

TREE PROTECTION BARRIER

TI-2 N.T.S.

Prior to the commencement of any site activity the tree protection barriers specified on this plan must be installed and written notice provided to Urban Forestry. The tree protection barriers must remain in effective condition until all site activities including landscaping are complete. Where required, signs as specified in the Arborist Report "Tree Protection Zone" must be attached to all

Any roots or branches which extend beyond TPZ indicated on this plan which require pruning, must be pruned by a qualified Arborist or other tree professional as approved by Urban Forestry. All pruning of tree roots and branches must be in accordance with good arboricultural standards. Roots located outside the TPZ that have received approval from Urban Forestry to be pruned must first be exposed by hand digging or by using a low pressure hydro vac method. This will allow a proper pruning cut and minimize rearing of the roots. The Arborist/tree professional retained to carry out crown or root pruning must contact Urban Forestry no less than 48 hours prior to conducting any specified work.

The following chart is showing minimum required distances for determining a Tree Protection Zone (TPZ) for Town—owned trees located on a Town Street, in parks and trees on private property subject to either the Ravine and Natural Feature Protection By-law or the Private tree By—law. Some trees and some site conditions may require a larger TPZ.

Table 1 — Tree Protection Zones:

Trunk Diameter	Minimum Prot	tection	Minimum Protection	Minimum Protection				
DBH*	Distances Required**		Distances Required					
	Town-owned and Private	Trees	Trees in Areas Protected by the Ray					
		and	d Natural Feature Protection By—law					
			Whichever of the two is greater:					
<10cm	1.8m		The drip line****or 1.2m					
10-30cm	2.4m		The drip line or 3.6m					
31-50cm	3.0m		The drip line or 4.8					
51-60cm	3.6m		The drip line or 6.0m					
61-70cm	4.2m		The drip line or 8.4m					
71-80cm	4.8m		The drip line or 9.6m					
81-90cm	5.4m		The drip line or 10.8m					
91-100cm	6.0m		The drip line or 12.0m					

Written notice must be provided to Urban Forestry prior to the removal of the tree protection barriers.

- 1. For trees over 100 cm. DBH, add 10cm. to the TPZ for every one centimeter of DBH.
- 2. Roots can extend from the trunk to 2-3 times the distance of the drip line (See Detail 3, TP-2) 3. Diameter at breast height (DBH) measurement of tree trunk taken at 1.37 metres above ground.
- 4. Tree Protection Zone distances are to be measured from the outside edge of the tree base towards the drip line and may be limited by an existing paved surface, provided the existing paved surface remains intact throughout the construction work.

*Diameter at breast height (DBH) measurement of tree trunk taken at 1.4 metres above the ground. ** Tree Protection Zone distances are to be measured from the outside edge of the tree base.

- *** Diameter (30cm) at which the trees qualify for protection under the private tree by-law. **** The drip line is defined as the area beneath the outer most branch tips of the tree.
- ***** Converted from ISA Arborists' Certification Study Guide, general guideline for tree protection barriers of 1 foot of diameter from
- the stem for each inch of stem diameter.
- Within a TPZ there must be:
- no construction: — no altering of grade by adding fill, excavating, trenching, scraping, dumping or disturbance of any kind.
- no storage of construction materials, equipment, soil, construction waste or debris.
- no disposal of any liquids e.g. concrete sleuth, gas, oil, paint.
- no movement of vehicles, equipment, or pedestrians. — no parking of vehicles or machinery.
- directional micro-tunneling and boring may be permitted with the limits of a TPZ subject to approval by Urban Forestry. — open face cuts outside a TPZ that are consistent with an approved plan and that require root pruning, require the services of a qualified arborist or approved tree professional. An exploratory dig, either by hand or using low water pressure hydro vac method, must be completed prior to commencing with open face cuts outside the TPZ.
- The above mentioned requirements are for area(s) designated as a TPZ. These requirements should also be implemented outside the TPZ in areas where tree roots are located. The roots of a tree can extend from the trunk to
- approximately 2-3 times the distance of the dripline.

