

Boulevard Tree Planting Standards

The Boulevard Tree Planting Program in the City of Pickering was developed in 2005, as an initiative to beautify and provide a unifying element to public streets in Pickering. In 2011, the City, in consultation with the Toronto and Region Conservation Authority (TRCA), conducted an Urban Forest Study, to confirm the extent and make-up of the City's urban forest cover. The study concluded that the existing urban forest make-up lacked diversity. With the ongoing threat of climate change and pests such as the emerald ash borer, Asian long-horned beetle, gypsy moth, and Dutch elm disease, species selection that is more resilient to urban conditions and pests is crucial for a continuing urban forest. Our urban forest is an important solution for mitigating and adapting to the impacts of climate change by reducing the heat island effect, cooling communities in extreme heat and preventing flooding.

The City's Planting Standards have also been reviewed and revised with an emphasis on planting site preparation and increased root zone areas, in effort to "grow" larger trees that will thrive and provide increased benefits to combat climate change.

1.0 Boulevard Tree Planting Requirements

- 1.1 Boulevard tree planting is required for all new residential, commercial, industrial and institutional developments. Boulevard tree planting will also be a requirement in an area of redevelopment where no existing boulevard trees exist or where there is opportunity to increase the number of trees along the street.
- 1.2 For residential developments, one (1) tree per lot is required for single and semi-detached dwellings and one (1) tree per ground floor unit is required for stacked townhomes. For multi-storied apartment, condominium and mixed-use developments, boulevard trees shall be provided at approximately a 10 metre spacing, to be reviewed on a per application basis.
- 1.3 For commercial, industrial, and institutional developments, boulevard trees shall be provided at approximately a 10 metre spacing, to be reviewed on a per application basis.

- 1.4 Where trees cannot be accommodated due to space restrictions or utility conflicts, applicants will first be required to make best efforts to reduce the number of conflicts. Where this cannot be accomplished, cash-in-lieu will be taken at the current years cost per tree.
- 1.5 Where the development lands front or side on to a regional road or provincial highway, approval for boulevard works will be required from the subject authority.

2.0 Tree Placement and Planting

- 2.1 Boulevard trees are to be located within the boulevard as per the City of Pickering Design Standards, P-700 Series. Boulevard preparation and tree planting shall be completed in accordance with Details P-1110 and P-1111. These Standards are available on the City of Pickering website.
- 2.2 While recognizing that space limitations and utility obstructions such as light standards, water boxes, hydro poles, and stop signs may restrict the number of trees planted within the public right-of-way, the City requires that developers work to minimize the conflicts presented by proposed utilities by coordinating the Street Tree Planting Plan with the planned utilities.
- 2.3 The following guidelines shall be used to minimize potential conflicts:
 - 2.3.1 No trees shall be planted within 12 metres of any intersection of a roadway with another roadway.
 - 2.3.2 No trees shall be planted within 1.5 metres of the location of any driveway or above ground utility.
 - 2.3.3 No trees shall be planted within 3.0 metres of a light standard.
 - 2.3.4 No trees shall be planted within 3.0 metres of a transformer.
 - 2.3.5 No trees shall be planted within 3.0 metres of a fire hydrant.
 - 2.3.6 No trees shall conflict with traffic signs or crosswalks.

3.0 Size of Trees

- 3.1 60mm caliper or larger deciduous trees shall be utilized for street tree plantings within the City of Pickering.

4.0 Tree Species Selection

4.1 A list of preferred and prohibited boulevard trees is found below. Table 1 provides a list of preferred, larger growth habit trees that can be planted in areas where space is not limited. Table 2 provides a list of preferred, smaller growth habit trees that can be planted in areas with limited space such as areas with overhead wires, cul-de-sacs, or closer proximity to driveways or utilities. Table 3 provides a list of prohibited tree species due to their invasive characteristics or qualities not suitable for boulevard locations.

Table 1 – Preferred Larger Boulevard Trees

Botanical Name	Common Name
<i>Acer x freemanni</i> 'Jeffersred'	Autumn Blaze Maple
<i>Acer saccharum</i> 'Green Mountain'	Green Mountain Sugar Maple
<i>Acer saccharum</i> 'Legacy'	Legacy Sugar Maple
<i>Aesculus glabra</i>	Ohio Buckeye
<i>Celtis occidentalis</i>	Common Hackberry
<i>Ginkgo biloba</i> 'Maygar'	Maygar Ginkgo
<i>Gleditsia triacanthos</i> 'Shademaster'	Shademaster Locust
<i>Gymnocladus dioicus</i>	Kentucky Coffee Tree
<i>Platanus acerfolia</i> 'Bloodgood'	Bloodgood London Planetree
<i>Pyrus calleryana</i> 'Bradford'	Bradford Pear
<i>Pyrus calleryana</i> 'Chanticleer'	Chanticleer Pear
<i>Quercus bicolor</i>	Swamp White Oak
<i>Quercus macrocarpa</i>	Burr Oak
<i>Quercus rubra</i>	Red Oak
<i>Tilia Americana</i> 'Redmond'	Redmond Linden
<i>Ulmus Americana</i> 'Valley Forge'	Valley Forge Elm

Table 2 – Preferred Smaller Boulevard Trees

Botanical Name	Common Name
Acer campestre	Hedge Maple
Acer ginnala 'standard'	Amur Maple
Amelanchier cvs.	Serviceberry
Carpinus betulus 'Fastigiata'	Pyramidal European Hornbeam
Carpinus caroliniana	Bluebeech
Crataegus crusgalli 'Inermis'	Thornless Cockspur Hawthorn
Malus 'Spring Snow'	Spring Snow Crabapple
Syringa reticulata 'Ivory Silk'	Ivory Silk Tree Lilac
Viburnum lentago	Nannyberry
Tilia Americana 'Redmond'	Redmond Linden
Ulmus Americana 'Valley Forge'	Valley Forge Elm

Table 3 – Tree Species Prohibited for Boulevard Plantings

Botanical Name	Common Name
Acer saccharinum	Silver Maple
Acer negundo	Manitoba Maple
Aesculus hippocastanum	Horse Chestnut
Allanthus altissima	Tree of Heaven
Betula spp.	Birch
Catalpa spp.	Catalpa
Fagus spp.	Beech
Fraxinus spp.	Ash
Populus spp.	Popular
Robinia pseudoacacia	Black Locust
Salix spp.	Willow
Tilia americana	Basswood
Ulmus americana	American Elm
Ulmus pumila	Chinese Elm

5.0 Uniformity in the Public Right-of-way

- 5.1 While supporting Urban Forestry efforts to provide a diversity of species within the public realm, the City requires that the issue of uniformity be addressed in Street Tree Planting Plans as well. Efforts shall be made to create a uniform and identifiable public right-of-way by utilizing tree size and leaf colour in selecting species. The same species should be used within identifiable areas and dependant on the size of the development, should be used on both sides of the street and adjacent to one another, before introducing a different species. Where possible, groupings shall be between three and five of one species.
- 5.2 In order to establish a more diverse tree population, the Urban Forest Study recommends that no species represent more than five percent of the tree population, no genus represent more than 10 percent of the tree population and no family represent more than 20 percent of the tree population. Although this goal may be impossible to achieve through the boulevard tree planting program, while still maintaining some uniformity, efforts should be made to introduce a variety of tree species so that the same species groupings, or trees from the same family are not repeated numerous times in the same development or neighbourhood.