ARBORIST REPORT AND TREE PRESERVATION PLAN

LOCATION:

1995 Dundas Street East

Mississauga, ON

PROPERTY OWNER/APPLICANT:

Landeal Group

c/o

Alexander Budrevics + Associates Ltd.

Landscape Architects

895 Don Mills Road, Second Tower, Suite 212
Toronto, ON
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31 July 2024, revised 24 October 2024



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INTRODUCTION

An Arborist Report and Tree Preservation Plan was completed for 1995 Dundas Street East, Mississauga, Ontario. The subject property is located north of Dundas Street East and west of Universal Drive.

The City of Mississauga's Public Tree Protection By-law 0020-2002 and Private Tree Protection By-law 0021-2022 are applicable to the subject property. A permit is required prior to impacts to any Public trees, and private trees greater than 15 centimetres in diameter.

Existing Conditions and Proposed Works

The subject property consists of an existing commercial/industrial building with associated parking and landscaped areas. The proposed development consists of a residential complex with two towers and associated underground parking. Refer to Figure A below for an aerial photo of the subject property and adjacent properties, taken from the City of Mississauga online mapping. Refer to Tree Preservation Plan (L100) for the topographic survey (existing conditions) and proposed development.



Figure A. Area photo of Site and Abutting Properties (Mississauga Maps, 2022)

METHODOLOGY

Tree Inventory

Field assessments to collect tree inventory data were completed on 17 July 2024. All trees greater than 5 cm diameter on the subject property and within 6m of the subject property, and all Cityowned tree resources greater than 6cm diameter within 6m of the subject property, were included in the inventory.

Trees and tree polygons were numbered 1 to 20. Species, diameter at breast height (DBH), health, condition, dripline and relevant comments were recorded for each of the trees. Trees were located using the topographic survey provided or aerial photo interpretation and estimations made in the field. Trees located on neighbouring property were assessed to the greatest extent possible from subject property limits. All assessments were limited to ground survey.

Tree Valuation

The appraised value of individual City trees was calculated using the Trunk Formula Technique as described in International Society of Arboriculture's 'Guide to Plant Appraisal, 10th Edition'.

RESULTS

Tree Inventory

A total of 20 individual trees were identified within the subject property limits, within 6m on neighbouring property, and within the City road allowance. Trees 1, and 3 to 12 are located within the City road allowance. Trees 2, and 13 to 16 are located within the subject property. Trees 17 to 20 are located on neighbouring property (1945 Dundas Street East). All trees are greater than 15cm DBH, with the exception of Tree 19.

Species found include: Crabapple species (*Malus* sp.), Austrian Pine (*Pinus nigra*), Norway Maple (*Acer platanoides*), Blue Spruce (*Picea pungens*), and Little-leaf Linden (*Tilia cordata*). Refer to Table 1 for the detailed tree inventory, Appendix A for photos of the trees and the Tree Preservation Plan (L100) for the locations of the trees.

ANALYSIS AND DISCUSSION

Tree Removal

The removal of a total of nine (9) will require removal to accommodate the proposed development or due to their condition. Six (6) trees will require removal to accommodate the proposed development and three (3) trees will require removal due to their condition. Trees 5 to 7, 9, 11, and 12 will require removal to accommodate the site access and walkway. Tree 2 is dying, Tree 3 is dead, and Tree 10 is in poor condition. A permit will be required for the removal of trees greater than 15 cm DBH, including all aforementioned trees. Trees 2 and 3 are dying/dead and an exemption from permit fees and compensation should apply.

Tree Retention and Tree Preservation Recommendations

The preservation of all remaining trees will be possible given the appropriate tree preservation measures discussed in this report and plan are implemented.

Trees 1, 4, and 8 will be protected by plastic snow fence framed hoarding. This hoarding should be kept in place for the duration of construction. Tree 13 will be protected by plastic snow fence framed hoarding within the City road allowance, and solid board (plywood) framed hoarding within the subject property. Trees 14 to 16 will be protected by solid board (plywood) framed hoarding.

