

# Appendix E

## Tree List

## List of preferred species for Urban Trees

SPECIES CODE	LATIN NAME	COMMON NAME	Salt Tolerance	Native	Soil pH	Soil Moisture	Soil Compaction Tolerance	Shade Tolerance	Flowers	Mature Size (m) (height & width)	Form	Planting Site Location
Aca	Acer campestre	Hedge Maple				D		T		10x10	R	1,2,3,4
Af	Acer x freemanii	Silver/Red Maple				W,A,D						3,4
Afar	Acer x freemanii 'Armstrong'	Armstrong Maple				W,A,D						3,4
Ag	Acer ginnala	Amur Maple			6.1-7.5	A				7x7	R	1,2,3,4
Ar	Acer rubrum	Red Maple	S	X	4.5-6.5	W,A	I			17x15	O	3,4
<b>Arb</b>	<b>Acer rubrum 'Bowhall'</b>	<b>Bowhall Maple</b>	<b>S</b>	<b>X</b>	<b>4.5-6.5</b>	<b>W,A</b>	<b>I</b>			<b>17x15</b>	<b>O</b>	<b>3,4</b>
Arf	Acer rubrum 'Frank Jr.'	Redpointe Maple	S	X	4.5-6.5	W,A	I			17x15	O	3,4
Asa	Acer saccharinum	Silver Maple		X	4.0-7.3	W,A						4
Asas	Acer saccharinum 'Silver Queen'	Silver Queen Maple				W,A						3,4
As	Acer saccharum	Sugar Maple	S	X	6.0-7.5	W,A	S	T		20x15	O	3,4
At	Acer tataricum	Tatarian Maple										2,3
Ac	Amelanchier canadensis	Serviceberry	T	X	6.0-6.5	W,A	S	T	X	8x3	O	1,2,3,4
Cb	Carpinus betulus	Hornbeam										2,3
<b>Cbf</b>	<b>Carpinus betulus 'Frans Fontaine'</b>	<b>Frans Fontaine Hornbeam</b>										<b>2</b>
Co	Celtis occidentalis	Common Hackberry	T	X	6.0-6.5	W,A,D	M	M		20x18	R	3,4
Cl	Crataegus laevigata 'Paul's Scarlet'	Paul's Scarlet Hawthorn				D			X			1,2,3,4
Gbp	Ginkgo biloba 'Princeton Sentry'	Princeton Sentry Ginkgo	M		4.5-7.0	A		S		17x11	I,P	2,3,4
<b>Gbp</b>	<b>Ginkgo biloba 'Saratoga'</b>	<b>Sartoga Ginkgo</b>	<b>M</b>		<b>4.5-7.0</b>	<b>A</b>		<b>S</b>		<b>17x11</b>	<b>I,P</b>	<b>3,4</b>
Gt	Gleditsia triacanthos var. inermis 'Skycole'	Skyline Honeylocust	T		6.0-7.5	W,A,D	T	S		15x13	P	3,4
<b>Gt</b>	<b>Gleditsia triacanthos var. inermis 'Draves'</b>	<b>Street Keeper Honeylocust</b>	<b>T</b>		<b>6.0-7.5</b>	<b>W,A,D</b>	<b>T</b>	<b>S</b>		<b>15x13</b>	<b>P</b>	<b>3,4</b>
Gme	Gymnocladus dioica 'Espresso-JFS'	Espresso Kentucky Coffee Tree	T			A,D	T	S				3,4
<b>Ltf</b>	<b>Liriodendron tulipifera 'Fastigiatum'</b>	<b>Columnar Tulip Tree</b>	<b>M</b>			<b>A</b>	<b>T</b>					<b>2,3,4</b>
Mr	Malus 'Royal Raindrops'	Royal Raindrops Crab Apple	T		5.5-6.5	A,D	I	S	X	20x15	R	1,2,4
Ns	Nyssa sylvatica	Black Gum	T	X		W,A,D						3,4
Pab	Platanus x acerfolia 'Bloodgood'	Bloodgood London Plane Tree	M		5.5-7.5	W,A		S				3,4
Pa	Platanus occidentalis	Sycamore	S	X	6.5-8.5	W,A	T	M		35x20	O	3,4
Po	Populus tremuloides	Trembling Aspen	M	X	4.3-9.0	W,A						4
Pc	Pyrus calleryana	Calleryana Pear							X	13x7	O	2,3,4
Ov	Ostrya virginiana	Ironwood		X	4.2-7.6	A		T				2,3,4
Qa	Quercus alba	White Oak	M	X	4.5-6.8	A,D						3
Qac	Quercus alba x robur 'Crimschmidt'	Crimson Spire Oak	M									2,3,4
Qb	Querus bicolor	Swamp Oak	M	X	4.5-6.5	D				15x15	R	4

