

TREE & SHRUB PRESERVATION

PART 1 GENERAL**1.1 Description of Work**

- .1 This section specifies the preservation of existing vegetation on the site.

1.2 Related Work

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| .1 | All Division 1 | Specification Sections |
| .2 | Section 01561 | Environmental Protection |
| .3 | Section 02231 | Clearing & Grubbing |
| .4 | Section 02232 | Tree Pruning |
| .5 | Section 02311 | Site Grading |
| .6 | Section 02315 | Excavating, Trenching & Backfilling |
| .7 | Section 02911 | Site Topsoil & Finish Grading |

1.3 Quality Control (Specific)

- .1 Contractor shall have a thorough knowledge of horticulture, being able to identify trees, shrubs and ground covers by both common and botanical nomenclature. All persons overseeing tree work must be trained according to the tree care standards accepted by the International Society of Arboriculture.

1.4 Product Delivery, Storage, and Handling (Specific)

- .1 Roots of existing trees to be preserved are not to be driven on.
- .2 Surplus soil, equipment, vehicles, debris or materials shall not be placed over root systems of the trees within the protective fencing. No contaminants will be dumped or flushed where feeder roots of trees exist, that is within 1.5 times the diameter of the tree's canopy. No cables of any type shall be wrapped around or installed in trees.

PART 2 PRODUCTS**2.1 Temporary Tree Protective Fencing (Specific)**

- .1 Existing trees shall be properly protected beyond the drip line with minimum 1.2m high temporary fencing as per City of Brampton standard until Substantial Performance.
- .2 Maintain existing grade within drip line of all trees to be preserved.
- .3 The area within the protecting fencing shall remain undisturbed and free of debris, building materials and equipment.

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- .4 Prune dead wood only unless directed otherwise by the Consultant. Do not prune leaders, all cuts greater than 25mm diameter shall be treated with approved dressing as per Section [02232 Tree Pruning](#).
- .5 Silt control fabric as per layout and extent on drawings.

2.2 Fertilizing Existing Trees

- .1 The Work will be carried out between October 15th and November 14th of the fiscal year.
- .2 The Contractor will provide 2.7 kg of actual nitrogen in an organic or synthetic organic form or 9 kg of product 30-10-7 per 100 square meters of area or to a 40 cm diameter tree suspended in 225 litres of water. (6 lbs. of nitrogen or 20 lbs. of product in 50 gallons of water).
- .3 The Consultant reserves the right to take samples of the mixture used, for analysis.
- .4 The Contractor will be responsible for any damage caused to turf, walkways, trees or structures.

PART 3 EXECUTION**3.1 Layout**

- .1 Stake out and locate any major root systems from existing trees.
- .2 All proposed construction Works that may intersect with root systems of existing trees are to be identified and staked out using yellow flags.
- .3 Protective fencing location(s) are to be staked out as directed by the Consultant.

3.2 Execution

- .1 **Through Existing Root Systems:** Excavation required through existing root systems due to proposed Works is to be excavated by hand. Roots are to be cut with a sharp axe, and all cuts to be sealed with approved Tree Surgeons paint.
- .2 **Pruning:** Prune vegetation, loose bark, hazardous wood removal and all dead and broken branches. Prune branches to compensate for root loss then treat with tree paint.

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- .3 **Grade Change Higher Around Trees:** Place 100mm diameter perforated pipe on the existing grade, radiating a minimum of 8 spokes out from the trunk, to the spread of branches, sloping away from the trunk. Connect tiles and place tiles at the end of each slope. The upright spokes shall be extended to reach the new grade to allow for aeration and watering. Tiles are to be covered with clean crushed rock and fill area covered with the tile system with sandy gravel fill.
- .4 **Grade Change Lower Around Trees:** A 1:3 downward slope is to be constructed to the new grade. Water is to be applied at least three (3) times during dry summer periods and once prior to freeze-up, until the tree has adapted to the new conditions, or until the project has been certified Substantially Performed.
- .5 **Fencing:** Maintain Temporary Tree Protective Fencing until removal which is directed by the Consultant.
- .6 **Fertilize:** Fertilize in accordance with good horticulture practices to ensure promotion of root growth for two (2) years after acceptance. Where trees whose roots have been disturbed, within the drip line, drill holes 20mm in dia. and 40mm deep at 1000mm intervals on a square grid pattern under the trees drip line, fill holes with topsoil, and water.

3.3 Trees To Be Replaced

- .1 Existing trees to remain as per the Contract Documents that have been severely damaged or die as a result of the construction shall be replaced with the same species or as approved by the Consultant. Trees to be removed shall be cut completely flush to ground or as otherwise directed by the Consultant.

3.4 Damage

- .1 Contractor to repair or make good any damage to trees or other vegetation, at no additional cost to the Owner.

END OF SECTION - 02901