Minor to moderate encroachment into the mTPZs of Trees 13 to 16 will be required to remove existing asphalt, and/or install walkways. Any curbs should be removed gently by hand or light equipment only. Any excavation for the walkways should be done towards the end of construction (landscaping phase). Any work within the mTPZs is to be completed by hand-digging, air spade/vac, or hydro-vac technology and supervised by a Certified Arborist. Any exposed roots should be pruned by a Certified Arborist following good arboricultural standards. Tree 16 should be monitored annually during the growing season for changes in health and condition for a minimum period of two years following construction completion. All trees will benefit from watering during and for a minimum period of two years following construction.

Trees 17 to 20 are located on neighbouring property and away from the proposed works. Tree preservation hoarding has not been prescribed for these trees. This tree should not be impacted assuming all construction activities, equipment, materials, and/or fill, remain within subject property limits.

Tree preservation hoarding should be installed prior to construction and remain in place throughout the construction process, as specified in the Tree Preservation Plan (L100). No grade changes, storage of materials or equipment is permitted within the tree protection zone (TPZ), unless specified above. The driplines, mTPZs, tree preservation hoarding locations, tree preservation hoarding detail, and tree protection notes, are shown on the Tree Preservation Plan (L100). Dripline distances are shown in Table 1. Refer to Appendix A for photos of these trees.

Tree Replacement Requirements

Replacement trees should be planted at a rate of one tree per 15 cm DBH of City trees, or private trees greater than 15 cm DBH to be removed, space permitting. A total of 9 trees will need to be planted to compensate for the required tree removals. Dead and dying trees were excluded from the calculations.

Tree Valuation

The total appraised value of individual City-owned trees is \$13,017. Refer to Table 2 for the tree valuation calculations.

CONCLUSION AND RECOMMENDATIONS

A total of 20 individual trees were identified within the subject property limits, within 6m on neighbouring property, and within the City road allowance. The removal of a total of nine (9) will

require removal to accommodate the proposed development or due to their condition. Six (6) trees will require removal to accommodate the proposed development and three (3) trees will require removal due to their condition. A permit will be required for the removal of trees greater than 15 cm DBH. Trees 2 and 3 are dying/dead and an exemption from permit fees and compensation should apply. All remaining trees may be preserved assuming the tree protection measures noted in this report and the Tree Preservation Plan (L100) are implemented.

Tree preservation measures should be installed prior to any construction work, as discussed in this report. Tree preservation hoarding should be implemented at dripline or mTPZ distances noted in Table 1 and/or shown in the Tree Preservation Plan (L100) and maintained throughout the construction process. Refer to the tree preservation hoarding detail and tree protection notes on the Tree Preservation Plan (L100) for further information regarding tree preservation as outlined by the City of Mississauga. Refer to Appendix A for photos of the trees.

Respectfully Submitted,



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TABLE 1. DETAILED TREE INVENTORY

Location: <u>1995 Dundas Street East, Mississauga</u>

Date: <u>17 July 2024</u> Surveyors: <u>KA</u>

Tree #	Common Name	Scientific Name	Diamet er at Breast Height (DBH) ¹	Trunk Integrity	Crown Structure	Crown Vigour	Crown Dieback	Dripline (radius)	minimum Tree Protection Zone (mTPZ) (radius)²	Comments	Proposed Action	Preservation Comments	Ownership
			(cm)		od (G),), Poor		%	(m)	(m)				
1	Crabapple species	Malus sp.	17.5	F	F	F		2	1.5	1.5 Moderate epicormic branching, minor pruning wounds with decay			City ROW
2	Crabapple species	<i>Malus</i> sp.	16	PF	PF	Р		2	1.5	Major coppice growth, dying, moderate pruning wounds, major deadwood	Remove (dying)		Subject
3	Crabapple species	Malus sp.	21		DEAD			-	-		Remove (dead)		City ROW
4	Crabapple species	Malus sp.	17	F	F	F		1.5	1.5	Major epicormic branching, moderate pruning wounds with decay	Preserve		City ROW
5	Crabapple species	<i>Malus</i> sp.	18	F	F	F		1.5	1.5	Major epicormic branching, moderate pruning wounds with decay	Remove		City ROW
6	Crabapple species	Malus sp.	15	F	F	F		1	1.5	Major epicormic branching, moderate pruning wounds with decay	Remove		City ROW
7	Crabapple species	<i>Malus</i> sp.	20	F	F	PF	20	2	1.5	Minor epicormic branching, moderate pruning wounds with decay	Remove		City ROW
8	Crabapple species	Malus sp.	22	F	F	F		2.5	1.8	Moderate stem wound with decay, moderate pruning wounds with decay, major epicormic branching	Preserve		City ROW
9	Crabapple species	<i>Malus</i> sp.	32.5	FG	F	F	5	3	2.4	Utility line through crown, minor pruning wounds with decay	Remove		City ROW
10	Crabapple species	Malus sp.	17,16 [23]	PF	F	PF	30	3	1.8	Co-dominant near base, major epicormic branching, moderate pruning wounds with decay, minor deadwood	Remove (poor condition)		City ROW