Qm	Quercus macrocarpa	Bur Oak	T,M	X	4.0-8.5	W,A,D	S			18x13	O	3,4
Qr	Quercus robur	English Oak	T		5.0-7.0	A	S	S		18x13	R	3,4
Qrf	Quercus robur fastigiata	English Pyramidal Oak	T		5.0-7.0	A	S	S		15x5	F	2,3,4
Qru	Quercus rubra	Red Oak	T	X	4.5-6.5	A	S	T		16x15	R	4
Saf	Sorbus aucuparia fastigiata	Pyramidal European Mountain Ash	M						X	11x2	F	2
Sd	Sorbus decora	Showy Mountain Ash	M	X	4.0-7.0	W,A			X			1,2
Stf	Sorbus thuringiaca fastigiata	Oakleaf Mountain Ash	M						X	7x3	F	1,2,4
Sr	Syringa reticulata 'Ivory Silk'	Japanese Ivory Silk Lilac							X			1,2,4
Ta	Tilia americana	Basswood	M,S	X	6.5-7.5	A	S			25x13	P,R	3,4
Tcc	Tilia cordata 'Corzam'	Corinthian Linden	M,S		6.5-7.5	A	S		X	25x13	P,R	2,3,4
Tch	Tilia cordata 'Halka'	Summer Sprite Linden	M,S		6.5-7.5	A	S		X	25x13	P,R	2,3,4
Uav	Ulmus americana var. resil	American Elm, DED resistant varietie	M		5.0-8.0	D						3,4
Up	Ulmus propinqua 'JFS-Bieberich'	Emerald Sunshine Elm	M		5.0-8.0	D						3,4
Zs	Zelkova serrata	Zelkova			6.0-6.9							3,4

**All Fraxinus Species Are Temporarily Prohibited Due To Emerald Ash Borer Infestation In Waterloo Region**

last updated: Feb, 2012

SALT TOLERANCE, S - Sensitive, M - Moderately Sensitive, T - Tolerant

SOIL pH, On scale of 1.0 (acid) to 14.0 (base) with 7.0 (neutral)

SOIL MOISTURE, W - Moist, A - Average, D - Dry

SOIL COMPACTION TOLERANCE, S - Sensitive, M - Moderately Sensitive, T - Tolerant

TRANSPLANTING EASE, S - Sensitive, M - Moderately Sensitive, T - Tolerant

SHADE TOLERANCE - T-Tolerance to Shade, M -Moderately Tolerant of Shade (Semi-shade), S -Sensitive to Shade

FORM - O-oval, R-round, F-fastigate,I-irregular,P-pyramidal

PLANTING SITE LOCATION - 1 - Under Utility Lines, 2 - Center Median Plantings, 3 -Street Tree, 4 -Park Plantings

File: h:pws/for-hort/forestry/policies/species.xls

Yellow New Additions

**APPENDIX C: Urban Forest Details -Tree Planting & Establishment Best Management Practices**

See the following link to the City of Kitchener website: ([Link](#))

