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# ARBORIST REPORT

# PROPOSED MIXED-USE DEVELOPMENT CITY OF MISSISSAUGA

SITE LOCATION: 579-613 LAKESHORE ROAD EAST MISSISSAUGA, ONTARIO

PREPARED FOR:
STAR SEEKER INC.
C/O GLEN SCHNARR & ASSOCIATES INC.
700-10 KINGSBRIDGE GARDEN CIRCLE
MISSISSAUGA, ONTARIO
L5R 3K6

ATTENTION: PAUL BREDA

PREPARED BY:
STRYBOS BARRON KING LTD.
5770 HURONTARIO STREET
SUITE 320
MISSISSAUGA, ONTARIO
L5R 3G5

ISA CERTIFIED ARBORIST MATTHEW GEHRES – ON1114A OUR PROJECT NO: 21-5559

October 28, 2022 - Issued for Rezoning

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Enclosed: Full Size V100 – Tree Inventory & Preservation Plan

#### Introduction

Strybos Barron King Ltd. was retained by Star Seeker Inc., C/O Glenn Schnarr & Associates Inc., to prepare an Arborist Report for the subject property in accordance with City of Mississauga tree bylaw requirements. The owner is proposing to demolish the existing commercial/office plaza and construct a new Multi-use development within the site. This report is to be read in conjunction with a completed V100 – Tree Inventory, Preservation Plan also prepared by Strybos Barron King Ltd.

#### Site Context

The subject site (579-613 Lakeshore Road East) is located on the north west corner of Lakeshore Road East and Caven Street. The property abuts existing single family lots to the east, an apartment development to the north and an existing townhouse condo development to the west. The property is currently a commercial plaza with associated buildings, parking areas, driveways and traffic islands. The majority of the existing trees are composed of planted landscape accent buffer plantings and naturalized individual trees around the perimeter of the site.

### **Plans Utilized**

A Topographic Survey prepared by R-PE Surveying Ltd. along with a Site Plan provided by Quadangle Architects Ltd. and a Grading & Servicing Plan prepared by Crozier Consulting Engineers were used to determine the location of existing trees in relation to the proposed development works.

# Methodology

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, 9<sup>th</sup> Edition, published by the International Society of Arboriculture.

**Tree Inventory** (See Appendix A – Contextual Tree Inventory Plan for *context* and refer to enclosed V100 – Tree Inventory & Preservation Plan)

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.					

