

APPENDIX A

TREE PLANTING STANDARDS/GUIDELINES

Tree Planting Standards:

- Overhead power lines:
 - No trees within 3m of pole or power line
 - o Max tree height of 6m within 3-6m from pole or power line
 - o Max tree height of 12m within 6-15m from pole or power line
 - Tree height of 12m or more must be a min of 15m from pole or power line
- Proximity Requirements:
 - 10.0m from street corners
 - 10.0m from private property for populous

Poplar Trees (poplar trees cannot be planted on front facing public property/homeowners' front yard that is public property)

- 5.0m from private property for trees
- 5.0m from major underground utilities (Main Gas Lines, Primary Cables 14,000 Volts & Concrete Ducts)
- 5.0m FROM STREET LIGHTS
- o 5.0m FROM YIELD/STOP & ALL REGULATORY SIGNS
- 4.5m FROM ALLEYS
- 2.0m FROM UNDERGROUND UTILITIES (Sewer, Water, Gas Lines, Secondary Cables 240 Volts & Telephone Lines)
- 2.0m from fire hydrants
- 2.0m from driveways
- o 2.0m from bus stops
- 1.0m from streetlight cables
- Proximity to Stop, Yield and 30 km/hr School Zone signs (we must stay 7m from the front of a sign)
- The tree planting site must be up-to-grade
- The City approves plant site and tree species that allow for successful establishment and contributes to a sustainable urban forest
- A tree should be picked up from the bottom of the container, root-ball, or root-ball cage.
 Never lift a tree by the trunk. This causes the trunk of the tree to pull away from the roots.
 Dropping the tree may also damage the roots. Carefully transport the tree to the planting site to avoid damage to the branches, leaves, needles, bark, and roots
- If trees, particularly bare-root trees, must be stored, "heel them in" by temporarily planting them and covering the roots with moist compost or sawdust. If they cannot be "heeled in," they should be kept in a cool place, away from asphalt or concrete. If trees are warmed up too quickly, they will break dormancy before planting

Soil Considerations:

- Soil moisture Good planting conditions require the soil to be moist. if the soil is too wet or too dry, avoid planting
- Soil texture Digging in clay soil may be more difficult and require more time for planting
- Soil compaction If the soil is hard to penetrate, use a rototiller, or pick to loosen the soil



- Soil temperature The soil needs to be warm enough, usually above 40 degrees F, for root growth. Avoid planting if the soil is frozen
- Soil interfaces Watch for rocks and construction debris when loosening the soil with tools and mechanical equipment
- Soil amendments Do not add organic matter, fertilizer, or other soil amendments. Also, do not place gravel in the bottom of the planting area. These amendments can cause problems with soil moisture and root growth

Digging considerations:

- The planting hole should be at least twice the width of the root-ball or container to encourage the roots to grow into the surrounding soil with the sides of the planting hole sloped with the larger width at the top.
- Most trees have the root flare below the top of the ball or soil in the container, so digging a
 hole the same depth of the ball or soil in the container often results in planting the tree too
 deep.
- The depth of the hole should be the same as the distance from the root flare of the tree to the bottom of the container or ball. One can check the root flare depth by probing down next to the trunk to look and find the flare.
- Backfill: Use the same soil that was taken out of the hole. If the soil is very poor and appears to need topsoil, increase the hole size and sparingly mix in some local topsoil (avoid using potting soil, peat moss, and soil amendments).
- Remove stones and other debris. Fill the hole halfway with backfill, then water.
- Finish filling the hole with the backfill and water again. Make sure to work the soil around the ball firmly to eliminate any air pockets but avoid packing the soil too hard since this can reduce soil pores and cause compaction.
- Make sure the tree is vertical and properly supported, but do not pack the soil around the trunk.

Mulch considerations

- The area around the tree should be mulched with wood chips, bark chips, or pine mulch. The mulch should be 3 to 4 inches thick and cover the entire planting area and the edges beyond the fill.
- The mulch needs to be placed in a donut or tire shape around the trunk of the tree. The
 mulch must be kept away from the trunk of the tree to keep insects away and prevent the
 trunk from being excessively wet. Mulch helps conserve soil moisture, reduces the
 competition from unwanted weeds, keeps lawn mowers and string trimmers from
 damaging the trunk, and moderates soil temperature extremes.
- Wood mulch, such as post peelings or long shredded bark or wood, may be used
- Water all mulched areas to lock the mulch in place and help the finer pieces settle to the bottom for maximum weed control. It is your responsibility to ensure mulch does not wash away and plug up the catch basins/storm sewers
- Do not use sawdust, black plastic, or grass clippings as mulch. Do not make mulch volcanos up the trunk of the tree.

Trunk Wrap/Staking considerations:

 Research indicates there are no benefits from using trunk wraps. Wrapping may encourage damaging insects or diseases on the trunk.



- Staking: Staking is not necessary if the tree has a proper size root-ball and has not been pruned too high. Stakes may however, help prevent lawnmowers and string trimmers from damaging the tree.
- If staking is needed for support, attach them so the tree has some sway. NEVER leave wires or straps on the tree for more than one growing season.

Fertilizing:

• Generally new trees do not need fertilizers. Using the wrong product could damage the already reduced root system. Fertilize the first year only if a specific problem develops.