

## MMMGROUP

### ARBORIST REPORT

RE-IMAGINING YONGE STREET - SHEPPARD TO FINCH AVENUE - ENVIRONMENTAL STUDY REPORT

City of Toronto

September 16, 2016 Revised: October 28, 2016



### **Arborist Report**

# REimagining Yonge Street Sheppard Avenue to Finch Avenue Municipal Class Environmental Assessment Study

**Prepared for:** 

**City of Toronto** 

Prepared by:



100 Commerce Valley Drive West, Thornhill, ON L3T 0A1 Tel: (905) 882-1100 Fax: (905) 882-0055

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#### 1.0 Introduction

MMM Group a wholly owned subsidiary of WSP Group was retained to undertake the Municipal Class Environmental Assessment (MCEA) Study, and prepare an Environmental Study Report (ESR) to meet the requirements of a Schedule 'C' project. This MCEA study will evaluate opportunities to improve the streetscape and public realm along Yonge Street from Sheppard Avenue to Finch Avenue.

Reimagining Yonge Street has developed a cross section to accommodate travel lanes, bike lanes or cycle tracks, improved streetscape including wider sidewalks, street furniture, pedestrian amenities, parking and street trees. This report presents a detailed inventory of the existing trees within the study limits of preferred cross section. Recommendations have been provided for tree protection and tree removals associated with this alternative.

The focus of the inventory and of this report is on two sections:

- Focus Study Area West and East Sides of Yonge Street
- Secondary Study Area Yonge Street to Beecroft Road and Yonge Street to Doris Avenue

This report is to be read in conjunction with:

- Table 1: Tree Inventory and Preservation Chart (Table 1)
- Cross sections:
  - Design Option 4A: 6 lanes from Sheppard south to Avondale, showing a median, bike lanes and pedestrian walkway
  - Design Option 4B: 4 lanes from Sheppard to Finch, showing a median, bike lanes, tree & furnishing zones and pedestrian walkways

#### 2.0 General Overview

The built form and vegetation in this section has been separated into two parts: Focus Study Area; and Secondary Study Area.

#### Focus Study Area

The built form along Yonge Street from the Finch Hydro Corridor to Avondale Avenue is characterized by high-rise office towers, condominiums, one storey retail, commercial plaza's, institutional and government buildings, restaurants and parking lots. Vegetation is limited to urban tolerant trees planted within the built form either in  $1(L) \times 1(w) \times 1(ht)$  planters, tree pits, raised continuous planters, medians and tree grates. The streetscape varies on the west and east sides of Yonge Street, therefore vegetation assessments have been separated into two sections: Yonge Street – West Side and Yonge Street – East Side.

#### Yonge Street – West Side

The west side of Yonge has experienced considerable redevelopment with office and condominium towers concentrated between Avondale and Park Home and Horsham Avenue to Finch Avenue. New development has provided a larger streetscape as the buildings are setback from the street farther than the older retail buildings. Vegetation is generally young <10 to 35cm DBH with a majority of trees ranging between 5-15cm DBH. Trees have been planted in raised 1x1x1 planters, tree pits or boulevards. The North York Centre, Government of Canada office at 4900 Yonge Street and the North America

Centre at Finch Avenue have raised continuous planters, rows of street trees in tree pits. There are several blocks that do not contain any street trees.

Tree health ranges between good to poor, however a majority of trees were found to be in good condition. Signs of decline and defects were observed on a small amount of trees including deadwood ranging between 10-80%, compaction, scorch from urban heat island, trunk wounds, frost cracks, decline from Emerald Ash Borer infestation and exposed cambium from bark flaking off and decline from a lack of growing space.

Species consist of an abundance of Honeylocust (*Gleditsia triacanthos*), frequent amounts of Kentucky Coffee Tree (*Gymnocladus dioicus*), Accolade Elm (*Ulmus japonica x wilsoniana*), the occasional Crimson King Maple (*Acer platanoides 'Crimson King'*), Sugar Maple (*Acer saccharum*), Ivory Silk Tree (*Syringa reticulata 'Ivory Silk'*), Freeman Maple (*Acer x freemanii*), Little Leaf Linden (*Tilia cordata*), Silver Maple (*Acer saccharinum*) and a small amount of White Ash (*Fraxinus americana*) and Austrian Pine (*Pinus nigra*)

#### Yonge Street - East Side

Some re-development consisting of predominantly condominiums and some office towers has occurred on the east side of Yonge Street between Avondale Avenue to Greenland Road, Spring Garden Avenue and Park Home and close to Finch Avenue. Vegetation consists of urban tolerant species, generally young <5 to 35cm DBH (average 10cm DBH) planted in 1x1x1 planters, a small parkette (south of Hollywood Avenue), continuous raised planters south of Sheppard in front of the Hullmark Centre, tree grates in front of the Proctor and Gamble building and trees within a small cemetery. Several blocks do not have any street trees.

Tree health ranges between good to poor, however a majority of trees were found to be in good condition. Signs of decline and defects were observed on a small amount of trees including deadwood ranging between 10-80%, compaction, scorch from urban heat island, trunk wounds, frost cracks, decline from Emerald Ash Borer (EAB) infestation and exposed cambium from bark flaking off and decline from a lack of growing space.

Species consist of a frequent amount of Honeylocust (*Gleditsia triacanthos*) and Accolade Elm (*Ulmus japonica x wilsoniana*), the occasional Sugar Maple (*Acer saccharum*), Freeman Maple (*Acer x freemanii*), Kentucky Coffee Tree (*Gymnocladus dioicus*) and Horsechesnut (*Aesculus hippocastanum*) and a rare amount of Little Leaf Linden (*Tilia cordata*), Crimson King Maple (*Acer platanoides 'Crimson King'*), Ivory Silk Tree (*Syringa reticulata 'Ivory Silk'*, Bradford Pear (*Pyrus calleryana 'Bradford'*), Serviceberry (*Amelanchier spp.*), Manitoba Maple (*Acer negundo*), Red Maple (*Acer rubrum*), Tree of Heaven (*Ailanthus altissima*), Karpick Maple (*Acer rubrum 'Karpick'*), White Spruce (*Picea glauca*) and Siberian Elm (*Ulmus pumilla*)

Species within the medians consist of Red Oak, Honeylocust and White Ash. The Ash is dying from EAB.

#### Secondary Study Area

The secondary study area focused on the east/west side streets between Yonge Street and Beecroft Road (west side) and Yonge Street and Doris Avenue (east side). The built form consists of continuous sodded boulevards, residential condominiums, some retail, churches, and institutional buildings (TDSB), Parks, performing arts centre, government offices, grocery stores and a school. Vegetation was observed predominantly in boulevards that allowed for a greater amount of growing space. Since the

streetscape varies on the west and east sides of vegetation assessments have been separated into two sections: Yonge Street to Beecroft Road and Yonge Street to Doris Avenue.

#### Yonge Street to Beecroft Road (west Side)

The side streets between Yonge Street and Beecroft Road consist of mainly residential uses (condominium towers) with some scattered retail, schools, a church, parkette, the North York Civic Centre, Toronto Centre for the Arts, TDSB office, Government of Canada building, Police department and parking lots. The boulevards range between 1 to 4m wide allowing for more growing space than the tree pits and planters found on Yonge Street. Vegetation ranged between <10 to 40cm DBH, with an average DBH of 15-20cm.

Tree health ranged from good to poor with a large amount of trees in good condition. Signs and symptoms of decline consisted of compacted boulevards, Emerald Ash Borer infestation in Ash trees, trunk wounds, frost cracks and 10-80% deadwood.

Species consist of a frequent amount of Honeylocust (*Gleditsia triacanthos*) and Accolade Elm, the occasional Sugar Maple, Siberian Elm, Crabapple (*Malus spp.*), White Ash, Little Leaf Linden, Silver Maple, Norway Maple, Kentucky Coffee Tree, Pyramidal English Oak (*Quercus robur 'Fastigiata'*), Ginkgo (*Ginkgo biloba*) and a rare amount of Scots Pine (*Pinus slyestris*), Crimson King Maple, Red Oak, Austrian Pine, Hackberry (*Celtis occidentalis*), Tulip Tree (*Liriodendron tulipifera*), Cherry (*Prunus spp.*), White Spruce (*Picea glauca*), and Ivory Silk Tree.

#### Yonge Street to Doris Avenue (east Side)

The side streets between Yonge and Doris Avenue consist of mainly residential uses (condominium towers) with some scattered retail, Parkettes, church, schools and a grocery store. The boulevards range between 1 to 4m wide allowing for more growing space than the tree pits and planters found on Yonge Street. Vegetation ranged between <10 to 110cm DBH, with an average dbh of 15-20cm. Several mature Silver Maple were observed on the north side of Spring Garden Avenue.

Tree health ranged from good to poor with a large amount of trees in good condition. Signs and symptoms of decline consisted of compacted boulevards, Emerald Ash Borer infestation in Ash trees, trunk wounds, frost cracks and 10-80% deadwood.

Species consisted of a frequent amount of Honeylocust, Hackberry and Gingko, the occasional Serivceberry, Little Leaf Linden, Freeman Maple, Accolade Elm, Bradford Pear, Ivory Silk Tree, Silver Maple, Red Oak, Kentucky Coffee Tree, White Ash, White Pine, Sugar Maple, Crimson King Maple, American Elm (*Ulmus americana*), Norway Maple, Basswood (*Tilia americana*), Chinese Elm (*Ulmus parvifolia*), Manitoba Maple, Bur Oak (*Quercus macrocarpa*), Crabapple and Austrian Pine.

#### 3.0 Field Observations

The field observations were conducted on May 18, 2016 on Yonge Street between Avondale Avenue (south of Sheppard Avenue) to the Finch Hydro Corridor (north of Finch Avenue). The purpose of the assessment was to identify species and evaluation of the health of vegetation within the Focus Study Area as part of Task 3 — Data Collection and Review of Existing Conditions. The assessment focused on the Focus and Secondary Study Areas, previously discussed. Tree information recorded included species, diameter at breast height (DBH), dripline radius, location and general health condition. Trees

were identified in accordance with the City of Toronto's Private and City tree by-laws (Toronto Municipal Code Chapter 813, Trees, dated: December 10, 2015). Trees of any size within the right of way were included in the inventory.

A total of 822 trees were assessed for this report consisting of 368 within the Focus Study Area and 454 within the Secondary Study Area.

#### 4.0 Definitions

The following are the definitions of the assessment categories utilized in our tree assessment:

Tree Number this number refers to the number on the reference plan i.e.: T-10

**Tree Grouping** a tree grouping is more than one (1) tree located within close proximity

of other trees with no separation between the canopies.

**Species** the botanical and common names are provided for each tree.

**DBH** this refers to diameter (in centimetres) at breast height and is measured

at 1.3 m above the ground for each tree.

**Tree Protection Zone** this refers to the preservation area of the tree to be protected with tree

protection measures. No construction activities are to be undertaken

within this zone.

Suppressed Refers to trees that have their crowns completely overtopped by

adjacent trees and received limited to very limited sunlight.

Codominant Stem Stems equal in size and relative importance, usually associated with

either the trunks and stems or scaffold limbs and branches in the crown.

**Union** Junction point where two or more stems meet. A 'U' shaped junction

indicates a well formed union. A 'V' shaped junction indicates a weakly formed union, whereas stems grow and increase in girth, weak bark called 'included bark' forms within the junction and stems start to push

apart causing vertical cracks and loss of structure.

Tree Form Refers to branches and stems that have formed irregularly often

resulting in contorted growth, weak attachments, weakly formed unions and codominant stems. The irregular growth of scaffold (lateral)

branches typically leads to damage to other scaffold branches.