Tree #	Common Name	Scientific Name	Diamet er at Breast Height (DBH) ¹	Trunk Integrity	Crown Structure	Crown Vigour	Crown Dieback	Dripline (radius)	minimum Tree Protection Zone (mTPZ) (radius) ²	Comments	Proposed Action	Preservation Comments	Ownership
			(cm)	Good (G), Fair (F), Poor (P)			%	(m)	(m)				
11	Austrian Pine	Pinus nigra	32	FG	FG	F		3	2.4	Utility line through crown, minor deadwood, crooks	Remove		City ROW
12	Austrian Pine	Pinus nigra	32	FG	F	PF		2.5	2.4	Utility line through crown, moderate deadwood, minor broken branches, missing leader	Remove		City ROW
13	Norway Maple	Acer platanoides	52	FG	FG	G		6	3.6			Any work to be	Subject
14	Norway Maple	Acer platanoides	53	FG	FG	G		6	3.6	Vertical scaffold limbs, minor pruning wounds, moderate exposed roots and root wounds with decay, girdling root, tagged 890	Preserve - injure	supervised by a Certified Arborist and any roots pruned according to good arboricultural practices.	Subject
15	Blue Spruce	Picea pungens	32	FG	F	FG		2	2.4	Dead leader, exposed roots, growth deficit, affixed wires, minor pruning wounds due to raised crown, tagged 889	Preserve - injure		Subject
16	Norway Maple	Acer platanoides	61	G	FG	G		7	4.2	Minor exposed roots and root wounds, vertical scaffold limbs, tagged 888	Preserve - injure		Subject
17	Austrian Pine	Pinus nigra	28	G	G	FG		2.5	1.8	Minor pruning wounds due to raised crown, tagged 886	Preserve		1945 Dundas Street East
18	Austrian Pine	Pinus nigra	33	FG	G	FG		2.5	2.4	Minor pruning wounds due to raised crown, crooks, utility lines through crown, tagged 887	Preserve		1945 Dundas Street East
19	Norway Maple	Acer platanoides	8	F	PF	F	15	1	1.2	Top of crown removed	Preserve		1945 Dundas Street East
20	Little-leaf Linden	Tilia cordata	15	F	PF	FG		1.5	1.5	Top of crown removed	Preserve		1945 Dundas Street East
										END			

¹ The effective DBH of multi-stemmed trees was calculated by taking the square root of the sum of the squares of the DBH of each stem.

² MTPZ distances are to be measured from the outside edge of the tree base towards the dripline and may be limited by an existing paved surface, provided the existing paved surface remains intact throughout the construction work.