TREE PROTECTION NOTES

	Jer			(cm)	Jiam (ition	ture	Comments - Condition	enda	1402	SN P	Ash sp.	Fraxinus Sp. Fraxinus Sp.	20
	Owne	Common Name	Botanical Name	DBH (cm	Canopy Diam (m)	Condition	Structure	Related	Recommenda	1404	N	Ash sp.	Fraxinus Sp.	33
					Ca			Signs of rot typical of an		1405 1406	P P	Ash sp. Ash sp.	Fraxinus Sp. Fraxinus Sp.	22 15
1	N	Silver Maple	Acer saccharinum	132	12	Р	Р	older growth tree Signs of rot typical of an	Р	1407 1408	N P	Ash sp. Ash sp.	Fraxinus Sp. Fraxinus Sp.	24 31
1	N	Silver Maple Dead Coniferous	Acer saccharinum	180 30	12	P D	P	older growth tree	P	1409	Р	Ash sp.	Fraxinus Sp.	22
\dagger	N N	Norway Spruce	Picea abies	57	10	F	F	Tree is Dead	Р	1410 1411	SN P	Ash sp. Ash sp.	Fraxinus Sp. Fraxinus Sp.	25 24
-	N N	Norway Spruce Norway Spruce	Picea abies Picea abies	45 46	6 8	F	P F	Co-dominant stems	P P	1412 1413	P P	Ash sp. Ash sp.	Fraxinus Sp. Fraxinus Sp.	27
1	N	Norway Spruce	Picea abies	59	8	F	F		Р	1414	Р	Ash sp.	Fraxinus Sp.	30
	SN	Ash sp.	Fraxinus Sp.	39	6	Р	Р	2 stem, tree is nearly dead due to EAB	Р	1415 1416	P P	Ash sp. Ash sp.	Fraxinus Sp. Fraxinus Sp.	28 31
1	M	Norway Spruce	Picea abies	55 27	8	F P	F		P P	1417 1418	P P	Ash sp.	Fraxinus Sp.	33 31
+	M	Norway Spruce Siberian Elm	Picea abies Ulmus pumila	53	8	Р	Р	Significant deadwood in	P	1418	P	Ash sp. Ash sp.	Fraxinus Sp. Fraxinus Sp.	30
+	M	Siberian Elm	Ulmus pumila	22	2	F-P	P	canopy	P	1420 1421	P SN	Ash sp. Ash sp.	Fraxinus Sp. Fraxinus Sp.	23
1	M	Siberian Elm Siberian Elm	Ulmus pumila	65	6	Р	F-P	Equiting hading present	Р	1422	Р	Ash sp.	Fraxinus Sp.	28
+	M	Siberian Elm	Ulmus pumila Ulmus pumila	76 26	2	P	P	Fruiting bodies present	P P	1423 1424	P P	Ash sp. Ash sp.	Fraxinus Sp. Fraxinus Sp.	22
+	M	Siberian Elm Siberian Elm	Ulmus pumila Ulmus pumila	27 42	8	P F-P	P		P P	1425	Р	Ash sp.	Fraxinus Sp.	18
1	М	Siberian Elm	Ulmus pumila	18	2	F-P	Р		Р	1426	Р	Swamp Cedar	Thuja occidentalis	17
$^{+}$	M	Siberian Elm Ash sp.	Ulmus pumila Fraxinus Sp.	24 16	2	F-P P	P		P P	1427 1428	P P	Ash sp. Ash sp.	Fraxinus Sp. Fraxinus Sp.	24
+	М	Siberian Elm	Ulmus pumila	46	10	F-P	Р	Internal trunk rot and	Р	1429 1430	P P	Ash sp. Ash sp.	Fraxinus Sp. Fraxinus Sp.	26 43
	М	Siberian Elm	Ulmus pumila	33	8	Р	Р	fruiting bodies are evident	Р	1431	Р	Ash sp.	Fraxinus Sp.	40
+	М	Siberian Elm	Ulmus pumila	40	6	Р	Р	Co-dominant stems,	Р	1432	Р	Swamp Cedar	Thuja occidentalis	15
\downarrow	M	Siberian Elm Siberian Elm	Ulmus pumila	29	4	P F-P	P	included bark	P	1422				17
\dagger	м	Siberian Elm	Ulmus pumila Ulmus pumila	70	12	Р	P	Co-dominant stems,	P	1433 1434	P P	Swamp Cedar Manitoba Maple	Thuja occidentalis Acer negundo	17 54
t	М	Siberian Elm	Ulmus pumila	44	4	Р	Р	Co-dominant stem was	Р	1435 1436	P P	Manitoba Maple Manitoba Maple	Acer negundo Acer negundo	38
t	М	Siberian Elm	Ulmus pumila	46	10	Р	Р	Co-dominant stem was	Р	1437	Р	Ash sp.	Fraxinus Sp.	30
#	М	Siberian Elm	Ulmus pumila	28	0	D	D	Tree is Dead	RX	1438 1439	P P	Ash sp. Manitoba Maple	Fraxinus Sp. Acer negundo	56 29
1	М	Siberian Elm	Ulmus pumila	26	4	Р	Р	Ash growing out of base	Р	1440 1441	P P	Manitoba Maple Manitoba Maple	Acer negundo Acer negundo	30
+	M	Siberian Elm Siberian Elm	Ulmus pumila Ulmus pumila	53 36	8	P F-P	P		P P				g	
