



STRYBOS BARRON KING
LANDSCAPE ARCHITECTURE

PARTNERS BRYN BARRON, OALA, CSLA, ISA
ALISTAIR JOHNSTON, LOHTA, ISA, ASCA
MATHIEU STRYBOS, OALA, CSLA
ASSOCIATES SALVATORE VIOLA, OALA, CSLA
MATTHEW REGIMBAL, LOHTA, ISA

ARBORIST REPORT

**PROPOSED TOWNHOUSE DEVELOPMENT
1110 LORNE PARK ROAD
CITY OF MISSISSAUGA**

***PREPARED FOR:*
LJM DEVELOPMENTS
100-48 VILLAGE CENTRE PLACE
MISSISSAUGA, ONTARIO
L4Z 1V9**

***PREPARED BY:*
CERTIFIED ARBORIST
MATTHEW GEHRES #ON-1114A
STRYBOS BARRON KING LTD.
5770 HURONTARIO STREET
SUITE 320
MISSISSAUGA, ONTARIO
L5R 3G5**

***PROJECT NO:*
18-5255**

STRYBOS BARRON KING LTD.

5770 HURONTARIO STREET, SUITE 320, MISSISSAUGA, ONTARIO L5R 3G5 T: 416.695.4949 F: 905.712.3101 WWW.STRYBOS.COM

TABLE OF CONTENTS

Introduction	1
Site Context	1
Plans Utilized.....	1
Methodology.....	1
Tree Inventory	1
Table 1 – Tree Inventory Descriptions	1
Existing Tree Inventory	2
Observations	2
Tree Preservation.....	3
Table 2 – <i>Tree Protection Zones</i>	3
Private Tree Bylaw	3
Table 3 <i>Tree Categories</i>	3
Tree Removals	4
Table 4 <i>Tree Removals Subject to Private Tree Bylaw</i>	4
Tree Protection.....	4
Conclusion	4
Appendix A – Key Map	5
Appendix B – Site Photographs	6
Appendix C – Contextual Tree Inventory & Removals Plan	8
Appendix D – Tree Protection Hoarding Detail	9

Enclosed: Full Size V100 – *Tree Inventory, Preservation & Removals Plan*

Arborist Report for 1110 Lorne Park Road

Introduction

Strybos Barron King Ltd. was retained by LJM Developments to prepare an Arborist Report for the subject property in accordance with City of Mississauga tree bylaw requirements. The owner is proposing to construct a 7-unit Townhouse Development within the site. This report is to be read in conjunction with a completed *V100 – Tree Inventory, Preservation & Removals Plan* also prepared by Strybos Barron King Ltd.

Site Context (See Appendix A – Key Map)

The subject site (1110 Lorne Park Road) is located on the southwest corner of Lorne Park Road and Albertson Crescent and is bordered by a single-family residential lot to the north, Lorne Park Road to the east, Albertson Crescent to the south and Bramblewood Lane to the west. The site is currently vacant with no buildings or structures.

Plans Utilized

A Survey prepared by David B. Searles Surveying Ltd., showing existing site conditions, and a Site Plan, prepared by Eugene Kuan Architect, were used as reference to determine the location of existing trees in relation to the proposed construction works.

Methodology

The trees discussed in this report were inventoried during a field study at the subject site by ISA Certified Arborist Matthew Gehres. For the purposes of determining a Diameter Breast Height (D.B.H.) for each of the trees, trunk diameters were measured by the arborist using a caliper tape at 1.4 metres from existing grade and recorded in centimetres. The trees were assessed using a health and condition rating of poor, fair or good, depending on overall vigour, presence of disease and structural integrity as recommended in the Guide for Plant Appraisal, 9th Edition, published by the International Society of Arboriculture.

Tree Inventory (See Appendix C – Tree Inventory Plan for *context* and refer to enclosed V100 – Tree Inventory, Preservation & Removals Plan for *details* pertaining to individual trees)

Trees were identified both within and immediately adjacent to the subject property. The trees are described in terms of species and a diameter at breast height (DBH – measured at 1.4m from grade). They have been assessed in terms of their general health from poor to good; **GOOD** – trees in good overall health and condition with desirable structure, **FAIR** – trees in moderate health and condition with less desirable structure, and **POOR** – trees displaying prominent health issues such as decay and disease and/or poor form and structure.