**Root Zone** Refers to the subterranean area around the tree measured from the

trunk to the drip line plus one metre.

Critical Root Zone The minimum area of the root system necessary to maintain vitality or

stability of the tree. Typically this area extends to the drip line of the

tree. The severing of one root can cause approximately 5-20% loss of the root system. A reduction of this area by greater than 30% can pose stability concerns for the tree.

#### **Tree Assessment Criteria**

**Trunk Integrity (T.I.)** this is an assessment of the trunk for any defects or weaknesses. It is

measured on a scale of poor, fair, good.

Canopy Structure (C.S) this is an assessment of the scaffold branches, unions and the canopy of

the tree. This is measured on a scale of poor, fair, good.

Canopy Vigour (C.V.) this is an assessment of the health of the tree and assesses the amount

of deadwood and live growth in the crown as compared to a 100% healthy tree. The size, colour and amount of foliage are also considered  $\,$ 

in this category. This is measured on a scale of poor, fair, good.

GOOD tree displays less than 15% deficiency/defect within the given tree

assessment criteria (TI, CS, CV).

FAIR tree displays 15%-40% deficiency/defect within the given tree

assessment criteria (TI, CS, CV).

**POOR** tree displays greater than 40% deficiency/defect within the given tree

assessment criteria (TI, CS, CV).

#### 5.0 By-laws / Permits:

The City of Toronto requires that an 'Arborist Report for Development Applications' be included and submitted for approval. The application form has been included in Appendix 1.

#### **Private Tree By-Law**

The City of Toronto's Private Tree By-Law applies to any tree 30cm diameter and greater.

• Exact impacts to trees to be confirmed as part of Task 15 – Completion of ESR. At that time any applicable application forms will be completed and submitted.

#### **City Street Tree By-Law**

The City of Toronto's City Street tree by-law applies to trees within a common or public highway, road, street, lane and any road allowance.

• Exact quantity and impacts to trees to be confirmed as part of Task 15 – Completion of ESR. At that time any applicable application forms will be completed and submitted.

#### Tree Injury

The City of Toronto's Tree injury policy is defined as: The minimum tree protection zone not being protected.

Exact quantity and impacts to trees to be confirmed as part of Task 15 – Completion of ESR. At
that time any trees identified as 'injured' will be included on an 'Application to injure or destroy
trees'.

#### **City of Toronto Tree Categories**

Categories as per City of Toronto Arborist Report for Development Applications Form (Refer to Table 1: Tree Inventory & Preservation Charts)

- 1. Trees with diameters of 30cm or more situated on private property on the subject site.
- 2. Trees with diameters of 30cm or more situated on private property, within 6m of the subject site.
- 3. Trees of all diameters situated on City owned parkland within 6m of the subject site.
- 4. Trees of all diameters situated within lands designated under City of Toronto Municipal code, Chapter 658, Ravine Protection.
- 5. Trees of all diameters situated within the City road allowance adjacent to the subject site.

### CFIA Directive (D-03-08): Phytosanitary Requirements to Prevent the Introduction Into and Spread within Canada of the Emerald Ash Borer, Agrilus planipennis (Fairmaire)

The Canadian Food Inspection Agency issues a prohibition of movement where the emerald ash borer (EAB) has been confirmed. EAB has been found in the City of Toronto and thus the municipality has been identified as part of the EAB Regulated Area encompassing most of south and central Ontario as well as western Quebec. The subject property is within identified areas prohibiting the movement of regulated materials (including but not limited to ash wood or bark and ash wood chips or bark chips) from a regulated area. EAB regulated articles moving out of a regulated area must be accompanied by a Movement Certificate issued by the CFIA. Refer to the EAB Regulated Areas of Canada found on the CFIA website.

Ash trees were observed within the limits of work. A visual assessment confirmed the presence of Emerald Ash Borer within these trees. These trees are permitted to be chipped on site and/or removed or cut down and removed from site. Chipped Ash material that is to remain on site must be grinded or chipped to a size of less than two and a half (2.5) cm in any two (2) dimensions. All Ash material chipped or whole that is to be removed from site must be disposed of within the regulated area of Canada. Removal, disposal and treatment of Ash material must be in compliance with Appendix 5&6 of directive #D-03-08. If it is necessary for Ash materials to be disposed of outside of this area than a 'Movement Certificate' will be required from the CFIA prior to transport. Contractor to consult with CFIA Toronto office for specific requirements (1124 Finch Avenue West, Unit 2, Downsview, Ontario, M3J 2E2, 647-790-1100).

#### 6.0 Discussion:

Trees identified within the limits of work of the Focus Study and Secondary Study Areas were assessed for condition potential to be retained as part of the preferred design. At the time this report was

prepared, preliminary cross sections were made available to the Arborist. Determinations were made with respect to tree survival based on their proximity to the proposed design. Vegetation recommended to be 'Retained' is deemed to be minimally affected by the proposed alternative or will be protected through mitigation measures. This designation may also be applied to trees that are in excellent, good or fair condition. Vegetation recommended to be 'Removed' is deemed to be within construction limits and would not be able to withstand construction related activities or changes to grading. This designation also may be applied to trees that are dead, in poor condition or trees that could pose future safety concerns.

Recommendations for tree retention, preservation and the evaluation of impacts are based on the preliminary concepts and are subject to change as this MCEA Study progresses. These recommendations and specific tree protection measures should be reviewed at the detailed design stage.

This section has been organized to discuss trees pertaining to the particular Segment the trees are located:

- **Study Focus Area** West and East sides of Yonge Street from the Finch Hydro Corridor to Avondale Road
- **Secondary Study Area** Side Streets from Yonge to Beecroft (west side) and Yonge to Doris (East side)

#### **Study Focus Area**

Cross Section Options 4A and 4B propose a 33.5m right of way (Option 4A is 6 lanes & Option 4B is 4 lanes), street trees in the median, bike lanes on either side of Yonge Street, 2m tree and furnishing zones (4B only) and 4m pedestrian walkways. This would involve reallocating space within the existing the right of way to accommodate the proposed streetscape and infrastructure improvements.

#### Impacts / Removals

Based on the cross sections all existing street trees on the west and east sides (217 trees, excludes Ash trees) will require removal to facilitate the reconstructing the right of way, altering of the road profile which in most sections will be lower than the existing and install streetscape features such was bike lanes, medians and boulevards for planting.

A permit would be required to remove 217 trees on City property and would be subject to the City Tree by-law. Exact impacts to be confirmed at completion of ESR.

#### Tree Injury

It is likely that some injury will occur to trees on private property due to the proposed works and encroachment into the minimum tree protection zones. The exact impacts and quantities of trees will be determined at the detailed design stage.

#### Tree Preservation

Trees private property, within the frontage of the North York Civic Centre can be retained and preserved. This applies to 127 trees located within the frontages of condominiums, office buildings, restaurants, commercial / retail stores and government offices that are beyond the existing municipal right of way. Tree protection fencing and minimum tree protection zone is to be applied in accordance with the Cities *Tree Protection Policy and Specifications for Construction near Trees*.

#### **Secondary Study Area**

The right of way width along Yonge Street varies depending on where redevelopment has occurred. As noted above in the 'Focus Study Area' the Design Option Cross Sections propose the right of way width of 33.5m which would involve the reallocation of space within the existing the right of way to accommodate the proposed streetscape and infrastructure improvements. These elements are mostly confined to the 'Focus Study Area'.

#### Impacts / Removals

There will be no impacts to trees located within the right of ways of the side streets from Yonge Street to Beecroft Avenue and Doris Avenue as the proposed cross section is confined to the right of way of Yonge Street.

#### Tree Injury

It is likely that some injury will occur to trees on private properties that are located on the corners of Yonge Street and adjacent side streets. The proposed reallocation of ROW, grading and streetscape work will potentially impact trees and may encroachment into the minimum tree protection zones. The exact impacts and quantities of trees will be determined at the detailed design stage.

#### Tree Preservation

Trees within the municipal right of ways of the side streets, trees on private property and within Parkettes can be retained and preserved. This applies to 436 trees located within the boulevards in front of condominiums, office buildings, restaurants and schools. Tree protection fencing and minimum tree protection zone is to be applied in accordance with the Cities *Tree Protection Policy and Specifications for Construction near Trees*.

#### **Mitigation Measures**

Tree protection fencing is recommended to be erected at the minimum tree protection distances required to protect trees that will be retained from construction activities; however roots outside of these zones may be exposed and damaged during streetscape and infrastructure improvements. It is recommended that roots be pruned cleanly and neatly utilizing the guidelines in this report under 'Pruning Practices' and 'Branch Pruning Practices'. Should any work be required within a minimum Tree Protection Zone, the contract administrator should be notified and this work shall be done so in accordance with the guidelines in this report under 'Work within a Tree Protection Zone' and 'Tree Preservation / Mitigation Measures'.

#### 7.0 Ash Tree Removal

Emerald Ash Borer (EAB) was observed within Ash trees inventoried within the Focus and Secondary Study Areas. The decline of trees as a result of the infestation varied from 'fair' to 'dead'. EAB killed trees are likely to become a 'Hazard' and are more susceptible to wind throw. As some of these trees are within proximity of the parking lot it is recommended that they be removed to reduce the possibility of becoming a hazard. As such 32 trees have been identified to be removed:

- 14 within the Focus Study Area
- 18 within the Secondary Study Area (within boulevards of side streets)

Ash tree removals are to occur within accordance with CFIA regulations (see section 5.0 of this report). Ash tree removals are exempt from requiring a permit and compensation.

#### 8.0 Transplanting

A majority of street trees within boulevards, planting pits, raised planters are immature and recently planted some of which are in good condition. The size of tree and condition make these trees good candidates for transplanting since the stress caused by transplanting would be minimal compared to a mature tree. Should transplanting be considered the following guidelines will apply:

- Trees will be flagged in the for identification
- Prior to the commencement of streetscape and infrastructure improvements, trees identified
  for transplanting and potential transplanting locations are to be reviewed by the Consultant /
  Landscape Architect, City and transplanting contractor. Trees identified for transplanting will be
  clearly marked in the prior to this review
- Trees identified to be transplanted are to be relocated into the designated transplanting area (to be determined).
- Transplanting details and notes to be provided at detailed design stage.
- Transplanted trees to be monitored for a period of 2 years.

#### 9.0 Tree Removals / Injury / Compensation

The proposed components of the cross sections will result in the removal of 217 trees on City property. Refer to the chart below that details tree removals and compensation as well as additional tree removal recommendations made in section 7.0:

#### **Tree Removal Chart**

By-Law /	Trees of	Exemption for Ash or	Total Removals included in
Recommendation	any Size	dead (Hazard) trees	the Permit application
City Tree By-law	217	0	217
Ash Tree Removal	32	32	0

The amount of trees identified as 'injured' due to the minimum tree protection zones not being protected and encroachment into the TPZ's Injury will be determined at the detailed design stage. At this time tree injury has been omitted from the compensation chart.

To compensate for tree removals, trees are typically replaced at a 1:1 ratio. This ratio are consistent with the replacement policies of the City of Toronto's tree protection by-laws. Refer to the table below that details required compensation:

#### **Compensation Chart**

Applicable by-law	Trees to	Compensation	Replacement
	be	ratio	trees
	removed		required
City Tree by-law	217	1:1	217
Tree Injury	0	1:1	0
Total Compensation	_		217

The total replacement tree equals **217** trees. These replacement trees are recommended to be incorporated into the Environmental Study Report and used as a basis for detailed design drawings,

planted where possible within the right of way of Yonge Street. Should the required amount not be achievable at this location than the remaining quantity can either be planted at an alternative location or paid as cash-in-lieu to the City of Toronto's Urban Forestry department (fee calculation and payment determined to be by others).