TABLE 2. TREE VALUATION CALCULATIONS

			SUBJ	ECT TREE		FUNCTIONAL REPLACEMENT TREE CALCULATIONS									
Tree #	Common Name	Scientific Name	Line 1	Line 2 (Line 1 ² x 0.7854)		Line 3		Line 5	Line 6	Line 7: Line 6 ² x 0.7854	Line 8	Line 9: RPAC	Line 10 (line 2 x line 9)	Line 11 (line 10 x line 3 x line 4 x line 5)	TOTAL VALUE
F			Diameter at Breast Height (DBH)	Cross-sectional Area	Overall Co Rati		Functional Limitations	External Limitations	Size (60mm caliper)	Area	Functional replacement tree cost	Unit Tree Cost	Basic functional replacement cost	Depreciated functional replacement cost	
			cm	cm ²	Health, Struc	lealth, Structure, form		%	cm	cm ²	\$	\$	\$	\$	\$
1	Crabapple species	Malus sp.	17.5	241	F	0.7	0.7	0.8	6	28	849.91	6.51	1566	849.91 (614)	
3	Crabapple species	Malus sp.	21	346	DEAD	0	0.8	0.8	6	28	849.91	6.51	2255	0	
4	Crabapple species	Malus sp.	17	227	F	0.7	0.7	0.8	6	28	849.91	6.51	1478	849.91 (579)	
5	Crabapple species	Malus sp.	18	254	F	0.7	0.7	0.8	6	28	849.91	6.51	1657	849.91 (649)	
6	Crabapple species	Malus sp.	15	177	F	0.7	0.7	0.8	6	28	849.91	6.51	1150	849.91 (451)	
7	Crabapple species	Malus sp.	20	314	PF	0.6	0.8	0.8	6	28	849.91	6.51	2045	849.91 (785)	13017
8	Crabapple species	Malus sp.	22	380	F	0.65	0.7	0.8	6	28	849.91	6.51	2475	901	
9	Crabapple species	Malus sp.	32.5	830	FG	0.8	0.8	0.8	6	28	849.91	6.51	5401	2765]
10	Crabapple species	Malus sp.	23	415	PF	0.4	0.7	0.8	6	28	849.91	6.51	2705	849.91 (606)]
11	Austrian Pine	Pinus nigra	32	804	FG	0.8	0.7	0.8	6	28	849.91	6.51	5236	2346]
12	Austrian Pine	Pinus nigra	32	804	F	0.65	0.7	0.8	6	28	849.91	6.51	5236	1906	
						·		END							

