing the number of mature trees that are preserved through the development of land in the City and to enhance the probability of survival of protected trees that are preserved through the development of land.

In recent years, the City has used cluster zones to preserve individual trees or stands of trees. Staff will continue to work in this direction and use other mechanism to provide for the development of land, while promoting the retention of trees to the extent possible.

Each zone in the Zoning By-law is very prescriptive with respect to lot configurations allowed within the zone and with respect to setback requirements from property lines to improvements. These specifications sometimes stand in the way of effective tree preservation. It is recommended that staff be directed to review the Zoning By-law and other relevant by-laws for the purpose of introducing flexibility to certain specifications, where appropriate, that would act, in balance with the other objectives of the by-laws, to increase the potential for tree preservation in the City and to enhance the probability of survival of those trees that are preserved through the development of a lot.

22. Direct that 2% of all building permit revenues, along with all cash-in-lieu of replacement tree funds, be placed in a Green City Reserve Fund for use by the City for tree management and to plant trees on City property and street boulevards throughout the City.

To demonstrate the City's commitment toward increasing the numbers of trees in the City on an on-going basis, it is recommended that a Green City Reserve Fund be established into which all cash-in-lieu contributions for replacement trees would be placed. It is also recommended that 2% of the City's revenues from the building permit process be budgeted on an annual basis, for tree planting in the City and that these funds also be placed in the Green City Reserve Fund. In 2005, this contribution from the building permit revenues would amount to approximately \$200,000, which would allow for the planting of additional trees. This will assist in fulfilling an objective of doubling the number of trees that the City plants on an annual basis, in comparison to the recent past. An increase to the building permit fees will not be necessary, as on-going efficiency gains in the administration of the City will allow for this amount to be made available out of the current building permit revenue stream.

23. Direct that the new provisions of the amended By-law and policies take effect for all new applications received after the date of adoption of the amended By-law and that complete in-stream applications be subject to the current By-law, provided that these applications are approved within 12 months of the date of adoption of the amended By-law.

To allow for individuals and companies that will be affected by the proposed amendments to adjust to the

changes, it is recommended that the amended By-law and policies be made applicable to new applications received by the City after the date of adoption of the amended By-law. Complete in stream applications will be processed under the provisions of the existing By-law, subject to them being approved within 12 months of the date of adoption of the amended By-law. This will provide for a "grace period" for in stream applications.

24. Authorize the City Clerk to forward a copy of this report to each of the Environmental Advisory Committee, the Heritage Advisory Commission, the Development Advisory Committee and the Agricultural Advisory Committee for review and comments.

In consideration of the advisory role of the referenced committees, it is recommended that this report be forwarded to each of the Committees for review and comments back to Council before the related amendment by-law is forwarded to Council for the necessary readings.

25. Other housekeeping amendments to the By-law are also necessary, including an improved application form and permit format.

Comments on Other Suggestions Received Through the Public Consultation Process

Several suggestions, regarding tree preservation received through the public consultation process, are not possible, due to the limits of the City's powers under legislation. For example, using reductions in Development Cost Charges and tax reductions as tree preservation incentives, are not possible in this regard.

The City has been following the practice of identifying areas of significant tree stands as potential locations for passive City parks where parkland is required, relative to the City's OCP standards. The City continues to acquire environmentally significant sites as an important part of its parkland inventory.

There were a number of suggestions that the definition of "protected tree" be amended to protect trees with a diameter at breast height of 20 centimetres, rather than 30 centimetres, as is currently the case. In reviewing the tree preservation by-laws of other jurisdictions, the City's current definition appears to be more in keeping with the general standard within the Lower Mainland and a change in this regard is not recommended.

There were suggestions to broaden the range of species of replacement trees. However, no specific suggestions were made and the range permitted in the By-law is already very broad. As such, no amendments are being recommended in this regard.

CONCLUSION

In accordance with Council's direction, staff has undertaken a public consultation program to allow the public an opportunity to provide input regarding changes to the By law and other by-laws and policies related to trees and the preservation of trees in the City. This process has resulted in a wide range of suggestions being made by the public, regarding potential amendments to the City's by-laws and policies. This report documents the suggestions and recommends a number of changes in relation to the City's approach to tree preservation and replacement for Council's consideration. If these recommendations are adopted by Council, the Surrey Tree Preservation By-law will become one of the most comprehensive and "leading edge" tree by-laws in the lower mainland.

Murray Dinwoodie General Manager Planning and Development

JMcL/kms/saw

Attachments:

Appendix I Corporate Report R270

Appendix II Letter

Appendix III Notes from February 1, 2005 Meeting with Community Representatives

Appendix IV Submission form Friends of the Semiahmoo Heritage Trail

Appendix V Heritage Advisory Commission Heritage Tree Sub-Committee Report

Appendix VI Comments from Public Consultation Process

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Appendix I



Corporate Report

NO: R270

COUNCIL DATE: November 1/04

REGULAR COUNCIL

TO: Mayor & Council DATE: October 28,

2004

FROM: General Manager, FILE: 3900-20-12880

Planning and Development

SUBJECT: Tree Preservation in the City of Surrey

RECOMMENDATION

It is recommended that Council:

- 1. Receive this report as information; and
- 2. Authorize staff to proceed with a public consultation program, as documented in this report, to allow the public an opportunity to provide input regarding changes to the City's Tree Preservation By-law and other by-laws and policies related to trees and the preservation of trees in the City.

INTENT

The purpose of this report is to provide information to Council, regarding trees and tree preservation in the City and to obtain Council authorization to proceed with a public consultation program with a view to receiving input from the

public regarding changes to the City's Tree Preservation By-law and other by-laws and policies related to protecting trees in the City.

BACKGROUND

Over the course of the last several months, there has been an increasing level of public concern with the cutting and removal of mature trees throughout the City, particularly as a result of sites being cleared for new land development projects. This increasing public concern is due, in part, to the significant increase in land development activity that has taken place over the last two years, in comparison to prior years. This development activity has resulted in a higher level of tree removal activity than has been the experienced in the City since the City's current Tree Preservation By-law was adopted in 1996.

At its meeting on September 27, 2004, Council requested that staff provide a report to Council on the City's Tree Preservation By-law and related practices. This report responds to that direction from Council.

Current Approach to Tree Preservation

There are two primary components in the City's current approach to tree preservation. These are:

- the preservation and planting of trees on streets and public lands in the City; and
- the preservation and planting of trees on private properties.

This report will address both of these components.

TREES ON PUBLIC PROPERTY

The City of Surrey uses several means that act to protect trees on public property. These include:

- The acquisition and on-going maintenance by the City of significant areas of parkland and other City-owned properties that are entirely forested or contain trees;
- The planting and on-going maintenance of trees during new park development and during refurbishment of parks;
- The planting and on-going maintenance of trees along street boulevards and medians throughout the City; and
- The protection of trees on slopes and in creeks and riparian areas by way of acquisition of the land by the City during the development process or by way of Restrictive Covenant registered in favour of the City on the title of private lands, which prohibits the disturbance of natural vegetation, including trees.

Each of these areas will be described in more detail in the following paragraphs.

Trees Preserved on Parkland and City-owned Properties

The City's Official Community Plan ("OCP") contains a series of policies on protecting the natural environment and on providing park space for the City's residents. These policies form the basis for the City's Parks, Recreation and Culture Master Plan that includes, as an objective, the provision of 4.2 hectares (10.5 acres) of parkland for every 1,000 residents of the City. The following table provides a summary of the parkland located in the City of Surrey and the acreage of parkland that is forested.

Statistics for Surrey

Type of Parkland	Area	Percentage	Forested
		Covered with Forest (est.)	Area
City Parkland	2,431 ha	42%	1,021 ha
(includes	(6,004		(2,522
dedicated Urban	acres)		acres)
Forests)			
GVRD Parkland	476 ha	76%	362 ha
(includes Surrey	(1,176		(893 acres)
Bend and	acres)		
Tynehead)	1001	1004	101
Provincial	103 ha	10%	10 ha
Parkland	(254 acres)		(25 acres)
(includes			
Serpentine Fen			
and Peace Arch Park)			
Total Parkland	3,010 ha		1,393 ha
Total Lai Klaliu	(7,434		(3,440
	acres)		acres)
Agricultural Land			,
Reserve	9,300 ha	10%	930 ha
(not counted in			
the above)	(22,972		(2,297
·	acres)		acres)
Creeks, Streams	500 ha	80%	400 ha
and Riparian	(1,235		(990 acres)
Areas (est.)	acres)		
covered by			
Restrictive			
Covenant			
Total Protected			2,723 ha
Forest Area (Not			(6,726
including Existing			acres)
Forests on non-			
ALR Private			
Property	0.2001		
ALR-protected	9,300 ha		
land	(22,972		
A was of Cit-	acres)		
Area of City	31,849 ha		
	(78,668		
	acres)		

It is noted that the City of Surrey standard of 10.5 acres of parkland for each 1,000 residents is a relatively high standard in the context of Canadian cities. Based on the fact that the City already has 6,004 acres of parkland in its inventory, this amount of parkland is sufficient for a population of 570,000 residents, which is almost the build-out population of the City's current OCP. Despite this, the City will continue to buy additional parkland, including some areas of forested land on a regular annual basis. It is also noted that the current area of parkland covered with forest is 2,522 acres. If it were assumed that half of the City's parkland should remain in a forested condition or 5.25 acres of forest land for each 1,000 residents, the current amount of parkland covered with forest would be sufficient for a population of 480,000. The City's population is currently about 390,000. It is clear that the City is in a very strong position, relative to providing parkland and forested parkland for its citizens.

The Brundtland Report alluded to a healthy City having 12% of its area protected from development. If the area of parkland and the area covered by Agricultural Land Reserve ("ALR") protection are recognized as areas protected from development, 30,406 acres are protected from development in Surrey. This is 38.7% of the area of the City, which is well above the above-noted healthy City standard. The Brundtland Report is a well recognized document, which is the result of work during the 1980s by the World Commission on Environment and Development, that developed guiding principles for sustainable development.

The following table provides a summary of parkland that is provided in a sampling of other larger lower mainland municipalities.

Statistics for Other Large Lower Mainland Municipalities

City	Type of Parkland	Area	Estimated Percentage Covered by Forest	Forested Area
Vancouver (pop. = 560,000)	City Parkland	1,295 ha (3,199 acres)	29%	375 ha (925 acres)
	GVRD Parkland	818 ha (2,020 acres)	100%	736 ha (1,818 acres)
	Provincial Parkland	0		0
	Total	2,113 ha (5,219 acres)		1,111 ha (2,743 acres)
Richmond (pop. = 170,000)	City Parkland	714 ha (1764 acres)	14%	100 ha (247 acres)
	GVRD Parkland	109 ha (270 acres)	0%	0
	Provincial Parkland	0		0
	Total	823 ha (2034 acres)		100 ha (247 acres)
Langley Township (pop. = 98,000)	City Parkland	277 ha (683 acres)	47%	131 ha (324 acres)
	GVRD Parkland	1102 ha (2723 acres)	60%	662 ha (1635 acres)

Provincial	0	0 acres
Parkland	acres	
Total	1379	793 ha
	ha	(1958
	(3406	acres)
	acres)	

As can be observed from the above table, the City of Surrey compares very favourably with these other municipalities, with respect to forested land that is protected within the City.

Trees Protected and Planted on Street Boulevards and Medians

The City currently has an estimated 43,000 trees on boulevards and medians throughout the City. Parks Division staff maintains these trees. The City also has an annual boulevard tree-planting program that has two components. These two components are:

- 1. A requirement for land developers to plant trees at approximately 15 metres (50 foot) spacing on street boulevards and medians fronting all new development projects in the City;
- 2. A street tree planting program that is part of the annual capital program of the Parks, Recreation and Culture Department. This program focuses on planting trees along residential streets in established neighbourhoods within the City.

During 2004, it is estimated that 3,100 trees were planted on medians and boulevards throughout the City under these two programs. In addition, the City planted an estimated **5,500 trees, seedlings and saplings** in natural park areas throughout the City.

Trees Protected in Creeks, Riparian Areas and on Slopes

As part of the approval of new developments, the developer normally dedicates to the City the riparian areas, creeks and slopes as public open space or, alternatively, the City protects these areas by way of "no disturbance" Restrictive Covenants. These areas are typically forested areas and contain many protected trees. The Covenants allow for the continued protection of these trees in perpetuity. It is estimated that there are approximately 500 hectares (1,235 acres) of creeks and streams and related riparian areas that are covered by these "no disturbance" Restrictive Covenants. It is further estimated that approximately 80% of this area (400 hectares (990 acres)) is covered with forest. This acreage is increasing on a monthly basis as development applications are processed through to approval.

TREES ON PRIVATE PROPERTY

In July 1996, City Council adopted Surrey Tree Preservation By-law, 1996, No. 12880. This by-law was adopted with a view to ensuring that tree preservation on private property was given proper attention as the City continued to grow and develop, while furthering the objective of Surrey being the City of Parks.

The City's authority to manage trees on private property by way of a by-law was contained in the *Local Government Act* and is now contained in the *Community Charter*. The *Community Charter* provides broad powers to municipalities in regulating, prohibiting and/or imposing requirements with respect to trees. However, it is noted that a tree by-law cannot prevent a permitted land use or development to a density, as permitted under the applicable zoning by-law for any particular lot, unless the City compensates the owner for losses.

The City's Tree Preservation By-law was prepared with the intention of balancing the preservation of mature trees on private property within the City with the efficient and reasonable use of land throughout the City. As such, it does not preclude the removal of trees on private property, but rather stipulates conditions under which the removal of trees will be allowed. These conditions can be categorized into several broad categories as follows:

1. To allow for the construction of buildings and/or improvements on private property as permitted by the Zoning By-law;

- 2. To allow for the efficient subdivision and/or development of land in accordance with the City's OCP, Secondary Plans and the Zoning By-law;
- 3. To eliminate a hazardous condition related to unhealthy trees; and
- 4. To allow for land to be used for agricultural purposes.

The current Tree Preservation By-law also stipulates that replacement trees must be planted when trees are removed, particularly in relation to 1 and 2 above.

In general, for the purposes of the Tree Preservation By-law, a tree is protected by the By-law if it has reached a trunk diameter of 30 centimetres (12 inches) at 1.4 metres (4.5 feet) above the ground. Trees that meet this dimensional criterion are classified as "protected trees" in the By-law.

Under the Tree Preservation By-law, if an owner of a property within the City wishes to remove a protected tree from that property, the owner must make application to the City for a tree cutting permit and pay the appropriate application fee.

Removal of Trees to Allow Construction of Buildings/Improvements on an Existing Lot

As noted earlier in this report, legislation stipulates that a tree by-law cannot prevent a permitted land use or development to a density, as permitted under the applicable zoning by-law, for any particular lot. The City's current approach is as follows: If a tree-cutting permit application is received and identified as having the purpose of making way for the construction of buildings or improvements on an existing lot, as permitted by the lot's current zoning, the owner must:

- submit a building permit application complete with drawings illustrating the buildings or improvements to be constructed on the property and confirm that such buildings or improvements comply with the requirements of the Zoning By-law;
- retain a surveyor or engineer and an I.S.A.-certified arborist to survey the protected trees on the property and provide a plan and documentation to the City, which accurately documents the size, species and location of all protected trees on the property and notes those trees within the footprint of the proposed building or improvement and within 3 metres (10 feet) of such footprint, which will need to be removed; and
- submit a tree replacement plan illustrating and documenting the number, species and size of replacement trees that are to be planted on the property.

A City arborist will attend the site with a view to confirming the documentation submitted to the City if there are concerns with the arborist's report. The Tree Preservation By-law stipulates that for every protected tree that is removed, the owner is to plant two replacement trees. The By-law, however, also provides that if the lot is not sufficiently large to accommodate a 2 to 1 ratio, the number of replacement trees to be planted can be reduced to that number which the lot can reasonably accommodate. Where the ratio of replacement trees to trees removed drops below 1:1, City staff normally requires that the replacement trees be up-sized over the minimum sizes stipulated by the Tree Preservation By-law. The By-law requires deciduous replacement trees to have a minimum trunk diameter of 5 centimetres and coniferous replacement trees to have a minimum height of 3 metres. Up-sized trees will typically have a trunk diameter of 7 or 8 centimetres for deciduous trees and a height of 4 or 4.5 metres for coniferous trees. The tree-cutting permit is issued in conjunction with the building permit.

The applicant is required to pay an application fee for the tree removal permit in accordance with a fee schedule that forms part of the Tree Preservation By-law. The applicant must also post a security (cash or a letter of credit) with the City for 100% of the cost of providing and planting the replacement trees. The City holds this security until the replacement trees are planted at which time 90% of the security is released. The remaining 10% of the security is held for an additional year (i.e., the maintenance period) for use in replacing those trees that do not remain healthy during the one-year maintenance period.

Removal of Trees to Allow the Efficient Subdivision and/or Development of Land

When a development application is received by the Planning and Development Department for rezoning and/or subdivision of land, the review process requires that the applicant retain the services of a surveyor or engineer and an ISA-certified arborist to undertake a detailed tree survey of the site and to submit a report and plan to the City that documents the size, species, condition and location of each protected tree on the site. The report must also document each protected tree that is proposed to be removed through the development process and the reasons for such removal (i.e., within the building envelope, hazardous, too close to building foundations, etc.). The applicant must also retain the services of a landscape designer or architect to submit a tree replacement plan illustrating the location, size and species of replacement trees to be planted in the proposed subdivision or development. The Tree Preservation Bylaw stipulates that for every protected tree that is removed, the owner is to plant two replacement trees. The By-law, however, also provides that if the lot is not sufficiently large to accommodate a 2 to 1 ratio, the number of replacement trees to be planted can be reduced to that number which the lot can reasonably accommodate. Where the ratio of one replacement tree for each removed tree is not met, City staff normally requires that the replacement trees be up sized over the minimum required by the Tree Preservation By-law.

The street trees that the developer is typically required to plant at 15 metre(50 foot) spacing in the boulevards of the streets fronting the development, are not counted as replacement trees.

The applicant is required to pay an application fee for the tree removal permit in accordance with a fee schedule that forms part of the Tree Preservation By-law. The applicant must also post a security (cash or a letter of credit) with the City for 100% of the cost of providing and planting the replacement trees. The City holds this security until the replacement trees are planted at which time 90% of the security is released. The remaining 10% of the security is held for an additional year (i.e., the maintenance period) for use in replacing those trees that do not remain healthy during the one-year maintenance period. In the case of single-family subdivisions, where there is only a tree replacement plan, only 50% of the security is released at the completion of planting of the trees and the remaining 50% is release after one year, subject to the replacement trees being in satisfactory condition. The tree removal permit is only issued after final adoption of the rezoning by-law or approval of the subdivision plan by the Approving Officer.

Removal of Hazardous Trees

A hazardous tree is defined as a tree that has structural defects or is in decline or dead due to natural causes. If the tree-cutting permit is issued for the purpose of removing a hazardous tree, no fee is charged for the tree-cutting permit, but the owner must:

- submit a photograph that clearly illustrates that the tree is hazardous; or
- retain an I.S.A.-certified arborist (i.e., I.S.A. = International Society of Arboriculture) to assess the condition of the tree proposed for removal and to submit a report to the City, which declares the tree to be hazardous and documents the reasons for such a declaration; and
- submit a plan that accurately illustrates the size, species and location of the tree proposed for removal.

A City arborist will normally attend the site with a view to confirming, at a general level, the findings of the report, as submitted by the arborist, if there are concerns with the arborist's report. No application fee is payable for a permit to remove a hazardous tree nor are replacement trees required under the Tree Preservation By-law.

Removal of Trees for Agricultural Purposes

The Tree Preservation By-law allows for a property owner to obtain a tree-cutting permit to remove trees from a lot for agricultural purposes. As part of the application, the applicant must retain an ISA-certified arborist to conduct a general tree survey of the area proposed for clearing to determine the number of protected trees that will be removed and to ascertain whether there are any special environmental features or considerations that should be taken into account in relation to where and how the tree clearing on the site takes place. When an applicant applies for such a tree cutting permit, they must submit a sworn affidavit that states that they intend to use the site for agricultural purposes, that the agricultural purpose cannot take place without the requested tree removal and that they will not apply to redevelopment the subject lot for a minimum of five years. The applicant must pay an application fee in accordance with the fee schedule that forms part of the Tree Preservation By-law. No replacement trees are required for this type of tree cutting permit.

Statistics with Respect to Tree Removal in the City

The following table provides a summary of the number of trees removed and the number of replacement trees planted on private property in each of the last four years:

Year	Trees Removed	Replacement Trees	
			Ratio of Replacement
			Trees
			To Removed Trees
2001	7,508	9,328	1.24 to 1
2002	7,171	7,958	1.11 to 1
2003	12,635	16,872	1.34 to 1
2004 (to Oct. 25)	9,018*	12,710*	1.41 to 1*

^{*}Tree cutting permits have been issued, as of September 14, 2004, to allow for the removal on private property of 9,018 trees in 2004. This does not include one tree removal permit that allowed for the cutting of 14,284 trees for the Phase I lands in the Campbell Heights Industrial area which covers an area of 250 +/- acres. The Campbell Heights development area will be developed out over the course of the next several years. Tree clearing on a large area of the site had to take place early in the project to allow for extensive site regrading and servicing work that was necessary prior to the development of individual lots within this large development project. Campbell Heights Phase I lands will also include many thousands of replacement trees that will be secured as part of the Development Permit approval process for the development of each new lot in the area as and when that development is approved. Since engineering services for the Phase I lands are still being constructed, Development Permits have not yet been issued for any sites in the area.