## **Urban Forest Details -Tree Planting & Establishment Best Management Practices**

<b>Asset Management</b>	
UF.1.1	Site Inspection Report – Tree Planting and Soil Habitat Zone
UF.1.2	Initial Acceptance Certificate – Tree Planting and Soil Habitat Zone
UF.1.3	Final Acceptance Certificate – Tree Planting and Soil Habitat Zone
<b>Planning</b> (AutoCAD file downloads city website)	
UF.2.3	Preliminary Master Tree Planting Plan Template
UF.2.4	Final Master Tree Planting Plan Template & Detail Sheet
UF.2.5	Minimum Tree Planting Requirements Table – Tree Planting Analysis (available for download city website)
<b>Soils</b>	
UF.3.1	Soil Habitat Zone & Volume Requirements For Trees In Boulevards
UF.3.2	Soil Habitat Zone & Root Pathways - Type 1 (Big O Pipe)
UF.3.3	Soil Habitat Zone & Root Pathways - Type 2 (Silva Cells)
UF.3.4	Soil Habitat Zone Installation & Specifications
UF.3.5	Soil Habitat Zone & Silva Cells
UF.3.6	Soil Volume Calculator (available for download city website)
<b>Tree Planting &amp; Establishment</b>	
UF.4.1	Standard Deciduous & Coniferous Tree Planting Detail

Operations, Infrastructure Services Department  
**Site Inspection Report - Tree Planting and Soil Habitat**



Date: \_\_\_\_\_

Project Name: \_\_\_\_\_

Registered Plan #: \_\_\_\_\_

Site Address: \_\_\_\_\_

Owner's Name: \_\_\_\_\_

Consulting Landscape Architect: \_\_\_\_\_

Initial Acceptance

Final Acceptance

Contractor: \_\_\_\_\_

Those in Attendance at Meeting: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

The above is considered to be a true and accurate recording of the site conditions. All contract documents, development guidelines and City of Kitchener Standard Specifications govern this inspection report. All deficiencies are to be remedied by the Developer or their representatives within **30 days** or as approved by the assigned City of Kitchener staff representative.

Agreed to by all parties on: \_\_\_\_\_ INSPECTION #: \_\_\_\_\_

\_\_\_\_\_  
Operations Representative (Name)

\_\_\_\_\_  
Consultant Landscape Architect/Representative (Name)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Signature)



**1. Soil Habitat Zone**

- 1.1. Y  N  Soil report received.
- 1.2. Y  N  Required quantity of LST, MST, SST soil habitats installed per approved plan.
- 1.3. Y  N  Soil habitat zones excavated per approved plan.
- 1.4. Y  N  Soil test results meet requirements per approved plan.
- 1.5. Y  N  Soil depths and volumes installed, compacted per approved plan.
- 1.6. Y  N  No soil settlement present.

1.7. Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**2. Root Pathways**

- 2.1. Y  N  Root pathways installed per approved plan.

2.2. Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**3. Tree Planting**

- 3.1. Y  N  Quantity of LST, MST & SST trees planted per approved plan.
- 3.2. Y  N  All trees 50 mm balled and burlapped per approved plan.
- 3.3. Y  N  Tree species per approved plan.
- 3.4. Y  N  Tree health and structure at time of planting per approved plan.
- 3.5. Y  N  Trees planted at correct height.
- 3.6. Y  N  Trees straight and staked correctly.
- 3.7. Y  N  Mulching per approved plan (width, depth, type, no volcano, excess soil).

3.8. Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**4. Tree Maintenance**

- 4.1. Y  N  Tree stewardship and watering being carried out.
- 4.2. Y  N  Required maintenance (staking, mulching, public education) being carried out.
- 4.3. Y  N  Noted problems (e.g. resident not participating in tree stewardship, vandalism).
- 4.4. Y  N  *At final acceptance:* Trees are healthy and vigorous and no longer require supplementary watering.

4.5. Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

A record of all deficiencies per address will be provided by the Consultant Landscape Architect to the Operations representative.