Ŧ	M M	Siberian Elm Siberian Elm	Ulmus pumila Ulmus pumila	16 68	2	P P	P P	Main leader was cut Co-dominant stems	P P	1442	Р	Manitoba Maple	Acer negundo	42
#	M	Siberian Elm	Ulmus pumila	48	6	Р	Р		Р	1443	P	Manitoba Maple	Acer negundo	34
+	N N	Siberian Elm Siberian Elm	Ulmus pumila Ulmus pumila	55 16	12 0	P D	P D	Tree is Dead	P P	1444	Р	Manitoba Maple	Acer negundo	20
Ŧ	N N	Siberian Elm Siberian Elm	Ulmus pumila Ulmus pumila	24 43	4	P P	P P		P P	1445	SN P	Manitoba Maple	Acer negundo	59
†	N	Siberian Elm	Ulmus pumila	43	0	D	D	Tree is Dead	Р	1446	Р Р	Manitoba Maple Manitoba Maple	Acer negundo Acer negundo	40
+	N	Siberian Elm Siberian Elm	Ulmus pumila Ulmus pumila	12 21	6	P P	P	Co-dominant stems,	P P	1448	Р	Manitoba Maple	Acer negundo	37
+	N	Siberian Elm	Ulmus pumila	33	8	Р	Р	signs of internal rot	P	1449	Р	Burr Oak	Quercus macrocarpa	24
1	N N	Siberian Elm Cherry Sp.	Ulmus pumila Prunus Sp.	60 23	8	P F	P F		P P					
‡	N	Austrian Pine	Pinus nigra	63	10	F	F		Р	1450	Р	White Birch	Betula papyrifera	19
+	N	Colorado Spruce Austrian Pine	Picea pungens Pinus nigra	27 75	10	F	F		P P					
	N	Red Maple	Acer rubrum	70	12	F	F	Root flare is grown into garage	Р	1451 1452	P P	Manitoba Maple Manitoba Maple	Acer negundo Acer negundo	61 30
Ŧ	N	Siberian Elm Siberian Elm	Ulmus pumila Ulmus pumila	37 38	8	F-P	P P		P P	1453	Р	Manitoba Maple	Acer negundo	34
‡	N	Siberian Elm	Ulmus pumila	40	8	F-P	Р		Р	1454 1455	P P	Manitoba Maple Manitoba Maple	Acer negundo Acer negundo	19 31
+	N	Siberian Elm Siberian Elm	Ulmus pumila Ulmus pumila	43 50	10	D P	D P	Tree is Dead	P P	1456	Р	Manitoba Maple	Acer negundo	15
1	N N	Siberian Elm Siberian Elm	Ulmus pumila	17 53	2	P P	P P	Co-dominant stems	P P	1457 1458	P P	Manitoba Maple Ash sp.	Acer negundo Fraxinus Sp.	26 31
†	N	Siberian Elm	Ulmus pumila Ulmus pumila	61	10	Р	Р	Signs of rot	Р	1459 1460	P P	Manitoba Maple Manitoba Maple	Acer negundo Acer negundo	21
	Р	Red Oak	Quercus rubra	104	12	F	F	Moderate deadwood in canopy	Р	1461	Р	Manitoba Maple	Acer negundo	26
+	P P	Red Oak Red Oak	Quercus rubra Quercus rubra	45 40	8	F	F		R R	1462	Р	Manitoba Maple	Acer negundo	23
	Р	Red Oak	Quercus rubra	48	10	F	F	Trunk cavity present.	R	1463	Р	Ash sp.	Fraxinus Sp.	16
+	P P	Red Maple Red Maple	Acer rubrum Acer rubrum	41 54	10	F-P	F-P	Signs of internal rot.	P	1464	P	Manitoba Maple	Acer negundo	39
\dagger			Acertusium					Trunk cavity present. Signs of internal rot.						
	Р	Red Maple	Acer rubrum	64	12	F	F	Significant structural failures on one side of	Р	1465	Р	Manitoba Maple	Acer negundo	45
+	Р	Siberian Elm	Ulmus pumila	10-15	2	F	F	the tree	R	1466 1467	P N	Manitoba Maple White Pine	Acer negundo Pinus strobus	45 17
‡	Р	Siberian Elm	Ulmus pumila	10-15	2	F	F		R	1468	N	White Pine	Pinus strobus	18
+	P M	Siberian Elm Siberian Elm	Ulmus pumila Ulmus pumila	10-15 10-15	2	F	F		R P	1469 1470	N N	White Pine White Pine	Pinus strobus Pinus strobus	20
+	M	Siberian Elm Siberian Elm	Ulmus pumila Ulmus pumila	10-15 10-15	2	F	F		P P	1471 1472	N N	White Pine White Pine	Pinus strobus Pinus strobus	18 17
1	M	Willow sp.	Salix Sp.	15-20	4	F	F		Р	1473	Р	Manitoba Maple	Acer negundo	37
-	M M1	Black Walnut Red Oak	Juglans nigra Quercus rubra	16 59	12	F	F		P R	1474 1475	P P	Manitoba Maple Red Oak	Acer negundo Quercus rubra	40 21