#### 10.0 Conclusion

A majority of vegetation found on site is immature to mature and characterized by a mixture of planted native and non-native urban tolerant species.

Removal of vegetation within the limits of the proposed works will be required to accommodate the preferred alternative. No Species at Risk (SAR) or regionally rare trees were observed within the limits of the proposed works. Given the implementation of the mitigation measures enclosed in this report, including protection of trees beyond the construction and staging limits and planting to provide a net benefit of vegetation coverage, significant impacts to trees are not anticipated.

Vegetation has been recommended to be retained and preserved beyond potential right of way limits. Proposed mitigation measures will minimize the detrimental effects from potential grading and construction and will help to ensure that trees remain in good health.

Care should be taken to protect trees to be retained with tree protection fencing as illustrated on the attached plans. Tree protection fencing shall be erected prior to the start of construction and demolition. Priority should be given to protecting vegetation that will not be impacted by grading and construction as this vegetation along property lines provides a visual barrier, shade, noise and wind buffer between properties.

#### 11.0 Preservation and Protection Recommendations

The survival rates for trees, which are in proximity to construction, are dependent on the resultant changes to a variety of environmental and anthropogenic factors. These construction activities bring about changes to a variety of environmental features such as the existing microclimate that includes winds, air temperature, soil moisture, amount of available sunlight, soil quality, and the level of the water table. Increased human activities may also damage the structure and/or physiological activities of the trees. The full effects of the damage may not appear until several years after its occurrence. Thus, it is essential that both vegetative clearing and preservation methods follow the guidelines below. The guidelines are organized into those requirements set out by the *City of Toronto Private Tree By-law* and the Ravine and Natural Feature Protection By-law and applicable provincial regulations, and additional recommendations that are in keeping with good horticultural and construction practices.

#### **By-Laws and Provincial Regulations**

#### Private Tree and Ravine and Natural Feature Protection Tree By-Laws

 Prior to the commencement of construction, tree protection barriers shall be installed in accordance with the City of Toronto Tree Protection Policy and Specifications for Construction Near Trees, and in accordance with the approved tree protection plans and arborist reports, and must be approved by Urban Forestry.

- Tree protection barriers shall be maintained in good condition and shall not be altered, moved or removed unless and until authorized by Urban Forestry.
- The owner shall notify all contractors and other parties working on site of approved tree protection plans and arborists reports and shall ensure that all contractors and other parties adhere strictly to the requirements of the tree protection plan.
- The permit shall be posted in a conspicuous location visible from the street, for a period of one day prior to the commencement of the approved tree injury and until such time as the approved tree injury has been completed in accordance with the permit.
- If a permit to injure or remove trees is issued, the work shall be carried out by or under the supervision of an arborist.
- Prior to commencing with any excavation, roots approved for pruning by Urban Forestry must first be exposed using pneumatic (air) excavation, by hand digging or by using a low pressure hydraulic (water) excavation. This root-sensitive excavation must be undertaken by an experienced operator under the supervision of a qualified and experienced arborist. The water pressure for hydraulic excavation must be low enough that root bark is not damaged or removed. This will allow a proper pruning cut and minimize tearing of the roots. The arborist retained to carry out root pruning must contact Urban Forestry no less than three (3) working days prior to conducting any specified work.
- The following activities are prohibited within a TPZ:
  - o demolition, construction, replacement or alteration of permanent or temporary buildings, structures or pathways of any kind;
  - o installation of large stones or boulders;
  - o altering grade by adding or removing soil or fill, excavating, trenching, topsoil or fill scraping, compacting soil or fill, dumping or disturbance of any kind;
  - storage of construction materials, equipment, wood, branches, leaves, soil or fill, construction waste or debris of any sort;
  - o application, discharge or disposal of any substance or chemical that may adversely affect the health of a tree;
  - o causing or allowing water or discharge, to flow over slopes or through natural areas;
  - o access, parking or movement of vehicles, equipment or pedestrians;
  - o cutting, breaking, tearing, crushing, exposing or stripping tree's roots, trunk and branches;
  - o nailing or stapling into a tree, including attachment of fences, electrical wires or signs;
  - stringing of cables or installing lights on trees;
  - o soil remediation, removal of contaminated fill;
  - o excavating for directional or micro-tunnelling and boring entering shafts.
- Every precaution must be taken to prevent damage to trees and root systems from damage, compaction and contamination resulting from the construction to the satisfaction of Urban Forestry. The Contractor must report immediately to Urban Forestry any accidental/unforeseen damage to trees such as broken limbs and damage to roots so that the damage can be assessed and mitigated as deemed appropriate by Urban Forestry.

#### **North York District:**

Urban Forestry Tree Protection & Plan Review North York Civic Centre 5100 Yonge Street, 3<sup>rd</sup> Floor North York, Ontario M2N 5V7

#### Migratory Bird Protection:

- Nesting migratory birds are protected under the Migratory Birds Conservation Act, MBCA (1994) and Regulations.
- No work is permitted to proceed that would result in the destruction of nests or eggs, or the
  wounding or killing of birds species protected under the MBCA and / or Regulations under that
  Act. It is the responsibility of the proponent and/or contractor to ensure compliance with the
  MBCA. Guidance for assessing potential risk of MBCA contravention and other relevant
  information is found on Environment Canada's website:

http://www.ec.gc.ca/paom-itmb/default.asp?lang=En&n=1B16EAFB-1.

• In general, it is recommended that activities which could result in an MBCA contravention be conducted outside of the area-specific "Regional Nesting Period". See nesting period and calendars here:

#### http://www.ec.gc.ca/paom-itmb/default.asp?lang=En&n=4F39A78F-1.

• If works are proposed within that Regional Nesting Period, the proponent must demonstrate due diligence, including an evaluation of risk (per Environment Canada guidelines at the referenced web links) and appropriate avoidance / mitigation measures. This is a site specific analysis based on habitat, species recorded / expected and potential risk due to activities.

#### **Additional Recommendations**

The following is a list of recommendations based on arboricultural best practices, to be implemented during the construction phase of the project and applying to all trees that may be impacted by construction. All items denoting the term "shall" are required to be followed in conjunction with City of Toronto and provincial regulations.

#### Construction Implementation:

- Prior to construction, a site meeting shall be held with the Contractor and Contract Administrator to review the clearing limits and confirm the installation location for the temporary tree protection fence.
- Tree protection barriers shall be clearly staked in the field and approved by Urban Forestry prior to construction to ensure correct positioning of fencing and avoid unnecessary disturbance.
- To avoid root zone impacts on trees to be retained, excavated material shall not be stored against the tree protection barrier.
- Inspection of the tree protection fencing, including photographic records and deficiency notes, shall be undertaken by the site supervisor and submitted to Urban Forestry prior to the commencement of construction, during construction and after construction is completed.
- 100-200mm of organic amendment and 500-750mm of wood chip mulch shall be applied to the
  area within the dripline of trees to be retained in parking islands within the subject property to
  retain moisture and promote survival. Upon completion of construction, all but 100mm of
  excess mulch shall be removed.
- All removals should be felled into the work area to ensure that damage does not occur to the
  trees within the tree preservation zone. Upon completion of the tree removals, all felled trees
  are to be removed from the site, and all brush chipped. All brush, roots and wood debris should
  be shredded into pieces that are smaller than 25 mm in size to ensure that any insect pests that
  could be present within the wood are destroyed.

#### Root Pruning Practices:

- All approved root pruning is to take place by or under the supervision of an arborist and in accordance with the Toronto Tree Protection Specifications.
- Pruned root ends shall be neatly and squarely trimmed and the area shall be backfilled with clean native fill as soon as possible to prevent desiccation and promote root growth.
- The exposed roots shall not be allowed to dry out and an appropriate watering schedule shall be undertaken (e.g. water bi-weekly to field capacity between June 1st and September 15th) so that the roots maintain optimum soil moisture during construction and backfilling operations.
- Backfilling shall occur immediately and shall be with clean uncontaminated topsoil from an approved source. It is recommended that texture of backfill be coarser than existing soils, and that backfill comes into clean contact with existing soils (remove air pockets, sod, etc.)

#### **Branch Pruning Practices:**

- All limbs damaged or broken during the course of construction should be pruned cleanly, utilizing by-pass secateurs in accordance with approved horticultural practices. Should there be a potential risk of transfer of disease from infected to non-infected trees; tools must be disinfected after pruning each tree by dipping in methyl hydrate. This practice is particularly important during periods of tree stress and when pruning many members of the same genera, within which a disease could be spread quickly (i.e., Verticillium Wilt on Maples or Fireblight on genera of the Rosaceae family).
- All pruning cuts should be made to a growing point such as a bud, twig or branch, cut just outside the branch collar (the swollen area at the base of the branch that sometimes has a bark ridge), and perpendicular to the branch being pruned rather than as close to the trunk as possible. This minimizes the site of the wound. No stubs should be left. Poor cut location, poor cut angle and torn cuts are not acceptable.
- Extensive pruning is best completed before plants break dormancy. Pruning should be limited to the removal of no more than one third (1/3) of the total bud and leaf bearing branches. Pruning should include the careful removal of:
  - 1. deadwood,
  - 2. branches that are weak, damaged, diseased and those which will interfere with construction activity,
  - 3. secondary leaders of conifers,
  - 4. trunk and root suckers,
  - 5. trunk waterspouts, and
  - 6. tight V-shaped or weak crotches (included unions).
- Any branches that overhang the work area and require pruning are to be pruned using good arboricultural practices utilizing by-pass secateurs in accordance with approved horticultural practices and/or American National Standard (ANSI) A300 (Part 1) 2008 Pruning.
- The Contractor must report immediately any damage to trees such as broken limbs, damage to roots, or wounds to the main trunk or stem systems so that the damage can be assessed immediately.

#### 12.0 Limitations of Assessment

It is our policy to attach the following clause regarding limitations. We do this to ensure that the client is aware of what is technically and professionally realistic in retaining trees.

The assessment of the trees presented in this report has been made using accepted arboricultural techniques. These include a visual examination of all the above ground parts of the tree for structural defects, scars, external indications of decay such as fungal fruiting bodies, evidence of attack by insects, discoloured foliage, the condition of any visible root structures, the degree and direction of lean (if any), the general condition of the trees and the surrounding site, and the proximity of property and people. Except where specifically noted, the trees were not cored, probed or climbed and there was no detailed inspection of the root crowns involving excavations.

Notwithstanding the recommendations and conclusions made in this report, it must be recognized that trees are living organisms, and their health and vigour constantly change over time. They are not immune to changes in site conditions or seasonal variations in the weather conditions.

While reasonable efforts have been made to ensure that the subject trees are healthy, no guarantees are offered, or implied, that these trees or any of their parts will remain standing. It is both professionally and practically impossible to predict with absolute certainty the behaviour of any single tree or its component parts under all circumstances. Inevitably, a standing tree will always pose some level of risk. Most trees have the potential for failure under adverse weather conditions, and the risk can only be eliminated if the tree is removed.