Some Practical Considerations With Respect to the Preservation of Trees

In developing an effective approach to the preservation of trees, there are many factors that need to be taken into account. Some of these include:

- Forest grown trees are difficult to preserve if they are not preserved as a group. This relates to the structural capabilities of individual trees to withstand weather conditions if they are exposed to the sun and wind;
- Potentially hazardous trees left standing through a development approval and construction process, can lead to liability issues for the City and the developer and safety issues for the occupants in the vicinity of the trees;
- If preserved trees, by virtue of the their location, density or maintenance requirements, are viewed as being a nuisance by the occupants of completed developments, it is unlikely that such trees will be given proper care and attention. This would have the effect of decreasing the life of these trees and have a detrimental effect on the urban forest condition over the longer term as these trees decline and eventually die;
- Trees such as cottonwoods and alders, even though they may be large, are not necessarily desirable to preserve, due to their relatively short life span;
- It is difficult to save trees on small lots, due to the limited outdoor area available on these lots. Small lots are popular in the City, due to their relative affordability.

The following is a list of some commonly asked questions with respect to the protection of existing mature trees in the City, with a brief answer to each question:

1. Why has the City been falling short of the 2 for 1 tree replacement policy?

There are a number of reasons for not fully achieving a 2 for 1 replacement for trees that are removed in the City as follows:

• The City's Tree Preservation By-law includes the following clause:

"Where an Owner, who is required by the terms of this By-law or a permit issued

pursuant to the By-law to plant Replacement Trees, provides the General Manager, a report by a Qualified Expert stating that one or more of the Replacement Trees cannot be planted in accordance with sound arboricultural practice such that its survival of adjacent existing trees is unlikely, or where it is not possible due to other considerations such as required setbacks, lot size or topography, the Owner will not be required to plant the required 2 for 1 replacement ratio".

There are many subdivisions and developments that are undertaken each year in the City where, due to site constraints, two trees cannot be planted for each tree that is removed from the site to accommodate the subdivision or development. This primarily relates to the fact that each replacement tree that is planted must be located such that it will have sufficient space to grow and mature without compromising adjacent existing or replacement trees. If trees are planted too close to one another or in too small a space, they will be unhealthy and ultimately be short-lived.

- The City's Tree Preservation By-law does not require that replacement trees be planted where an existing tree is being removed after being assessed by an arborist as being hazardous, due to natural causes. The City issues permits to allow the removal of many hazardous trees annually.
- The City's Tree Preservation By-law does not require that replacement trees be planted where existing trees are being removed for agricultural purposes. Some of these types of permits are issued every year.
- Tree clearing permits for industrial developments are often issued after the rezoning of a site for industrial use, but before Development Permits are issued for individual lots within the industrial development. Replacement trees are then included in the Development Permit drawings that are approved, prior to new industrial development taking place on individual lots within the development. There is sometimes a delay between when a tree-cutting permit is issued to allow removal of trees and when the Development Permit is issued that provides for the planting of the replacement trees. A good example of this is the Campbell Heights Business Park that is currently being developed. A tree-cutting permit was issued earlier this year that allowed for the removal of approximately 14,000 trees from that 250-acre industrial area. The trees that were cleared were predominantly alder and cottonwood trees in a forest condition with some firs and cedars growing among the alder and cottonwood trees. There will be many thousands of replacement trees required to be included on the Development Permit drawings for the individual lots in this industrial area as and when development of the individual lots occurs in the future. Therefore, the tree removal statistics for 2004, to date, are weighted heavily on the tree removal side because of the tree-cutting permit that was issued for Campbell Heights. The replacement trees in the area have not yet been approved as part of the Development Permit process for each of the individual lots since the development of the individual lots will take place on an on-going basis over the next few years. However, as the lots in the area develop there will be thousands of replacement trees planted in the area.
- Small lots preclude the preservation of trees and allow for the planting of only 1 or 2 replacement trees per lot, due to lack of outdoor area on the lot outside of the building envelope. Small lots are becoming increasingly popular in the City for affordability reasons.

2. Are there other cities that have been successful in retaining significant trees? Best practices?

The City's Landscape Architect continues to dialogue with other lower mainland cities, with respect to tree preservation and tree replacement. There are a variety of approaches that are being taken by various municipalities in the lower mainland in an effort to preserve more existing mature trees. Some municipalities place more emphasis on saving trees and place less emphasis on density efficiencies, while other municipalities place more emphasis on density efficiencies and less emphasis on saving trees. There are still a number of lower mainland municipalities that do not have a tree preservation by-law.

3. Can we look at design guidelines further with the objective to build around significant trees?

The Planning staff, the City Architect and the City Landscape Architect work closely with individual developers to protect as many existing mature trees on development sites as practical. Developers object to saving trees, from time to time, particularly where the saving of trees compromises the potential density of a development site. Similarly, many "greenfield sites" in the City are forested and the individual trees within the forest have been protected from wind and other natural forces by the other surrounding trees in the forest. When development occurs and some of the forest trees must be removed to accommodate buildings or roads, the remaining trees are often not structurally capable of withstanding the new wind forces to which they are exposed. To leave these remaining trees within the development, is potentially hazardous to the occupants of the development.

Even when trees are saved through the residential development process, staff is approached on a fairly regular basis, by the occupants of the new residential development, for permission to remove the saved trees soon after the completion of the development because of safety concerns with the trees or tree limbs being blown down onto the new homes in the development.

Despite the above, staff are careful to encourage the saving of as many trees as possible through the development process.

The Development Advisory Committee ("DAC") has discussed the matter of tree retention at a recent meeting and suggested that more flexibility in the Zoning By-law, related to the shape of lots and setbacks to buildings, may assist in saving more existing trees in new residential developments. This matter will be discussed at more length at a future DAC meeting, with a view to determining if amendments to the Zoning By-law should be made in support of tree retention.

The City's current tree by-law and related development policies, focus on ensuring that new developments contribute reasonably to maintaining an urban forest condition throughout the City. This is accomplished through the retention of existing mature trees where possible and through the planting of replacement trees on development sites and on boulevards in a way that ensures their long term health and survival. The existing trees that are saved and the replacement trees that are planted on development sites, must comply with sound arboricultural practice to ensure that the trees will not only survive, but will thrive over the long term so that the City's urban forest is replaced and maintained.

There are concerns that some protected trees that could be preserved are lost due to poor construction techniques.

4. What are the typical species of replacement trees?

The Surrey Tree Preservation By-law lists about 200 different species as being suitable for use as replacement trees. The City's Landscape Architect reviews and approves all tree replacement plans, in relation to single-family residential development and landscape plans that include trees related to Development Permits covering multi-family, commercial and industrial development. On average, about 40% of the trees planted in the City, on new single-family lots under approved replacement tree plans, are either firs or cedars. Maple trees are another prevalent species of replacement tree, accounting for approximately 25% of all replacement trees that are planted. Magnolia and cherry trees are also commonly planted in the City. The City's Landscape Architect, in reviewing plans, attempts to ensure that the type of replacement tree being proposed is suited to the location at which it is being planted. In some circumstances, smaller ornamental trees are more suitable to a space than a larger tree. If trees are not planted with due regard to the usability of the area around the tree, the owner of the lot on which the tree is located will view the tree as a nuisance

and will not be prone to giving the tree the needed care to ensure its longevity.

Infractions Related to the Tree Preservation By-law

The landscape inspection staff responds, on a regular basis, to complaints regarding the unauthorized removal of trees in the City and monitor sites for which tree cutting permits are issued, to ensure that the tree removal is undertaken in compliance with the requirements of the Tree Preservation By-law.

Between January 1, 2004 and October 28, 2004, 55 infraction notices have been issued for the removal of protected trees without a permit. Based on the best available information, it is estimated that a total 239 protected trees were removed without the prior issuance of a tree-cutting permit. In most circumstances, when more than a few trees have been removed without a permit, Landscaping staff reviews the matter with Legal Services to determine the potential to lay charges against the owner. If the owner is cooperative, typically charges are not pursued, but rather the owner is required to:

- pay a fee to the City equivalent to the permit fee that would have been payable had a tree cutting permit been issued:
- prepare a replacement tree plan that provides for at least two replacement trees for every tree that was removed without authorization, with the replacement trees being up-sized from the minimum replacement size specified in the Tree Preservation By-law; and
- if the site on which the trees were removed cannot accommodate the number of required replacement trees, provide a cash payment to the City for the value of those replacement trees that cannot be accommodated on the site and the money is used to fund the planting of trees on parks and street boulevards in the City.

Landscape Inspection staff has also addressed the following types of incidents during the last year:

- incidents where trees were damaged during excavation/construction;
- incidents where tree protection barriers around protected trees were not constructed or not constructed or maintained to the standards specified in the Tree Preservation By law; and
- miscellaneous incidents involving trees on City property or trees on neighbouring property to a development site.

In these circumstances, staff typically notifies the property owner or his representative, to correct the deficiency. In instances where cooperation is not forthcoming, City building, plumbing and electrical inspections and/or approvals are withheld until the matter has been addressed to the satisfaction of City staff.

Tree By-laws of Other Lower Mainland Municipalities

Twelve of the 22 municipalities/electoral areas in the GVRD have a tree protection by law of some form. These municipalities are Belcara, Burnaby, Coquitlam, Delta, Maple Ridge, New Westminster, North Vancouver District, Port Coquitlam, Port Moody, Surrey, Vancouver and White Rock. The remainder of the GVRD municipalities do not have such a by-law, including Anmore, Bowen Island, Electoral Area A, Langley City, Langley Township, North Vancouver City, Lions Bay, Pitt Meadows, Richmond and West Vancouver.

The City of Abbotsford (not in the GVRD) has a tree protection by-law.

Summary of Variations of Tree Protection By-laws Across Other Municipalities

The following provides a general overview of the range of by-law provisions found in the existing tree protection by-laws throughout the region:

- Variations with respect to the Definition of a Protected Tree
 - Minimum tree diameter: from a low 10 centimetres (4 inches) to a high of 75 centimetres (30 inches);
 - Minimum tree height: from not being specified to a minimum height of 3.6 metres (12 feet).

• Variations in the Species/Types of Trees Protected

- All trees meeting the minimum dimensional requirements;
- All trees in certain geographic areas;
- Only trees of certain species;
- Only trees on sloped land.

Variations as to the Purposes for Which a Protected Trees can be Removed

- To allow for building or improvements construction on a lot;
- To allow land development/subdivision;
- To remove a hazardous tree from a lot;
- To remove some percentage of the trees from a lot in any one year without other justification;
- For agricultural purposes.
- Variations as to when replacement trees are to be planted and the ratio of replacement trees planted in comparison to the number of trees that are removed

Other Considerations

In most by-laws an arborist's report is required as part of an application for a tree cutting permit and a fee is payable which varies depending on the number of trees and/or area of land from which trees are being removed.

In general, Surrey's current Tree Preservation By-law appears to be in the "same range" as other existing tree preservation by-laws in the lower mainland. Some of the provisions in Surrey's by-law are more onerous than others in the region, while others are more toward the less onerous end of the range. It should be noted that some GVRD municipalities do not have any tree preservation by-law at this time as noted previously in this report.

Possible Tree Preservation and other By-law Amendments

Although public concern with the removal of mature trees throughout the City has been more vocal over the course of the last few weeks, there has been a level of on-going concern by the community over the last few years with tree removal in the City. Staff has spent time reviewing the Tree Preservation By-law and other City By-laws, such as the Zoning By-law, with a view to drafting amendments that would act to protect more mature trees in the City, while still allowing for the reasonable use and development of land in the City. Possible areas for consideration of by-law amendments are listed below:

- 1. Encourage property owners and developers to save more protected trees by including incentives within the bylaw toward this end. For example, a clause could possibly be included in the by-law that would allow for a reduction in the number of replacement trees that a developer is required to plant on a development site, based on the size of the protected trees that are preserved (i.e., the larger protected trees are given more credit than smaller protected trees);
- 2. Provide alternative approaches for Council's consideration that will more fully achieve the objective of having 2 replacement trees planted for every tree that is removed in the City. One option is to require that, where a development site cannot accommodate a 2 to 1 ratio of replacement trees to trees removed, that the developer be required to provide a cash payment to the City for the difference and the City use these funds to plant trees in City parks and boulevards;
- 3. Include a broader range of species of trees that can be used as replacement trees in the City (this is intended to encourage the planting of more replacement trees and to ensure that trees that are planted are suitable to their location through to maturity);
- 4. Specify that an arborist who assesses a tree and submits a report to the City, declaring the tree to be hazardous, cannot also be retained by the owner to remove the tree. This will remove the potential for conflict of interest in the assessment of trees in the City;
- 5. Increase the penalties for illegal cutting/damaging/removal of trees. This may include a revision to the

Municipal Ticket Information By-law to allow City staff to issue tickets for infractions of the Tree Preservation By-law and set a list of fine amounts that would relate to the various common infractions, as noted previously in this report;

- 6. Provide flexibility for the City to issue tree removal permits for trees that are not hazardous, but are not suitable for their location and also require the planting of replacement trees when such trees are removed. This addresses the frustration of some property owners where a tree becomes a nuisance as a result of its growth, but there is no provision in the current By-law that would allow for its removal;
- 7. Increase the securities that applicants are required to post at the time of tree cutting permit issuance for tree removal and replacement to encourage compliance with the Tree Preservation By-law;
- 8. Add a provision that will allow the City to collect a relatively high security for especially valuable specimen trees or trees that are significant in their context (e.g., trees along Semiahmoo Trail) to ensure that they are not damaged during clearing/construction activities;
- 9. Add other important trees to the List of Significant Trees appended to the By-law, in response to community suggestions;
- 10. Add a provision that allows the City or its contractors and/or agents to enter private property to plant replacement trees, at the owner's expense, if an owner, after being given due notice, does complete the planting of such trees and, further, to give the City the right to collect the costs of such action as taxes if the owner refuses to pay the costs that the City has incurred in planting the trees;
- 11. Make the by-law more clear and simple to understand and administer (i.e., remove the vagueness and inconsistencies in some of the definitions and clauses that are making effective administration of the by-law more difficult);
- 12. Consider amending the City's Municipal Ticket Information By-law to allow municipal tickets to be issued for infractions of the provisions of the Tree Preservation By-law;
- 13. Encourage the use of cluster zoning through the approval of Neighbourhood Concept Plans and other secondary plans and in the design of amenities, to preserve significant stands of trees; and
- 14. Consider modifications to the Zoning By-law that will allow for lot configuration, building setback and building envelope flexibility, where such flexibility could be exercised in relation to preserving protected trees.

Public Consultation Program

Based on the level of public concern with the removal of mature trees throughout the City, which prompted Council to request this report, it is considered appropriate to undertake a public consultation program related to tree preservation in the City and possible amendments to the City's Tree Preservation By-law and other by-laws and policies. This program should be directed toward better understanding the concerns and expectations of the public and to receiving suggestions and input, with respect to amendments to the City's by-laws and practices related to tree preservation.

It is proposed that the public consultation program include a public open house hosted by City staff, at which information would be displayed regarding:

- the City's current approaches to tree preservation;
- areas where the City has experienced difficulties in by-law compliance and/or administration; and
- possible by-law and policy amendments that would assist in establishing a higher level of tree preservation in the City.

Comment sheets would be available for those attending to formally submit comments and suggestions to the City for consideration. Such an open house would be advertised in the local newspapers and an invitation to the open house would be sent by mail to community associations and other interested organizations.

It is also proposed that a series of meetings be held with individual community groups and associations that have expressed concerns with tree preservation in their community.

In addition, it would also be appropriate to allow the Development Advisory Committee to provide input and suggestions, on behalf of the development industry. Similarly, the Greater Vancouver Homebuilders Association would be approached to provide input, on behalf of the residential home building industry.

This public consultation program could be undertaken over the next two to three months.

CONCLUSION

Based on the above, it is recommended that Council authorize staff to proceed with a public consultation program, as documented in this report, to allow the public an opportunity to provide input regarding changes to the City's Tree Preservation By-law and other by-laws and policies related to trees and the preservation of trees in the City. Subject to Council approval, once the public consultation program is completed, staff will prepare a further Corporate Report to Council documenting the information received from the public and making recommendations regarding additional actions focused on enhancing tree preservation in the City.

Original signed by

Murray Dinwoodie General Manager Planning and Development

MDD:saw

Appendix II

November 12, 2004

File: 3900-20-12880

«Name» Dear «Sal»:

Re: City Seeking Input with Respect to Tree Preservation and Tree Replacement By law and Policies

At its November 1, 2004 Regular meeting, Surrey City Council considered Corporate Report No. 270, entitled "Tree Preservation in the City of Surrey" and authorized City staff to proceed with a program to allow interested members of the public an opportunity to provide input into possible changes to the City's Tree Preservation By-law and other by-laws and policies related to the preservation and replacement of trees in the City.

The public consultation process will include three "open house" meetings held at various locations across the City and will

also include meetings with interested groups and community associations, during which information about the City's current regulations and requirements related to tree preservation and tree replacement will be shared and opportunities will be given for comments and suggestions to be submitted to the City as to how the current regulations and requirements should be amended. Similar information will also be posted on the City of Surrey web site and will be on display in the main lobby of City Hall, at 14245 - 56 Avenue. There will be opportunities for interested members of the public to submit their comments and suggestions to the City through these other avenues as well.

As an initial step in the public consultation process, a copy of the above-referenced Corporate Report, No. R270 (copy attached), is being forwarded to community associations throughout the City, including your association, for review and consideration. If after reviewing the report your association is interested in providing comments and/or suggestions to the City, please submit them in writing to the attention of the undersigned, either by facsimile at 604-591-2507 or by e mail to treebylaw@city.surrey.bc.ca. If your association would like to meet with City staff to discuss your ideas, comments and concerns, related to tree preservation and replacement in the City, please contact Judy McLeod, Manager of Long Range Planning and Policy Development at 604-591-4606 or by e-mail at imcleod@city.surrey.bc.ca.

City staff is in the process of arranging suitable venues, dates and times for the three open houses that were mentioned previously in this letter. Once such arrangements are finalized, information regarding the scheduling of the open houses will be forwarded to your association, as information. These open houses will also be advertised in the local newspapers with a general invitation to interested citizens of Surrey to attend.

If you require any other information, please contact Judy McLeod, Manager, Long Range Planning and Policy Development, at 604-591-4606.

Yours truly,



Murray Dinwoodie General Manager Planning and Development

JMcL:saw Attachment

Appendix III

Tree Preservation By-law Public Input Meetings

Meeting notes from meeting between staff and the following community representatives - Tuesday February 1, 2005 at 6 pm.

In Attendance were:

Deb Jack, Surrey Environmental Partners (SEP)
Katherina Ross, (SEP)
Rob Way, RESCUE (Elgin Ratepayers)
Liz Walker, WRS Naturalists, SEP
Tom Godwin, South Port Kells, SEP
Bob Cattermole, SKP, SEP
Wayne Good, Port Kells, Anniedale, Tynehead
Wady Lehmann, Green Timbers Heritage Society
Kevin Purton, SEP
Rosemary Zelinka, SEP, Surrey Association of Sustainable Communities (SASC)

Dennis Woods, SEP, RESCUE Ken Bennett, SEP Judy McLeod, Surrey Planning& Development Department Preet Heer, Surrey P&D Randall Epp, Surrey P&D Greg Ward, Surrey Parks, Recreation and Culture Department

Deb Jack

- A letter has been sent to Council expressing that there should be a Public Hearing for amending the tree preservation by-law just as there is with other by-law changes.
- Concerns with the Corporate report, in that it seems to give a "we're doing fine" attitude, and we should be striving for more than that

Rosemary Zelinka

- The minimum size for Protected Trees should be reduced from 30 cm to 20 cm or less. Vancouver and Burnaby are at 20 cm. Delta does not currently have a tree protection by-law.
- List of protected species needs to be re-examined and expanded.
- The corporate report that goes to Council should point out that all trees in areas that have been given high ESA ratings are Protected Trees.
- The number of employees responsible for enforcing the by-law needs to be increased.
- Building Inspectors, Plan Checkers and By-law Enforcement Officers all need to be educate about tree retention.
- Area Planners need to make a greater effort to re-configure and adjust building locations to accommodate the existing trees. The use of Development Permit areas would allow a more subjective and individual assessment of each site.
- Increase fines for illegal removal.
- Need for better monitoring of sites during clearing and construction.
- Differentiate DP areas from other areas and apply stricter preservation restrictions on these areas.

Wayne Good

- The by-law goes too far in restricting what a person can and cannot cut on his own property, and forces people to live in fear of large trees on their property.
- The by-law forces people to be liable for damages the trees might cause if they failed. (safety concerns)
- There is enough natural park space in the City for people who want to experience trees.
- Owners should be allowed to harvest the wood on their property.
- The large trees reduce the life span of roofs.
- There is a new report by Environment Canada that states conifers actually contribute to air pollution.
- When contracting out tree clearing the GVRD includes penalties of tree damage that are based on the size and extent of the damage.
- Re-planting should be done with native species

Waddy Lehman

- We require wise, informed guidance from City Council; they should be leading the residents and directing them in terms of how best to manage the urban forest.
- There should be DCC or other credits available (parkland acquisition levies) to the owners for preserving trees.
- Although there is a different perspective in light of our urbanizing areas, some trees have intrinsic value to the City and we should not lose track of this aspect.

Ken Bennett

- There is a need to educate the people about tree issues.
- Residents need to be told that there are often other ways of mitigating hazardous conditions, other than removal.

- The District. of North Vancouver now calculates the dollar value of trees in terms of their importance for soil stabilization, carbon sinks, reduced demand on City sewer systems, etc. A sign must be posted on site with a checklist of things that the developer has to do; including the construction and maintenance of the tree protection barriers. Phone numbers of City staff have to be posted for each of these items so that the public knows who to call whenever they notice the developer is not doing what he is required to do (maintain tree protection barriers, etc.)
- The problem is not the Tree Preservation By-law; the problem lies in the subdivision/DP process.