Table 1 - Tree Inventory Descriptions

Key#	This number refers to the inventory number for the tree/grouping.
Species	The common names are provided for each tree.
DBH	This refers to Diameter (in centimetres) at Breast Height and is measured at 1.4m above the ground for each tree.
Crown	Estimated diameter of tree canopy (in metres), measured from dripline to dripline (varies in most cases considering the nature of tree groupings)
Health	An assessment of the general health and vigour of the tree, derived partly through a comparison of deadwood and live growth relative to a 100% healthy tree. The size and colour of foliage are also considered in this category. During the leaf-off season, the amount and distribution of buds is an important determinant of canopy vitality. This indicator is also measured on an ascending scale of poor-fair good.
Structure	A term describing key distinguishing structural character or defect.

Arborist Report for 1110 Lorne Park Road

EXISTING TREE INVENTORY									
KEY	SPECIES	CALIPER		CROWN	HEALTH	STRUCTURE	COMMENTS	PRESERVATION	MIN. TPZ
		IN (cm)	IN (m)						
1	CRIMSON KING NORWAY MAPLE	64	12	GOOD	GOOD FORM	SEVERE SCAR ALONG STEM, LOWER LIMBS PRUNED.			3.6
2	SIBERIAN ELM	35-73	3	FAIR	MULTI-STEMMED	THREE STEMS, DIEBACK ON LOWER BRANCHES, WEAK CROTCH, SLIGHT DIEBACK IN CROWN.		PRESERVE	2.4
3	SIBERIAN ELM	21-27	8	POOR	MULTI-STEMMED	THREE STEMS, SEVERE DIEBACK THROUGHOUT, BASAL DECAY, INCLUDED BARK, WEAK CROTCH.		REMOVE	1.8
4	SIBERIAN ELM	24-33	6	POOR	MULTI-STEMMED	FOUR STEMS, NARROW FORM, SEVERE DIEBACK THROUGHOUT, WEAK CROTCH.		REMOVE	1.8
5	SIBERIAN ELM	21-23	8	FAIR	MULTI-STEMMED	ONE SIDED FORM, DOUBLE STEM, CROWDING BY ADJACENT TREE, DIEBACK ON LOWER BRANCHES.		REMOVE	1.8
6	SIBERIAN ELM	43	7	FAIR	MULTI-STEMMED	NARROW FORM, DIEBACK ON LOWER BRANCHES, CROWDING BY ADJACENT TREE.		REMOVE	1.8
7	SIBERIAN ELM	15-23	5	POOR	MULTI-STEMMED	THREE STEMS, NARROW FORM, SEVERE DIEBACK ON LOWER BRANCHES, CROWDING BY ADJACENT TREE, HIGH CROWN, INCLUDED BARK, WEAK CROTCH		REMOVE	3
8	SIBERIAN ELM	17 to 32	7	FAIR	MULTI-STEMMED	CLUSTER OF FOUR STEMS, INCLUDED BARK, WEAK CROTCH, DIEBACK ON LOWER BRANCHES.		REMOVE	0
9	SIBERIAN ELM	17-20	6	POOR	MULTI-STEMMED	THREE STEMS, NARROW FORM, CROWDING BY ADJACENT TREE, DIEBACK ON LOWER BRANCHES, DIEBACK IN CROWN, INCLUDED BARK WEAK CROTCH.		REMOVE	1.8
10	SIBERIAN ELM	70	10	FAIR	MULTI-STEMMED	DIEBACK THROUGHOUT, DOUBLE STEM, WEAK CROTCH, BASAL DECAY, OPEN FORM.		REMOVE	3
11	SIBERIAN ELM	18-29	7	FAIR	MULTI-STEMMED	THREE STEMS, LEANING, ONE SIDED FORM, CROWDING BY ADJACENT TREE, DIEBACK ON LOWER BRANCHES, WEAK CROTCH.		REMOVE	1.8
12	SIBERIAN ELM	42	6	FAIR	MULTI-STEMMED	ONE SIDED FORM, CROWDING BY ADJACENT TREE, DIEBACK ON LOWER BRANCHES, INCLUDED BARK.		REMOVE	3
13	SIBERIAN ELM	44	6	FAIR	MULTI-STEMMED	MULTI-LEADERS, ONE SIDED FORM, CROWDING BY ADJACENT TREE, DIEBACK ON LOWER BRANCHES.		REMOVE	3
14	RED OAK	159	25	GOOD	GOOD FORM	MATURE, BROAD FORM, CAVITY IN NORTH SIDE OF STEM.		PRESERVE	8.7
15	SIBERIAN ELM	13-18	8.0	GOOD	MULTI-STEMMED	DIEBACK ON LOWER BRANCHES, STEM SPLITS AT GRADE		PRESERVE	1.8
16	CEDAR HEDGE	5-10	1.5	GOOD	GOOD FORM	DENSE, WELL MAINTAINED HEDGE FLANKING THE ADJACENT PROPERTY LIMIT		PRESERVE	1.8
17	WHITE SPRUCE	30.0	8.0	GOOD	GOOD FORM	BRANCHING TO GRADE		REMOVE	2.4
18	RED OAK	25.0	10.0	GOOD	GOOD FORM	LOW BRANCHING		PRESERVE	1.8
19	WHITE PINE	20.0	6.0	GOOD	IRREGULAR FORM	SUBORDINATES FORM DUE TO CROWDING BY ADJACENT OAK		PRESERVE	1.8