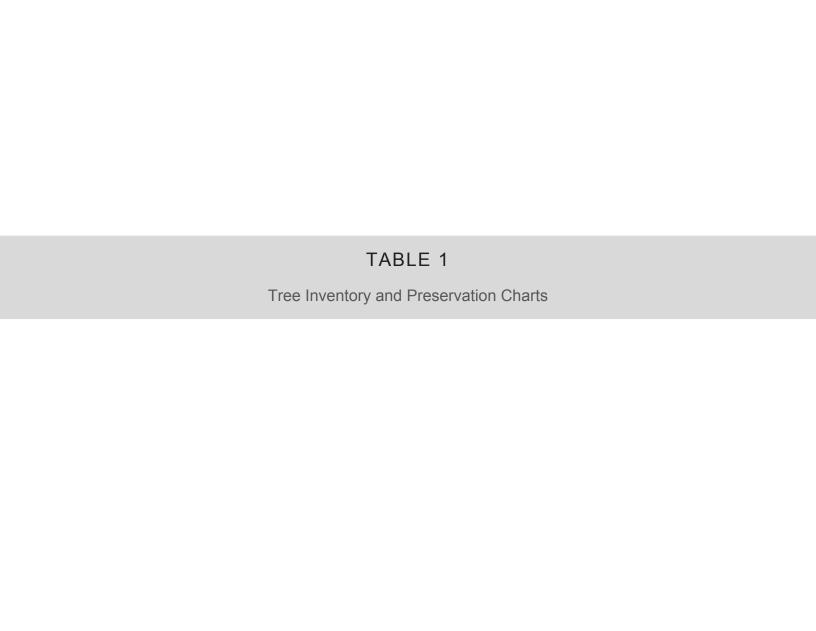
Although every effort has been made to ensure that this assessment is reasonably accurate, the trees should be re-assessed periodically. The assessment presented in this report is valid at the time of inspection.

WSP | MMM GROUP

Peter McNamara, BA

potos manancera

Landscape Designer | ISA Certified Arborist ON-1140A



roject: F	Reimaging Yonge Street - MCEA			Field Work				_		servatio				
	ield Work: May 18, 2016	•		Weather: 1			ter iviciva	aillaia						Conditions: G=Good, F=Fair, P=Poor, D=Dead
ee Asses - Trunk I S - Canop / - Canop	sment Criteria: ntegrity: assessment of the trunk for y Structure: assessment of scaffold y vigour: assessment of the health	branches, unions and canopy	f deadwood			Tree Con Good: tre Fair: tree	ee displays displays 1	L5-40% de	eficiency/de	fect within the gi	ven tree ass	sessment cri	ment criteria (TI,CS,CV) teria (TI,CS,CV) essment criteria (TI,CS,CV	
gend:	Trees to be Retained Trees to be Preserved			Trees to be F Focus Area	Removed				Sub-focus a	area: Tree Locatio	ons			
ree #	Botanical Name	Common Name	No.	DBH (cm)	Height (m)	Tre	e Condit	ion	Dripline Radius	Tree Location	City of Toronto	Tree Protectio	Recommendation	Remarks
tudv Fo	ocus Area - Yonge Street We	est Side				<u> </u>	L3	CV			Category	n Zone		
	reet - Hendon Avenue to To													
	Gleditsia triacanthos	Honeylocust	16	5-15		G	G	G	1-3	Boulevard	5		Remove	Boulevard 5700 Yonge in planting pit
	Gleditsia triacanthos	Honeylocust	12	5-15		G	G	G	1-3	Private	5	1.8	Preserve	LA Centre plaza
	Acer platanoides 'Crimson King'	Crimson King	5	5-10		G	G	G-P	1-3	Boulevard	5		Remove	raised planters
onge St	reet - Tolman Street to Kem	pford Boulevard												
	Acer saccharum	Sugar Maple	10	4-6		G	G	G-F	1	Boulevard	5		Remove	raised planters
	Gymnocladus dioicus	Kentucky Coffee Tree	1	<5		G	G	G	1	Boulevard	5		Remove	
	Gleditsia triacanthos	Honeylocust	14	10-15		G	G	G	3	Private		1.8	Preserve	5460 Yonge plaza - circular planters
onge St	reet - Kempford Boulevard	to Horsham Avenue												
	Gleditsia triacanthos	Honeylocust	18	10-20		G	G	G	2-4	Private		1.8	Preserve	plaza of 5444 Yonge in planters w/yew, spirea
	Gleditsia triacanthos	Honeylocust	1	±10		G	G	G	2	Boulevard	5		Remove	5430 Yonge - planter circular 2x2m
	Gleditsia triacanthos	Honeylocust	2	±10-15		G	G	G	2.5	Boulevard	5		Remove	raised planter
	Syringa reticulata	Ivory Silk Tree	2	<10		G	G	G	1	Boulevard	5		Remove	1x1 raised planter
	Gymnocladus dioicus	Kentucky Coffee Tree	1	<10		G	G	G	1	Boulevard	5		Remove	1x1 raised planter
onge St	reet - Horsham Avenue to C	Churchill Avenue												
	Gleditsia triacanthos	Honeylocust	3	15-20		G	G	Р	3	Private		1.8	Preserve	raised planter of 5400 Yonge
	Fraxinus americana	White Ash	1	<10		G	G	Р	1	Private		1.8	Preserve	5350 Yonge Daycare, EAB
	Acer saccharinum	Silver Maple	2	20-50		G	G	G-F	3-6	Private	1	3.0	Preserve	5350 Yonge Daycare
	Acer x freemanii	Freeman Maple	5	5-10		G	G	G	1	Private		1.8	Preserve	

				Table	1: Tre	e Inv	ento	ry an	d Pre	servatio	n Cha	rts		
Project: F	Reimaging Yonge Street - MCE	A		Field Work	Complete	ed By: Pe	ter McNa	amara						
	ield Work: May 18, 2016			Weather: 1	.5 degrees	. ,								Conditions: G=Good, F=Fair, P=Poor, D=Dead
TI - Trunk I CS - Canop CV - Canop	isment Criteria: ntegrity: assessment of the trunk y Structure: assessment of scaffol by vigour: assessment of the health		deadwood	& live growtl	n in the	Fair: tree	e displays displays 1	.5-40% de	eficiency/de	fect within the gi	ven tree ass	essment cr	ment criteria (TI,CS,CV) iteria (TI,CS,CV) essment criteria (TI,CS,C	v)
Legend:	Trees to be Retained Trees to be Preserved	_		Trees to be F Focus Area					EAB Remov					
Tree #	Botanical Name	Common Name	No.	DBH (cm)	Height (m)	Tre	e Condit	ion CV	Dripline Radius	Tree Location	City of Toronto Category	Tree Protectio n Zone	Recommendation	Remarks
	Ulmus americana	American Elm	4	8-9		G-F	G-F	G-F	1	Boulevard	5		Remove	trunk wounds, stores close to sidewalk
Yonge St	reet - Ellerslie to Park Hon	ne												
	Tilia cordata	Little Leaf Linden	4	6-8		G	G	G	1	Private			Preserve	raised planter
	Tilia cordata	Little Leaf Linden	4	6-30		G	G	G	1-4	Private	1	2.4	Preserve	raised planter/ plaza of condo - northwest corner of park home ave.
	Tilia cordata	Little Leaf Linden	2	30-35		G	G	G	3-5	Private	1	2.4	Preserve	raised planters - north side of park home in plaza o condo.
onge St	reet - Park Home Avenue t	o Elmwood Avenue - Mel Las	stman Sq	uare	ı		ı							
	Tilia cordata	Little Leaf Linden	7	6-9		G	G	G	1	Boulevard	5		Remove	1X1m planter
	Gymnocladus dioicus	Kentucky Coffee Tree	1	6		G	G	G	1	Boulevard	5		Remove	1X1m planter
	Ulmus americana	American Elm	2	8-10		G	G	G	1	Boulevard	5		Remove	1X1m planter
	Tilia cordata	Little Leaf Linden	21	15-25		G	G	G	2-4	Private		1.8	Preserve	two rows in planters 1x1m
	Acer x freemanii	Freeman Maple	3	<10		G	G	G	1	Boulevard			Remove	
onge St	reet - North York Boulevar	d to Elmhurst Avenue												
	Tilia cordata	Little Leaf Linden	18	10-15		G	G	G-P	3	Boulevard	5		Remove	dieback 10-40%, outgrown planters, raised 1x1m planter
	Gleditsia triacanthos	Honeylocust	5	6-15		G	G	G	2-3	Boulevard	5		Remove	1.5x1.5m planter
	Gleditsia triacanthos	Honeylocust	3	10-18		G	G	G	3-4	Boulevard	5		Remove	4924 Yonge, 0.5x0.5n raised planter
	Gleditsia triacanthos	Honeylocust	7	5-12		G	G	G	2-3	Boulevard	5		Remove	1x1m planter in plaza of 4900 Yonge
	Gleditsia triacanthos	Honeylocust	7	15-20		G	G	G	3-4	Private	5		Preserve	Landscape planters of 4900 yonge, northwest conrner of Elmhurst and Yonge.
	Pinus nigra	Austrian Pine	7	13-30		G	G	G	3-5	Private			Preserve	Landscape open space, 4900 Yonge, south side
		Sheppard Avenue West - No	Trees											
onge St	reet - Bogert Avenue to Po	yntz Avenue												
	Acer x freemanii	Freeman Maple	4	6-7		G	G	G	1	Boulevard	5		Remove	city - continuous planter

				1				_	ia Pre	servatio	n Cna	irts		
	Reimaging Yonge Street - MCEA	1		Field Work			ter McN	amara						1
Tree Asse TI - Trunk CS - Canop CV - Canop	Field Work: May 18, 2016 ssment Criteria: Integrity: assessment of the trunk for by Structure: assessment of scaffold by vigour: assessment of the health	branches, unions and canopy	deadwood	Weather: 1		Tree Con Good: tree Fair: tree	ee displays displays 1	L5-40% de	eficiency/de	fect within the gi	iven tree ass	sessment cr	ment criteria (TI,CS,CV) iteria (TI,CS,CV) essment criteria (TI,CS,C	Conditions: G=Good, F=Fair, P=Poor, D=Dead
egend:	Trees to be Retained Trees to be Preserved			Trees to be F Focus Area	Removed				Sub-focus EAB Remo	area: Tree Locati	ons			
Γree #	Botanical Name	Common Name	No.	DBH (cm)	Height (m)	Tre	e Condit	ion	Dripline Radius	Tree Location	City of Toronto Category	Tree Protectio n Zone	Recommendation	Remarks
	Acer x freemanii	Freeman Maple	11	6-7		G	G	G-F	1	Boulevard	5		Remove	city - 1x1m planters, 2-fair
Yonge S	treet - Poyntz Avenue to Avo	ondale Avenue				-			1		-			
	Gleditsia triacanthos	Honeylocust	4	5-7		G	G	G	1	Boulevard	5		Remove	city - 1x1m raised planters
	Tilia cordata	Little Leaf Linden	6	6-9		G	G	G	1	Boulevard	5		Remove	city - 1x1m raised planters
Study F	ocus Area - Yonge Street Eas	st Side												
Yonge S	treet - Avondale Avenue to S	heppard Avenue East												
	Gleditsia triacanthos	Honeylocust	5	±20-35		G	G	G	4	Boulevard	5		Remove	landscape open space - 4685 Yonge
	Ulmus americana	American Elm	6	8-9		G	G	G	1	Boulevard	5		Remove	planter pit 1x1m - 4711 Yonge
	Pyrus calleryana	Bradford pear	3	8-9		G	G	G	1	Boulevard	5		Remove	planter pit 1x1m - 4711 Yonge, 4m in length
	Acer x freemanii	Freeman Maple	5	7		G	G	G	1	Boulevard	5		Remove	raised continuous planter in boulevard, 1-poor
	Amelanchier canadensis	Serviceberry	4	<5		G	G	G	1	Boulevard	5		Remove	shrub form
Yonge S	treet - Sheppard Avenue to C	Greenfield Avenue - No trees	5											
onge S	treet - Spring Garden Avenue	e to Hollywood Avenue												
	Acer negundo	Manitoba Maple	1	<10		F	F	G	1	Boulevard	5		Remove	1m open space
	Acer rubrum	Red Maple	10	9-20		G	G	G	2-3	Park	3	1.8	Preserve	parkette
	Acer platanoides 'Crimson King'	Crimson King	1	±50		G	G	G	7	Park	3	3.0	Preserve	parkette
	Ailanthus altissima	Tree of Heaven	1	±25		G	G	G	4	Private		1.8	Preserve	4965 Yonge Street
Median	- Spring Garden Avenue to H	lollywood Avenue												
	Quercus rubra	Red Oak	3	10-20		G	G	G		City	5		Remove	
	Fraxinus americana	White Ash	10	±20-30		G	G	F-P		City	5		Remove/EAB	EAB
onge S	treet - Hollywood Avenue to	Elmwood Avenue												