Bob Cattermole (See also his list of comments)

- The By-law requires better enforcement and higher penalties.
- The criteria for determining what is and isn't a Protected Tree should be based on both the size and the age of the tree.
- The ESA maps need to be updated.
- The arborists should not be hired by the developers they should be independent so as to provide an unbiased assessment of the trees on site.
- The environmental impact on wildlife has to be taken into consideration when issuing permits.
- The City should look into compiling a complete computer inventory of all trees in Surrey.

Kevin Purton

- There needs to be better enforcement of the by-law. Development applications have doubled or tripled in the past 5 years; the number of employees should have increased proportionately.
- Area Planning should have an Environmental Planner and the City should have an Environmental Officer. These planners should develop criteria to allow assessment of sites
- Better aerial photos/surveys are required.

Tom Godwin

- The City's Environmental Officer should be the first person on site for each development permit application.
- The arborist must be hired by the City, not the developer, and the City should then bill the developer for the arborist's services
- There need to be better inspections and enforcement of the tree protection barriers.
- Penalties need to be made stiffer.
- The City requires a canopy cover target to work towards. (compared South Surrey tree canopy to Newton)

Liz Walker

- There needs to be a way of making sure that land cleared for agricultural purposes is actually used for agricultural purposes after the clearing permit is issued.
- 38.7% protected greenspace includes agricultural land, without ALR this figure would be 9.4%
- There are not enough boulevards and boulevard trees going into the new subdivisions in Newton.
- Enforcement is required 24/7. There have been problems getting someone to come out to the site on evenings and weekends.
- There needs to be more incentives to maintain trees

Rob Way

- The backhoe operators and construction crews should be held responsible for damaging trees.
- There should be incentives for preserving trees (tax reductions or DCC credits) for those who demonstrate they are suffering hardship by retaining trees.
- The Zoning By-law should be modified to provide for relaxed building setbacks, heights, etc., where relaxations can provide for tree retention.
- There needs to be sufficient staff so that they have the time to work with owners and guide them in ways that will result in greater tree preservation, rather and simply letting them construct whatever their engineers or architects tell them to build.
- The minimum size of what constitutes a Protected Tree should be reduced.

- When trees are removed illegally, they should be replaced with a number and size of replacement trees that provide a combined DBH equal to the tree removed.
- Septic pits, rather than septic fields should be allowed.
- Trees provide a "common" benefit to the community, even when they are on private property.
- There needs to be a canopy cover target set up specifically for retained trees.
- Fines should be increased enough to pay for the increased staff needed to enforce the by-law.

Dennis Woods

- Applicants need to be submitting better tree surveys.
- It is too easy to recommend removal on the basis of the tree being hazardous, or simply not work retaining.
- The words "may" should be removed from the By-law so that it reads: "The General Manager must request a tree survey" for every development.
- Expand the list of protected trees
- There should be a complete environmental assessment, not just an arborist's report, done for every development site, before the preliminary layout is designed.
- The City should not be exempt from the by-law when doing work on City property.
- ISA arborists don't have the kind of accountability that is required. An Engineer, Arch, or R.P Biologist should have to undersign their work, so that if it's inaccurate they can be held accountable.
- It is too easy to become ISA accredited. Need a better definition of a "Qualified Person" in the by-law.

Deb Jack

- Only 3% of the total area of Surrey is covered by Forest; this is far below the 35 65% that is being promoted in current literature.
- The 12% canopy cover has no scientific basis and should not have been included in the report to council.
- The CITY GREEN computer programs can be used to calculate a city's canopy cover.
- There needs to be a specified amount of natural forested areas per capita the way there is a specific amount of playing fields or developed park space per capita. There is no official plan for natural areas
- The City should have to replace whatever trees it removes from City land and the combined DBH of the replacement trees should equal to the DBH of the removed tree.
- Need to be issuing fines for tree topping and pollarding, especially to the landscape maintenance companies that prune the trees in commercial parking lots and multi-family developments.
- There should be buffer zones created around all high ESA zoned land.
- There needs to be a requirement for planting replacement trees when hazardous trees are removed.
- The ESA maps should be updated and made available to all developers.
- Building setbacks are relaxed too frequently and there is now insufficient buffering between properties in new developments/subdivisions.
- 2 to 1 ratio is not being met.

Attachment:

Submission by Bob Cattermole SEPS

SURREY TREE PRESERVATION

What is good about Surrey's By-laws

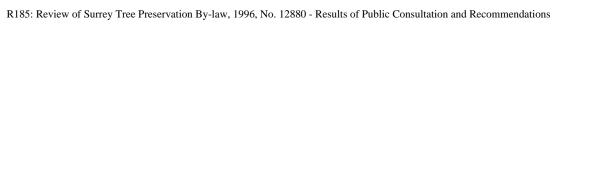
- Requires tree removal permits for trees on private lands
- Protects all trees in Environmentally Sensitive Areas
- Planning tries to get replacement trees where they can

Suggested Improvements to Surrey's Tree Preservation

- One of the main problems is the by-law needs to be enforced!!!
- Builders opt to pay penalties rather than plant trees, penalties should be greater
- By-law states, trees are protected if diameter is 30 cm or more, a combination of size and age should be included in By-law
- No clear cutting before development, if developer clear cuts 1 year before application, developer should not be allowed to develop for a minimum of 10 years
- By-law only protects certain trees. It is not comprehensive enough. More species should be added
- Developers should not be allowed to trump tree protection
- Inventory of environmentally sensitive areas need to be updated, only have '95, '96, '97
- Penalty fines should be improve and enforced
- Arborists should not be paid by the developers, but be independent in their decisions
- City should hire environmental officers to walk areas slated for development, then could help plan to reduce environmental impact
- More trees should be planted along boulevards and roads, especially to replace trees that could not be saved on new developments (these trees could be planted 2 for 1 removed, along boulevards to maintain Surrey's tree canopy)
- Environmental impact on wildlife should be considered (eagles, owls, squirrels, etc.) before trees are removed
- All inspectors and city employees should be observant in watching protected trees as they drive around the city
- By-laws department only act on public complaints, by then it is too late. There has to be a more pro-active approach. Large signs could be placed on properties to be developed indicating tree removal.
- There should be natural park designations especially for environmentally sensitive areas
- Modernize by use of "City Green" computer program to do inventory of tree canopy (Burnaby and North Vancouver have it)
- Surrey should have an environmental planner

Appendix IV



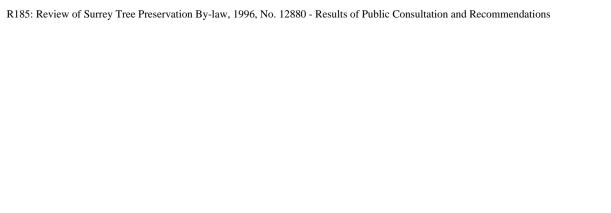




Appendix V



















Appendix VI

Comments from Public Consultation Process

Numbers in brackets represent the **comment sheet number**.

1. Do you have any comment on possible amendments to Surrey's Tree Preservation By-law or policies?

Incentives?

ıster zoning – 8 responses

- > Particularly good encourage developers to use "cluster zoning" (1)
- Support cluster zoning. (20)
- ➤ Definitely encourage cluster zoning to preserve groups of trees in new developments it is very discouraging to see wall-to-wall houses even if replacement trees are planted on the boulevards. (27)
- Leaving clusters of trees as suggested should be encouraged. (38)
- ➤ Please allow smaller units to be built on lots. Thereby allowing for more green space. Make tree suggestions for lot sizes. (43)
- > Yes. (55)
- ➤ Cluster zoning seems a good idea. I hear at least one developer left large trees standing (Sullivan?). Can City encourage such developers? (66)
- Encourage the use of cluster zoning to preserve significant stands of trees. (90)

Compensation to developers/property owners/ financial incentives – 31 responses

Developers pay more for clear-cutting large trees on properties and get money 4 saving trees

➤ Rebate on taxes for saving trees – developers to pay more for clear-cutting large trees on properties and to get financial encouragement for saving trees. (5)

Compensation when keeping large trees

The developer should be compensated with a rebate for half the cost of all charges related to the development of the property when keeping the large trees at a minimum 25%. (8)

Tax Reduction for Preserving Trees

- > Some form of tax/fee reduction for preserving significant trees would be much more effective. (12)
- Reduce property taxes or pay private property owners to preserve their properties. If Surrey is to protect trees for the common good, Surrey is to bear the cost and not the unfortunate owners who happen to have some trees. (24)
- Provide tax breaks to make larger lots (that are able to keep large trees). (30)
- > Small Property tax reduction (1% or 0.5%?) for having a significant # of trees on your property! (36)
- Tax write-offs/incentives for those who adhere to laws and develop neighbourhoods around existing natural environments. (39)
- ➤ Visit lot mill rates and taxes if a lot is taxed as a view lot, but the view is blocked by trees, then no incentive to save the trees. To encourage the copse idea further, consider rewarding landowners of larger properties (more than a third of an acre) with a tax break, rather like the Homeowner's grant, to keep a minimal (an eight to a tenth acre) area as a small wood. Many homes on my own avenue (23rd Ave between 128 St and 124 St) have wooded areas in the back of their property and the combination actually provides a significant green corridor that almost links Crescent Park with the trees on the bluff overlooking Mud Bay at the west end of 24 Ave. I'd be willing to research and detail my

- copse proposal further if it is of interest. (41)
- If trees are left there by foregoing housing, a tax benefit or smaller units could be allowed. (43)
- > Tax credits for stewardship, or developments that provide greater tree protection. (58)
- Five a tax credit for large trees on private property. (62)
- ➤ ALR owners receive a tax concession to preserving mature trees on tracks of land; c. Home owners receive tax concession for maintaining 75% tree canopy over property; d. Developers of strata properties and new subdivisions that preserve > 1/3rd land base for green belt/tree preservation receive a tax concession; greater the preserved land base that preserves mature trees, greater the incentive (69)
- ➤ Provide tax reduction incentive for developers and homeowners who modify their proposals (hardship in doing so must be demonstrated). (71)
- A reduction of property tax for owners who preserve historic/heritage trees. (97)
- Allow some credit for enhanced landscaping using shrubs, dwarf fruit trees and tree groupings rather than solitary trees on small lots. (103)

Financial Incentives/Rewards

- If the developer agrees to save the 'significant' tree or trees...the value of the tree or trees will be crudities toward the DCC (Development Cost Charge) or the Parkland Acquisition Fund (4, 7)
- Rewards for innovative development around trees. Financial incentives for developers to retain trees. (53)
- Give developers who save forest, developmental and financial bonuses for their next projects. (57)
- ➤ Incentives are given when something is done right. A reward. Are we planning to reward developers if they save a tree? (63)
- Reward developers that work with the existing trees and design around them, with lower lot development costs. Increase the fees and the number and size of replacement trees for those clear cut in the development area. (89)
- Could the city provide money or some other incentive to developers for replacing 3:1 or 4:1 ratio of trees? (97)
- ➤ Monetary incentives (108)
- Reduce development cost charges. (109)

Parkland Acquisition Credit

- Parkland acquisition credit for any significant tree saved and the land on which it stands. Must be healthy and on suitable ground. (4)
- Award parkland acquisition credit for any significant trees saved (109)

Increase Density

- > Smaller lots and higher density if a <u>much higher</u> percentage of trees will be saved in the subdivision. Not for providing replacements trees. (91)
- ➤ Increasing density (108)
- Allow denser development in exchange for significant natural features retained. (109)

General

- > Developers could be rewarded for preserving important clusters or stands of trees. (40)
- ➤ City invest money in the process. A minority of homeowners may make some financial sacrifices to preserve trees, but I doubt that developers would. They have a lot at stake in each development and will try to calculate their risks. A reduction in the required replacement trees, in my opinion, is definitely not going to encourage them to keep large trees that reduce the number of units they can build. (66)

Reduce the number of replacement trees required based on the sizes of the trees being preserved. For example, larger trees are given more credit than smaller trees. – 6 responses

- Less replacement trees if large trees are preserved is good, but not enough incentive. (66)
- ➤ The Corporate Report of 12 November suggests some worthwhile initiatives such as require fewer replacement trees in lieu saving protected trees, on sites where space not available, make a cash payment to buy trees for boulevards, etc. (7)
- ➤ Relax the 2:1 replacement if mature trees are preserved the replacement trees will NEVER make up for the cutting of the nature stands. (23)

- ➤ Better trees worth more points good idea. Replace evergreens with evergreens not deciduous trees. (47)
- Encourage to save trees by incentives (e.g. reduction of replacement trees based on size of protected trees that are preserved). I do not think these incentives are enough where there is big development, they might be sufficient for existing lots. For a developer, there is no comparison between the cost of replacement trees and the loss of buildable land. I one mentioned to a real estate agent that if I sold my land I would have two large walnut trees preserved. He told me the prospective purchasers (developers) would not like that, that it might kill a deal, and I should try and understand what the loss would be to a developer if he had to keep these two trees when he could build three of four townhouses instead. (67)
- With cash from developers for replacement trees also allowed to go towards purchasing habitat that is deemed by a professional biologist as sensitive habitat or of significant ecological importance (90)

Do not like reducing the number of replacement trees required based on the sizes of the trees being preserved. -2 responses

- For incentive number 1, would larger trees then be replaced with 3 or 4 new trees or would it be 2 replacement trees for larger trees and only 1 for smaller? If 2 for larger and 1 for smaller trees was the case I would not support this incentive. (44)
- The ratio of replacement trees to those that are cut should be increased to account for the removal of significantly large trees of all species. (90)

Fees based on Height and circumference of the trees - 1 response

Consider a variable schedule of incentives, fees and/or fines based on both the height and circumference of the trees being both saved and removed. Possible use of board feet. (103)

Replacement Tree Ratio – 20 responses

- Replacement measures to date are far too low. The actual value of a tree is its cost to remove, grow, and replace with equal size and a 10-year insurance for survival. This a very high value, but realise you are wasting your heritage now. (5)
- ➤ If trees are removed for building, a certain percent should be replaced with new ones. Houses should not be close together that there is not enough room for trees like in South Surrey. They could be slums some day, cause they are too close. (6)
- Medium planting does little to protect wildlife. (13)
- Replacement trees are a requirement not an incentive. (20)
- The current policy installing or planting 2 trees to cut one tree is enough. (21)
- Falling short on 2:1 ratio –this ratio may be unrealistic in the long run. (25)
- All new development should feature, in terms of private property with existing trees, a certain ratio of housing to trees/existing bushes, etc. Perhaps 75% to 25%? Pressure on developers. (34)
- Replacing 2 trees for one removed obviously hasn't worked. (38)
- ➤ No. (55)
- ➤ I think in areas where high-density housing is planned, there have to be much better incentives for the developers in order to preserve trees. The areas where a developer preserves trees should first be deducted before the density ratio is calculated. It is not fair to ask a developer to place so many units on a piece of land and at the same time ask him to preserve trees. (66)
- ➤ The incentive concept must recognize that substitution (new trees for old) as currently enacted does very little to stem the huge loss of biomass going on in Surrey. Starting with a commitment to saving biomass makes decisions about prioritizing the many other tasks that trees perform a little less daunting. (70)
- Total gross-cut area of replacement tree(s) must be equal or greater than area of unauthorized tree removed. (Replacement trees thus could be greater than 2:1 ratio) (71)
- Allow developers to compensate for lost 'protected trees' at a 1:1 ratio for equal sized trees and species that are protected on properties elsewhere in the City of Surrey in which tree and habitat conservation is sought or is an important priority. (90)
- When the ratio 2:1 cannot be met on a property, require cash from the developer for the difference to plant trees on city parks and boulevards. With cash from developers for replacement trees also allowed to go towards purchasing habitat that is deemed by a professional biologist as sensitive habitat or of significant ecological

importance. (90)

Rather a minimum tree replacement per lot could be established to ensure adequate tree replacement for each new building lot. (92)

- Allow a smaller ratio for more diverse larger or expensive replacement trees. (97)
- > (Section 32 of Tree By-law) Replace "may with" WILL" (105)
- The 2:1 ratio needs to be achieved no traded for cash. (106)
- The 2:1 RATIO NEEDS TO BE ACHIEVED. That's the goal, and it's what we need to measure up to. On a site I reviewed in Surrey in 2001, 88% of the trees were removed, and many retained trees were damaged from development. After the building envelope was taken into consideration there was not enough land left to replace trees in the 2 to 1 ratio. I've seen acre after acre go down in Surrey in much the same way, most of it clear cut. Apparently replacement trees don't need to be planted if the lot size does not allow for it. The fact that Surrey is consistently falling short of this mark means we need to make changes. We can't settle for trading trees for cash or planting trees somewhere else. The bylaw and criteria for development need to be tougher, and more land needs to be preserved to ensure a healthy and sustainable balance. We should not allow clear cutting in the City. We need to establish a percentage of trees that must be retained (in my opinion the 12% above Is too low), and a percentage of trees and landscaping that we want to be maintained in the City (whether by retention or planting) if we are to achieve this balance. (106)

Strict adherence of 2:1 tree replacement although this won't come close to immediately replacing the natural capital of mature trees, that have been removed. (109)

Replacement Trees should be a Good Size - 10 responses

- > SIZE OF REPLACEMENT TREES must be increased to double the current size (4, 7)
- > Two for one replacement not adequate where one large tree is replaced by 2 tiny trees. (16)
- ➤ If permits are issued to remove existing trees two trees should have to be planted on the property the new trees should have to be a good size no more cut down a 50' tree and replacing it with a 6' tree. (36)
- Replacement of torn down trees with "good sized tree" not a 2-foot sapling. (42)
- To "replace" only large trees with twigs preserves nothing. (50)
- Even if the by-law is followed, a developer can cut a block of say 100 mature 50, 75, or 100 ft cedars, firs, cottonwoods, and alders, and destroy the wildlife habitat that they provide and pay the city to plant 200 ornamental cherries and dwarf maples which will never grow more than 20 ft tall along the city's boulevards. This is a poor substitute for what the original trees provided. (74)
- Replacement trees should be as large as is physically possible to plant on the property. The use of tree spades allows quite large trees to be transplanted successfully. (77)
- When a 50-year-old tree is replaced by a 5 year old tree that dies within months for lack of water and continued damaging construction around the tree, that is hardly a "replacement." (78)
- The trees that are taken down are mature and in most cases the trees replanted are very small and do not have the potential to get large as there is so little space in the reduced size lots that city has allowed. (84)

Size of Tree Should Determine Number of Replacement Trees – 1 response

The size of the tree being removed should be an important factor in how many replacement trees are required for planting. One means of achieving this is by having more than one size category for 'protected trees' (e.g., 12-20" diameter at breast height (dbh), 21-30" dbh, 31-40" dbh, etc.) and more than one category for the number of trees required for replacement (2, 3, 4, 5, 6, etc.). This will help account for the increased value larger trees have (e.g., wildlife cover and food, rain water management, pollution absorption, temperature and noise moderation, etc.). Replacement trees should be planted for all ages and decay classes of trees that are deemed hazardous and fall within the size requirements for 'protected trees'. (90)

Replacement Trees Should Be Native Trees – 8 responses

- Replacement trees are from Norway and other countries of Europe, and Japan. This is introducing foreign species into our environment. (11)
- Ensure that hardy native species are promoted over foreign ornamentals. (35)
- Native species: No exotics. (55)
- > Trees The type and size of trees that are being planted. Ornamental trees are not a replacement for significant native trees that have been removed. There is also a big problem with trees like oak trees that are planted by developers around warehouse developments and shopping plazas, that are then totally ruined by severe annual pruning. These trees are not allowed to grow. (73)
- An increase in native species that should be protected at any size. (89)
- Species used as replacement trees should primarily (e.g., 75% or greater) be species that are native to the City of Surrey. This will ensure that those species of trees being cut are being replaced at adequate levels (i.e., what the Tree Preservation By-law is suppose to do). This would also ensure that in the future natural or as high as possible levels of native habitat, ecological diversity and adaptation are be present. Replacement trees should be native firs and cedars of BC, with priority given to using locally grown trees that have genetic origins from Surrey or the GVRD. Similarly, Maples and Cheery trees should be those native to Surrey. In reality, approximately 15 native tree species are being cut in Surrey from development and those tree species should be given the highest priority in replacement trees being planted, as these species are what is being lost. Trees that are native to Surrey, including deciduous species, such as Alder, Black Cottonwood, Paper Birch and Bitter Cherry, should be species of priority in replacement, as these trees are the most common species being lost and they provide critical habitat for many species via their role as food sources, wildlife cover and nesting sites (e.g., wildlife trees). (90)
- > The tree replacement program is poor, we plant flowering cherry trees to replace 70 yr old Douglas Fir trees. (102)
- Specify that at least 20% of replacement trees be native species. e.g. biodiversity, they grow better here and survive without water, fertilizer, and pesticides. (106)

Broaden the Range of Replacement Tree Species – 4 responses

- For commercial developments consider a mix of replacement trees (35)
- Have more types of trees that are expendable beyond cottonwood and elder e.g. willow and elderberry. (64)
- The definition of protected trees should be amended to exclude trees such as cottons and alders as there is limited desire to save such species. (92)
- Include a broader range of tree species (106)

Replacement Trees Should Be of High Quality - 1 response

Make sure that the owner of the property plants replacement trees of a high quality, either on the lot or in the immediate area. Maybe the money could go to planting more boulevard trees. (85)

Replacement Trees are not the Answer – 1 response

➤ "Replacement" trees and shrubs are not the answer. A prof at U of Oregon (Dr. Mark Narmon, I believe) published a study in the late 80's, early 90's concluding that removal of large trees = permanent 90% carbon displacement, even allowing for rapid early growth. Ornamental trees and shrubs do not provide equal habitat for urban wildlife, equal tree cover, and evapotranspiration to mitigate urban heat island effect and global climate change. Stand-alone "replacement" trees have far shorter life spans than groves or forest. We need to preserve a greater percentage of forested area than we are under current development ratios. None of these questions addresses or invites the public to address the issue of development, which is the problem. (49)