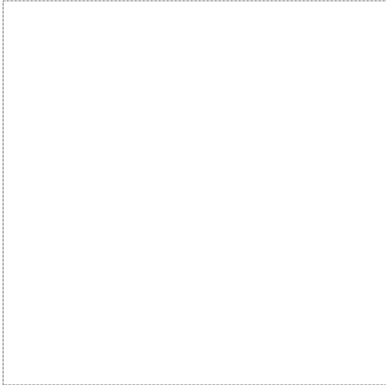
Operations, Infrastructure Services Department  
**Initial Acceptance Certificate – Tree Planting and Soil Habitat**



Date: \_\_\_\_\_  
Project Name: \_\_\_\_\_ Registered Plan #: \_\_\_\_\_  
Site Address: \_\_\_\_\_ Owner's Name: \_\_\_\_\_

Pursuant to the City of Kitchener Subdivision Agreement No. \_\_\_\_\_ and dated \_\_\_\_\_, I \_\_\_\_\_ of the firm \_\_\_\_\_ hereby certify that the municipal improvement work noted herein meets all the requirements for a Initial Acceptance Certificate as specified in the said subdivision agreement mentioned above, and is constructed in accordance with the City of Kitchener Subdivision Manual. I hereby recommend this municipal improvement for approval of the Initial Acceptance Certificate.

\_\_\_\_\_  
Consultant Landscape Architect (Name) Date  
\_\_\_\_\_  
(Signature)  
\_\_\_\_\_  
Signing Officer (Consulting Firm) (Name) Date  
\_\_\_\_\_  
(Signature)



Seal

Approved/Rejected on: \_\_\_\_\_  
Date City of Kitchener Operations Reviewer

Causes for Rejection: (see attached inspection report) \_\_\_\_\_

I hereby certify that the items listed as reasons for rejection on the attached report have been corrected.

\_\_\_\_\_  
Consultant Landscape Architect City of Kitchener Operations Reviewer

Date Maintenance Period to Start: \_\_\_\_\_

Anticipated Date Maintenance Period to End: \_\_\_\_\_

cc: Consultant Landscape Architect  
Engineering



Operations, Infrastructure Services Department  
**Final Acceptance Certificate – Tree Planting and Soil Habitat**



Date: \_\_\_\_\_  
Project Name: \_\_\_\_\_ Registered Plan #: \_\_\_\_\_  
Site Address: \_\_\_\_\_ Owner's Name: \_\_\_\_\_

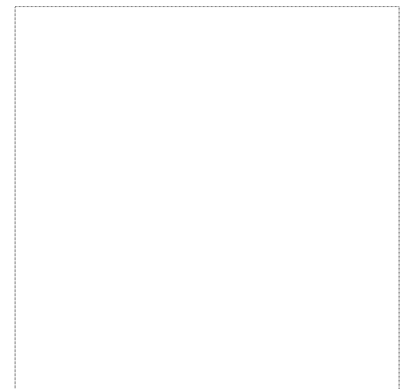
Pursuant to the City of Kitchener Subdivision Agreement No. \_\_\_\_\_ and dated \_\_\_\_\_, I \_\_\_\_\_ of the firm \_\_\_\_\_ hereby certify that the municipal improvement work noted herein meets all the requirements for a Final Acceptance Certificate as specified in the said subdivision agreement mentioned above, and is constructed in accordance with the City of Kitchener Subdivision Manual. I hereby recommend this municipal improvement for approval of the Final Acceptance Certificate.

\_\_\_\_\_  
Consultant Landscape Architect (Name) Date

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
Signing Officer (Consulting Firm) (Name) Date

\_\_\_\_\_  
(Signature)



Seal

Approved/Rejected on: \_\_\_\_\_  
Date City of Kitchener Operations Reviewer

Causes for Rejection: (see attached inspection report) \_\_\_\_\_

I hereby certify that the items listed as reasons for rejection on the attached report have been corrected.

\_\_\_\_\_  
Consultant Landscape Architect City of Kitchener Operations Reviewer

Date Maintenance Period to Start: \_\_\_\_\_

Anticipated Date Maintenance Period to End: \_\_\_\_\_

Digital As-Built Plans received Y  N

cc: Consultant Landscape Architect  
Engineering