				Table	1: Tre	e Inv	ento	rv an	d Pre	servatio	n Cha	rts		
Project: F	Reimaging Yonge Street - MCEA	A		Field Work				_		23	5			
Date of F	ield Work: May 18, 2016			Weather: 1	L5 degrees	, sunny								Conditions: G=Good, F=Fair, P=Poor, D=Dead
TI - Trunk I CS - Canop CV - Canop	ssment Criteria: Integrity: assessment of the trunk f by Structure: assessment of scaffold by vigour: assessment of the health		deadwood	& live growt	h in the	Fair: tree	ee display displays	15-40% de	eficiency/de	ect within the gi	ven tree ass	sessment cr	ment criteria (TI,CS,CV) iteria (TI,CS,CV) essment criteria (TI,CS,C)	/)
egend:	Trees to be Retained Trees to be Preserved			Trees to be F Focus Area	Removed				Sub-focus a	area: Tree Locatio	ons			
Tree #	Botanical Name	Common Name	No.	DBH (cm)	_	Tre	e Condi	tion	Dripline Radius	Tree Location	City of Toronto	Tree Protectio	Recommendation	Remarks
					(m)	TI	CS	CV	Radius		Category	n Zone		
	Acer truncatum	Tartarian Maple	2	±25		G	G	G	3	Private		1.8	Preserve	in raised planter - 5001 Yonge Street
	Syringa reticulata	Ivory Silk Tree	4	5-6		G	G	G	1	Boulevard			Remove	city - 1x1m raised planter
Yonge St	treet - Elmwood Avenue to I	Hillcrest Avenue - No trees/ n	o trees	in median	- all cut d	own								
onge St	treet - Hillcrest Avenue to Er	mpress Avenue												
	Ulmus americana	American Elm	4	6-8		G	G	G	1.5	Boulevard	5		Remove	city - raised 1x1m planter
	Syringa reticulata	Ivory Silk Tree	7	6-8		G	G	G	1.5	Boulevard	5		Remove	city - raised 1x1m planter
	Aesculus hippocastanum	Horsechestnut	3	4		G	G	G	1	Boulevard	5		Remove	city - raised 1x1m planter
Yonge St	treet - Empress Avenue to K	ingsdale Avenue - No trees												
Yonge St	treet - Kingsdale Avenue to	Parkview Avenue - No trees/	no tree:	s in mediar	1									
Yonge St	treet - Parkview Avenue to N	Norton Avenue												
	Acer saccharum	Sugar Maple	2	6-8		G	G	F	1	Boulevard	5		Remove	city - 1x1 raised concrete planter
	Acer x freemanii	Freeman Maple	3	6-8		G	G	G-F	1	Boulevard	5		Remove	city - 1x1 raised concrete planter
	Gymnocladus dioicus	Kentucky Coffee Tree	3	7		G	G	G	1	Boulevard	5		Remove	
Yonge St	treet - Norton Avenue to Mo	ckee Avenue - No trees												
onge St	treet - Mckee Avenue to Chu	urch Avenue - No trees												
Yonge St	treet - Church Avenue to No	rthtown Way												
	Tilia cordata Picea glauca	White Spruce + Linden	±10	±20-35		G	G	G	5	Private	1		Retain	in cemetery
	Syringa reticulata	Ivory Silk Tree	5	6-7		G	G	G	1.5	Boulevard	5		Remove	1x1m raised planter box
onge St	treet - Northtown Way to By	yng Avenue												
	Ulmus americana	American Elm	2	5-6		G	G	G	1.5	Boulevard	5		Remove	city - 1x1m raised planter box
	Gleditsia triacanthos	Honeylocust	7	5-6		G	G	G	1.5	Boulevard	5		Remove	city - 1x1m raised planter box

					ble 1: Tree Inventory and Preservation Charts  Work Completed By: Peter McNamara												
	Reimaging Yonge Street - MCE	:A					ter McN	amara						1			
	ield Work: May 18, 2016			Weather: 1	.5 degrees	, sunny Tree Con	dition							Conditions: G=Good, F=Fair, P=Poor, D=Dead			
I - Trunk I	ntegrity: assessment of the trunk					Good: tre	e display						ment criteria (TI,CS,CV)				
	y Structure: assessment of scaffol by vigour: assessment of the healt	d branches, unions and canopy h of the tree, base on the amount of	deadwood	l & live growth	n in the					fect within the gi iciency/defect w			iteria (TI,CS,CV) essment criteria (TI,CS,C\	/)			
egend:	Trees to be Retained			Trees to be R						area: Tree Location							
	Trees to be Preserved	1		Focus Area			- "		EAB Remov	<i>r</i> al		_		1			
ree #	Botanical Name	Common Name	No.	DBH (cm)	Height (m)	Tre	e Condi	tion	Dripline Radius	Tree Location	City of Toronto	Tree Protectio	Recommendation	Remarks			
					(,	TI	CS	CV			Category	n Zone					
	Gymnocladus dioicus	Kentucky Coffee Tree	4	4-5		G	G	G	1.5	Boulevard	5		Remove	city - 1x1m raised planter box			
	Tilia cordata	Little Leaf Linden	4	5-6		G	G	G	1.5	Boulevard	5		Remove	city - 1x1m raised planter box			
onge St	treet - Byng Avenue to Holi	mes Avenue - No trees															
onge St	treet - Holmes Avenue to C	live Avenue - No trees															
onge St	treet - Olive Avenue to Find	h Avenue															
	Syringa reticulata	Ivory Silk Tree	1	6		G	G	G	1	Private			Preserve	esso station			
	Ulmus pumila	Siberian Elm	1	multi (3) 15-20		F	G	G	3	Private			Preserve	esso station			
	Gleditsia triacanthos	Honeylocust	13	6-8		G	G	G	1	Boulevard	5		Remove	city - planters 1x1m in two rows of continuous planters			
onge St	treet - Finch Avenue to Bish	nop Avenue - No trees															
onge St	treet- Bishop Avenue (sout	h) to 7 Bishop															
	Gleditsia triacanthos	Honeylocust	1	7		G	G	G	1	Boulevard	5		Remove	in raised planter, street corner			
	Tilia cordata	Little Leaf Linden	1	7		G	G	F	1	Boulevard	5		Remove	in raised planter			
	Syringa reticulata	Ivory Silk Tree	9	5-15		G	G	G	2	Boulevard	5		Remove				
	Pinus nigra	Austrian Pine	10	20-30		G	G	G	5	Private			Preserve	landscape open space of condo			
	Syringa reticulata	Ivory Silk Tree	1	±20		G	G	G	4	Private			Preserve	landscape open space of condo			
ledian	- Greenfield Avenue to Spr	ing Garden Avenue															
	Quercus rubra	Red Oak	4	±20		G	G	G	3	City	5		Remove				
	Gleditsia triacanthos	Honeylocust	1	±20		G	G	G	3.5	City	5		Remove				
	Fraxinus americana	White Ash	4	±20-30		G	G	P-D	4	City	5		Remove/ EAB	2-dead, 2-poor EAB			

				Table	1: Tre	e Inv	ento	ry an	d Pre	servatio	n Cha	rts		
roject: F	Reimaging Yonge Street - MCEA	A		Field Work	Complete	ed By: Pe	ter McN	amara						
	ield Work: May 18, 2016			Weather: 1	5 degrees									Conditions: G=Good, F=Fair, P=Poor, D=Dead
l - Trunk I S - Canop V - Canop	isment Criteria: ntegrity: assessment of the trunk for y Structure: assessment of scaffold y vigour: assessment of the health		deadwood	& live growth	n in the	Fair: tree	ee displays displays 1	.5-40% de	eficiency/de	fect within the gi	ven tree ass	sessment cri	ment criteria (TI,CS,CV) iteria (TI,CS,CV) essment criteria (TI,CS,C)	<i>v</i> )
egend:	Trees to be Retained Trees to be Preserved			Trees to be F Focus Area	emoved				Sub-focus a	area: Tree Locatio	ons			
ree #	Botanical Name	Common Name	No.	DBH (cm)	Height (m)	Tre	e Condit	ion	Dripline Radius	Tree Location	City of Toronto	Tree Protectio	Recommendation	Remarks
econda	ry Study - West Side betwe	een Yonge and Beecroft				<u>  ''</u>	63	CV			Category	n Zone		
	sing Lot - North of Hendon A													
	Pinus sylvestris	Scots Pine	10	15-30		G	G	G	3-5	Boulevard	5		Retain	
	Acer platanoides 'Crimson King'	Crimson King	5	30-40		G	G	G	5-6	Boulevard	5		Retain	
	Acer saccharum	Sugar Maple	3	10-20		G	G	G	2-3	Boulevard	5		Retain	
endon	Avenue between Yonge Stre	eet and Duplex Avenue (Nort	th Side)											
	Ulmus pumila	Siberian Elm	5	clump <10		G	G	G	2-3	City	5		Retain	
	Pinus sylvestris	Scots Pine	15	15-30		G	G-F	G	3-5	Parkette	3		Retain	lean
	Malus spp.	Crabapple	1	±25		F	F	G	3-5	Parkette	3		Retain	
	Ulmus pumila	Siberian Elm	3	15-20		G	G	G	3-5	City	5		Retain	beside utility station
	Acer saccharum	Sugar Maple	1	24		G	G	G	4	City	5		Retain	beside utility station
endon	Avenue between Yonge Stre	eet and Duplex Avenue (Sout	th Side)											
	Quercus rubra	Red Oak	3	15-20		G	G	G	3-4	Boulevard	5		Retain	21 Hendon Avenue
	Gleditsia triacanthos	Honeylocust	10	5-15		G	G	G	1-3	Boulevard	5		Retain	5700 Yonge in planting pit
inch Av	enue (North Side) - Yonge S	treet to Duplex Avenue					ı							
	Gleditsia triacanthos	Honeylocust	5	15-25		G	G	G-P	1-4	Boulevard	5		Remove	5680 Yonge Xerox tower
	Pinus nigra	Austrian Pine	12	20-30		G	G	G	3-4	Private	1		Preserve	5681 Yonge Xerox tower - plaza
	Quercus & Fraxinus	Red Oak + Ash	20-25	15-25		G	G	G-P	3-5	Parkette	3		Retain	Northeast corner of Finch & Duplex
	Gleditsia triacanthos	Honeylocust	7	10-15		G	G	G		City	5		Retain	raised planters - Duplex & Beecroft
nch Av	enue (South Side) - Yonge S	treet to Duplex Avenue												
	Gleditsia triacanthos	Honeylocust	8	6-8		G	G	G	1-2	Boulevard	5		Remove	planting pit

