
TREE PRUNING

PART 1 GENERAL**1.1 Reference Standards**

- .1 Perform pruning in accordance with Agriculture Canada Publication 1505-1977, The Pruning Manual, except where specified.

1.2 Related Work

- .1 All Division 1 Specification Sections.
- .2 Section [01450](#) Quality Control & Inspection
- .3 Section [01561](#) Environmental Protection
- .4 Section [01740](#) Cleaning
- .5 Section [02901](#) Tree & Shrub Preservation

1.3 General Requirements

- .1 The following requirements shall be used during any pruning Work:
 - .1 Dispose of all tree debris generated
 - .2 Ensure that good traffic control measures are utilized at all times.
 - .3 Minimize disruption of the public.
 - .4 Ensure the adequate safety measures are utilized at all times for employees and the public.
- .2 Contact the Consultant prior to starting any tree Work.

1.4 Specific Tree Pruning Specifications

- .1 All persons performing tree Work on City of Brampton projects or trees must be trained according to the tree care standards accepted by the International Society of Arboriculture;
- .2 All persons performing Work on City of Brampton projects or trees or around primary electrical lines must be trained to do so.

1.5 Workmanship

- .1 Pruning to be coordinated at appropriate seasonal intervals.
- .2 Coordinate all pruning practices with Contractor.
- .3 Store all on site materials as directed by Contractor.
- .4 Collect and dispose of debris and excess materials daily.

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PART 2 PRODUCTS**2.1 Disinfectant**

- .1 Disinfectant measures to be used in accordance with the best practices as stipulated by the International Society of Arboriculture.

PART 3 EXECUTION**3.1 Tool Maintenance**

- .1 All cutting tools and saws used in tree pruning shall be kept sharpened to result in final cuts with smooth wood surface and secure bark remaining intact. All trees 150mm in diameter or less shall be pruned with hand tools only. Chain saws will not be permitted on any trees 150mm in diameter or less. This is to prevent any unnecessary abrasions to cambial tissue that may predispose a tree to insect and disease problems.
- .2 All tools used on a tree known to contain an infectious tree disease shall be properly disinfected immediately prior and after completing Work on such tree. All major diseases and pest problems shall be promptly reported to the Consultant.

3.2 Annual Thinning

- .1 Remove dead, dying, diseased and weak growth in order to promote healthy growth. Retain natural form and shape of plant material.
- .2 Prune in dormant season but not during heavy frost. Prune evergreens in spring before start of new growth.
- .3 Remove growth designated by the Consultant.
- .4 For branches under 150 mm in diameter:
 - .1 Make cuts smooth and flush with outer edge of branch collar. Do not cut lead branches unless directed by the Consultant.
- .5 For branches greater than 150 mm in diameter:
 - .1 Make first cut on lower side of limb 300 mm from trunk, one third (1/3) diameter of limb.
 - .2 Make second cut on upper side of limb 500 mm from trunk until limb falls off.

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- .3 Make final cut adjacent to and outside limb collar. Tree limbs shall be removed and controlled in such a manner as to cause no damage to other parts of the tree or to other plants or property.
- .4 Ensure that trunk bark and limb collar are not damaged or torn during limb removal.
- .5 Remove one of crossed or rubbing branches. Where removal may affect natural form or health of plant, resolve pruning action with the Consultant.
- .6 Remove exposed portion of girdling root after cleanly cutting root flush with grade on each side of parent root. Do not injure bark or parent root.
- .7 No more than twenty-five (25) percent of the live wood may be removed from the crown of any tree, without approval from the Consultant, except live oaks, which are limited to no more than ten (10) percent. Resulting in keeping as much of the crown of the tree as possible.
- .8 Any extraneous metal, wire, rubber, or other material (ex: stakes, ties) interfering with tree growth shall be removed immediately.
- .9 Any defective or weakened trees shall be reported to the Consultant. Specifically, and structural weakness of a tree, decay of trunk or branches, shall be reported in writing, noting the location of the tree by street address and a description of the hazard found in the tree.
- .10 The use of climbing spurs or spike shoes in the act of pruning trees is prohibited unless specifically authorized by the Consultant.
- .11 Beneficial animal, bird nests, or other nesting cavities shall be preserved and protected whenever feasible, unless doing so would create a hazard.