Owner/Developer Responsibility of Replacement Trees - 5 responses

> REPLACEMENT TREES - it is mandatory that the developer replace the precise number of trees required by the

By-Law BEFORE the houses or condos go on sale on the market. (4, 7)

- Every significant tree that is replaced by 2 small twigs would require the remover to tag and register the replacements. The remover must be held accountable long after the trees have been planted (suggest 2 years). The contractor remover should not be allowed to get a future permit if they have not practiced due diligence and assured the City that they truly have replaced the removed tree. (63)
- ➤ I hate the way developers can clear-cut areas and not replace the trees or they replace the old trees with spindly little things that in a lot of cases die before they get a chance to grow. Poor planting processes, little or no follow-up or fertilization and in some cases the replacement trees are more like shrubs. (88)
- ➤ There MUST be some kind of requirement to go along with commercial development which requires ALL owners to maintain the trees in a manner contributory to the public good so that severely truncated trees and shrubs are not permitted. For reference look at the property on the southeast corner of 72 Ave. and King George. Any resemblance to a healthy, contributing tree is long gone with the severe lollypopping done. There is not shade so that any car parked there in sun contributes to ground ozone development. (105)

Limit Number of Mature Trees that are Felled – 2 responses

- ➤ I firmly believe that it is incumbent on the city to draw up legislation limiting the number of healthy mature trees that can be felled. (85)
- Need to preserve healthy mature trees and healthy clusters of trees in any development. Clear cutting should be abandoned. (40)

Tree Maintenance – 10 responses

- ➤ DEVELOPERS & CONTRACTORS & HOMEOWNERS must ensure that the surviving trees remain healthy (4, 7)
- ➤ Share solutions/awnings, planters, built form wind breaks (keeping CPTED in mind), encourage more overhangs on buildings. (35)
- ➤ Require tree maintenance and gardening companies to obtain pruning certification before issuing a business license. Some hazardous trees became that because of terrible pruning both by private citizens and so called arborists. Require gardening and maintenance companies to pay substantial fines or lose their licenses for badly preened/damaged trees. (57)
- Tree service firms operating in City of Surrey be licensed/certified to **verify competency**. This may be the solution to help stop the unnecessary topping and butchering/pruning of trees in our landscape. (69)
- ➤ Heights of trees perhaps should be addressed at least in the Crescent Beach area to preserve views and daylight. There are in addition trees that need topping, but perhaps this is not the issue here? (76)
- In some cases, the tree can be pruned, or a band installed to prevent a split crown from breaking etc, that could save the tree. These options are rarely considered. (77)
- What started this letter is that a few homeowners have found a way around the present cutting bylaw. They are trimming back larger trees so there is a poodle like chunk of greenery at the top of what was a good healthy tree that looked good in the neighbourhood. I must say that I was astonished to see this tall, maybe 50 feet of trunk, with 5 feet of greenery at the top. This should be wrong. Top it or cut it down but this is just plain ugly. (88)
- ➤ We should have help from the City in preserving our Restrictive Covenant regarding view property. We want trees pruned back not cut down. This also applies to trees as City boulevards. (93)
- > Allow watering of large trees during restriction periods in the summer with a hose. (97)

Requiring Cash from the developer in Lieu of Replacement Trees Does Not Work – 3 responses

- Cash penalties have not seemed to help or be enforced in the past. (1)
- Money collected in lieu of parkland from each development should be used for this purpose in some areas with very large trees. (9)
- > Yes. (55)

Provide Education on the Value of Trees – 12 responses

- More education regarding value of trees to media, City Council, Chamber of Commerce, business groups, real estate boards, schools, housing developers if you want to increase density, then go to high rises with more large trees left on properties or smaller homes on larger lots? (5)
- Education of the benefits trees bring may be more effective. Right now Jan 2005 the worst flooding is happening where there is only huge areas covered with concrete (parking lots roads and huge shopping centres). (6)
- > Small-scale developers need to be educated in the many values of trees. (17)
- > Citywide education program. (32)
- ➤ Developers should be aware of not damaging the skyline too much (which is what clear cutting does) on hillsides and around agricultural zones. (40)
- Educate people about energy and savings from residential tree planting. See Tree-House Effect, Friends of the Earth Cda 1991. (49)
- Developers need to be educated about the value of the environment. They need to learn about sprawl, the greenhouse effect, they need a planning department that values the natural environment and has policies that preserve and protect not flatten and pave over. Find flexibility within the environment. The by-law itself is not the problem. EDUCATION on the value of aesthetics and plants especially green spaces. (50)
- More education about the socio-economic value of trees as natural capital/natural assets. (55)
- The biggest benefit of tree by-laws is voluntary compliance. Commit \$, staff, and communication activities to reaching and informing residents, developers, and realtors of the need to protect and restore trees (stands). (58)
- Education as to the usefulness of the trees re: soil erosion, shade, etc. (61)
- All trees are common resource and visual benefit. By-law regarding development of private lands must respect this concept. (71)
- School programs to encourage knowledgee and involvement of the community. East Kensington. (97)

Promote the City's Tree Preservation Efforts – 5 responses

- > Until this week, was unaware that Surrey had a policy of tree preservation; evidence difficult to find. (37)
- Make people aware of efforts to preserve trees. Encourage public participation/pressure. Publish the information! Until lately I was unaware that trees on private property could be protected. (62)
- > Please put some teeth and good science into the proposed tree bylaw and *please* publish it somewhere! (82)
- ➤ Use the Great Tree Hunt, but make it an annual event with a yearly deadline. Celebrate by plaquing the trees during Heritage Week, or through the Environmental Extravaganza.
- ➤ Provide a directory of Heritage Tree that is easy to find. (97)
- Once more, knowledgeable, empathetic, and up-to-date information from our City Staff will become more and more crucial to maintaining and monitoring our environment, to ensure safe surroundings. (108)

Recognition Awards – 9 responses

- > Set up award on appreciation system to recognize sustainable and "green" development projects and especially those where tree preservation is encouraged (clustering of developments, etc.). Find ways to encourage sound development and a liveable city. (16)
- Annual award for steps taken to preserve trees. (20)
- Reward people for doing so recognition in some form. Give public recognition for the "best" tree replacement program execution (a.k.a. "Georgie Awards") (35)
- ▶ Public notification of developers who respect tree by-laws especially those who preserve sections of trees. (39)
- Recognition of private individuals and businesses by municipality for their care for trees on their property, just like citizen of the year, why not arbour person or company of the year? Golf courses would do well. (41)
- ➤ Being able to show a classification on advertising might or should improve tree preservation and replanting a lot. This would awarded on an annual basis only. A group of city and public people would be included in this process not the builders. (75)
- ➤ He or she should be commended. (85)

- ➤ Public recognition for superior site management. (108)
- > Special recognition of any developer incorporating significant treed areas in their plans. Perhaps "bonus discounts" in fees paid to city as well would add to the 'Special Recognition'. (112)

Free Trees to Citizens – 2 responses

- ➤ Offer free trees to citizens. Perhaps include 'tree' presentations at community fairs. Could you imagine a 35' tree roaming the city and have people pledge (sign) something as a recognition of its life. (32)
- Free trees given out to residents private property on re leaf celebration days (41)

Re-Leaf Program – 1 response

➤ Re-leaf program great – plant under power lines. Private properties – great. Large areas – developers down load tree preservation to lot owner. Developer needs to pay for new planting on designated area. Needs lots of work now. Put large buckets and little drain hole at bottom by new trees in residential area to be filled by neighbours or ____. (43)

City Should Plant More Trees (Boulevards, Roads, Parks, Private Property) – 5 responses

- City Hall suppose to plant more trees on each side of roads. (21)
- ➤ If large areas are needed for bigger trees, plant more on street boulevards and in parks. There have been far too many trees removed at too fast a pace. Too much development...too fast!! More flooding is the result, also has affected our air quality. (38)
- More trees should be planted along boulevards and roads, especially to replace trees that could not be saved on new developments (these trees could be planted 2 for 1 removed, along boulevards to maintain Surrey's tree canopy) (72)
- Allow City to plant on private property (up keep negotiated). (97)
- > Continue to add trees and flowering shrubs to the boulevards using low maintenance and suitable plant material that will stand the test of time. (108)

City Should Purchase Land – 6 responses

- > City should purchase more of these properties, then develop them themselves. (34)
- ➤ If a good stand of trees on lot to be developed then City should purchase the property the stand is on so not to burden the developer. (41)
- Encourage buying lots of land and shrub and trees even just for nature. Please plant more trees at ballparks and play grounds. (43)
- > Perhaps Planning could designate small pockets of treed areas as parks and buy the land from the developers. (66)
- For the City to provide natural areas adequately for the future, it must immediately aggressively pursue a plan of acquisition of stands of trees where the trees are 20cm and larger, above and beyond the base requirements for Parks. The City has funds in reserve. It is now time for this investment for the future to be made. These stands of trees/forests/copses WILL NOT be available again, so the City must buy them up. It will go some way to the City making amends to the populace for not having adequately enforced the by-laws and OCP over the past 20 years with the resultant huge loss of Biomass to the detriment of the citizens. For the sake of our grandchildren and their grandchildren. We've run out. No more trade-offs. Just buy up as much as possible, the supply is vanishing rapidly and will never again be present in Surrey. This just might make Surrey look different from all the other places where people live and work and therefore be an important attractant to future settlement. Any place can do a built environment, Surrey has been concentrating on that for decades. Long past time to slow down, establish us as a singular location, not just the same as all the others. (105)
- ➤ Purchase land for parks to preserve heritage trees. (106)

Significant Trees should be Owned and Maintained by the City – 2 responses

- ➤ Once a site is up for development and the assessment has been made the trees identified as 'significant' then become state owned and as such are protected in perpetuity and the above fines are applicable. (4)
- ➤ Consider those trees that we already have in our park system and look after these areas very well, making them user friendly and safe, so that we can truly enjoy their beauty. (108)

Add More Trees to the Protected Tree List – 1 response

> By-law only protects certain trees. It is not comprehensive enough. More species should be added (72)

Save Tree Clusters - 2 responses

- Tracts of trees should be preserved, not just individual trees. This would help with damage and wildlife preservation. (62)
- We need to save groves of trees and forests, not just a couple of single specimens. Single trees are nice, but we are destroying whole ecosystems by allowing developers to clear cut wooded areas. (74)

Adjust "Development First" Policy – 1 response

Since the City adopts a "development first" policy, any outbuilding, garage, addition that a homeowner wants to build and obtains a building permit for means certain death for any tree in the way. (77)

Developer Should Work Closely with the City – 1 response

Developers and City staff should work together towards a common goal to produce the best possible aesthetic and practical outcome. This can be accomplished by ensuring that City staff are available to work with Developers throughout the planning process. Ideally the final outcome of a project should be visualized before it is commenced. This includes computerized renderings of plantings that show how the choice of trees will look in five years time. It is my opinion, therefore, that one of the most cost effective ways of ensuring that the very best is done for our environment, is by providing excellent empathetic communication between Developer and Staff. The City of Surrey should ensure that the Developer is indeed provided with expert direction and guidance so that communication breakdown and frustration does not arise. This would facilitate ease in bringing a development to fruition and confidence in working with the City of Surrey.

I feel that this could be one of the best incentives towards promoting a working partnership with Developers and give the City a reputation for being cutting edge, visionary, decisive, and easy to work with. (108)

Like all of the proposed incentives – 3 responses

- Agree with 4 suggestions presented. (35)
- > I agree with all of the incentives. (44)
- ➤ I like all of the proposed changes except the flexibility part. Some very good suggestions. (57)

Existing Policies Fine – 1 response

The existing policies are fine as is. (93)

General Comments on Proposed Incentives – 2 responses

- > Proposed incentives are better than current situation, by far not sufficient. (12)
- The incentive concept must recognize a scale of value that recognizes different types of trees, different groupings of trees and their value in terms of aggregate ecological function compared to "replacement" trees. (70)

Other – 10 responses

- In talking to your attending staff, Permit of #55 plus #25/tree is far too low. It does not incur administrative costs; (2)
- ➤ Very little change. (13)
- Regarding agricultural removal and 5 year criteria there should be a sizeable deposit; (22)
- Sorry, I do not know the in's and out's of by-laws. I just know that we are stripping the land. The article says my feelings. (26)
- > Yes, have Councillors at "open" houses so residents can voice their concerns!!! This was a waste of my time! (31)
- ➤ Public identify ethical builders. (34)
- Less is more. (42)
- The problem is not the Tree By-law, it's Surrey's development practices. None of these questions addresses or invites the public to address the issue of development, which is the problem. (49)
- All possible incentives are already known to the City. It seems that they have not been implemented and/or been successful. (105)
- > I feel that it is impossible to make a by-law where one size fits all. In some instances it might be possible to leave a stand of existing trees in other instances i.e. residential dwellings might not benefit from the same treatment. (108)

Ways of Providing Flexibility?

Lot Configuration, Building Setback, and Building Envelope Flexibility – 14 responses

- > Varying setbacks and street alignments and clustering (4)
- Proposition #2 is a very good one. (12)
- ➤ Change zoning bylaw with respect to lot shapes and building setbacks to allow more trees to be saved and planted. Such neighbourhoods will offer a better quality of life to people. (16)
- Lot coverage and side yard setbacks do not lend themselves to retaining large trees. Abutting driveways would allow retention of existing trees. (18)
- ➤ Allow zoning flexibility to adjust lots shapes/configurations. (55)
- Alter position on lot to allow retention of major trees. (60)
- Modify zoning by-law to allow for lot configuration seems very good. So far, the Planning Department seems to use template plans that ignore the existing use template plans that ignore the existing trees until it is too late. (e.g. tree survey done too late, when buildings already planned). (66)
- ➤ City of Surrey to provide **flexibility** to proposed building size, building location, setback allowances, roadways, locations of on-site services to help enable the preservation of significant trees. (69)
- Modify zoning by-law to allow relaxation \$/or relocation of building, zone, setbacks, height (71)
- Modify the zoning by-law to allow for lot configuration, building setback and building envelope flexibility for the preservation of protected trees. (90)
- Adjust setbacks, road allowances etc, taller houses with smaller footprints, a willingness to adjust the placement of the house so that trees may be saved. Have the independent arbourist and planners review the site with awareness of where the trees and vegetation are already and adjust the roads and houses placements accordingly. (91)
- > Consider an incentive to realign lot lines and move services in order to save more trees, (103)
- > City must stop allowing reductions in setbacks on applications. This reduces the space for plantings, contributions to the green of the city. (105)
- The recommendation of providing flexibility with setbacks in the new bylaw is admirable and I can see that this alone is an incentive to the Developer to work hard to retain existing trees. Once more the promotion of cluster housing together with the added bonus of higher densities would also be an incentive to work with the existing landscape as much as possible. (108)

Design around trees – 17 responses

- ➤ When significant trees are 'identified' on site, the developer needs to plan with the architect to A) landscape AROUND them or B) create a substantial 'COMMON AREA' (park) or C) create a BUFFER ZONE so that high density neighbourhoods can benefit from the natural indigenous beauty and wildlife and be able to walk the grounds. (4, 7)
- Encourage development "around" mature trees, unless absolutely necessary for some to be removed. (12)
- ➤ Building on a site should "go around" significant trees. Example, the huge pine/fir at the southwest corner of 154 St and 18 Ave could have been saved with minor reshaping of foundation. (18)
- > Developers/architects should be encouraged to design around trees. Treed developments are far more aesthetic. (23)
- ➤ Should be flexible in zoning to allow retention of trees. (28)
- ➤ Look at trees on lot BEFORE, planning development and put buildings in between design building according to space available. Trees should be saved. (46)
- The problem is wholesale destruction of entire eco-systems to allow for urban sprawl, for example acres of one or two level "industrial" developments, miles from anywhere (Campbell Heights) surrounded by paved parking because no one can access it except by car. Even housing developments can be planned to accommodate the existing environment instead of flattening and then "replacing" the existing "significant" trees with twigs. (50)
- Encourage developers to work around trees in the area. (60)
- > Treed vegetation on property design around it. (73)
- Removing beautiful large trees simply because they don't fit the landscape architect's design should not occur. I believe it should be the other way around create a design that incorporates as much as possible of the existing naturescape. (81)
- The city must make it financially painful for the developer to clear cut properties and force them to design their projects around the trees. The development must incorporate the nature setting it is in, we must make the development conform to natural elements not nature conform to the subdivision. (91)
- There are many developments that have managed to retain large trees and even incorporate them into patios (128th Avenue Crescent Beach area). I find it hard to believe that developers of today are less skilled than those of 15 years ago, perhaps just greedier. I have even seen trees in Mexico, Cuba and the Dominican Republic saved to the point that buildings and pathways are built around the trees. (98)
- ➤ Plan development to the land and cover rather than change the land (and obliterate the cover) for the plan, as at present, in all areas even in the South of the City. This means a switch in the attitude/expectations and requirements of the City to development/building. (Have building modified to accommodate a tree.) Ever have building modified to accommodate a tree. What are the criteria? Big hole here, close it (105)
- Provide environmental design incentives and challenges. (106)
- Frees are an integral part of the natural ecology and balance of this area. The natural state of most of Surrey is "forest", or urban forest. When we're designing and developing in this environment we would do well to look at this fact and the important ecological role of trees here. Development in Surrey is pushing this "balance" over the edge. More trees need to be retained on properties being developed, esp. significant trees. Natural features such as bluffs and slopes need better protection of trees to preserve their integrity. More consideration needs to be made of the increasing importance of trees in mitigating the effects of climate change. Provide incentives to builders and developers who design with more consideration for the environment, and preserve more trees and natural features. That's what people want and value so why don't we provide incentives. The City of Surrey should challenge architects, designers and developers to design projects that are more in harmony with the environment and work within the context of natural systems. There's this incredible opportunity here to not just talk the talk, but to genuinely find some answers and solutions to the challenges we face. (106)

Thinking outside the box; more variation in placement of buildings to allow more natural features to be retained.

Cluster Housing – 4 responses

- Clustering (4)
- ➤ Provide a bonus in the form of clustering in return for retaining protected trees; to this add waiving charges for processing the variance application. (7)
- Cluster housing to work around trees (23)
- Encourage cluster development in order to preserve stands of mature trees. (37)

Reduce Flexibility – 14 responses

- ➤ I am concerned about providing developers flexibility particularly, "replacement" trees cannot really replace 40 m tall intact forests (as in my own neighbourhood. However, some greater flexibility in lot shapes (pan handle, etc.) may be helpful. (9)
- All the flexibility is all in the developers favour at the moment. (23)
- > City already is too flexible. (34)
- > Cutting down a tree is not flexible. (38)
- Not needed. Council's developer friends can follow the rules or go away, nobody needs either of them (Council and/or developers). (95)
- ➤ None some groups of people in Surrey obviously see no use to having trees at all "Moonscape City" in parts of Surrey. (61)
- No one should be above the law and bending of the law should see trying of massive lines! If an owner causes the death of a tree to advantage themselves (our "Surrey Palm Trees") removal when dead should be heavily fined. Because illegal suites generate unreported income and of services and fees, just like property owners are to keep sidewalks shovelled in front of their properties, there's no enforcement. That seems to be the public's perception of our municipal staff. Enforcement = after fact. Penalties far far too light as now they are only a very very small portion of the construction of a sub-division. (22)
- If exceptions need to be made they should be few and far between and there should be no other option to removing the tree. Two for one replanting should occur and new trees should be of substantial size. (36)
- There is too much flexibility with regards to large developers. i.e. Clayton Village where large areas of land have been clear-cut. Development has taken precedence over tree-preservation. (39)
- There is no need for flexibility in the removal of trees. The protected tree and 2:1 ratio of replacement guidelines are already infringed upon by the agricultural policies and loopholes in development such as limited land space you are not providing soon for one tree growing into another, you're providing soon to prevent a tree from growing into manmade machines? (56)
- ➤ I'm afraid it's already way more flexible than I'm comfortable with. Certainly a broader list. We already have flexibility. That's why there really is no such thing as a "protected" tree. (62)
- You talk of providing flexibility unfortunately, this by=law provides too much flexibility. There is absolutely nothing to stop developers from cutting trees, so we end up with 10 acre clear cuts such as the one on my street at 150 St and 70 Ave. (74)
- > Draw up guidelines for tree removal, which must be strictly adhered to. If the house or condo plan calls for removal of all the trees ask the designer to come up with an alternative plan. (85)
- Flexibility is already provided for in OCP and brochures provided developers and builders when going to City Hall. There seems to be no ATTITUDE to facilitate/require alternatives to cookie-cutter layouts with maximum space devoted to built environment. (105)

Flexibility During Hazardous Conditions – 1 response

If you have any danger from tree (like too close to house). (21)

Allow Removal of nuisance trees - 1 response

➤ Be flexible in allowing removal of trees that have grown to be a nuisance. i.e. too close to a building causing roof and gutter damage with droppings or roots that could damage foundations, drain tile, and patios. Some should not be the deciding factor in such cases and a report by an arbourist should not be required. The tree should be removed healthy or not. (3)

Allow removal of trees that are not hazardous, but that are not suitable for their location – 2 responses

➤ I was personally concerned with trees on single-family residential lots where a tree may be unsuitable for the location. If there are already a significant number of trees on a relatively small lot, it would appear reasonable to

- allow the removal of at least one tree, which is unsuitable due to a very large size. For example, if a 7200 sq. ft lot has 4-6 mature trees, then one tree could be removed without any difficulty. This tree may be blocking sunlight to the house or a possible view but not actually posing a danger. It appears that the current by-law does not take the above situation into consideration. (14)
- Sometimes our trees are just not growing in the right place for our new development and there is no choice but to remove them. Let us make sure, however, that we plant the right tree in the right spot and do not have to go through this process ever again. This once more comes down to working closely with the Developer from start to finish with knowledgeable staff that have up-to-date information. (108)

Concerned about allowing removal of trees that are not hazardous, but that are not suitable for their location – 1 response

➤ I worry about the vagueness about the term "not suitable for their location". I strongly support modifying the zoning by-law in point #2. (44)

For properties with significant stands, allow removal of 1 or 2 trees – 1 response

➤ Allow homeowners with significant stands of trees to remove 1-2 without a long drawn out process and expense to do so. (59)

Use Development Permit Areas – 1 response

➤ Use development permit areas for protection of the natural environment and apply these to Surrey's ESA's and all potential development sites, so that they can't clear any trees of the size without a permit. These will allow a subjective assessment of each site, rather than being bound by a 30 cm calliper, etc. (20)

Property owner rights – 4 responses

- > Property owners should be able to thin out trees to provide more sunlight. (18)
- ➤ We cannot preserve every tree. Property owners must have some rights and a say as to what happens to the trees on their property. (24)
- For large development projects, many trees are cut down to make room for shopping malls and homes. However, in other instances, when a single homeowner wishes to cut down a single tree, which is within the owner's own property and which is damaging to his property, he is not allowed to do so and is often fined if he takes any action. On the other hand, developers can happily cut down 100s and thousands of trees. I guess money talks. We definitely need a little equality and reform in regards to the Tree Bylaw. (80)
- ➤ I feel that "private" property is private. I feel that guidelines can be made, but enforcing them is not possible and also undesirable because different circumstances call for different action plans. I do not want to see or feel that having trees on one's property is a liability. This will see the gradual advent of properties with few large trees. The cost of maintaining them, the cost of maintaining the buildings that they surround, the fear of lack of choices, health hazards (allergies especially cedars) strains of fungus, i.e. Vancouver Island etc., are areas of concern for those living in densely wooded areas. Safety issues concerning crime prevention, weather conditions, and cultural influences and personal preferences will all influence how individuals decide to maintain their individual property. (108)

Public Consultation – 3 responses

- Encourage developers to talk with surrounding residents before finalizing plans. (35)
- None of these questions addresses or invites the public to address the issue of development, which is the problem.
- Ask citizens and develop. (58)

Other – 6 responses

- ➤ Have areas designated as ugly "monster" home areas. i.e. no trees, all building, multi-family. But leave our "single family" (i.e. mother, father, dependent children) communities alone!!!!! (31)
- \triangleright What does that mean? (54)
- ➤ I'm all for flexibility but deformation from a case-to-case situation is going to prove difficult due to different interpretations. There needs to be some common denominator. i.e. inspector or arborist. (65)
- Generate \$ by allowing the sale of expensive trees rather than burn them as I see in Stoke Pit. Maples, etc. could go for sale prior to clearing. Use this money directly for tree preservation. (97)
- ➤ Modify zoning by-laws to preserve trees where this won't create problems. (106)
- Thinking outside the box by planning and engineering departments, instead of the current cookie cutter approach. (109)

Administrative, Enforcement and Penalty and Security Provisions?