				Table	1: Tre	e Inv	ento	rv an	d Pre	servatio	n Cha	rts		
Project:	Reimaging Yonge Street - MCE	EA .		Field Work				_						
	ield Work: May 18, 2016			Weather: 1	15 degrees									Conditions: G=Good, F=Fair, P=Poor, D=Dead
TI - Trunk CS - Canor CV - Canor	ssment Criteria: Integrity: assessment of the trunk by Structure: assessment of scaffol by vigour: assessment of the healt		deadwood	I & live growt	h in the	Fair: tree	e displays displays :	.5-40% de	eficiency/de	fect within the g	iven tree ass	sessment cri	ment criteria (TI,CS,CV) teria (TI,CS,CV) essment criteria (TI,CS,C	V)
Legend:	Trees to be Retained Trees to be Preserved			Trees to be I Focus Area	Removed				Sub-focus EAB Remo	area: Tree Locati val	ons			
Tree #	Botanical Name	Common Name	No.	DBH (cm)	Height (m)	Tre	e Condit	ion	Dripline Radius	Tree Location	City of Toronto	Tree Protectio	Recommendation	Remarks
						''	C3	CV			Category	n Zone		
	Tilia cordata	Little Leaf Linden	7	6-9		G-F	G	F	1-2	Boulevard	5		Remove	lean, in raised planting pit, 10-30% deadwood
	Gleditsia triacanthos	Honeylocust	4	6-9		G	G	F	1-2	Boulevard	5		Remove	lean, in raised planting pit, 10-30% deadwood
Tolman	Street - Yonge Street to Du	plex Avenue												
	Gleditsia triacanthos	Honeylocust	6	5-6		G	G	F	1	Boulevard	5		Retain	compacted boulevard - no sod
	Gleditsia triacanthos	Honeylocust	2	7-8		G	G	G	1.5	Boulevard	5		Retain	sod
	Tilia cordata	Little Leaf Linden	3	10-12		G	G	G	2.5	Boulevard	5		Retain	7 Lorraine Drive
	Tilia cordata	Little Leaf Linden	2	15-20		G	G	G	2.5	Boulevard	5		Retain	Boulevard of condo south side
	Acer saccharum	Sugar Maple	2	15-20		G	G	G	3	Boulevard	5		Retain	Boulevard of condo south side
Kempfo	rd Boulevard - Yonge Street	t to Beecroft Road (North Side	e)											
	Acer saccharum	Sugar Maple	2	±12-35		G	G	G	2-4	Boulevard	5		Retain	
	Tilia cordata	Little Leaf Linden	2	±12		G	G	G	2.5	Boulevard	5		Retain	
	Ulmus japonica x wilsoniana	Accolade Elm	1	±15		G	G	G	2	Boulevard	5		Retain	
	Acer saccharinum	Silver Maple	2	10-15		G	G	G	3	Boulevard	5		Retain	
Kempfo	rd Boulevard - Yonge Street	t to Beecroft Road (South Side	e)											
	Tilia cordata	Little Leaf Linden	5	10-15		G	G	G	2-3	Boulevard	5		Retain	
	Acer platanoides	Norway Maple	5	6-15		G	G	G-F	2-3	Boulevard	5		Retain	
	Acer saccharum	Sugar Maple	2	15-20		G	G	G	3-4	Boulevard	5		Retain	5444 Yonge, pruned
Horshar	n Avenue - Yonge Street to	Beecroft Road	•			•			•		•			
	Fraxinus americana	White Ash	1	±18		F	G	Р	2.5	Boulevard	5		Remove	EAB - north
	Fraxinus americana	White Ash	1	±20		F	G	Р	2.5	Boulevard	5		Remove	EAB - south
Churchi	Il Avenue - Yonge Street to	Beecroft Road												

									d Pre	servatio	n Cha	rts		
<u> </u>	Reimaging Yonge Street - MCEA	1		Field Work			ter McN	amara						I
Tree Asses TI - Trunk I CS - Canop	ield Work: May 18, 2016 ssment Criteria: integrity: assessment of the trunk for y Structure: assessment of scaffold by vigour: assessment of the health		deadwood	Weather: 1		Tree Con Good: tre Fair: tree	ee display displays	15-40% de	eficiency/de	fect within the g	iven tree as:	sessment cr	ment criteria (TI,CS,CV) iteria (TI,CS,CV) essment criteria (TI,CS,C\	Conditions: G=Good, F=Fair, P=Poor, D=Dead
Legenu.	Trees to be Retained Trees to be Preserved			Trees to be F	Removed				Sub-focus a	area: Tree Locati	ons			
Tree #	Botanical Name	Common Name	No.	DBH (cm)	_	Tre	e Condi	tion		Tree Location	City of Toronto	Tree Protectio	Recommendation	Remarks
					(m)	TI	CS	CV	radias		Category	n Zone		
	Gymnocladus dioicus	Kentucky Coffee Tree	2	<5		G	G	G	1	Boulevard	5		Retain	north side
	Celtis occidentalis	Hackberry	1	<5		G	G	G	1	Boulevard	5		Retain	north side
	Liriodendron	Tulip Tree	2	<5		G	G	G	1	Boulevard	5		Retain	north side
	Ulmus americana	American Elm	1	<5		G	G	G	1	Boulevard	5		Retain	north side
	Prunus spp.	Cherry	6	<10		G	G	G	1	Boulevard	5		Retain	south side
	Malus spp.	Crabapple	2	10-20		G	G	G	2-3	Boulevard	5		Retain	
Ellerslie	Avenue - Yonge to Beecroft													
	Ulmus americana	American Elm	3	6-9		G-F	G-F	G-P	1	Boulevard	5		Retain	1x1m planter, frost cracks, exposed bark, bark curl
	Acer x freemanii	Freeman Maple	4	4-5		G	G	G	1	Boulevard	5		Retain	boulevard with sod
	Celtis occidentalis	Hackberry	3	8-10		G	G	G	2	Boulevard	5		Retain	boulevard - 38 Ellerslie
	Prunus spp.	Cherry	1	6-8		G	G	G	2	Boulevard	5		Retain	
	Quercus robur 'Fastigiata	Pyramidal English Oak	3	<10		G	G	G	2	Boulevard	5		Retain	Triangle boulevard south side
	Acer saccharinum	Silver Maple	1	±10		F	F	G	2	Boulevard	5		Retain	65 Ellerslie - private
North Yo	ork Boulevard - Yonge Street	to Beecroft Road												
	Quercus rubra	Red Oak	3	±25		G	G	G	4	Boulevard	5		Retain	landscape open space north side
	Picea glauca	White Spruce	9	15-20		G	G	G	2.5	Boulevard	5		Retain	landscape open space north side
	Syringa vulgaris	Lilac clump	2	<10		G	G	G	1	Boulevard	5		Retain	landscape open space north side
	Gleditsia triacanthos	Honeylocust	1	±25		G	G	G	4	Boulevard	5		Retain	landscape open space north side, 5100 Yonge stree
	Ginkgo biloba	Maidenhair Tree	3	15-20		G	G	G	3	Boulevard	5		Retain	0.5x0.5m planter south side
	Quercus alba	White Oak	4	9-11		G	G	G-P	1	Boulevard	5		Retain	1 - poor, planters, 5000 Yonge street
	Quercus robur 'Fastigiata	Pyramidal English Oak	2	5-6		G	F	F	1	Boulevard	5		Retain	planters

				Table	1: Tre	e Inv	ento	rv an	d Pre	servatio	n Cha	rts		
Project: F	Reimaging Yonge Street - MCE	4		Field Work				_						
	ield Work: May 18, 2016			Weather: 1	L5 degrees	s, sunny								Conditions: G=Good, F=Fair, P=Poor, D=Dead
TI - Trunk I CS - Canop	sment Criteria: ntegrity: assessment of the trunk f y Structure: assessment of scaffold by vigour: assessment of the health		f deadwood	l & live growt	h in the	Fair: tree	ee displays displays 1	L5-40% de	eficiency/de	fect within the g	iven tree ass	sessment cr	ment criteria (TI,CS,CV) iteria (TI,CS,CV) essment criteria (TI,CS,C)	/)
Legend:	Trees to be Retained Trees to be Preserved			Trees to be I Focus Area	Removed				Sub-focus EAB Remo	area: Tree Locati	ons			
Tree #	Botanical Name	Common Name	No.	DBH (cm)	Height (m)	Tre	e Condit	ion	Dripline Radius	Tree Location	City of Toronto	Tree Protectio	Recommendation	Remarks
						- ''	CS	CV			Category	n Zone		
	Gleditsia triacanthos	Honeylocust	5	<10		G	G	G	1	Boulevard	5		Retain	
Elmhurs	t Avenue - Yonge Street to E	Beecroft Road												
	Ulmus americana	American Elm	7	7-9		G	G	G		Boulevard	5		Retain	city - concrete planters north of stairs
	Pinus nigra	Austrian Pine	5	±20-30		G	G	G		Boulevard	5		Retain	raised landscape planters of 4900 Yonge on private property
	Gleditsia triacanthos	Honeylocust	10	±20-35		G	G	G	3-5	Boulevard	5		Retain	city - boulevards compacted
	Gleditsia triacanthos	Honeylocust	1	±35		G	G	G	4	Boulevard	5		Retain	city - boulevard of 33 Elmhurst - south side
	Pinus nigra	Austrian Pine	4	±25-30		G	G	G	4	Private			Retain	private - boulevard of 33 Elmhurst - south side
	Quercus rubra	Red Oak	1	±20		G	G	G	3	Boulevard	5		Retain	city - boulevard of 33 Elmhurst - south side
	Gleditsia triacanthos	Honeylocust	1	<10		G	G	G	1	Boulevard	5		Retain	city - boulevard
	Acer x freemanii	Freeman Maple	5	10-15		G	G	G	2	Boulevard	5		Retain	city - boulevard, south side adjacent to parking lot
Harlanda	ale Avenue - Yonge Street to	Beecroft Road												
	Quercus rubra	Red Oak	3	±20-40		G	G	G	3-5	Boulevard	5		Retain	city - boulevard
	Pinus nigra	Austrian Pine	4	±20-30		G	G	G-F	3-4	Boulevard	5		Retain	city - boulevard
	Acer platanoides	Norway Maple	1	±20		G	G	G	3	Boulevard	5		Retain	city - island, suppressed, 1m between trees
	Ulmus pumila	Siberian Elm	1	±15		G	G	G	3	Boulevard	5		Retain	city - island, suppressed, 1m between trees
	Quercus robur 'Fastigiata	Pyramidal English Oak	1	<10		G	G	G	1	Boulevard	5		Retain	city - south side
Sheppar	d Avenue West - North Side	- Yonge Street to Beecroft I	Road											
	Syringa reticulata	Ivory Silk Tree	4	<10		G	G	G		Boulevard	5		Retain	1x1m raised planters
	Fraxinus americana	White Ash	2	<10		G	G	Р		Boulevard	5		Remove / EAB	circular planter - EAB
	Tilia cordata	Little Leaf Linden	4	<10		G-F	G	G-F		Boulevard	5		Retain	circular planter
	Quercus robur 'Fastigiata	Pyramidal English Oak	3	<10		G-F	G	G		Boulevard	5		Retain	circular planter