Observations

The vegetation on this site can be described as relatively mature, naturalized invasive trees as well as a mature boulevard tree and adjacent rear lot landscape accent trees.

Specific information regarding tree location, health and condition is indicated on the enclosed Tree Inventory & Removals Plan and illustrated in Appendix B - Site Photographs.

Naturalized Siberian Elm Grouping: (Key #'s 2 to 13)

There are several semi-mature to mature Siberian Elm trees which comprise a naturalized grouping within the central area of the subject property. These trees are of generally poor to fair health and condition. Most of these trees have multiple stems and several weak branch unions are present. There is evidence of structural failure within some trees. Dieback and deadwood within several crowns have been observed as well. These generally weak wooded trees are invasive and are assessed a low preservation priority.

Mature Red Oak (Key # 14)

A mature Red Oak tree (159cm DBH) is located within the municipal right of way north west of the property. This tree exhibits a broad form and is an important feature of the streetscape along Lorne Park Road. There is a cavity on the north side of the stem that has been filled with a synthetic fill material. Due to the tree's age, size and health, along with its positive contribution to Lorne Park Road.

Neighbouring Trees (key #'s 16-19)

Four landscape accent trees occur within the adjacent lot to the north within close proximity to the subject site. These trees include a Cedar hedge, semi-mature White Spruce, Red Oak and White Pine. All of these trees are in good health and condition.

Tree Preservation

In determining the tree preservation recommendations for the site, the criteria noted below were considered:

- Overall tree health, form, size, species and predicated longevity.
- Anticipated impact from construction of buildings and proposed landscape features, road works, site servicing and grading.

Each tree was assigned a minimum Tree Preservation Zone (TPZ) as per standard requirements used by municipal by-laws (Refer to Table 2-Tree Protection Zones).

Table 2 - Tree Protection Zones

Trunk Diameter (DBH)	Minimum Protection Zone
<10 cm	1.2m
10-29 cm	1.8 m
30-40 cm	2.4 m
41-50 cm	3.0 m
51-60 cm	3.6 m
61-70 cm	4.2 m
71-80 cm	4.8 m
81-90 cm	5.4 m
91-100 cm	6.0 m
< 100 cm	6cm per 1cm DBH

Private Tree By-Law

Table 3 – Tree Categories

CITY OF MISSISSAUGA TREE CATEGORIES	
1	Trees with diameters of 15cm or more, situated on private property, on the subject site.
2	Trees with diameters of 15cm or more, situated on private property, within 6m of the subject site.
3	Trees of all diameters situated within the City road allowance adjacent to the subject site.
4 <i>(exempt)</i>	Trees that are less than 15cm diameter and located on private property.