-	M1 M1	Siberian Elm White Mulberry	Ulmus pumila Morus alba	78 17	10 4	F	F		P P	1476 1477	P P	Red Oak Red Oak	Quercus rubra Quercus rubra	34 33
1	M1	Black Walnut	Juglans nigra	20-23	6	F	F		P	1477	N	Black Cherry	Prunus serotina	42
1	M1 M1	Manitoba Maple Ash sp.	Acer negundo Fraxinus Sp.	21	3	D	D	EAB	P					
-	M1 M1	White Cedar White Cedar	Thuja occidentalis Thuja occidentalis	10-15 10-15	4	F F	F	4 stem, part of hedge 3 stem, part of hedge	P P	1479	N	White Oak	Quercus alba	108
1	M1 M1	Red Oak	Quercus rubra	57 32	10	F	F	, parentineuge	P					
1	M1	Ash sp.	Fraxinus Sp. Fraxinus Sp.	31	5	F	F		Р	1480 1481	P P	Cherry Sp. American Elm	Prunus Sp. Ulmus americana	23 15
1		Ash sp. White Mulberry	Fraxinus Sp. Morus alba	21 15-17	3 5	F-P F	F	BAB 3 stem	P P	1482	N P	Cherry Sp.	Prunus Sp.	15
-	M1 M1	White Mulberry White Mulberry	Morus alba Morus alba	11-23 12-20	5 5	F	F	3 stem	P P	1483 1484	N	Red Oak Burr Oak	Quercus rubra Quercus macrocarpa	18 64
-	M1	Manitoba Maple	Acer negundo	39 34	5	F	F	J Stem	P P	1485 1486	N P	Burr Oak American Elm	Quercus macrocarpa Ulmus americana	25 17
1	M1 M1	Red Oak Manitoba Maple	Quercus rubra Acer negundo	25-42	5	F F	F	2 stem	Р	1487	SN	Burr Oak	Quercus macrocarpa	29
-	M1 M1	Ash sp. Manitoba Maple	Fraxinus Sp. Acer negundo	29 45	6	F-P F	F	EAB	P	1488	N	Burr Oak	Quercus macrocarpa	45
-	M1 M1	Manitoba Maple Red Oak	Acer negundo Quercus rubra	52 25	7	F	F F-P		P P	1489 1490	N P	Red Oak American Elm	Quercus rubra Ulmus americana	35 18
1		Red Oak Red Oak	Quercus rubra Quercus rubra Quercus rubra	58 65	9	F	F		P	1491 1492	P SN	Burr Oak Burr Oak	Quercus macrocarpa	29
	M1	White Spruce	Picea glauca	15	3	F	F		R	1493	Р	Burr Oak	Quercus macrocarpa Quercus macrocarpa	30
+	M1 M1	White Spruce Little Leaf Linden	Picea glauca Tilia cordata	15 6	3	F F	F		R R	1494 Key to		Burr Oak r Codes	Quercus macrocarpa	43
0	M1 M1	Kentucky Coffee Tree Tulip Tree	Gymnocladus diocus Liriodendron tulipfera	6	1	F	F		R R	P N		Private client owned tree Neighbour (private) owned tree		M M1
2	M1	Horse Chestnut	Aesculus hippocastanum	5	1	F	F		R	SN		ared ownership with neighbour (priv	ate)	SM
+	M1 M1	Red Maple Black Walnut	Acer rubrum Juglans nigra	8 5	1	F P	F		R R			tion Ratings d Health ratings are measured on a	scale of Good (G), Fair (F), Poor (
5	M1	Black Walnut American Elm	Juglans nigra Ulmus americana	6	1	P	F		R R					
7	M1	White Oak	Quercus alba	8	2	F	F		R					
-	M1 M1	White Spruce White Spruce	Picea glauca Picea glauca	6	1	P F	F		R					
0	M1	TulipTree	Liriodendron tulipfera Acer rubrum	7	2	F	F		R R					
2	M1	Red Maple Honey Locust	Gleditsia triacanthos	6	1	F	F		R					
-		Black Walnut Flowering Crabapple Tree	Juglans nigra Malus Sp.	4 5	1	F	F		R R					
5	M1	Horse Chestnut	Aesculus hippocastanum	3	1	F	F		R R					
7		Tulip Tree Horse Chestnut	Liriodendron tulipfera Aesculus hippocastanum	6	1	F	F		R					
_		Red Maple Basswood	Acer rubrum Tilia americana	17 16	4	F	F		R R					
0	M1	Colorado Blue Spruce	Picea pungens var. glauca	15	2	F	F		R					
_	M1 M1	Colorado Blue Spruce Colorado Blue Spruce	Picea pungens var. glauca Picea pungens var. glauca	10 16	2	F	F		R R					
3		Colorado Blue Spruce Manitoba Maple	Picea pungens var. glauca Acer negundo	7 15	2	F	F P	4 stem	R R					