				Table	1: Tre	e Inv	ento	rv an	d Pre	servatio	n Cha	ırts		
Project: Reimaging Yonge St	reet - MCEA	\		Field Work				_						
	Date of Field Work: May 18, 2016													Conditions: G=Good, F=Fair, P=Poor, D=Dead
Tree Assessment Criteria: TI - Trunk Integrity: assessment of CS - Canopy Structure: assessment of CV - Canopy vigour: assessment	of the trunk fo			Tree Condition  Good: tree displays less than 15% deficiency/defect within the given tree assessment criteria (TI,CS,CV)  Fair: tree displays 15-40% deficiency/defect within the given tree assessment criteria (TI,CS,CV)										
Legend:  Trees to be Retained  Trees to be Preserved				Trees to be I	Removed				Sub-focus	area: Tree Locati val	ons			
Tree # Botanical Name	-	Common Name	No.	DBH (cm)	Height (m)	Tree Condition			Dripline Radius	Tree Location	City of Toronto	Tree Protectio	Recommendation	Remarks
						TI	CS	CV			Category	n Zone		
Gleditsia triacan	thos	Honeylocust	1	<10		G	G	G		Boulevard	5		Retain	circular planter
Ulmus japonica > wilsoniana	(	Accolade Elm	4	<10		G	G	G		Boulevard	5		Retain	circular planter
Gleditsia triacan	thos	Honeylocust	1	±15		G	G	G		Boulevard	5		Retain	raise landscape planters 40 Sheppard Avenue West
Acer platanoides King'	'Crimson	Crimson King	1	<10		G	G	G	1	Boulevard	5		Retain	raise landscape planters 40 Sheppard Avenue West
Prunus spp.		Cherry	2	<10		G	G	G	1	Boulevard	5		Retain	raise landscape planters 40 Sheppard Avenue West
Sheppard Avenue West - S	South Side	- Yonge Street to Beecroft	Road											
Ginkgo biloba		Maidenhair Tree	3	7-9		G	G	G	1	Boulevard	5		Retain	1x1m planter pit
Gleditsia triacan	thos	Honeylocust	2	6		G	G	G	1	Boulevard	5		Retain	1x1m planter pit
Secondary Study - East Si	de betwee	n Yonge and Doris												
Sheppard Avenue East - S	outh Side (	no trees on north side)												
Gleditsia triacan	thos	Honeylocust	2	6		G	G	G	1	Boulevard	5		Retain	raised continuous planter, 4m in length
Amelanchier can	adensis	Serviceberry	2	<5		G	G	G	1	Boulevard	5		Retain	raised continuous planter, 4m in length
Tilia cordata		Little Leaf Linden	10	9-10		G	G	G	1.5	Boulevard	5		Retain	raised 1x1m planters
Greenfield Avenue South	Side - Yong	ge Street to Doris Avenue												
Acer x freemanii		Freeman Maple	2	7		G	G	G	1	Boulevard	5		Retain	1x1m planter - boulevard
Ulmus american	a	American Elm	2	7		G	G	G	1	Boulevard	5		Retain	1x1m planter - boulevard
Pyrus calleryana		Bradford pear	1	6		G	G	G	1	Boulevard	5		Retain	1x1m planter - boulevard
Gleditsia triacan	thos	Honeylocust	1	5		G	G	G	1	Boulevard	5		Retain	1x1m planter - boulevard
Spring Garden Avenue - S	outh Side -	Yonge Street to Doris Aver	nue											
Ulmus american	a	American Elm	3	5-7		G	G	G	1	Boulevard	5		Retain	city - 1x1m planter pit
Acer x freemanii		Freeman Maple	1	5-6		G	G	G	1	Boulevard	5		Retain	city - 1x1m planter pit

				Table	1: Tre	e Inv	ento	ry an	d Pre	servatio	n Cha	rts		
Project: F	Reimaging Yonge Street - MCE	A		Field Work				_						
Date of F	ield Work: May 18, 2016			Weather: 1	L5 degrees	, sunny			Conditions: G=Good, F=Fair, P=Poor, D=Dead					
TI - Trunk I CS - Canop CV - Canop	ssment Criteria: Integrity: assessment of the trunk f ly Structure: assessment of scaffolo by vigour: assessment of the health		l & live growtl	<i>/</i> )										
Legend:	Trees to be Retained Trees to be Preserved			Trees to be F Focus Area	Removed				Sub-focus a	area: Tree Locati	ons			
Tree #	Botanical Name	Common Name	No.	DBH (cm)	Height (m)		e Condit		Dripline Radius	Tree Location	City of Toronto	Tree Protectio	Recommendation	Remarks
						TI	CS	CV			Category	n Zone		
	Gleditsia triacanthos	Honeylocust	3	5-10		G	G	G	1.5	Boulevard	5		Retain	city - 1x1m planter pit
	Syringa reticulata	Ivory Silk Tree	2	6		G	G	G	1	Boulevard	5		Retain	city - 1x1m planter pit
	Tilia cordata	Little Leaf Linden	2	±15-25		G	G	G	3-4	Boulevard	5		Retain	
Spring G	arden Avenue - North Side	- Yonge Street to Doris Avenu	ue											
	Celtis occidentalis	Hackberry	7	±8-15		G	G	G	blvd	Boulevard	5		Retain	
	Acer saccharinum	Silver Maple	4	±70-110		G	G	G-F	blvd	Boulevard	5		Retain	1-fair in front of legion
	Ginkgo biloba	Maidenhair Tree	1	±5		G	G	G	blvd	Boulevard	5		Retain	
	Quercus rubra	Red Oak	5	±8-10		G	G	G-F	1.5	Boulevard	5		Retain	2-fair
	Tilia cordata	Little Leaf Linden	6	±15-35		G	G	G	3-5	Boulevard	5		Retain	adjacent to 18 Spring Garden Avenue
Hollywo	od Avenue - Yonge Street to	Doris Avenue - South Side												
	Quercus rubra	Red Oak	7	2-9		G	G	G-P	1	Boulevard	5		Retain	1-poor
	Aesculus hippocastanum	Horsechestnut	1	12		G	G	G	2	Boulevard	5		Retain	
Hollywo	od Avenue - Yonge Street to	Doris Avenue - North Side												
	Ginkgo biloba	Maidenhair Tree	1	5		G	G	G	1	Boulevard	5		Retain	
	Acer saccharinum	Silver Maple	1	±40		G	G	G	5	Boulevard	5		Retain	
	Gleditsia triacanthos	Honeylocust	9	±20		G	G	G	3	Boulevard	5		Retain	
	Fraxinus americana	White Ash	3	20-40		G	G	D	3-5	Private	1		Remove/ EAB	planter of condo - 18 Hollywood Avenue. Condo corporation should consider removal
Elmwoo	d Avenue - Yonge Street to	Doris Avenue												
	Gleditsia triacanthos	Honeylocust	2	5-6		G	G	G	1	Boulevard	5		Retain	city - continuous planter 4-10m length
	Pinus strobus	White Pine	1	±20		G	G	G	3	Boulevard	5		Retain	city - boulevard
	Acer saccharum	Sugar Maple	3	±15-20		G	G	G	4	Boulevard	5		Retain	city - 1x1m raised planter, 1-dead

				Table	1: Tre	e Inv	ento	ry an	nd Pre	servatio	n Cha	rts					
Project: F	Reimaging Yonge Street - MCEA	1			Field Work Completed By: Peter McNamara												
	ield Work: May 18, 2016	Weather: 1	15 degree	s, sunny								Conditions: G=Good, F=Fair, P=Poor, D=Dead					
TI - Trunk I CS - Canop CV - Canop	ssment Criteria: Integrity: assessment of the trunk fo y Structure: assessment of scaffold by vigour: assessment of the health	branches, unions and canopy	l & live growt	Tree Condition  Good: tree displays less than 15% deficiency/defect within the given tree assessment criteria (TI,CS,CV) Fair: tree displays 15-40% deficiency/defect within the given tree assessment criteria (TI,CS,CV) Poor: tree displays greater than 40% deficiency/defect within the given tree assessment criteria (TI,CS,CV)													
Legend:	Trees to be Retained Trees to be Preserved			Trees to be I	Removed				Sub-focus EAB Remo	area: Tree Locati	ons						
Tree #	Botanical Name	Common Name	No.	DBH (cm)	Height (m)	Tre	e Condi	ion		Tree Location	City of Toronto	Tree Protectio n Zone	Recommendation	Remarks			
					(111)	TI	CS	CV			Category						
	Ginkgo biloba	Maidenhair Tree	2	±15-20		G	G	G	3	Boulevard	5		Retain	city - 1x1m raised planter			
	Acer saccharinum	Silver Maple	4	±20-25		G	G	G	4	Boulevard	5		Retain	city - 1x1m raised planter			
	Acer saccharinum	Silver Maple	5	±20-25		G	G	G	4	Private			Retain	landscape open space planters - plaza			
Hillcrest	Avenue - Yonge Street to Do	oris Avenue															
	Acer saccharinum	Silver Maple	3	±20		G	G	G-D	3	Boulevard	5		Retain	1-dead, 1-poor			
	Tilia cordata	Little Leaf Linden	3	±18-20		G	G	G	4	Boulevard	5		Retain	one on north side adjacent to Scotiabank			
	Gleditsia triacanthos	Honeylocust	1	±10		G	G	G	2	Boulevard	5		Retain				
	Acer saccharum	Sugar Maple	1	±60		G	G	Р	8	Boulevard	5		Retain				
	Acer platanoides 'Crimson King'	Crimson King	1	±50		G	G	G	7	Boulevard	5		Retain				
	Acer saccharum	Sugar Maple	9	±20-25		G	G	G-F	4	Boulevard	5		Retain	3-fair			
	Ginkgo biloba	Maidenhair Tree	1	±15		G	G	G	3	Boulevard	5		Retain				
	Ulmus americana	American Elm	1	multi 15	-	F	F	F	3	Boulevard	5		Retain				
	Aesculus hippocastanum	Horsechestnut	1	±25		G	G	G	5	Boulevard	5		Retain				
mpress	Avenue - Yonge Street to Do	oris Avenue															
	Fraxinus americana	White Ash	3	±8-10		G	G	Р	2	Boulevard	5		Remove/ EAB	terraced planter - EAB			
	Pyrus calleryana	Bradford pear	2	±6-7		G	G	G	1.5	Boulevard	5		Retain				
	Acer platanoides	Norway Maple	6	±15-25		G	G	G	3	Boulevard	5		Retain				
	Acer saccharum	Sugar Maple	9	±15-25		G	G	G	4	Boulevard	5		Retain				
	Tilia americana	Basswood	3	±30-40		F	G	G	5	Boulevard	5		Retain				
	Tilia cordata	Little Leaf Linden	3	±20		G	G	G	4	Boulevard	5		Retain				
	Ginkgo biloba	Maidenhair Tree	4	5-6		G	G	G	1	Private			Retain	landscape planter northside of sidewalk			