APPENDIX A. PHOTOS OF THE TREES

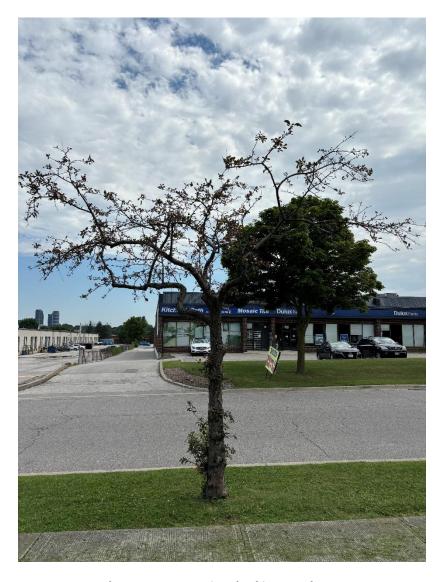


Photo 1. Tree 1, view looking northeast



Photo 2. Tree 2, view looking west



Photo 3. Tree 3, view looking west



Photo 4. Tree 4, view looking northeast



Photo 5. Tree 5, view looking northeast

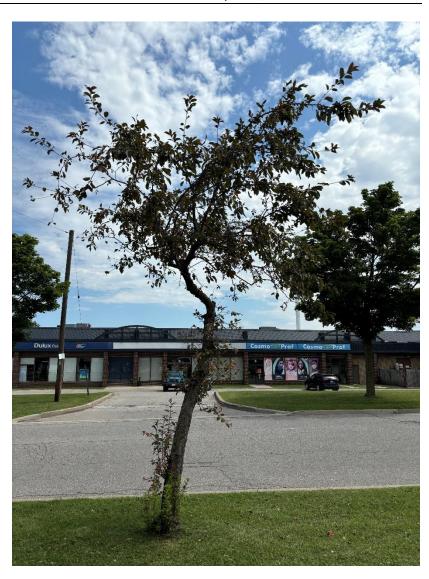


Photo 6. Tree 6, view looking northeast

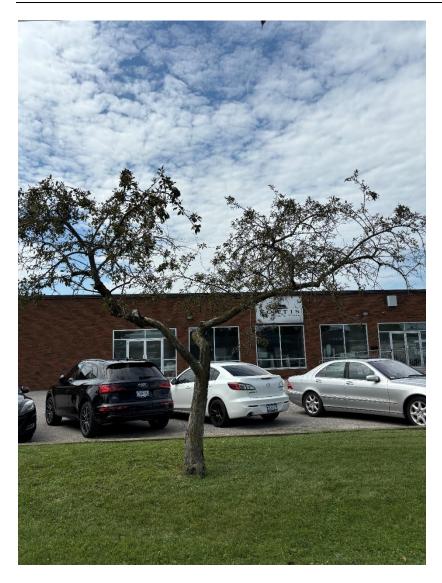


Photo 7. Tree 7, view looking west



Photo 8. Tree 8, view looking northeast



Photo 9. Tree 9, view looking southwest

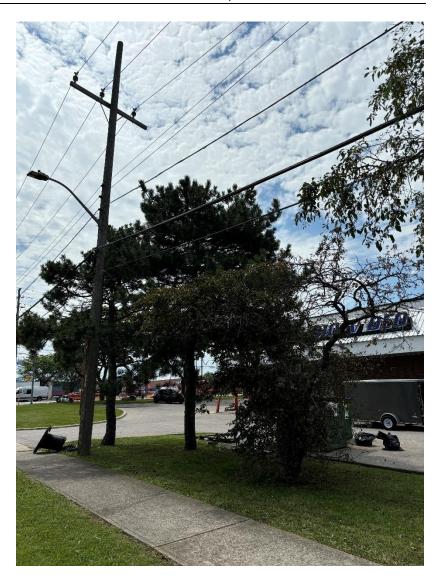


Photo 10. Trees 10 to 12 (right to left), view looking south

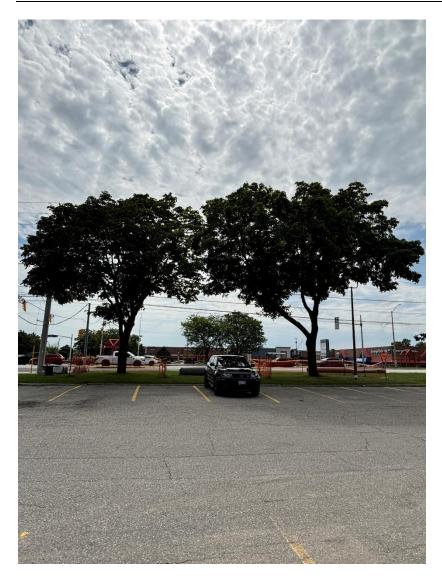


Photo 11. Trees 13 and 14 (left and right), view looking southeast



Photo 12. Tree 15, view looking southeast



Photo 13. Tree 16, view looking southeast



Photo 14. Trees 17 and 18 (left and right), view looking southwest

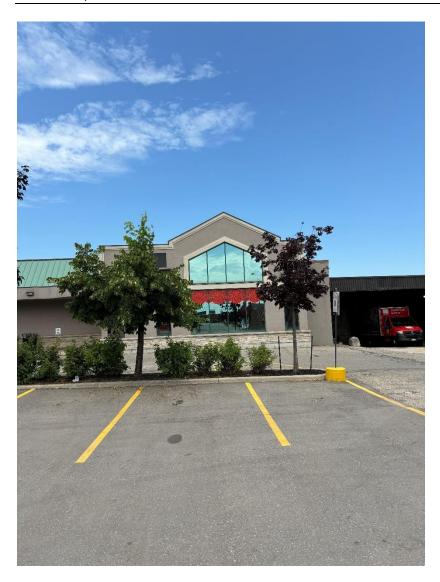


Photo 15. Trees 19 and 20 (right and left), view looking northwest