The City of Mississauga Private Tree Bylaw protects trees found on private property that are greater than 15cm DBH (Diameter at Breast Height) as well as trees of all diameters situated within the City road allowance.

The By-law states that:

- A permit is required to remove **three (3) or more healthy trees** with a diameter greater than 15cm (6 in) within one calendar year.
- A permit is required to remove **three (3) or more dead, dying or hazardous trees** with a diameter greater than 15cm (6 in) within one calendar year.
- A permit is not required to remove **up to two (2) trees** with a diameter greater than 15cm (6 in) within one calendar year.
- A permit is not required to remove trees with a diameter of 15cm (6 in) or less.
- A permit is required to remove **any city owned tree**.

Arborist Report for 1110 Lorne Park Road

Tree Removals

The following is a summary of proposed tree removals for this site that will require a permit for removal in accordance with City of Mississauga Private Tree Bylaw.

Table 4 – Tree Removals subject to Private Tree Bylaw (Refer to Existing Tree Inventory List for details pertaining to specific trees)

KEY	SPECIES	CALIPER IN (cm)	DBH IN (m)	TREE CATEGORY	MIN. TPZ
2	SIBERIAN ELM	35-73	3	1	2.4
3	SIBERIAN ELM	21-27	8	1	1.8
4	SIBERIAN ELM	24-33	6	1	1.8
5	SIBERIAN ELM	21-23	8	1	1.8
6	SIBERIAN ELM	43	7	1	1.8
7	SIBERIAN ELM	15-23	5	1	3
8	SIBERIAN ELM	17 to 32	7	1	0
9	SIBERIAN ELM	17-20	6	1	1.8
10	SIBERIAN ELM	70	10	1	3
11	SIBERIAN ELM	18-29	7	1	1.8
12	SIBERIAN ELM	42	6	1	3
13	SIBERIAN ELM	44	6	1	3
17	WHITE SPRUCE	30.0	8.0	2	2.4

Total of 13 trees

Tree Protection (Refer to Appendix D – Tree Protection Hoarding Detail).

All trees eligible for preservation shall be protected in accordance with City of Mississauga tree protection standards. Tree protection is to be installed along the limit of the minimum TPZ or as outlined on the V100 - Tree Inventory, Preservation & Removals Plan. Hoarding is to remain in place throughout the duration of construction and should be periodically reviewed by the Consulting Arborist to ensure that it remains in good working condition.

Conclusion

Strybos Barron King Ltd. was retained by LJM Developments to prepare an Arborist Report for the subject property in accordance with City of Mississauga tree bylaw requirements. The owner is proposing to construct a 7-unit townhouse development on the site. Due to the constraints associated with the site plan work, including building construction, access, parking and grading, several trees are to be removed. The majority of these trees are invasive, exotic trees that have naturalized within the vacant site. As part of the planning for this site, the mature Red Oak along the Lorne Park Road boulevard is to be preserved and protected throughout the construction process. A permit to remove 13 trees will be required prior to removal works, in compliance with City of Mississauga Private Tree Bylaw. All trees to be preserved are to be protected in accordance with City of Mississauga tree protection standards.