More Enforcement – 29 responses

- ➤ I believe the key is in enforcement. (1)
- This by-law requires much better enforcement. Laws and Policies are window dressing only if they are not enforced and violators punished. (2)
- Make hard and fast rules of enforcing by-laws and lands staked and surveyed well before developing. (5)
- ➤ INVESTIGATION into the so-called documents required to be signed by developers and arbourists guaranteeing the trees they sign off on...NEED to be investigated. No one is forcing a prospective buyer to buy a house with a tree on it. (7)
- Strict, consistent enforcement, and especially a lower standard for burden of proof that trees have been illegally removed. The City's aerial photographs alone should suffice to prove that property has been logged. Again, the enforcement of existing by-law has been abysmal. I cannot emphasize this enough. (9)
- Need more enforcement. Very little enforcement in old tree by-law and see very little enforcement. Start enforcing by-laws. (13)
- Enforcement of existing rules would be helpful. (16)
- ➤ Vigorous enforcement is essential. (17)
- More emphasis in making private areas equitable in enforcement to what public lands are required to conform to.
- There is no enforcement and no way of protecting trees in new or re developments. (23)
- We have enough of penalties and security provisions but need more admin or enforcement. We have a law already. We need more enforcement and consultation with owners. (24)
- Enforcement is lax there doesn't seem to be much interest in pursuing violations. (25)
- Enforce the by-laws or they are useless. We all loose when people flaunt the by-laws. (35)
- We have a tree that is designated and even named a heritage tree but it is neglected because the "protective covenant" means nothing to the landowner and the City won't enforce it. A development near us destroyed a forest with 51 "significant" trees. According to the "plan" there should be over 100 new trees planted. I have not counted, but I'd be surprised if there were 50. NO ONE BOTHERED TO CHECK! (50)
- > Establish better monitoring of the by-law. (58)
- For every development permit constant checking on the property. Make sure owners/developers don't cut back/prune trees so severely that eventually the trees die! then they get what they want "legally". Have a look at approximately 127 St and 90A/91 Ave. Owners there have hacked off all the branches of a 50-60' tree (except top 3 branches) eventually it will have to come down. I used to live in the area look at Wal-Mart (ii Ave) look at 152 St and at 32A Ave, 64 Ave, and 166 St area disgusting! Enforce the by-laws. Insufficient enforcement! Make them a lot tougher and enforce them! I.e. rock tree in Kennedy Heights look at how much effort had to go into the project to save this tree because developer at 122 St (by Kirkbride Elementary) wanted to "get rid" of a unique tree. (61)
- The problem, as I see it, we don't enforce the rules we now have. Unfortunately, the only method that will work involves enforcement. By-law #12880 (1996) requires replacement trees "two for every protected tree". Is removal protection? The by-law does not state two twigs for each significant tree that was felled. No one comes back to ensure the "twigs" are still in place. Trees of size must be planted to replace what was a significant tree. In 205, 9018 large trees were placed by 12710 twigs. 1.41 to 1 doesn't cut it. (63)

- It's good to have a policy but enforcement is key. (65)
- ➤ One of the main problems is the by-laws need to be <u>enforced !!!</u> (72)
- ➤ Enforcement development has increased at a tremendous rate in Surrey, but I believe that staffing levels have not. Inspection is a way down and therefore developers are more prone to cheat. They cheat because they can; they won't be caught. There is no one to catch them, and if caught there are no consequences. (73)
- > Strict enforcement (89)
- ➤ Increasing enforcement of the Tree Preservation By-law is by far one of the most important changes that can be made. A strong By-law with no enforcement means nothing! (90)
- ➤ I, along with my neighbours, would like to see some back up from the City so our Restrictive Covenant #326489 at St. Helen's Park is enforceable. We are tired of hiring lawyers to protect our view. (93)
- ➤ Enforcement. Why people buy wooded property and clear it is beyond me. Either make it work by enforcement or stop pretending, like you do with lip service to environment, and take it off the books. Planning has ceased in Surrey, S.E.T.'s Surrey looks worse than Cleveland, Ohio. (95)
- ➤ The Surrey Tree By-law is pretty good...mostly the problem lies in the fact that it is not enforced it does protect with permits for private trees. (102)
- Enforcement must be equally applied. It does not deter development or building to have the most stringent of requirements only the requirements need be imposed. (105)
- Enforce tree protection zones. RETAINING TREES DOES NOT EQUAL PRESERVING THEM. Maintaining the integrity of the tree protection zone is probably the most important factor in tree preservation during construction. In my opinion the current by-law is not adequate in this regard. For example it allows for excavation inside protective barriers, then recommends it "should" be done by hand. Again we need to establish tougher requirements, more musts instead of offering guidelines or should. For example: 1. Trenching is not allowed inside tree protection barriers. Excavations inside this barrier must be made by hand tunnelling only. The tree protection zone has also not been well enforced in the City. Barriers are often on the ground, and dirt and construction debris are often piled at the bases of trees. (106)
- If the initial planting plan has not been adhered to and trees have been removed without consultation it is a natural consequence that the City of Surrey demand the addition of suitable trees to replace those that have been removed. Perhaps closer monitoring during site preparation by the City of Surrey would lessen this occurrence. (108)

Better use of aerial photos for penalty enforcement. E.g. Before and after views of sites. Have the number of enforcement/assessment personnel tied to the dollar amount of development in the city. E.g. If there is three times more development there should three times more staff. Lack of site assessment and lack of enforcement on tree cutting are serious issues that need to be addressed. (109)

More Enforcement Staff (City employees, volunteer residents, community committee, new staff) – 18 responses

- The City must invest a portion of the development profits in hiring enough Staff to make sure that each and every proposal is policed from beginning to end. With the above amendments in place it will more than pay for itself. (4, 7)
- > Enable by-law officers to give fines and hire more by-law officers to maintain and uphold the by-laws. (8)
- > All City employees should be authorized to report suspected violations to by-law officers. (17)
- ➤ All City Staff should be able to issue tickets. (23)
- We need more staff to take care of the situation. Hire regular by-law officers to check up on developers. Surrey needs more money and manpower to police the existing by-laws. (30)
- ➤ Hire more staff to enforce laws. (39)
- ➤ Just as we have Parking Commissionaire we need tree police. (53)
- Raise taxes and hire more enforcement people!!! By-law people available at evenings and weekends. (57)
- ➤ Use volunteers in their own residential area to report illegal cutting. Follow through more with your enforcement I know you need more staff more money same old story! (64)
- All inspectors and city employees should be observant in watching protected trees as they drive around the city (72)
- A community committee (like "SEP"), with community representatives, would be a more representative way of dealing with these issues. (73)
- ➤ Use the money from the charges levelled to hire more inspectors to ensure the above ideas are carried out. (85)
- Have a volunteer group with the authority to survey and catalogue all the trees that now exist and monitor all private

- property Replacement trees as long as people think they're being watched, the less likely they will be to kill, pull or mutilate the trees. (89)
- > Citizens should be allowed to bring forward infractions by developers or property owners to the Tree Preservation By-law and stop development if these infractions are proven to be true. (90)
- More staff is needed. Allow citizens to report cutting that is of worry. (97)
- ➤ Implementation of the by-law greatly lacks resources we need a full time staff person dedicated to the enforcement of the by-law and follow-up on the tree replacement after development. (102)

All City personnel should be trained to observe and report infractions. (110)

Negative Aspects of More Enforcement – 1 response

More tougher by-law and enforcement will mean more vandalism to existing stands. E.g. poisoning, bad pruning, fires. (41)

Penalties/Fines – 62 responses

- ➤ Penalties should be levied on removal of significant trees, graduated according to age (rings) at \$100 per year. FINES \$100.00 per year of the tree (4)
- > Stiff fines for clear cutting without authorization. Fines to compare with the cost of replacement of large trees and care for five years. Also this can apply to smaller trees. Extra large homes on lots shoulder-to-shoulder or roof-to-roof leave no room for trees greed is the problem whether it is developers or the cities. The city is responsible, as yearly floods now equal our 100-year flood-levels. Consider the money wasted in damage against ideal development. We know everything has its variables. However, they must be considered carefully and not necessarily in favour of the developers. A couple of years ago on a garbage dump area at 140 Ave to 144 Ave and 32 Ave to 34 Ave, the residents at large made many presentations regarding green area and trees to be left which were verbally agreed upon. Now however go take a look. It's Rosemary Heights all over again, indicating to us that you don't really care. Also look at the damage to Semiahmoo Trail at 32 Ave for this desecration. The whole City of Surrey should be charged. (5)
- ➤ Since trees are the lungs of the planet, if enforcement/penalty is necessary, yes. We have to keep this world liveable. (6)
- ➤ \$100 per year of the tree. Hire a photographer to accompany the arbourist during the assessment and the follow-up to provide documentary photographs. Hire enough arborists and by-law officers to sufficiently enforce all development stages. (7)
- Increase the fine for the bylaw to \$500/tree on developments over 1 hectare and \$250 for developments under 1 hectare. The total development time from application to initial development should be a minimum of 4 months. City of Surrey will provide digital photos or video of every development previous to development and after and this will enable fines to be levied. Increase fines per tree and enforce them. (8)
- This is where changes are most needed. Current by-law is not being enforced and developers know that they can break it with impunity. Stiffer fines. (9)
- > Hefty fines (10)
- > Pay a fine so money can be used to plant trees in other parts of the city. Increase fines, (13)
- Increase penalties and fines for unlawful tree removal. A reasonable approach would be to charge for the actual replacement cost of a mature tree, and also to deny applications for rezoning or development of a site where this has occurred (as well as requiring the individual to plant 2 new trees and ensure their survival). Current penalties and fines do not discourage this behaviour but in fact penalize those developers who do follow the rules and follow good practice. (16)
- Penalties must be significant much more than just a cost of doing business, even to the extent of revoking licences for repeat offenders. Note the ISA is not a registering body. (17)
- Penalties for illegal cutting should deter cutting. Fine for unsanctioned removal of tree should reflect value of the tree and the owner should forfeit the proceeds of the site of the log(s). Existing fines are not a deterrent. (18)
- Make sure violators of cutting down trees realize how they are hurting the environment. Maybe make them plant trees and fix up areas to show them what they are hurting. (19)
- Maximum penalty for cutting down each tree. Need proper inspections and enforcement. (20)
- There should be some penalty to cut trees without any permit. (21)

- ➤ Illegal fee of \$800/2 tree WAY too little as it's considered an aspect of doing business NOT a deterrent. People who trim branches to only leave a crown and cause ultimate death of tree should face very extensive fines, not just regular since they do so very deliberately. (22)
- Penalties for illegally cutting should be in the thousands of dollars to address the real value of a mature tree. The wording of the by-law must be unambiguous so there is no haggling over the penalties. (23)
- ➤ Increase fines and securities to help enforce the by-law. (28)
- > Severe penalties for blatant offences. Very stringent fines for by-law breakers and ignorers. (30)
- Fines of \$5000 per tree taken without permit. No cutting without permits. "Mature" trees should be bigger than saplings! If the "open house" says that 50 "mature" trees should remain after development for e.g., then fine \$5000 per tree not mature left standing. (31)
- Enforce stiff fines. (32)
- Perhaps public notice, of those who have NOT met the by-laws. (34)
- Penalties: illegal tree removal should be met with harsh fines, which should go toward planting in the neighbourhood. (36)
- ➤ Penalties totally inadequate (\$55.00!) Dramatically increase the penalty for removal of large, mature trees; a \$55.00 fine is not a deterrent to the developer, merely a cost of doing business. A penalty of several thousand dollars is needed, now. (37)
- Penalty for cutting down mature trees is way to low. (38)
- Public notification of developers that don't adhere to laws and clear cut large areas. Larger fines with no exceptions for developers. (39)
- More fines, less clear cuts given by City! (42)
- Fines are no good after all the trees are cut down. A huge fine might be a deterrent, but what if fine is not paid? The trees are already gone. (46)
- ▶ Big fines for destruction of forested areas or even well matured gardens. (50)
- ➤ Heavy financial fines for non-compliance. (53)
- **44.** (55)
- ▶ #5. Yes. Tickets work well. Also fine to value of the tree to ensure penalty is greater than the \$ from a tree. (55)
- ➤ Your penalties are pitiful. If a developer wants to cut down a tree all he/she must do is pay your penalty fee and his/her mission is completed. For sure the developers financial gain is greater than loss. Increase penalties substantially. (56)
- Much higher fines put some teeth into it! Charge developers who cheat and don't allow them to develop anymore in Surrey. The City must provide a better example! It's like paying a criminal to enforce the law. (57)
- ➤ Increase penalties for non-compliance. (58)
- Larger penalty for removal of major trees. (60)
- ➤ Ignorance/lack of caring by "certain groups" is allowed with no penalties. (61)
- The penalty must be significant to have any effect. (63)
- ➤ In the end penalties are going to make people take notice, but it seems the dollar value for permits is out of whack. It seems that a higher permit fee per tree would be more of an incentive to his cut. As well high penalties for illegal cutting would also help. Enforcement costs money so raise permit and penalty levies. (65)
- Increase the penalties for illegal cutting they should definitely be much higher (money talks). (66)
- ➤ Hoe operators and construction contractors operating in City of Surrey and working near trees be subject to **fines/penalties** for destroying trees designated for preservation. Fines/penalties for destroying trees designated for preservation may include the right for the City to seize equipment. (69)
- Fines/penalties to be levied against the developer/owner for removal/destruction of trees scheduled for preservation. The fines/penalties to be equal to the monetary value of the trees as determined by a qualified Consulting Arbourist using the **Trunk Formula Method**; Council of Tree and Landscape Appraisers, <u>Guide for Plant Appraisal</u>, 9th Edition, ISA, 2000 or \$10,000.00, whichever is the greater sum. *The monetary value is easy to calculate since the tree information is provided in the Arbourist report tree survey and the photographs of the trees.* (69)
- Enforce penalty regulations. Zero tolerance for blatant infractions. (71)
- > Builders opt to pay penalties rather than plant trees, penalties should be greater (72)
- Penalty fines should be improved and enforced
- No clear cutting before development, if developer clear cuts 1 year before application, developer should not be allowed to develop for a minimum of 10 years (72)
- Fines are absorbed as a cost of doing business and development. Asking for forgiveness is easier than asking for permission. Enhance tree protection by enforcing the rules with adequate penalties. To much cheating and destruction is going on. Fines should be mandatory, immediate and significant. (73)
- There is almost never any fine or deterrent for cutting trees without a permit. Even if there is lots of evidence that a tree has been cut illegally, the homeowner is usually let off with a warning. Cutting first and see if anything happens is a policy that generally works very well and has almost no consequences. The penalty for illegal removal should be

significantly higher and strictly enforced. Trees that need to be removed because they were damaged through the construction process, deliberately or inadvertently, should invoke the maximum financial penalty and the placement of large replacement trees. (77)

- ➤ I have seen first hand (in Rosemary Heights) what has happened. I urge you to change the laws so (especially) developers will not remove as many trees and that the penalty is much stiffer. (84)
- ➤ Charge a fee for every healthy mature tree cut down or severely pruned on the lot. (85)
- ➤ Broader power and heavier fines (89)
- Increase the penalties for illegal cutting, damaging or removal of trees. (90)
- Amend the city's municipal ticket information by-law to allow tickets to be issued for infractions of the provisions of the tree preservation by-law, including for failure to construct and maintain tree protection barriers. (90)
- ➤ All protected trees that are cut must be assessed the value the developer will receive for the cutting and processing of the timber. All money made from cutting protected trees must be given in taxes to the city. Large protected trees must be assigned a monetary value of significance. Taking in it age and condition and importance in providing habitat to wildlife and pleasure to the public. If a tree assessed value is \$5,000 and is clear-cut, the developer should be charged that fee. Everyone in Surrey has right to the environment in Surrey, if the average homeowner cannot cut protected trees, then the city who represents the citizens should charge a hefty fee for the loss of the trees cut by developers. Make the fines much higher, make it financially uncomfortable for the developer to clear cut the property. (91)
- When Arborists, developers or landowners are proven to be in violation of the Tree Preservation By-law there ability to conduct business in the City of Surrey will be suspended for a period of 1 month, with the next violation receiving a 6-month suspension. If developers or landowners do not replace trees that are required to be replaced under the Tree Preservation By-law, they will be given one warning per year to meet the replacement requirements. If they are given an additional warning within the same calendar year for failing to replace trees that have been lost, they will be fined the total cost of replacing those trees by city staff plus an additional 100\$. Both these fines will be directed to parks staff and parks programs responsible for planting trees and purchasing park lands in Surrey that contain trees to meet replacement levels.
- You want to "develop" in Surrey you follow the rules or you are out personal not only corporate liability one strike and you're out. Clear cut before permits? Property now belongs to city. (95)
- Fines must be improved and follow the enforcement process. (102)
- Increase the penalties and revise the Municipal Ticketing By-law based on the variable schedule indicated above. I agree but add a fine/penalty to ensure the timely installation of protective fencing. Then make sure there are on site inspections. (103)
- Enforce fines and require landowners (developers) to replace twice the ratio as well as fines. Fines, etc. should go directly towards tree programs. (97)
 - COMPLIANCE occurs in direct correlation with the likelihood of a) being caught and b) being penalized in an effective manner. If either or both are absent, compliance does not occur; by initial perpetrators or by observers who see them get away with it and copy knowing they too will be effectively consequence-free. (c) This is not adequate. Trees are cut, then cutter says Sorry and pays a weenie fine. Revoke permit to develop/build. Penalty of some serious level required. This would handle the Weekend Cutters. If trees removed/clearcut prior to application, applicant cannot apply for that property for 10 years AND must compensate the citizens of Surrey for lost biomass, i.e., provide money for City to purchase equivalent biomass. (After all, person makes money on the logs going to the mill) Penalty increases with number of trees removed, per tree, not decreases as now. (105)
- Increase penalties for illegal cutting, damage and removal. (106)

Fines for violations – e.g. \$100 per year of tree (109)

Penalties must be severe enough to be a significant deterrent to the developers to definitely discourage clear cutting. Blatant disregard of laws should cancel their reight to develop in Surrey. Blacklisting? (112)

No Fines – 2 responses

No fines for developers because it makes the fine into "cost of doing business". Take away business-licence if developers break a law. (11)

Where a heavily treed site is not able to achieve a 2 to 1 ratio of replacement trees any cash payment required should be capped to a reasonable limit. Otherwise the owners of a heavily treed site could be severely penalized for not having removed their trees at an earlier date. (92)

Allow the City or its contractors/agents to enter private property to plant replacement trees, at owner's expense, if an owner, after being given a due notice, does not complete the planting of such trees – 2 responses

- > City entering private property this seems mandatory. How else is the by-law enforced? If a developer removes 14,000 trees, is it realistic to replace 28,000 trees? In the long-term, the number of trees in Surrey will decline. (25)
- ➤ Enhance Admin, #2: No: take the \$ the owner won and provide proper care or remove the tree later you cannot enforce the long-term survival of an unwanted tree. (55)

Do not like the City Gaining Access to Private Property – 1 response

➤ I do not like the suggestion that City of Surrey Staff gain entry to private property to enforce the replanting of trees. I imagine that this can lend itself to a multitude of legal implications. It can also bring punitive and confrontational issues into force which will break down the cohesiveness of a community. I feel, however, that entering a property to clear up an unsafe and unsanitary condition is entirely different. (108)

Simplify tree by-law language – 2 responses

- ➤ "Make the tree by-law more clear and simple to understand and administer (i.e., remove the vagueness and inconsistencies in some of the definitions and clauses that are making effective administration of the by-law more difficult)." Highly desirable! (1, 90)
- ➤ Clean and concise language very short so people can look at the by-law and say they understand and know how far they can go and if they clear cut a property the penalties will truly affect them. (54)

Definition of a Protected Tree – 1 response

Secure the definition of a protected tree. According to your agricultural regulations, there is no such thing as a truly protected tree. (56)

More City Planning Staff - 4 responses

- > Surrey should have an environmental planner and hire environmental officers to walk areas slated for development, then could help plan to reduce environmental impact. (72)
- ➤ Increase staffing to keep up with the demand of development. Have a 100% audit of property, which includes predevelopment and post, on-site visits. (73)
- There is clearly a need for greater funding, positions and resources to ensure the Tree Preservation By-law is enforced. (90)

City should hire at least one environmental officer.