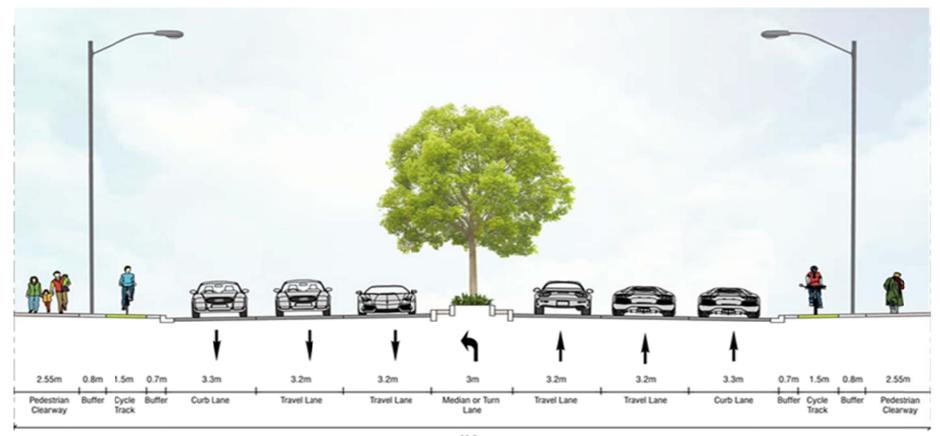
Project: F	Reimaging Yonge Street - MCEA	Λ.		Field Work	Complete	d By: Pe	ter McN	amara						
	ield Work: May 18, 2016											Conditions: G=Good, F=Fair, P=Poor, D=Dead		
	sment Criteria:			Weather: 15 degrees, sunny C										Conditions: G-Good, I -I all, F -F ool, D-Dead
	ntegrity: assessment of the trunk for	or any defects or weaknesses.						s less thar	15% defici	ency/defect with	in the giver	tree assess	ment criteria (TI,CS,CV)	
	y Structure: assessment of scaffold									fect within the g				
CV - Canop L <b>egend:</b>	y vigour: assessment of the health	of the tree, base on the amount of	deadwood	& live growth	n in the	Poor: tre	e displays	greater th	nan 40% def	iciency/defect w	ithin the giv	ven tree ass	essment criteria (TI,CS,C	V)
Legena.	Trees to be Retained			Trees to be F	Removed				Sub-focus	area: Tree Locati	ons			
	Trees to be Preserved	1		Focus Area	1	1			EAB Remov					-
Tree #	Botanical Name	Common Name	No.	DBH (cm)	_	Tre	e Condi	tion	Dripline	Tree Location	City of	Tree	Recommendation	Remarks
					(m)	TI	CS	CV	Radius		Toronto Category	Protectio n Zone		
	Ulmus parvifolia	Chinese Elm	1	±20		G	G	G	3	Private			Retain	landscape open space adjacent to 5157 Yonge Stree
Kingsdal	! e Avenue - Yonge Street to [	Doris Avenue	-					-			-	-		
	Tilia amaniaana	Desaured	1						1	Davilavand			Detein	
	Tilia americana	Basswood	1	6		G	G	Р	1	Boulevard	5		Retain	
	Tilia cordata	Little Leaf Linden	1	±15		G	G	G	1.5	Boulevard	5		Retain	
	Gymnocladus dioicus	Kentucky Coffee Tree	1	4		G	G	G	1	Boulevard	5		Retain	
	Fraxinus americana	White Ash	3	20-30		F	F	D	4	Boulevard	5		Remove/ EAB	EAB
	Acer platanoides 'Crimson King'	Crimson King	1	±35		G	G	G	5	Boulevard	5		Retain	
Parkviev	Avenue - Yonge Street to D	oris Avenue												
	Ulmus parvifolia	Chinese Elm	2	±20-25		F	G	G	4	Boulevard	5		Retain	
	Fraxinus americana	White Ash	4	±15-25		F	F	P-D	3	Boulevard	5		Remove/ EAB	EAB
	Acer saccharinum	Silver Maple	1	±60		Р	G	G	8	Boulevard	5		Retain	
	Acer saccharum	Sugar Maple	2	±10-20		G	G	G	4	Boulevard	5		Retain	
	Gleditsia triacanthos	Honeylocust	1	4		G	G	G	1	Boulevard	5		Retain	
	Quercus rubra	Red Oak		10		G	G	G	2	Boulevard	5		Retain	
	Syringa reticulata	Ivory Silk Tree		10-15		G	G	G	3	Boulevard	5		Retain	symposium café

			·	Table	1: Tre	e Inv	ento	ry an	d Pre	servatio	n Cha	rts				
Project: F	Reimaging Yonge Street - MC	EA		Field Work				_								
	ield Work: May 18, 2016			Weather: 1	L5 degrees		-Pat		Conditions: G=Good, F=Fair, P=Poor, D=Dead							
TI - Trunk I CS - Canop CV - Canop	isment Criteria: ntegrity: assessment of the trunl y Structure: assessment of scaffo y vigour: assessment of the heal		I & live growtl	h in the	Tree Condition  Good: tree displays less than 15% deficiency/defect within the given tree assessment criteria (TI,CS,CV)  Fair: tree displays 15-40% deficiency/defect within the given tree assessment criteria (TI,CS,CV)  Poor: tree displays greater than 40% deficiency/defect within the given tree assessment criteria (TI,CS,CV)											
egend:	Trees to be Retained Trees to be Preserved			Trees to be F Focus Area					EAB Remo		ons			,		
ree #	Botanical Name	Common Name	No.	DBH (cm)	Height (m)		e Condit		Dripline Radius	Tree Location	City of Toronto	Tree Protectio	Recommendation	Remarks		
						TI	CS	CV			Category	n Zone				
	Acer negundo	Manitoba Maple	1	±30		Р	F	G	4	Private	1		Retain	landscape open space		
	Gleditsia triacanthos	Honeylocust	1	±50		F	G	G	6	Private	1		Retain	landscape open space		
	Quercus macrocarpa	Burr Oak	1	6		G	G	G	1	Boulevard	5		Retain			
	Acer saccharum	Sugar Maple	3	6-7		G	G	G	2	Boulevard	5		Retain			
∕Ickee A	venue - Yonge Street to D	oris Avenue														
	Acer saccharinum	Silver Maple	1	±50		G	G	G	7	Boulevard	5		Retain	south side		
	Acer saccharum	Sugar Maple	4	5-6		G	G	G	1	Boulevard	5		Retain	south side		
	Fraxinus americana	White Ash	1	±15		F	G	Р	2	Boulevard	5		Remove/ EAB	north side, EAB		
	Gleditsia triacanthos	Honeylocust	1	±12		G	G	G	2	Boulevard	5		Retain	north side		
Church A	Avenue - Yonge Street to D	Ooris Avenue														
	Acer platanoides	Norway Maple	2	±50-95		G	G	G	10	Private			Retain	landscape open space of 19 Church Avenue		
	Gleditsia triacanthos	Honeylocust	7	7-11		G	G	G	2	Boulevard	5		Retain	boulevard - 1x2m planting pit		
Vorthto	wn Way - Yonge Street to	Doris Avenue														
	Ginkgo biloba	Maidenhair Tree	1	±15		G	G	G	3	Private			Retain	raised landscape planter		
	Ginkgo biloba	Maidenhair Tree	3	±10		G	G	G	2	Private			Retain	Roundabout		
	Ginkgo biloba	Maidenhair Tree	4	±15-20		G	G	G	4	Private			Retain	raised planters		
Holmes .	Avenue - Yonge Street to I	Doris Avenue														
	Acer saccharum	Sugar Maple	1	±20		G	G	G	3	Boulevard	5		Retain	landscape open space		
	Ginkgo biloba	Maidenhair Tree	6	±6-7		G	G	G	1	Boulevard	5		Retain	landscape open space of condo		
	Sorbus aucuparia	Mountain Ash	1	multi <10		F	G	G	1	Boulevard	5		Retain	landscape open space		
	Quercus rubra	Red Oak	1	9		G	G	G	1	Boulevard	5		Retain	landscape open space of Willowdale Baptist Chi		

				Table	1: Tre	e Inv	ento	rv an	d Pre	servatio	n Cha	rts		
Project: F	Reimaging Yonge Street - MCEA			Field Work				_						
ree Asses I - Trunk I S - Canop V - Canop	ield Work: May 18, 2016 isment Criteria: ntegrity: assessment of the trunk for y Structure: assessment of scaffold by vigour: assessment of the health	deadwood	Weather: 1		Tree Con Good: tre Fair: tree	ee displays displays 1	L5-40% de	n 15% deficio eficiency/de nan 40% def						
gend:	Trees to be Retained Trees to be Preserved			Trees to be R Focus Area	emoved				Sub-focus a	area: Tree Locati	ons			
ree #	Botanical Name	Common Name	No.	DBH (cm)	Height (m)		e Condit		Dripline Radius	Tree Location	City of Toronto	Tree Protectio	Recommendation	Remarks
Nina An	anua Vanga Straat ta Daria	A.10.0110				ТІ	CS	CV			Category	n Zone		
live Av	enue - Yonge Street to Doris	Avenue	1			I	ı	I	I					
	Gleditsia triacanthos	Honeylocust	6	±30-50		G	F	G	6	Boulevard	5		Retain	hydro pruned
		Silver Maple	3	7-8		G	G	G	1	Boulevard	5		Retain	
	Acer platanoides 'Crimson King'	Crimson King	4	±20-35		G	G	G	4	Boulevard	5		Retain	
	Gleditsia triacanthos	Honeylocust	9	6-11		G	G	G	2	Boulevard	5		Retain	
	Ulmus pumila	Siberian Elm	1	±25		G	G	G	4	Private			Retain	laneway of condo
nch Av	enue (east/ south side) - Yor	nge Street to Doris Avenue												
	Malus spp.	Crabapple	1	±30		F	F	G	5	Private	1		Retain	landscape open space of condo
	Gleditsia triacanthos	Honeylocust	2	±7-10		G	G	G	1	Private			Retain	landscape open space of condo
	Gleditsia triacanthos	Honeylocust	1	±60		G	G	G	7	Private	1		Retain	landscape open space of condo
	Acer saccharinum	Silver Maple	2	±50-60		G	G	G	8	Private	1		Retain	landscape open space of condo
ishop <i>A</i>	venue - No trees on north si	ide												

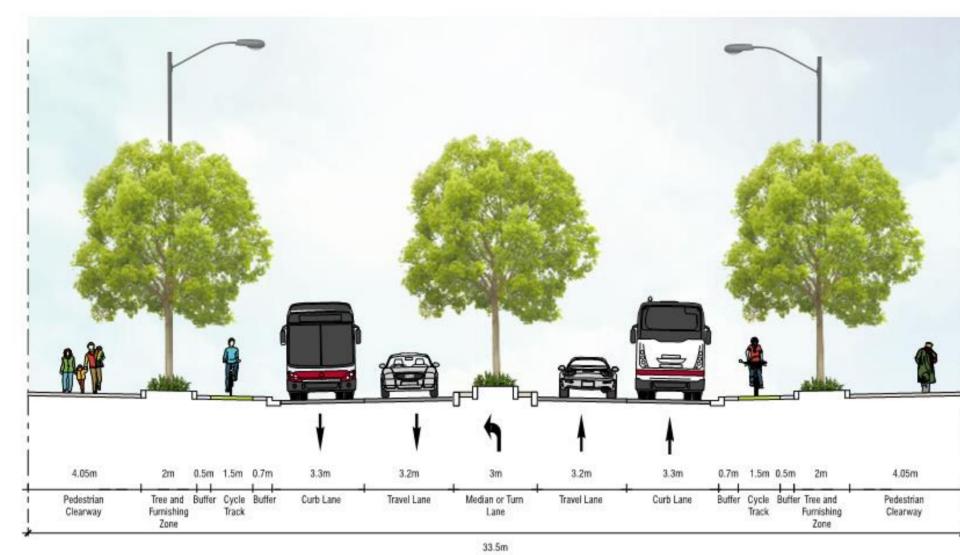


#### **DESIGN OPTION 4A: 6 LANES**



# DESIGN OPTION 4B: 4 LANES

## **Typical Cross Section**



What do you like or dislike about this option?

Use a post-it note to tell us

**Typical Section – Plan View** 