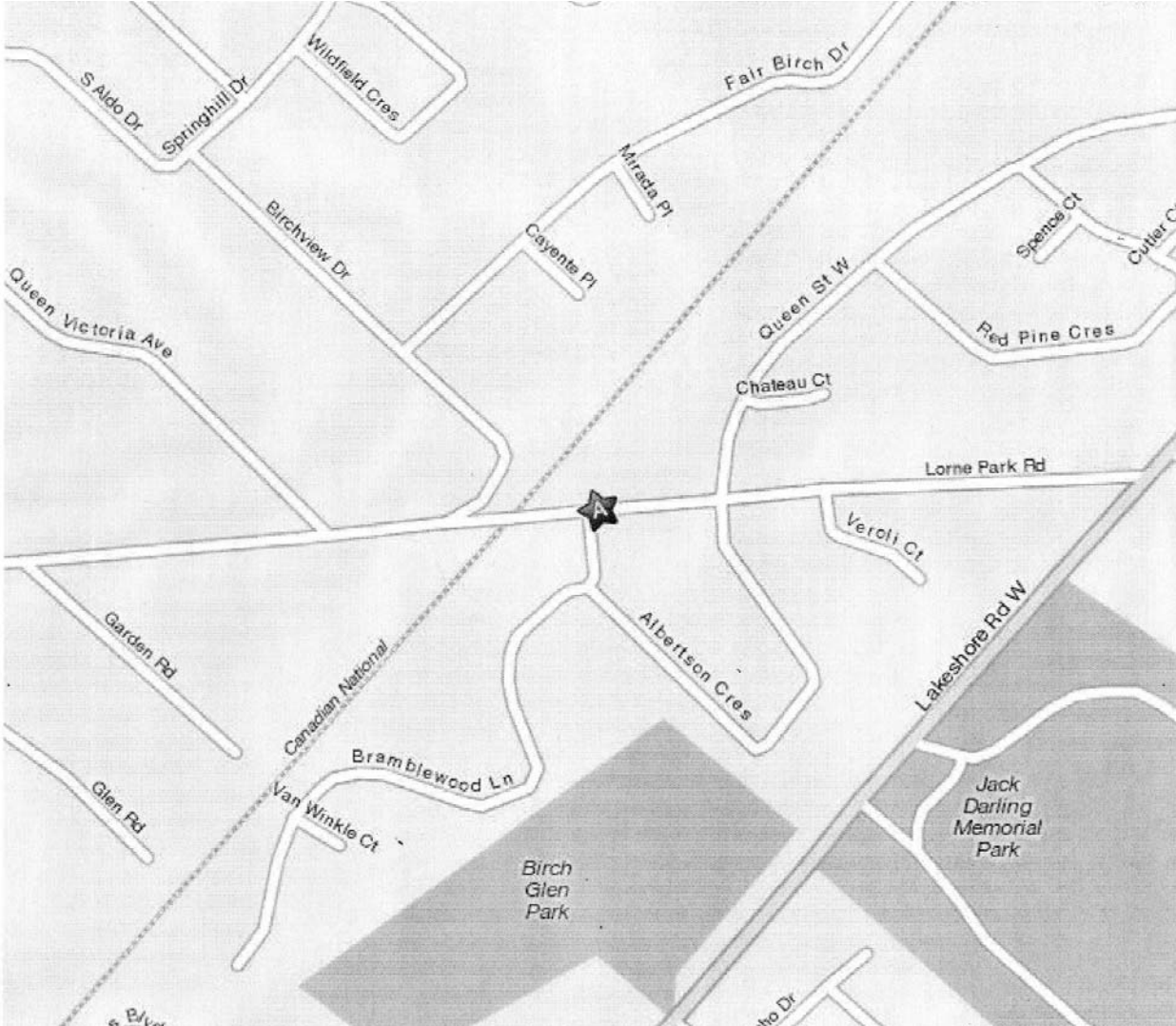
Prepared By:
STRYBOS BARRON KING LTD.