More expertise needed – 8 responses

- > ON SITE a photographer alongside the designated arbourist to document the evaluation (4)
- At time of clearing (same day or no less than 24 hours after) the Photographer and Arbourist return to complete documentation of site. This would be clear proof of violations and fines could be issued instantly and would eliminate unnecessary court cases. (4, 7)
- More expertise on transplanting of large trees and this method used more as these trees are much more valuable than mere lumber they supply oxygen and stabilize water flows and give off radiant heat. To save the appearance of the neighbourhood which attract homeowners in the first place, which is a wilderness theme. (5)

- Need more City arbourists studying developments use and surveys to see what trees are being taken down. (13)
- > Provide services of a City-paid arborist to give free advice to residents upon request. (38)
- > Increase building/development permit fees to hire architect or planner specifically to review site planning and assess viable options. (71)
- Enough satellite photos already to show present situation on every lot. (95)
- MUST be a tree survey and Biologist or Zoologist report on wildlife, done at correct time of the year. Survey to be complete, site walked, not partial or estimated. Should be by City retained persons, with allegiance to City with billing to developer or builder. And there should be included an assessment of impact of tree and understory removal on area outside the development/building site for distance of 1 kilometre. (105)

City of Surrey provide resources to survey the property before development – 2 responses

- The City of Surrey should provide the resources to survey the property for development prior to and after development. No clear cuts should be allowed under any circumstances unless 3x the trees are replanted of at least 6 ft each. (8)
- ➤ Thanks for Surrey Lake. (43)

To remove the potential for conflict of interest in the assessment of trees, specify that an arborist who assesses a tree and submits a report to the city, declaring the tree to be hazardous, cannot also be retained by the owner to remove the tree. – 1 response

The quality of the timber on some parcels is quite high, and we are aware that in many cases, the developer knows the timber sales will pay for much of the development costs. It's very tempting to find a reason to knock down a 100 year old fir, if that tree is worth thousands of dollars as timber. We had one situation where the designated 'arbourist' on a subdivision project doubled as the bulldozer operator. He was able to "access" trees and knock them down in one fell swoop. It is well known that there are certain arbourists who for \$200 will find a reason to condemn any tree you want removed. It is better now, but in the past the City would rarely verify a tree was actually in a condition in which it could be removed. For liability reasons, the City was very reluctant to overrule the opinion of a certified arbourist even if they suspected the arbourist had a profit motive. The arbourist who issued the tree assessment would often then receive the contract to actually remove the tree. Arbourists who assess trees for removal should not be able to receive revenue from the removal of the trees. A City arbourist should verify all or a very large percentage of trees requested for removal. The City should assume some liability for tree assessments made by their arbourists that counter commercial arbourists. If they don't, all trees are condemned. Arbourists who submit opinions for removal that are consistently called into question by the City arbourist should be disallowed from providing this service. (77)

Arbourist making the assessment should be selected by the City - 4 responses

- Arbourists for developments contracted by City instead of by development will give more honest reports. This can be billed to the developer. (53)
- This amendment, in my opinion, does not go far enough. The arborist could simply get a buddy to assess the tree. I think the assessment should be made by an arborist who is not at all in the business of cutting trees, preferably independent arborist, appointed (or even employed) by the City. In my opinion, ISA certification may prove that the arborist has knowledge about trees, but it does not certify that he is honest and scrupulous. Some ten years ago (under the previous by-law) we had to deal with an arborist (according to the City he was certified) who had arranged for our neighbour's acreage to be clear-cut. I think this arborist's principal occupation was to cut trees for B.C. Hydro. According to his application for a permit he was going to cut "scrub trees", and he mentioned only a few of the "real" trees, omitting, among others, a tall, beautiful Douglas Fir. When we later asked him why he had cut the Douglas Fir without a permit he stated that he did not need a permit for a hazardous tree. The tree had been in very good health and it was about 80 and 100 m from the closest houses. In my opinion the only reason for cutting this tree was the value of the timber. The new by-law will have to include measures to prevent such abuse. (67)
- Arbourists should be selected by and paid by the City of Surrey and the developers should reimburse Surrey for this service, thereby keeping the arbourist at arms length from the developer. (73)

Assessment done by certified arborists, biologists, environment officers who are employed by the City, not hired by the developer. Make use of engineering department computer software that calculates the natural capital of

trees, etc. (109)

Arborists should not be hired by the developer – 5 responses

- Arborists need to be hired on their ability to preserve the maximum amount of indigenous trees possible not to justify the removal of all trees on a site to satisfy the needs of the developer. (4)
- Arborists should not be paid by the developers, but be independent in their decisions (72)
- The new bylaw should be one that takes the decision making process to remove (or not remove) a tree or stand of trees out of the hands of developer financed arborists and put it in the hands of an independent body. It is plainly a conflict of interest for anyone who stands to gain financially from removing trees to be the sole authority to make the call. The tree is going to lose every time when the arborist who decides if the tree(s) should or could come down stands to get the job of removing (and in some cases selling) that same tree(s). (88)
- An independent arborist and biologist must be hired to review the site and their fees could be charge as development fee. They should not be hired by the developer. (91)
- Arborists should be completely independent from owner/developer and not be allowed to be the same company that actually does the tree removal. (102)

Objective Arborists – 3 responses

- > Is there any way of using only "objective" arborists i.e. those who have a history of being fair? (1, 90)
- Remove potential for conflict of interest/arborist. (55)
- For arborist conflicts of interest I think we need more "professional ethics". (106)

More arborists needed – 1 response

Add to the number of accredited arborists to do thorough environmental assessments. (4)

Arborist Report – 1 response

Arbourist reports: Reports to be written by qualified Consulting Arbourists in a specified reporting format to provide consistent and appropriate information. Minimal reporting information/format to include, but not limited to: a. Introduction; b. Tree Survey: Tree number, Specie, DBH, Condition rating, Tree protection zone radius from tree, Observations, Recommendations; c. Discussion: site description, site conditions; d. Tree preservation plan and/or best management recommendations; e. Site maps: showing location of trees, building envelopes and impermeable surfaces, location of on-site services, elevations, locations of tree protection zone (TPZ) barriers; f. Tree Preservation Summary form; g. Photographs showing site conditions and trees; h. Statement of qualifications of Consulting Arbourist. Developers submit an Arbourist letter of intention indicating the Developer has hired a Consulting Arbourist to develop the tree preservation plan with the consultation of associated planning professionals (Developer, Architects, Civil engineers, Geo-technical engineers, Landscape Architects, General contractors, etc.) and monitor the site during development. This is particularly applicable for large projects containing valuable trees. Consulting Arbourist to be required to provide timely **due diligence reporting** to insure Developer compliance in accordance to the Arbourist report and best management practices. Due diligence reporting should be required for the following development activities to include, but not limited to: a. Consulting Arbourist to verify the locations and condition of tree protection zone barriers, prior to site demolition or construction activities; b. Consulting Arbourist to monitor (witness) demolition of site and help ensure preservation trees are not damaged by hoe operators; c. Consulting Arbourist to monitor the site during construction; d. Consulting Arbourist to provide recommendations during construction, if required; e. Sign-off the completed project (69)

Planning in Advance (neighbourhood plans, etc.) – 15 responses

- ➤ HOMEOWNERS must have a covenant written into their sale agreement that the original indigenous 'significant' tree/trees or replacement trees are non-removable without a substantial penalty (4, 7)
- Larger areas for larger trees must be part of the community plan. (16)
- ➤ This Council only sees 3 areas park, ALR, or cover it with asphalt. Part of every development should be designated "undevelopable". (27)

- Assess trees in neighbourhood plans so protection plans (through other planning, etc. tools) can begin before the bylaw stage. (58)
- ➤ Look at the land before even considering looking at rezoning. If land is cleared or trees cut down before application is made deny zoning application. Stop the current practise of rubber-stamping zoning applications. Planning should actually look at the land before they look at the paper. (62)
- ➤ I think that when the Planning Department first makes plans for a large area, designating future roads and parks, including linear parks, they should have better information on the trees to base their plans on. The aerial photos, good as they are, do not seem to tell them where there are trees worth preserving. (66)
- > City council change OCP zoning to ensure > 1/3rd of any new development and subdivision be devoted to tree preservation (69)
- Planning staff be authorized to be more proactive in influencing site planning and building footprint so as to accommodate and maximize site amenities (trees, topographic features, streams, etc.) (71)
- > There should be natural park designations especially for environmentally sensitive areas (72)
- Please, please ensure that the forested spaces in our city be respected and at least partially protected. (82)
- ➤ It is very galling to see householders hacking away at trees with no permit clearly displayed (and yes I do know what trees require a permit and which trees do not.) (85)
- ➤ If the approved building plans do not allow room for the correct number of replacement trees on site, have them planted as close as possible on private or public land so whole neighbourhoods aren't left almost devoid of trees. RF12 developments need to have a higher percentage of park/open space, as the small yards don't allow enough room to plant the trees. These lots are the most common for the new homeowner to remove the replacement trees. RF12 has a higher environmental impact than townhouse developments, which also plant more greenery with the added bonus of no illegal suites. (89)
- There should be a study undertaken to examine all of the social, economic and ecological values each native tree provides. This analysis would then be used to assess the proper level of tree replacement that must occur when different aged, sized, species and density of trees are removed. Policies in the City's Official Community Plan and the Parks, Recreation and Culture Master Plan should recognize, through scientific research and other forms of study, what level of park preservation (i.e., natural habitat) is required to maintain viable populations of wildlife species and fully functioning ecosystems. This should be the guiding principal in the amount of parkland protected versus the current calculation of 10.5 acres of parkland for every 1000 residents. A landscape level ecosystem management plan should be written, forming the foundation for sustainable development in Surrey with regards to habitat conservation, wildlife and endangered species management and tree preservation. This plan would be developed through the City of Surrey in consultation with all interested stakeholders (e.g. GVRD, Environmental Non-Governmental Organizations, Community Associations and individual residents). The plan would include growth management strategies that account for the carrying capacity of the natural environment (physical, chemical and biological) and create a network of corridors among parklands to ensure the long-term conservation of viable wildlife populations.
- ➤ In the new tree preservation by-law there should be a reference to the policies in the OCP and a statement regarding the social, community, environmental and economic benefits of trees. Statements regarding the amount of parkland in the City are irrelevant and should not be included in the new by-law. Provide for early consultation with engineering to ensure that trees intended to be retained will still be there after the engineering works are installed. Incorporate tree preservation plans into Servicing Agreements and ensure all on-site workers are aware of the plan. (103)

Planning Process – 15 responses

- Thank you for undertaking this process. (1)
- ➤ PERMIT FEES must be non-refundable. Recommend that Surrey not rush the approval process as we want to achieve a high quality residential community. Land is a community resource not a commodity for developers' bottom line! SLOW DOWN BUILLDING TO A MANAGEABLE PACE! (4)
- ➤ PERMIT FEES must be non-refundable. (7)
- ➤ IF ALL ELSE FAILS the permit fee needs to be raised to #10,000.00 per tree (world market prices). This would encourage the developer to get a much higher price per board foot for the processing of the raw logs of these priceless old growth trees at which time a percentage of this profit would be redirected to the municipality towards further acquisition of parkland. SCHEDULING of the approval process has to be paced slow enough for each step to be properly addressed and enough arbourists and other planning professionals keep on staff to assure that a thorough plan results in the interest of building a healthy stable community. (4, 7)

- Surrey could be doing more to improve drainage and reduce the likelihood of flooding. Surrey could insist on much more tree retention on properties that are being developed, through hard-nosed negotiations with developers. This would require a major change in attitude by developers and city hall, but it can be done. Mature trees are among the best way to prevent major flooding...The city itself has set the worst sort of example in Campbell Heights, levelling thousands of trees and allowing Latimer Lake to fall to unheard-of water levels. (26)
- Each development assessed by planning on its merits in tree retention. There is a huge loophole in tree preservation when the by-laws reads that the trees may be removed for construction of buildings permitted in the zoning, while the zoning allowed by Council is so small that once the building is there, there is no room for re-growth. This zoning also nullifies any by-law because of the Provincial Local government act. Council appears to be dancing around tree preservation by focusing only on individuals and not the mass deforestation by development. (53)
- The City of Surrey provide **incentives** for land owners to preserve trees: a. Tree preservation should be a condition of development approval (69)
- Many other jurisdictions have stated in their planning documents in the strongest possible terms their commitment to supporting the specific and detailed ecological values of existing trees in excess of their pure market value. Without that precursor it is difficult to convince people of the worthiness of the incentive concept. (70)
- Modernize by use of "City Green" computer program to do inventory of tree canopy (Burnaby and North Vancouver have it) (72)
- Trees should be surveyed while they are still standing by a City of Surrey arborist. Tree protection barriers are frequently removed by the developer and equipment (heavy) rumbles over the roots, destroying the tree. (73)
- For new subdivisions, only those trees that need to be removed for roads and services should be allowed to be cut when the subdivision is created. Many times the developer clears trees in anticipation of what he believes the building outlines will be (or to make money from the timber), and then the eventual owner clears again for the actual outlines of the home he intends to build. The eventual owner should be the only person allowed to clear the property. Stated another way, the person applying for a building permit should be the one to obtain tree removal approval. The City should not grant variances, or zoning relaxations if granting these items allows the removal of mature trees. It's bad enough that building takes precedence over trees, but to relax the rules and allow building that does not meet zoning requirements and then remove trees is even worse. The tree permit issuing process should include an inspection by the City or evidence provided by the owner, (such as a property survey), to ensure the trees slated for removal are in fact on private land and not on City property. (77)
- There needs to be much more follow up and follow through on removal and replacement of the trees. An active citizen group needs to be involved to help keep it honest. (89)
- Land-use zoning should not be changed for potential development until the developer has clearly shown how he/she intends to conserve trees to the best of their ability. This allows the City of Surrey under the Provincial Local Government Act and the Community Charter to regulate development and ensure the adequate conservation of trees without having to compensate developers or property owners once the land is rezoned. Subdivisions and other developments should be designed to allow for the largest possible retention of existing trees and habitat. Upon approval for rezoning and/or development, developers and landowners must commence development on the site within 1 month of tree removal, barring some unforeseen circumstances. This is to not allow trees to be removed prematurely and also to avoid habitat loss in areas were development is scheduled, but doesn't actually take place for more than 2 months. Photo documentation (e.g., digital pictures) of development sites and other areas where trees are being recommended for removal and the reasoning why trees are being recommended for removal or preservation will be a mandatory requirement for Arbourists when submitting reports to city staff. This documentation will be available to the public upon request. This documentation will also address the problem of proving if potential or existing development sites have or don't have trees that may require protection under the Tree Preservation By-law. There should be an independent body established to monitor and report on the implementation of the new Tree Preservation By-law. Reports should be available to the public upon request. (90)
- The OCP should be used as a basis for changes to the Tree Protection By-law. Our OCP states, (G 1.2) "Follow environmentally sustainable practices in development." It also states "Retain significant trees native to the site" (G 1.2/3). The OCP on page 108 6-1-1 also covers the policies of maintaining natural linkages. "Preserve ravines and watercourses in their natural state and wherever possible, link them with green spaces to develop a continuous network of the natural environment throughout and between the developed areas of the City. These networks may provide for public access where such access is not detrimental to the environment." (101)

Comprehensive environmental assessment of every development site before any work is done on the site. Allow only one tree cut per year with a permit unless a development permit is taken out and assessment has been done. (109)

Development sites must be assessed for tree preservation before applications are processed. The "assessor" should be completely independent from owner/developer and the tree removal company. (112)

Administration – 4 responses

- Too much bureaucracy, hope this by-law and its enforcement don't take away from needed municipal services like police and parks. Administration expenses should be set as a percentage (0.1%) or of total budget, with most spent on maintenance. (41)
- All departments inside city hall must be on the same page, with the same rules no loopholes. (89)
- > A well known reporting process where developments of breaking the by-law is dealt with quickly. (97)
- > (Schedule D1 of Tree By-law) Replace "may" with "MUST" (105)

Canopy Target – 8 responses

- ➤ Insist on certain percentage of trees. Healthy older trees should be protected. They are large and probably have more effect on the. (6)
- Look at a building lot in terms of canopy cover as well as just the number of trees planted. Develop a tree canopy target and plan. (7)
- My own neighbours are largely people who have bought here because of the large trees and the ambience they provide. The City should target some forested neighbourhoods and encourage developers to develop in a fashion that will continue to attract like-minded people. (9)
- Private property/areas sold for multi-residential and industrial development should only be allowed to develop a certain percentage of the land and the rest must be untouched. (i.e. only allowed to develop 75% of it). Stop cutting trees to make parks. Leave trees and make trails. (39)
- Treescapes are important. Establish a tree canopy coverage target; not just tree by tree, but neighbourhood based. (73)
- Flexibility assign tree canopy coverage based on the community or neighbourhood or development. Engineering needs creativity for infrastructure curve roads around trees. Adjust roads to save significant trees and treescapes. Assign more value to the tree. Engineering will work around this. (73)
- > Surrey parks does not have a natural parks designation policy or an acquisition policy for natural parks. We now have a general fragmentation of natural areas. We need a canopy target of 40%. (102)

City should develop a city-wide tree canopy approach. Overall canopy cover. (109)

Public Notification of Tree Removal – 6 responses

- Require tree cutters/removers to display a permit as homebuilders do this would allow neighbours/citizens to report illegal tree cutting/removing use the people to help you police the by-law. (36)
- Large signs could be placed on properties to be developed indicating tree removal. (72)
- It should be mandatory that tree-cutting permits are prominently posted on the subject property before the trees are cut and for at least one week after they are removed. A contact number should be included on the posting. (77)
- ➤ Developers or homeowners must prove a more clear intention of cutting 2 weeks prior to give public a chance for input. (97)
- To increase the possibility of catching those doing illegal cutting/damaging/removal of trees, post a list of tree cutting permits on the City's web site, advise the residents to check regularly, and advise By-law Enforcement of any tree cutting activity in areas not posted. Providing such a list to those staff that drive around the city would provide more watchful eyes. (103)
- ➤ Proof of emergency required. This would handle the Weekend Cutters. (105)

Tree By-law Language Clarity – 2 responses

- Agree by-law needs to be worded more simply. (46)
- ➤ The provisions of a by-law needs clear concise language and only a few pages how many ways can you say: DON'T CUT ANYMORE TREES. For example, if a house is being built on the property only the area being built

upon is cleared – if more trees are cut, there must be a fine (dollars). (54)

Increase Securities – 9 responses

- > Security definitely should be higher and provision should be made for incremental increases i.e. COL (22)
- Large up front fees to ensure preservation of trees. (23)
- ➤ Put stronger restrictions on developers we do not want to see developers clear cutting sites because it is more cost effective for them require larger deposits to be sure the land is not completely levelled. (36)
- Increase the securities that applicants are required to post at the time of tree-cutting permit issuance for tree removal and replacement to encourage compliance with the tree preservation by-law. (90)
- Allow the City to collect a high security for valuable specimen trees or for trees that are significant in their context (e.g., trees along Semiahmoo Trail) to ensure that they are not damaged during clearing/construction activities. (90)
- Increasing securities for the majority of developers who comply with the Tree Preservation By-law is counter productive to the objectives of providing relatively affordable housing. The incidence of non-compliance is relatively minor for the removal of protected trees (55 infractions for a total of 239 trees). The securities for replacement trees are already adequate to provide for replacement in other City locations should the developer be unable to obtain the co-operation of builders to comply with the requirements. I would think that the non-compliance for multi-family sites would be negligible. (92)
- Increase the securities but require payment earlier in the process. Add a security deposit and fine/penalty to ensure the timely installation of protective fencing. Then make sure there are on site inspections. (103)
- (Schedule C1 (b) of Tree By-law) Needs to be much more than \$200. Maybe \$1,000. (Schedule C3 (b) of Tree By-law) Have it 2, better yet, 3 years) (105)
- Increase securities for large scale developments as in contracting, not small-scale (homeowner, etc.) unless there have already been problems. (106)

Add More Trees to the Significant Trees List – 2 responses

- Add other important trees to the list of significant trees appended to the by-law, in response to community suggestions with priority given to expanding the list to include all tree species that are native to Surrey. (90)
- Add more trees to the significant trees list. (106)

Remove Potential for Conflict – 1 response

Remove potential for conflict of interest is very, very important. This should be made more strict. (see also my attached typed comments). (66)

Administration (General Tree Preservation Measures) – 3 responses

- Change the logo of Surrey (or mascot?) from the beaver to a tree. Seems more fitting with theme "City of Parks". (32)
- After reading your display on "ideas for possible amendments to tree preservation" we hope you implement as many of those as possible. (36)
- > Proof of emergency required. (105)

Existing Proposals are good – 3 responses

- ➤ All proposed suggestions are good. (12)
- Agree with 5 suggestions presented. (35)
- > I think all of these provisions are great! (44)

Other – 5 responses

- Flexibility must be larger trees of same gender and as many as possible for each site. Keep or increase setback areas for creeks. Do not divert water supply but if possible increase flows back to creeks. (5)
- Too much work given to arborist, why arborist? What's wrong with forestry people, experienced gardeners and horticulturalist? Are by-law officers so under worked they need to worry about trees on private property? One display shows a tree on a house roof, underneath it is written that a resident has to get a permit and the inspection by an arbourist has it come to this? Also, how long will permits be free? (41)
- How can you enforce by-laws about cutting down a few trees when permission is given to re-develop areas and strip the whole area of trees? Leave some areas in Surrey as they are instead of cramming so many homes on small lots. See the area south of 64 Ave west of 168 St barren! (47)
- > Priority given to tree preservation by planning and Council. Council reads these comments. (53)
- ➤ Builders should be members of a tree preservation certification society. May be operated by each city for their unique situation. (75)
- 2. Do you know of any tree, other than the trees on Surrey's List of Significant Trees, that in your opinion should be designated a Significant Tree? Please describe the tree and provide its location or address of the property where it is located.