124 M1 Manitoba Maple Acer negundo 15 4 F P 4 stem R

F/P F Part of hedge of smaller caliper cedar +/- 40 stems 4 stem, part of hedge of similar caliper cedars +/- 50 stems at 10-15 F Part of hedge Co-dominant at 1.2m, weak union with included bark and signs of probable 21 P F/P Significant deadwood in canopy, tree is in decline 10 F F Mild lean D EAB 6 F/P P Strangled by vines Significant failure of former 4 P P unbalanced, former co-dominant stem has failed, remaining stem has moderate/significant lean 2 Stem, co-dominant, 22 F/P F/P moderate/significant deadwood in canopy 2 Stem, co-dominant, 18 F/P F/P moderate/significant deadwood in canopy canopy, multiple P developing structural issues, tree in severe

Municipal tree on boulevard

Shared ownership with Municipality

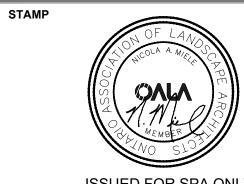
Municipal tree in park, open space or naturalized area

GENERAL NOTES

- 1. Do not scale the drawings. All dimensions are in millimetres unless noted otherwise.
- 2. This drawing is to be read in conjunction with the project site plan. landscape plan, and engineering plan.
- 3. The tree inventory includes assessment of trees >10cm DBH. The trees have been assessed based on species, size and condition.
- 4. The contractor shall check and verify all existing and proposed grading and conditions on the project and immediately report any discrepancies to the consultant before proceeding with any removals.
- The contractor is to be aware of all existing and proposed services and utilities. The contractor is responsible for having all underground services and utility lines staked by each agency having jurisdiction prior to commencing work.
- 6. This drawing is to be used for development approval only.
- 7. Do not leave any holes open overnight.
- 8. Keep area outside construction zone clean and useable by others at all times. Contractor shall throughly clean areas surrounding the construction zone at the end of each work day.
- 9. Contractor to make good any and all damages outside of the development area that may occur as a result of tree removals at no extra cost.
- 10. This drawing is Copyright MHBC Planning, 2023.

7.	DECEMBER 19, 2023	RE-ISSUED FOR SPA	PD
6.	July 11, 2023	RE-ISSUED FOR SPA	PD
5.	June 06, 2023	RE-ISSUED FOR SPA	PD
4.	JUNE 16, 2022	RE-ISSUED FOR SPA	СС
3.	NOVEMBER 17, 2021	RE-ISSUED FOR SPA	СС
2.	MARCH 01, 2021	RE-ISSUED FOR SPA	СС
1.	DECEMBER 19, 2019	ISSUED FOR SPA	SN
REVISION N	NO. DATE	ISSUED / REVISION	ВҮ





ISSUED FOR SPA ONLY NOT FOR CONSTRUCTION

All drawings and specifications are instruments of service and will remain the property of MHBC Planning and must be returned at the completion of the work. This drawing shall not be used for construction purposes unless the drawings are marked 'Issued for Construction' and the professional seal is signed and dated by the landscape architect.

PROJECT

FILE NAME

560 WINSTON CHURCHILL BLVD TOWN OF OAKVILLE, ON

DWG NO.

DRAWN BY

PLAN SCALE

CHECKED BY

FILE NO.

TREE INVENTORY, PROTECTION, AND **REMOVALS**

TI-2

DECEMBER 2018