3.3**Street Trees**

- .1 Complete tree pruning shall consist of the total removal of those dead or living branches as may threaten the future health, strength and attractiveness of trees. Specifically, trees shall be pruned in such a manner as to:

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- .1 Prevent branch and foliage interference with requirements of safe public passage. Over street clearance shall be kept to a minimum of 5000mm above the paved surface of the street, 4500mm above the curb, 2500mm above the surface of a public sidewalk or pedestrian way. Exceptions are allowed for young trees, which would be irreparably damaged by such pruning action.
- .2 Remove dead and dying branches and branch stubs that are 50mm in diameter or more.
- .3 Remove all broken or loose branches.
- .4 When trees are in the proximity of overhead energized lines and equipment, reliability of service, safety, and governmental standards require a reasonable amount of tree pruning to avoid conductor contacts and grounding of circuits through the trees. Power line clearance pruning, therefore, shall consist of the removal of tree branches for proper electric line clearance in order to minimize the likelihood of power outages and improve safety.
 - .1 Clear all branches and foliage within 3000mm of primary electrical lines.
 - .2 Clear all branches that interfere with secondary electric lines within 915mm to 1525mm.
 - .3 During the tree pruning process, all safe minimum working distances for energized conductors shall be observed. These clearances are defined under ANSI Z133.1-2006, Tree Care Safety Standards. Current ANSI specifications will supersede these requirements when they take effect. Any contact with energized lines shall be promptly reported to the Consultant.

3.4 Care and Dressing of Wounds

- .1 Shape bark around wound to an oblong configuration ensuring minimal increase in wound size.

3.5 Unacceptable Pruning

- .1 The procedures including but not limited to those listed below will result in tree decline and are not allowed (storm damage and other extenuating circumstances exempted):

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- .1 Severe cutting back of all growing tips usually referred to as topping, pollarding, or hat racking.
 - .2 Flush cutting where a cut is made even with the surface of the trunk or limb, removing the branch collar and branch bark ridge.
 - .3 Stub cutting where branch removal results in the base of branch removed protruding more than approximately 6mm beyond the zone of branch collar and branch bark ridge.
 - .4 Removal of a healthy main leader, for reasons other than power line clearance.
 - .5 Excessive cutting or lifting that exceeds the International Society of Arboriculture or these specifications.
- .2 The Contractor shall replace at the Contractor's sole expense any trees that have declined in health due to use of improper pruning procedures.

3.6 Public safety and cooperation

- .1 All tree Work shall be conducted in a manner as to cause the least possible interference with, or annoyance to others.
- .2 Pedestrian and vehicular traffic shall be allowed to pass through the Work areas only under conditions of safety and with as little inconvenience and delay as possible. Unless the Work area is totally barricaded or otherwise kept safe, at least one (1) worker shall serve to coordinate safe operations on the ground at all times when Work operations are in progress.
 - .1 Whenever larger tree sections are being cut in the treetop, which may endanger persons or property, such sections shall be secured by ropes and lowered safely to the ground in a controlled manner.
 - .2 All fire hydrants, meter vaults, water and gas shut off valves and similar facilities must remain accessible during the course of Work.

3.7 Clean-up

- .1 Cleanup of any debris resulting from any tree pruning operations shall be promptly and properly accomplished. The Work area shall be kept safe at all times until all operations are completed. Under no

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circumstances shall the accumulation of debris be allowed in such a manner as to result in a hazard to the public. All debris shall be cleaned up each day before the Work crew leaves the site, unless permission given by the Consultant to do otherwise. All lawn areas, parkways, streets and sidewalks shall be raked or blown clean. All brush, branches or other debris shall be removed from the site. Areas are to be left in a condition equal to or better than that which existed prior to the commencement of tree pruning.

- .2 All cuttings, branches, wood chips and other debris shall be cleared from the site and disposed of by the Contractor. Disposal expenses will be the Contractor's responsibility.

3.8 Report

- .1 Report to the Consultant conditions detrimental to health of plant material.

3.9 Inspections

- .1 The Consultant will inspect the Work performed by the Contractor to ensure completion of the pruning in accordance with these specifications.

END OF SECTION - 02232