Cloverdale – 2 responses

- Magnolia on Haley Park Lane. 14828. (10)
- ➤ I am concerned about the trees on the property that is going to be developed at the end of our street. (The heritage house on 182 St between Hwy 10 and 57A Ave) (47)

Fleetwood – 8 responses

- ➤ The willow trees along Fraser Highway between 168 St and 176 St I hope these will be preserved when Fraser Highway is expanded to 4 lanes. They can be trimmed above road level but not cut down. (40)
- Willow tree 50 m from southwest corner of 168 St and 84 Ave... Preserve it. (40)
- > Trees along sloped water course behind property at 8327 167 St and forest and habitat behind 16658 84 Ave beside Bonnie Shrenk Park. No development of 8 house. (42)
- ➤ The trees lining 154 St at 88 Ave along Northwood United Church property. They add immensely to the character of the neighbourhood. Yet they are evidently slated to go when 154 St is widened. Could we not put the sidewalks on church property and save the trees??? (the church would be willing, I'm pretty sure). (57)
- ➤ Gary Oaks and a cedar on north side of 90 Ave at 160 St Church of the Nazarene property (73)
- ➤ We wanted to note our concern for the wonderful Douglas Firs on the piece of property just purchased by Basant Motors on Fraser Highway just west of 164 St. We're concerned that the City will allow the new owner to fell those huge trees and replace them with more "toothpicks". The character of Fraser Highway depends on the retention of some of our urban forest. (82)
- ➤ Our neighbour at 15955 80 Ave is planning on selling to a developer and there will be a development proposal in to you soon, I would guess. The said property has some beautiful large trees on it, I'm guessing to be at least 200 years old. They are mostly along the property line at the front and along the side of the property. I realize that to develop some of the trees must be removed but am wondering what we can do to try to keep as many as possible. The said property is across the street from Fleetwood Park and the trees add to the beauty of the park and neighbourhood. They are also home to many different species of birds, including I believe a raven. Keeping them would help to maintain the "feel" of the Fleetwood community. There is a proposed walkway from 80 Ave. to 159A Street on the plans that my neighbour showed me. This walkway is not needed (as we are three doors down from 160 and three doors down from an existing walkway) and would force the removal of more trees as it is where the property line is. (107)

Guildford - 4 responses

- ➤ ESA 100 acre wood NE corner 88 Ave and 176 St. Best woodland-coastal species off Vancouver Island. (95)
- ➤ Single trees the big maple and two huge firs at 9043 184 St. (95)
- ➤ The large trees on 19020 88 Ave. 3 large cedar and one large Douglas Fir. The school yard have a few specimen at the same size which are protected already. (102)
- > 5 foot diameter grand fir at approximately 184 St and 97 Ave on private land. It is going to the heritage advisory committee this month. (109)

Newton – 5 responses

- ➤ There is a significant stand of cedar trees north of 68 Ave, just west of 152 St. The development signs are up. This is the only significant group in the area most has been cleared for agriculture. (23)
- > See large group of very huge cedar trees at 7025 150 St and 3 lots north. 10 acres with over 30 trees 2' diameter and 10 trees 3' diameter. (30)
- You think my willow tree is one!! (14187 66A Ave) (64)
- So many beautiful stand-alone old significant trees have been dropped in Surrey, that no amount of replanting will replace. One or more of the mature Big-Leafed Maples on a property behind me that is up for rezoning should be saved, 14486 76th Ave. (89)
- At 6988 150 St. there is a Monkey Puzzle tree that is over 40' tall and more than 12" in circumference at chest height. It has been growing for well over twenty years because it was a large tree when I moved into my current residence at 7016 150 St. The Bailey Residence in which I reside at 7016 150 St. has many significant trees and we hope as the NCP indicated that the large trees at the edge our property line will be protected as they border the supposed park?. We will in the near future apply for heritage status for these trees. Several large cedars at 7025 150 St and a whole grove of cedar trees at the front of 7041 150 St. are significant but are slated for removal once final reading is passed on Feb.7/05 but council even though the citizens of Surrey have complained about clear cutting. These properties have made it through two readings with apparently no concern from council about the aorist report. In fact we couldn't even get the arbourist report on this property until Feb.3/05. (91)

South Surrey – 7 responses

- Large trees on our property (14391 Crescent Rd). I think these trees are significant because traveling south on the King George Hwy. These trees on the southwest present a wilderness entrance into South Surrey of a heritage presence for the whole area. The same with saving large trees looking north on Panorama Ridge and King George Hwy. The way you are allowing development now these landmarks will be lost in future. All the trees on my property larger than 10" diameter because when one is removed the others are blown down from wind across now caused by tree removal due to your development. (5)
- There are several such trees on 18 Ave east of 152 St, which are probably doomed even though several are close to the lot line between 2 redevelopment projects. (18)
- > Many trees in Redwood Park, where there is adequate room and the environment for them to exist. (4)
- Take care of the magnolias at the Dart Hill Garden. (41)
- The development that is currently going on in South Surrey along 152nd Street and 32/34. There is a stand of nice evergreens (from the previous owners yard) which should remain standing but I'm sure that the developer will cut them down in order to put up some more of those unsightly buildings that are going up along that part of the street. (83)
- ➤ On 184 St, a fir (large) near the road in front of yellow house west side between 16 Ave and 20 Ave. (97)
- ➤ 15332 32 Ave. I have a tree that I feel deserves to be saved. It is a cedar tree, total circumference on the bottom is 17 ft. I would guess that it is over 60 ft high. It is shaped like a groomed Christmas tree. I would appreciate some information on how I would proceed to save this tree. (100)

Whalley - 8 responses

- ➤ 10400 10600 block of 127 St has an intact forest. Part of this is already listed (St. Helens Church) #51 on Significant Tree list. This should be expanded. I would be happy to see the trees on my own property included. 10621 127 St. (9)
- > Every tree in Holland Park. (11)
- ➤ Green Timbers Urban Forest whole forest. (13)
- Many trees in Green Timbers, where there is adequate room and the environment for them to exist. (41)
- Property on 128 St north of 88 Ave, east side (vacant lot, church and this site being developed) has a grove of Redwoods which surrounded the old Bigle family holdings. That the Council allowed development and left only provision for a very small percentage of these Redwoods to be left is a travesty. (22)
- ➤ 89 Ave/128 St = Redwoods should be saved at all costs. I feel trees should be saved as much as possible. It's a crying shame to see large areas "clear cut" before work starts. (46)
- Redwoods? At 8916 128 St. Redevelopment plan. (60)
- ➤ We (9133 122B St) have a tree that is designated and even named a heritage tree but it is neglected because the "protective covenant" means nothing to the landowner and the City won't enforce it. (50)

General/City Wide - 5 responses

- Surrey's tree hunt should be accelerated on all properties and roadways in order to add to the list of significant trees.
 (4)
- All trees over 25 m must be saved at all costs. Developers should be made to keep at least 25-33% of the trees in the developed area. (8)
- > Significant trees should be groups of trees all over Surrey throughout every subdivision of homes, apartments, and industrial buildings. (54)
- ➤ "Significant tree" designations should be made with an eye to corridor protection. Ideally, your tree by-law dovetails with the natural area management plans, ESA and DPA designations, zoning, etc. move from side level assessments to landscape level assessments, thinking forests more than trees. (58)
- > I think that Yew should be added, to be retained regardless of size. (105)

Other – 3 responses

- ➤ How does one designate Significant Trees before a development sign goes up? (7)
- Quote from display "About 1235 acres of creeks and streams and related riparian areas now protected by such covenant". Who enforces "covenants"?? NOT DONE why designate significant trees if there are no teeth to rules. A rule isn't worth writing if it's not enforced. (63)
- ➤ I feel that the City of Surrey is providing an abundance of beautiful trees in our Parks. Anyone who wishes to enjoy or study our natural flora has ample opportunity. I feel that the only person who can claim to have a significant interest in a particular tree on private property is the owner. Where the interest is truly "significant" and its welfare is deemed to be of concern, the City should be prepared to acquire the parcel of land that it sits on for the enjoyment of those who prize it so highly. (108)

3. Do you have any other ideas for possible amendments to Surrey's Tree Preservation By-law?

Reduce DBH Minimum – 7 responses

- Trees of at least 1.8 m circumference or 18 m in height must be preserved at 25% of the original counted trees before development. (8)
- Reduce the DBH of trees needing an application. (58)
- Reduce the minimum size of a protected tree from 30 cm to 20 cm. DBH (69)
- Reduce min. caliper for 'protected' trees thus prevents unregulated removal of smaller yet healthy and viable trees that are more suitable than replacement trees. (Young trees more adaptable to intrusion of development) (71)
- > By-law states, trees are protected if diameter is 30 cm or more, a combination of size and age should be included in By-law (72)
- Decrease the size of which trees need a permit to remove, (some species don't even reach 12" at maturity) 4" for deciduous and 8" for conifers. This will give the city more revenue and better control over its greened landscape. (89)
- ➤ Caliper of the tree is 30 cm at chest high Bby and Vancouver use 20 cm perhaps we should change to the age of the tree or a combination of the measurement and age. Is clear-cutting before an application is issued legal? We need to discourage clear-cutting with a penalty to the developer or possibly take away their right to develop in Surrey. (102)

Have a Minimum DBH – 1 response

➤ To have a number e.g. 10 trees of a minimum trunk diameter to be kept on each acre being developed. These would probably be along the edges of the development at road frontage – a big improvement. (64)

Efforts to Preserve Older Trees – 4 responses

- Landmark trees need to be valued for their uniqueness to the city, both aesthetically and for their natural attributes. A tree of between 50 and 100 cm DBH, should be worth well beyond its commercial value and command a fee of up to \$10,000 instead of the 2 trees for 1 ratio. The proceeds should be added the Parkland Acquisition. The City could certainly not bring in such a tree for less even if it were possible. (7)
- Make it very expensive or/and very difficult to remove old trees and groups of old trees. (12)
- Mature stands of trees small forested sections should be protected. This is the only way of saving any environmental integrity. Again replanting is not adequate. Trees above a certain size should be protected period. No one should have the right to cut down a 100-year-old tree. The person occupying that property is transient. We need to see the whole picture. (23)
- ➤ If larger diameter replacement trees are encouraged, then these needs to be same way to ensure that such trees are given appropriate husbandry until they are well re-established. (35)

Reduce Lot Coverage - 1 response

➤ Ban "monster" mini-hotel houses. 33% of a lot is way too much allowance making huge homes and no trees. (31)

Tree Map Needs to Show Trees that can be Saved and Nature of the Topography – 1 response

The tree map needs to show what trees can be saved and the nature of the topography before any building sites can be drawn on the plan. The plan should then be reviewed to MAXIMIZE the landscape possibilities for the site for the benefit of the community. (4)

Save Trees Along Heritage Trails – 1 response

➤ Please save trees – all – at least 25 ft on either side of heritage trails – no clear cutting as at 32 Ave and Semiahmoo Trail and also respect stream protection distances as is – no matter what Provincial government decides. Yes, leave enough for wildlife – not just corridors but areas for habitat and not riddle the whole areas with paths. Consider very

carefully the effect of storm winds – other trees when any removal done. (5)

Heritage Trees – 1 response

All the public to be able to designate/nominate trees as significant or heritage, rather than the owner of the property (i.e. developer). (30)

Limit Small Lots – 2 responses

- ➤ Developers should not be allowed to develop every square inch of the land they purchase. They should be required to leave a stand of trees (a certain percentage) or small forested area. Especially in the case of high density 2000 5000 sq. ft lots where it's impossible to replace large native trees. (48)
- Limit small lot size so that it must accommodate regrowth. Stop developments in tiny lots. (53)

Limit Number of Trees Cut Down Annually - 1 response

Limit the # of trees cut per year (e.g. Vancouver) one or two/year unless part of an approved development plan (eliminates pre-clearing). No cutting/clearing during wildlife nesting period. (55)

Diversify the Type of Trees Cut – 1 response

Diversity the type of trees parted. (97)

Create a budget for tree maintenance – 1 response

➤ Put in a municipal funding formula for maintenance of the trees. E.g. \$50,000 for every 1000 trees or 0.5% of annual budget for tree maintenance, so budget politics can't interfere. (41)

Require an Up-to-Date ESA Assessment – 5 responses

- > Inventory of environmentally sensitive areas need to be updated, only have '95, '96, '97 (72)
- ➤ The existing By-law #12880 includes Schedule A Environmentally Sensitive Areas. This map is insufficiently detailed and is considerably out of date. We ask that an up-to-date ESA be undertaken as soon as possible and that it should include the areas that still contain mature tree stands. (101)
- ➤ ESA's the inventory is out of date. Staff should hire consultants to update the ESA done in 1990 another one was done in 1996 this one was suppressed by the manager for confidential use only. All trees should be on the ESA Inventory. There were many more square acres indicated as ESA in the 1996 review. We need a tree survey by a professional forester and biologist. (102)
- Require an up-to-date Environmentally Sensitive Areas assessment. To be made public. To document the amount of loss in H and M categories from the 1990 report, using it's boundaries, and then further calculation referencing the 1997 report. This so everyone knows what is really going on. The 2 reports are good, the latter should have been made available it addresses development and has suggestions for retention and strategies it is not just for parkland acquisition purposes. These should be in the OCP and guide manner of development. (f) Has this ever happened? I now don't think so. There is a lot of Surrey which is High ESA which has been clearcut or logged. (105)
- The map of Environmentally Sensitive Areas, noting that this is insufficiently detailed and considerably out of date, and urging an update as soon as possible and to include areas that still contain mature tree stands. (110)

Environmental Initiatives – 2 responses

- ➤ ENVIRONMENTAL STUDIES Surrey's tree heritage is unique for its landscape, healthy air quality, water retention, carbon sequestration, wildlife and bird habitat and general life ambience all of which are priceless assets. Therefore, before a development permit can be issued a full environmental study by a competent professional from an APPROVED CITY LIST of names has to be made and drainage plans, stream setbacks and tree classification with retention options of relevant trees decided upon. (4, 7)
- ➤ Encourage the establishment of a copse or spinney as part of any closed community, multi-dwelling etc., development. Planting of single trees, while beneficial, does not provide as rich an ecological microclimate as a small wood, and a small wood could be viable on an eighth or tenth of an acre. A copse could feature several native trees Douglas fir, Western red cedar or Hemlock (evergreen) or Alder, maple, choke cherry, cottonwood (deciduous) with an undercover ranging from salal to salmonberry. Such a collection of plants could contribute more to sil stability, windbreak, fauna enhancement than a similar biomass spread over separated, individual trees. Most householders avoid planting such native trees in favour of smaller, more colourful exotics. In areas of safety concerns (from falling trees) a true coppice could be established using Big-leaf Maple which regrows successfully if cut when the tree is 6 − 8 m in height. It is dismaying to see a development like Rosemary Heights. In S. Surrey without adequate 'greening' in the tree sense. Perhaps the developer is meeting the by-law rules by contributing to trees that are planted in neighbouring parks. If so, then the developer and the City have made an unfortunate partnership in depleting an area of viable ecosystems. (41)

Consider the environment – 4 responses

- Displaced animals. e.g. raccoons and coyotes. (10)
- Trees act as carbon-dioxide filters, which reduce this greenhouse gas. The effects of GLOBAL-WARMING will impact on Surrey. The City can save money on infrastructure (roads, sewers, bus routes) by <u>only</u> allowing development on already developed land. (11)
- > City needs to buy more forestland and preserve the trees and wildlife habitat. (13)
- ➤ There aren't usually too many ways of stopping developers when they want to maximize the number of lots on a piece of land every square inch covered with either a building or blacktop. They can't be given choices; when the bottom line is large profits, etc. the dollar is usually the winner not the environment. (54)

Consider Wildlife – 8 responses

- More concern needed to protect wildlife. (13)
- Please do not allow developments that remove all vegetation some natural areas should be left for wildlife, etc. (28)
- ➤ Include wildlife habitat as part of requirements for maintaining forest "bulb" so that non-flight animals can interact and maintain genetic diversity. Include wildlife as part of your concerns. (56)
- ➤ Preservation of trees should also include preservation of wildlife. In the policies we read at the open house, no mention of wildlife is made. (62)
- Environmental impact on wildlife should be considered (eagles, owls, squirrels etc.) before trees are removed (72)
- ➤ Birds including songbirds, raptors, and owls are being displaced or extirpated. (74)
- Increased efforts and incentives must be used to protect wildlife trees and those trees surrounding them, as wildlife trees are critical habitat for numerous animal and plant species, with birds species, such as primary and secondary cavity nesters requiring their existence for breeding and thus survival. It is also important to protect wildlife trees outside of parkland as they are becoming more and more rare in the Lower Mainland. (90)
- ➤ Present practices are decimating many wildlife (especially bird) shelter and nurturing areas. Mature trees also are very efficient at purifying air for thousands of homes. They also will assist in flood control. Nothing humans can do will safely cut pests/insects as effectively as birds do. (112)

Maintain Surrey's greenery – 3 responses

- ➤ Keep the greenery in Surrey as is and don't allow developers to cut and clear forested areas without leaving some of the old flora behind. (10)
- ➤ Having a beautiful tree filled municipality and neighbourhood should be incentive enough remember Surrey: City of Parks people should be proud of that. (36)
- ➤ DO NOT STRIP GREENERY that causes death or damage to tree or causes it to become a danger to other property. Replacement of same # of evergreens as removed. (53)

Homeowners and Developers should Adhere to the same laws – 1 response

> By-laws should be the same for homeowner as to the developer towards tree removal. (42)

Grade Builders – 1 response

➤ Grade builders according to standards of tree preservation and replanting – A/B/C. This grading can be used for builders advertising. Educate public about this grading and how it works and is applied. (75)

Section 20 of Tree By-law – 1 response

Replace "may" with "MUST" (105)

Section 23 of Tree By-law (No control over trees declared hazardous) - 1 response

➤ (Do not like the fact that) No control over trees declared hazardous. Is proof required beyond word of arborist? What are the penalties imposed on an arborist who falsely declares a tree to be hazardous, likely to fail, in poor condition, etc.? (105)

Section 24 of Tree By-law – Tree Removal for Agricultural Use – 1 response

(f) Who checks if it is actually "agricultural use"? Make this 10 years before development. And proof provided of annual bona fide agricultural use or deny any development a further 5 years for each year agricultural use not followed. (105)

Branch Pruning (Page 47) of Tree By-law - 1 response

➤ Include "lollypopping" and "poodling". also cocktail glassing - when cut off tree halfway down branching and it looks like a cup or cocktail; shape. Destroys the shape of the tree and reduces it's contribution to the public good. (105)

Protected Trees - 2 responses

- ➤ Trees worthy of preservation would need to be listed as 'protected' a big project but perhaps worth considering.
- A tree should be considered "protected" when it is the size of replacement trees as defined in this bylaw.