Matthew Gehres



ISA Certified Arborist ON-1114A
Senior Landscape Technologist
Ext. 228

Appendix A - Key Plan

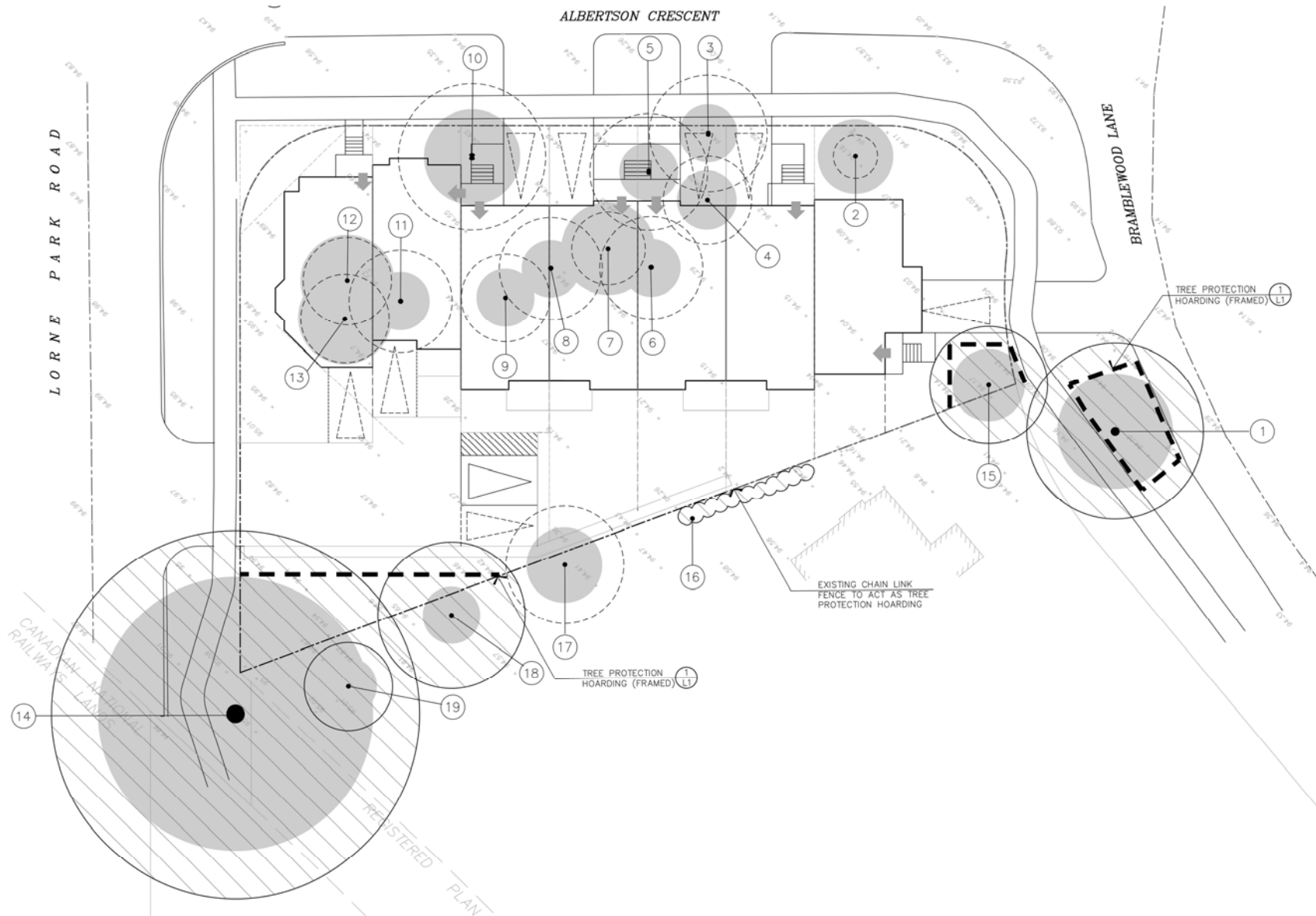


1110 Lorne Park Road, Mississauga, Ontario

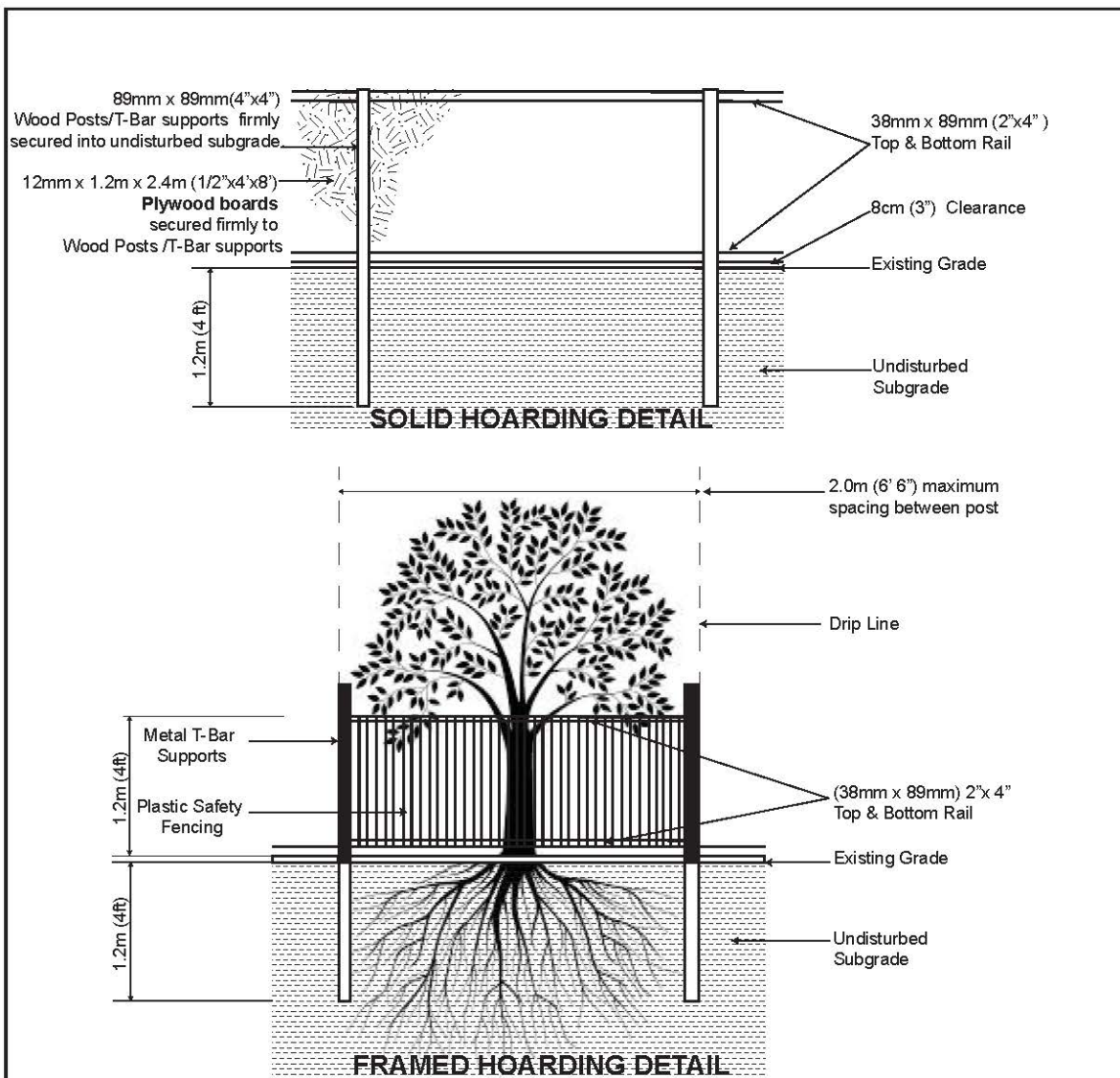
Appendix B - SITE PHOTOGRAPHS	
	
Grouping of Siberian Elm within subject property – To be Removed	Norway Maple south west of the subject property – To be Preserved
	
Mature Red Oak north west of subject property – To be Preserved	Mature Red Oak north west of subject property – To be Preserved

Appendix B - SITE PHOTOGRAPHS	
	
Trees within neighbouring lot to the north	Trees within neighbouring lot to the north – White Spruce (on left) to be Removed

Appendix C - CONTEXTUAL TREE INVENTORY & PRESERVATION PLAN



Appendix D - TREE PROTECTION HOARDING DETAIL



NOTES:

1. Hoarding details to be determined following initial site inspection.
2. Private tree hoarding to be approved by Development & Design ;
City tree hoarding to be approved by Community Services Dept.
3. Hoarding must be supplied, installed and maintained by the applicant throughout all phases of construction.
Inspection must be conducted by the Development and Design Division prior to removing any/all private hoarding.
4. Do not allow water to collect and pond behind or within hoarding.
5. **T-bar supports are acceptable alternative to 4x4 posts. U-shaped metal supports will not be accepted.**
6. **Plywood** must be utilized for 'solid' hoarding. OSB/Chipboard will not be accepted for solid hoarding. Plywood sheets must be installed on "construction" side of frame.
7. Applicant is responsible to ensure utility locates are completed within city boulevard prior to installing framed hoarding.

TREE PRESERVATION HOARDING



SCALE : N.T.S DATE : June 2017