 Measurements should be a tree circumference rather than the less accurate diameter. Incentives and/or fines only work is if they reflect a benefit or disincentive over the true cost. These amounts should reflect annual increases

similar to City fees. (103)

Tree By-Law is fine as it is – 1 response

Present law is good enough. (21)

General - 2 responses

- ➤ A fundamental change in emphasis is due development should no longer trump tree preservation. (9)
- ➤ Development should not be approved on such a grand scale (i.e. Clayton area of Surrey) without ensuring large areas are protected or wildlife, etc. i.e. areas of 64 Ave to 96 Ave and 184 St to 196 St have no areas protected for parkland and wildlife preserve. Large preserved areas are condensed and not spread through the city. (39)

Other – 12 responses

- ➤ Only one landscape architect reviews development plans? Is this enough? Does more time need to be devoted to this important aspect of development? (1)
- > Need to be able to negotiate? and service line location to respect trees worthy of preservation (20)
- > 2 years ago I purchased and renovated my house at 10259 124A St. There was a good possibility of a view but many tall trees, that had been topped at 20' but had grown much higher since there was a covenant in existence, which promised all trees would be topped at 20', I bought. There seems to be some resistance with some neighbours below me to topping trees. This is my retirement home and I love it. But I would like a view. (29)
- All new housing/commercial development with trees/forests should be built according to following ratio: 33% housing/commercial, 33% park/paths/forestry, 33% community programs/low income housing. (34)
- ➤ Add NOT STRIP GREENERY, that causes death or damage to tree or causes it to become a danger to another property. (53)
- Arborists to be supplied by City. Ha ha ha. Or to be arborists doing reports only. (59)
- ➤ Have reinforcement developer area to be getting away with clear cutting. Am thinking of area on north side of 64 Ave between 142 St and 138 St. One area down will there be a tree by-law the areas to the west are cleared? (64)
- ➤ Why are we (Surrey) selling treed (mature) parkland to a developer??? (73)
- ➤ We of St. Helen's Park have a covenant where trees cannot be over 20 ft high. There are five people who do not want to top their trees. We do not want them removed, just topped so we can have our view back. (94)
- ➤ What is a tree? Why are not mature hedges included? Apparently some magnificent ones have been mowed down along property edges. (105)
- Look at the devastation in North Vancouver this winter or take a look closer to home in Surrey at the flooding and slides. Trees will play a critical role in mitigating the effects of climate change. If anything we need more buffering and mitigating factors, not less. Trees actually "store" carbon; they are a carbon sink and mitigate the effects of global warming. Tree removal reverses this process, contributing to global warming and reducing air quality. Natural features need to be protected because destabilization of these slopes represents a public safety risk and causes property damage and environmental damage. The City needs to ensure that it's safe to develop in these areas if we are to avoid problems like the recent slides in North Vancouver. Trees and native vegetation holding the soil need to be protected and the appropriate "buffer" distances established so houses are not literally hanging over the "edge" after the bank falls away. The character of the bluff as a prominent landmark along its environmental functions and habitat values also require consideration. Drainage and run-off from subdivisions has been a big problem in Surrey causing flooding in low-lying agricultural areas. Numerous plant and animal species are threatened and have been displaced in Surrey. Some species have been completely eradicated such as the chocolate lilies that grew in the tall grass in Crescent Beach. We need more "liveable" cities, and trees are part of this solution, greatly improving their quality of life. (106)
- We are fortunate to live in a climate where foliage grows quickly. This means that we also have the opportunity to replant and put the right trees in the right spot and thus create an environment that will last for generations. (108)

4. Do you have any other suggestion on how to enhance tree protection on private properties?

In new subdivisions, portion of land given up for boulevards from each property could be used to cluster trees – 1 response

Extra land can become available to save cluster areas of trees and bush. A couple of changes to the planning of clear cut and construction areas would have to be made. When developments happen, a portion of land goes to the city for boulevards. Instead of all the extra land developers give up for boulevards, a portion of it could be held aside for the cluster areas of trees and bush. Boulevards could be made one foot narrower for the entire length of each property. The square feet remaining in this narrow section would be multiplied by the number of lots in each subdivision. These areas would be city land and all trees and bush could be under the same protection as parks are. They could possibly be called environmental protection areas. All future subdivisions could use this method to make extra land available. When planning malls and other construction sites, the usual size of a boulevard surrounding the construction area would be figured. One foot could then be removed in the plan from the width of the boulevard for the entire circumference. The developer, city, and a highly trained impartial environmentalist could discuss where the best possible location of the area to be saved would be. It could also be mandatory for one or two trees to remain on each new city lot. The trees would be located in a safe area away from homes. If trees had to be taken down, others should be planted in appropriate areas. Trees could also be planted or currently standing ones left, on boulevards. Benefits: Developer should not have to give up extra land. City would not have to purchase land. Cleaner air. Breakers for the wind. Hold soil in place. Keep our city beautiful. Please save as many trees as possible so that our city does not become an ugly, polluted, desert. (33)

Developers should not be allowed to clear cut a property – 12 responses

- > Developers should not be allowed to clear cut a property. They should only be allowed to clear for access roads and within approximately 30 ft of proposed building. (3)
- > Do not allow new owners of property to clear cut all existing trees and build monster homes without any greenery left. (10)
- > Do not allow developers to clear cut acres of land. If a large tract is natural, leave it there! (26)
- Surrey lets developers clear cut land on a far too regular basis developers should be forced to retain as many trees as possible the City should have an arborist verify that trees tagged for removal are not on the significant tree list. A property next door to us had maple trees removed that the developer claimed were cottonwoods. We have photos and these trees were not cottonwoods. (36)
- Worry more about the developer "clear cuts" okay. (42)
- ➤ I am not an expert on Surrey's current approach but from what I have seen trees are being cut down everywhere areas are being clear cut for new subdivisions and developers seem to do whatever they want. (44)
- ➤ I am more concerned with the areas where whole city blocks have been totally cleared off to prepare for development. (47)
- Levity should crack down on developers completely clearing trees from subdivisions. (60)
- ➤ It does not seem to be working on building lots. I have seen too many clear cuts and only a few small trees planted. Some of these tree die. (75)
- ➤ I am adding my voice to the many who contest that developers within the city of Surrey are cutting down TOO MANY trees in order to build houses etc. They should be able to plan their development that allows for some of the trees to remain standing. (83)
- > Developers are cutting ALL trees on lots, even though peripheral trees could easily be kept. All for the sake of expediency and a few dollars. (86)
- ➤ If the developer complains about the additional cost then let them go develop somewhere else. The tax base may be hurt for a while but overall, in the long run, we will end up with a more desirable place to live. The developers will eventually see this and want to develop here for exactly the reasons they left. For the reason that people like to live in communities with character. Not mowed down parking lots for people. (88)

Do not Cut on Hillsides - 1 response

➤ Clear cutting of any hillside should not be permitted, not just because trees/roots keep a hillside from collapsing but also because visually/aesthetically it is less ugly than clear cutting. (40)

Larger Lots – 1 response

➤ Changes to developer's plans as far as density is concerned – much larger lots. Keep development in town centers – stop high-density development all over Surrey. Industrial areas included. (54)

Easements – 1 response

A stronger by-law would in effect create easements on private lands. It may already be in effect. (24)

No differentiation between public and private – 1 response

➤ Public/private should be same! If we use the criteria of one letter to editor equals at least 100 with same opinion. Surrey taxpayers are very concerned that the way things are, our by-laws regarding trees by fines/permits, are a very small cost of doing business. (22)

Existing By-law is Fine As It Is – 1 response

The existing by-law seems to be a rational approach – it balances the need to replace existing trees and at the same time is not too onerous on the developer. That ensures that the lots remain affordable and also will eventually have a well-treed environment. (52)

General Comments – 2 responses

- These days with our value systems we have a higher priority for development lands. Hence, trees become a liability when one sells and subdivisions replace beautiful areas. It's sad that Council and developers don't appear to appreciate the fantastic treed properties and save them somehow (high rise apartments)? (Equal density and larger lots and trees.) Leave more trees on development lots. (5)
- ➤ I think more land should be left in its natural state. Your by-law is fine the 2 for 1 is not the problem. Clear cutting is the problem. (27)

Other – 3 responses

- ➤ If you don't have any a beautification tax of \$10 per home! Or water reduced by 10 \$25. (43)
- ➤ To be more flexible on kind and condition of trees have owners want to cut but remain very definite on replacement trees and that this is done with a tree of significant authority. (64)
- The addresses are: 10287 124A St; 10277 124 St, corner house at 103 and 124; 10266 124 St, 10256 124 St. Everyone else keeps their trees topped!! (94)

5. Do you have any comment on Surrey's approach to tree preservation?

Approach to Tree Preservation is too heavily in favour of the developer – 4 responses

- > Surrey's approach to tree preservation is too heavily weighted in favour of the developer. He does not have to live with results of his shortsightedness. We do! (7)
- > Surrey is not taking a preventative approach and this is where the problem lies because it takes money and staff to enforce these laws. Development overrides the tree preservation by-laws with all of the exceptions in the by-law

- provisions. Stop approving zoning for so much development. The replanting of even 2 small trees does not replace what was once there. (39)
- ➤ Development and growth is such a priority and so rapid the city does not have the environmental/planning staff. Change is urgent. (97)
- It appears that the tree preservation by-law does not apply to developers. (109)

Too Easy to Rezone Land for Uses that Prevent Tree Preservation – 2 responses

- ➤ It is much too easy to get land rezoned for uses that preclude tree preservation. Once rezoned, it seems that City Staff, who have good intentions, are very limited in what they can do to reduce the effects of the development. (18)
- Recognize ecosystem function and structure values when developing compensation guidelines, cutting restrictions, and development/cutting applications. Surrey's challenge is less with effective tree by-laws, and more with inappropriate greenfield development. Please alter zoning, encourage cluster development, set more stringent DPA's and approve development with an eye to protecting natural corridors. (58)

Surrey in the International Context and Preserving Trees - 2 responses

- Inasmuch as we are the largest Rain Forest city on the Coast and the birthplace of reforestation in BC, we should exemplify this in the prevalence of our natural trees. We pride ourselves justifiably in the quality of our city. At the same time we have recently created some unsightly and unimaginative scars. Yet as we still have wriggle room left, we have a chance to become a world model for a sustainable urban environment. (7)
- > Our forest is the one natural resource BC has to draw visitors, would we not put more effort into protecting it? This is not a small concern for Surrey, it is a monumental concern. (56)

Inventory of Surrey's mature trees on private land should be created – 1 response

An inventory of Surrey's large trees on private land should be done NOW to serve as evidence in illegal logging cases and for changes to OCP – NCP. (9)

Preserve City trees – 1 response

Free Preservation MUST apply to City-owned trees, on City land, in parks, on road allowances/dedications. These trees function for the Public Good and are the natural capital assets of the citizens. The evergreens are the only air cleaners we have the majority of the year, along with other beneficial functions. Therefore, for removal of each tree exceeding 15cm diameter (less in the case of deciduous, multi-stemmed large shrubs and hedges), the City MUST REPLACE, into the City's Tree Inventory, a tree or trees of COMMENSURATE BIOMASS within 6 months. This replacement to be over and above the allocations for land for parks. That is, a separate issue. The land will have to be purchased with the equivalent biomass on it. By having the time frame of 6 months would allow the accumulation of a number of units of destroyed biomass units (trees) to be factored together, justifying purchase of larger parcels of land. Retroactive for 5 years. This would encompass the tree losses at Stokes Pit at 24 Ave. and 192 St., the roadside trees at 71A and 140 St, the roadside giants on 64th Ave. A bit east of King George on the north side of the street, the trees taken out at the Arts centre to provide for parking expansion. WHY they could not have gone around the trees, who knows. (105)

New Tree By-Law Should Produce Tangible Results – 1 response

> Please try to ensure the new bylaw has some "teeth" so that past horrendous mistakes will not happen again. (1)

Do not like how additional trees are removed for a tree that has to be removed due to wind – 1 response

➤ It is nice to know that you people are concerned enough and see the problem – as we do. I applaud how you saved Elgin Creek and the trees there. Incidentally, though, there are some down blocking the salmon run at about 33 Ave. We at R.E.S.C.U.E. will remove at low flows with permission. It seems to us to be just a game to you. Please get serious – now don't decent on my property like a cloud and taboo every tree that isn't looking great because you will be taking out 5 others for everyone removed because of wind. (5)

Replanting Trees – 1 response

Replanting trees is very good. However, old large trees need many years to re-grow. (10)

Public Green Spaces – 1 response

➤ Good approach regarding public green spaces. (12)

Not Enough Evergreens are Being Saved – 1 response

Not enough stand of evergreens are being saved. (26)

Inform the Public About the Eventual Growth of Replacement Trees Into Mature Trees - 1 response

➤ Please ensure the public realizes that trees are being replaced and lots will be affordable under current by-laws. Everyone wants more trees but where do we put houses – education of the public is necessary for them to realize that a bare site cleared of trees will eventually be full of mature trees again. (52)

Do Not Clear Trees for Sports Fields – 1 response

Around Hillcrest Elementary, land was cleared for baseball/soccer fields. This is a high-density area where there is no room for large native trees. In these areas parkland must be left with as many large stands of trees as possible rather than developed into fields. (48).

How Tree Issues are Handled During Development Applications – 1 response

> The main problem is how tree issues are handled during development applications. (55)

Inadequate Tree Preservation Policies – 9 responses

- > Insufficient, ineffective preservation policies regarding private properties, especially towards preserving mature trees. (12)
- > Very little preservation happening with exception of Green Timbers, Sunnyside, and Redwoods. (13)
- In a nutshell, it doesn't happen. Look at these ugly developments = no trees, all buildings and cars. (31)
- Yes. City has allowed too much development without being conscious of how many trees are going down. If, for example, trees can't be saved, or tree re-planting ratio's can't be met, why are developers allowed to start projects? (34)
- ➤ Really needs improvement! (38)
- ➤ I do not have much faith in Councils commitment to tree preservation. Actions speak louder than words. Priority should be given to preservation not replacement. Shrubs do not protect wildlife or evaporation. (53)
- Surrey's approach has been non-existent in the past few years. In the distant past each lot was left with a few trees that must become the 'norm' again. (54)
- ➤ I appreciate the boulevards, but it's way too little I'm appalled at the City park property that was clear cut next to the Sports Leisure Centre on Fraser Hwy. How can the City enforce something that they clearly value so little? (57)

Currently Surrey's approach to tree preservation is weak (especially assessment and enforcement). (109)

Too Harsh − 1 response

> Yes, Draconian. (59)

Allow Tree Removal – 2 responses

- ➤ Certain private properties should not be allowed to plant trees that grow 100's of feet high and whose roots clog drainage tile and break small retaining walls. (93)
- ➤ I feel that the creation of vistas by removing trees should be handled on an individual basis. The topography of Surrey presents the opportunity for creating wonderful views. Developers are aware of this, and because of this potential, special consideration should be given by City Staff and Developers to handle a site where trees are selectively cleared to expose the viewscape but replaced by smaller shrubs to retain the green canopy and groundcover. (108)

Tree Preservation By-Law Fine As Is/Positive Comments – 2 responses

- ➤ I am satisfy with tree present we have. (21)
- ➤ It seems to be both ecological and smart. Bravo! (32)

Importance of Trees – General Comments – 3 responses

- Yes, it's a good thing that people actually do care about the trees in Surrey because it's what keeps Surrey beautiful. (19)
- Need to respect environment more, and stand up to the developers. (20)
- Surrey looks more like a parking lot everyday. Please leave us some trees along the roads, not just parks. (47)

General Comments – 1 response

> Surrey could be a world leader in preserving the natural environment at the same time as it creates compact and well-designed growth. This should be done BEFORE we run out of trees to be concerned about. (50)

Other - 6 responses

- > Basic lack of understanding of biology, evolution (molecular biology), ecosystems. (11)
- ➤ It appears that the City is more than willing to allow cutting on land zoned industrial and commercial. Why are homeowners treated differently? (24)
- Can you assist me with some good advice? (29)
- Yes! Begin by uniting development to the 5% upper limit set by Bruntland Commission for Sustainable development. (49)
- Surrey is the exact opposite of tree preservation or should I say Doug McCallum is the exact opposite of tree preservation? However, trees are meaningless when the environment around them is destroyed. (95)
- > AND, related should be the requirement that any pavement the City puts down now, other than roads, should be pervious. (105)
- 6. Are you aware of any other successful approaches to tree preservation? If yes, please provide the name of the city or municipality and briefly describe their approach to tree preservation.

Barrie

> City of Barrie has a tree cutting by-law, albeit too late to avoid clear cutting in some areas. (18)

Burnaby

Burnaby has better assessment capabilities and more control over what developers are doing. (109)

Delta

> Delta has better assessment capabilities and more control over what developers are doing. (109)

Europe

- Suggest that the City of Surrey takes a good hard look at the parks and commons and land use in cities such as London, Paris, Berlin, and Copenhagen and their surrounds. Their policies speak for themselves. Meanwhile, closer to home the North Shore is very progressive and well enforced. It can be done! (4)
- ➤ In European cities like London, Paris, Copenhagen, one finds no clear cuts while their street scenes are well treed and they have surprisingly large parks. (7)
- ➤ Just about every European country, which have something unknown in Lower Mainland a city limits, the definite point at which your urban sprawl ceases. (95)

Japan

> Just outside Tokyo, Japan, villages are built among the trees. It is a foreign concept here but they are healthier for it. (53)

Langley

The setbacks in Walnut Grove appear to be working very well with regard to mixing residential, commercial and industrial together with greenspace. Housing developments back onto ravines and streams, giving a rural feeling in a very densely populated area. Large stands of trees have been retained where possible. The newer plantings on the boulevards have now grown in and people are enjoying the ambience of the area and walk a great deal. Trees were removed to give mountain views and the new growth has now grown in giving a sense of lushness. It has evolved very nicely. I can see exactly the same thing happening to our new areas in Surrey. It just takes time. I think Surrey is doing a great job, considering the amount of change we have had in such short time and the amount of roads and housing we have had to build to accommodate our increasing population. (108)

North Vancouver

- North Vancouver and the area where Dug McCallum lives. Holly Park Lane is an example of an environmental development. (8)
- North Vancouver tree by-law. (13)
- North Vancouver is 20 cm calliper instead of 30 cm. (20)
- North Van Lion's Bay, where provincial parks, and natural disasters are an incentive to preserve trees. (41)
- ➤ I've heard that North Vancouver requires an "environmental assessment" prior to development. This is not just about trees. It is about ecosystems. (50)
- Yes. District of North Vancouver in the development review process. (55)
- ➤ District of North Van integrates their tree, soil, and water by-laws, taking a more holistic approach to ecosystem protection. City of Nanaimo has developed "steep slope DPAs" would protect trees, on slopes, from development. Commit to going beyond RAR guidelines and enlarge your stream buffers. Would more effectively protect riparian-located trees. (58)

- North Vancouver (73)
- North Vancouver has better assessment capabilities and more control over what developers are doing. (109)

Port Moody

Port Moody. (39)

Richmond

There is a Richmond firm that has a very large portable clam digger that can remove large trees up to 70 ft high and replant them. However keeping them surviving for years in a new location may be a problem. There is an outfit in Richmond that transplants large trees – check out their methods and study how it can be utilized and improved. (5)

Surrey

➤ We think that all future development should leave as many trees as possible. The Amble Green development in Ocean Park at 132 St and 16 Ave was very well planned by Shell Oil where more thought was given to save trees. I think the Mayor and Council should tour this area to see how a subdivision should look. (104)

United States

➤ We must take advantage of the multi-city survey work several other cities have done. Many US jurisdictions make the strongest possible reference to trees in their most central planning documents. (70)

Vancouver

- ➤ Vancouver is 20 cm calliper instead of 30 cm. (20)
- > Surrey should look at Vancouver, it sure has a lot prettier subdivisions than Surrey even in some high-density areas. Look at Kerrisdale or False Creek or Kitsilano people pay a lot for there houses but people are paying \$450,000 for houses in Surrey and people like these areas of Vancouver not only for the ocean but for the fact they have lots of green space and large parks with lots of trees. The boulevards and streets have large trees that provide shade. None of the trees planted down 152 St. will get anywhere near the size of the tree lined streets in Vancouver. (91)
- > Vancouver has better assessment capabilities and more control over what developers are doing. (109)

West Vancouver

- West Van, where provincial parks, and natural disasters are an incentive to preserve trees. (41)
- ➤ West Vancouver (73)

Whistler

➤ Whistler (73)

BC Professional Foresters

➤ BC professional foresters (B.Sc. Forestry and after 2 year apprenticeship RDF's) continually work with First Nations groups and creek feds in their cut blocks. Surely if BC's major industry can find solutions, why can't all the highly paid staff (arbourists, by-law offices) in Surrey do so effectively? (22)

General Comments

- The process is weighted so heavily in favour of development that a tree doesn't stand a chance. I realize that politicians love to pint out that Surrey is the fastest growing city in Canada etc., etc., but to really save any of the character of Surrey, and its trees, we need to slow down the process. (74)
- In general, we have less concern with the removal of trees due to new development than we have with tree removal on single existing lots. Very often, all the best efforts put into saving trees during the development process is quickly undone by the new owner who proceeds to cut them down. (77)
- ➤ We believe that most homeowners have well-treed properties, and would not remove trees unnecessarily if there were no legal restrictions. We therefore suggest that consideration be given to the removal of much of the restrictions involved in the tree bylaw. (79)

There are too many to list, but are available on line from Alaska to Australia and most of Western Europe. (89)

General Positives

- ➤ What is good about Surrey's By-laws:
 - Requires tree removal permits for trees on private lands
 - Protects all trees in Environmentally Sensitive Areas
 - Planning tries to get replacement trees where they can (72)

Other

- North America is a bad example of tree preservation. (11)
- No, but after today's open house, I am very pleased that Surrey is 1 of 12, out of 22 cities who do have a preservation program. (32)
- None. Big business always seems to win. (34)
- This City could become a leader in tree preservation. The only approach to healthy native trees is to stop cutting them. Planting ornamental plum or cherry is not the answer. We need a strong healthy forest of native trees throughout Surrey. (54)
- ➤ I only wish I were aware! (57)
- ➤ Have any of you visited and seen the film on Milton Keynes a past WWII town in the UK They've planted millions of trees housing is in village settings with walking, cycling, and parks in each area connected to roads business and shopping centres. Quoted as a surprise example of town planning. (64)
- Please see enclosed printouts. These were found on the Internet under saving urban forests. These are only 2 of 475,500 addresses. Many have names you can contact. Check to see what has been accomplished in Europe. (75)

The city of Surrey Planning & Development has pushed the tree by-law aside in favour of development and removed many of the tree lined streets and parklike areas in Surrey it so desperately tries to tell the citizens of Surrey it bylaw protects. (91)

- East Kensington Elementary Heritage School will be sending writings and letters. Follow up on this please. (97)

houses also cover open land. I recommend that storyboards or presentations of proposed building/developments be required to include graphics with both trees in leaf and in winter so that the clear impression of how it will actually appear and contribute to the biodiversity of the City is immediately visible. The 12 % is not scientifically supportable. It is a myth. Dr. Valentin Schaeffer, Instit. Urban Ecology, Douglas College; Dr. Geoff Scudder, Prof. Emeritus, UBC Centre for Biodiversity Research. The amount scientists seem to believe is correct now, and they recognize there is much more to learn about the complexity of the bio systems of the area and the world, is on average 50%, with the range from 35% to 63%. Make this by-law review and amendment a meaningful and valuable contribution to the development of the City and it's future. (105)

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