#### **EXISTING TREE INVENTORY** SPECIES CALIPER CROWN HEALTH STRUCTURE COMMENTS PRESERVATION **OWNERSHIP** MIN. TPZ IN (cm) IN (m) G/F/P DIRECTION 1 Linden 28.5 5.0 Poor One sided form 60% dead, declining REMOVE PRIVATE 1.8 Asymmetrical form 2 Austrian Pine 33.0 7.0 Good Double leader REMOVE **PRIVATE** 2.4 2 Honey locust 37.0 11.0 Asymmetrical Epicormic growth throughout REMOVE CITY 3 Fair form 4 Honey locust 41.0 14.0 Good Good form Some epicormic growth on lower branches REMOVE **PRIVATE** 3.0 4 5 Honey locust 35.0 13.0 Good One sided form Elevated crown, east side pruned due to hydro wires REMOVE **PRIVATE** 2.4 5 Honey locust 31.5 10.0 Fair Good form Minor dieback in crown REMOVE **PRIVATE** 2.4 6 Linden 41.0 6.0 Good Double leader Significant sucker growth at base REMOVE **PRIVATE** 3.0 7 8 Linden 36.0 9.0 Broad form REMOVE PRIVATE 2.4 8 Good Multiple leaders, crowded by adjacent tree Linden 30.0 9.0 Good Asymmetrical Crowded by adjacent tree, elevated crown REMOVE **PRIVATE** 24 9 form Linden 34 0 10.0 Good Broad form Minor dieback on lower branches REMOVE PRIVATE 24 10 Irregular form Leaning, double leader, one sided form 11 Linden 35.0 7.0 Fair REMOVE **PRIVATE** 2.4 11 12 White Mulberry 20.0 7.0 Good Pollarded form **PRESERVE NEIGHBOUR** 1.8 12 Heavily pruned REMOVE 13 Juniper 15-21 7.0 Good Multi-stemmed One sided form, crowded by adjacent tree, elevated crown PRIVATE 1.8 13 Juniper 40.0 7.0 Good Multi-stemmed Multiple stems fused together, One sided form, crowded by adjacent tree, REMOVE **PRIVATE** 24 14 elevated crown PRIVATE REMOVE 15 Juniper 31.0 8.0 Good One sided form crowded by adjacent tree, elevated crown 2.4 15 16 Juniper 23.0 8.0 Multi-stemmed One sided form, crowded by adjacent tree, elevated crown REMOVE **PRIVATE** 1.8 16 Good Significant dieback on east side 17 Juniper 9-28 7.0 Fair One sided form REMOVE PRIVATE 1.8 17 18 Juniper 12-28 10.0 Fair One sided form Dieback on lower branches REMOVE **PRIVATE** 1.8 18 19 Juniper 22.5 7.0 Fair One sided form Crown subordinated by adjacent tree REMOVE **PRIVATE** 1.8 19 20 Black Walnut 60.0 15.0 Good One sided form West side of crown pruned due to overhead wires **PRESERVE NEIGHBOUR** 3.6 20 Manitoba Maple 25.0 7.0 Fair One sided form Leaning, epicormic growth throughout **PRESERVE NEIGHBOUR** 1.8 21 22 Silver Maple Approx 16.0 Good Double stem Broad form, low branching, minor internal dieback **PRESERVE** NEIGHBOUR 3.6 22 50 23 REMOVE PRIVATE 23 Norway Maple 20.0 8.0 Fair Irregular form Crossing branches, some sucker growth throughout 1.8 24 Norway Maple 23.0 6.0 Poor Irregular form Wound at base, significant dieback in crown REMOVE **PRIVATE** 1.8 24 25 Norway Maple 24.0 8.0 Good Good form Minor decay near base, some internal deadwood REMOVE **PRIVATE** 1.8 25 Girdled stem, basal decay, minor dieback throughout Norway Maple 21.0 Good form REMOVE PRIVATE 1.8 26 26 7.0 Poor **NEIGHBOUR** Austrian Pine Approx 7.0 Fair Co-dominant Elevated crown, crowded by adjacent trees, minor dieback in crown **PRESERVE** 24 27 30 leaders Austrian Pine **PRESERVE** NEIGHBOUR 28 35.0 8.0 Fair High crown Dieback on lower branches, dieback in crown 2.4 28 Austrian Pine 8.0 Poor One sided form Crowded by adjacent tree, dieback on lower branches, no clear leader **PRESERVE NEIGHBOUR** 29 Approx 35 REMOVE EXEMPT 30 Serviceberry 6.0 2.0 Poor Good form Dieback throughout 1.2 30 Linden 11.5 4.0 Good Asymmetrical Girdled roots REMOVE **EXEMPT** 1.8 31 form REMOVE **EXEMPT** 32 Linden 13.0 4.0 Good Good form Immature tree 1.8 32 33 Linden 11.0 3.0 Good Good form REMOVE **EXEMPT** 1.8 33 Irregular form 34 Linden 22.5 6.0 Good Multiple leaders, lower limbs pruned, sucker growth at base REMOVE **PRIVATE** 1.8 34 35 10.0 4.0 Good form REMOVE EXEMPT 1.2 35 Honey locust Good Immature tree **EXEMPT** Honey locust 9.0 3.0 Good Good form Immature tree REMOVE 1.2 36 EXEMPT 37 Honey locust 9.0 3.0 Good Good form Immature tree REMOVE 1.2 37 38 Honey locust 6.0 2.0 Poor Narrow form Dead leader REMOVE **EXEMPT** 1.2 38 39 Honey locust 7.0 3.0 Poor 95% Dead REMOVE **EXEMPT** 39 Narrow form 1.2 EXEMPT 40 Honey locust 6.0 3.0 Poor Good form 50% of crown dead REMOVE 1.2 40 41 Honey locust 7.0 3.0 Fair Good form Minor dieback in crown REMOVE CITY 1.2 41 42 Honey locust 9.0 5.0 Good Good form REMOVE CITY 1.2 42 43 Linden 19.5 7.0 Good Good form REMOVE CITY 1.8 43 44 Emerald Cedar Whip-13 2.0 Good Good form Minor internal dieback REMOVE **EXEMPT** 1.8 44 45 Emerald Cedar Whip-13 2.0 Good Good form Minor internal dieback REMOVE EXEMPT 1.8 45

### **Observations**

The majority of the trees identified within and immediately adjacent to the property can be described as planted, landscape accent and buffer trees as well as a small number of naturalised individual trees along the property limits. The majority of the trees are immature and include some relatively recently planted trees. Some of the more mature trees occur around the existing office building at the southeast corner of the property and along the rear lots flanking the east side of the site. The health and condition of the trees vary; however, the majority are in relatively fair health.

# Appendix B - SITE PHOTOGRAPHS

#### 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 (exempt)	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:

- No Person shall Injure or Destroy a Tree with a Diameter of 15 centimeters or greater located on private property without a valid permit.
- No Person shall interfere with Hoarding that is erected in accordance with this By-law.
- No Person shall injure or destroy a Replacement Tree without a valid Permit.
- Permission is required for Ash or dead tree removals, but no permit fee is required.

# Appendix B - SITE PHOTOGRAPHS

#### **Tree Removals**

The following is a summary of proposed tree removals for this site that will require a permit for removal in accordance with the City of Mississauga Private Tree Bylaw. A total of twenty-six (26) trees are to be removed to accommodate the proposed site plan and grading requirements. As per City of Mississauga requirements, compensation planting for the removal of these trees will be required.

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

KEY	SPECIES	CALIPER	HEALTH	REASON	STATUS	OWNERSHIP
		(cm)	G/F/P			
1	Linden	28.5	Poor	Building Envelope	REMOVE	PRIVATE
2	Austrian Pine	33.0	Good	Building Envelope	REMOVE	PRIVATE
3	Honey locust	37.0	Fair	Building Envelope	REMOVE	CITY
4	Honey locust	41.0	Good	Building Envelope	REMOVE	PRIVATE
5	Honey locust	35.0	Good	Building Envelope	REMOVE	PRIVATE
6	Honey locust	31.5	Fair	Site Grading &	REMOVE	PRIVATE
7	Linden	41.0	Good	Site Grading &	REMOVE	PRIVATE
8	Linden	36.0	Good	Site Grading &	REMOVE	PRIVATE
9	Linden	30.0	Good	Site Grading &	REMOVE	PRIVATE
10	Linden	34.0	Good	Site Grading &	REMOVE	PRIVATE
11	Linden	35.0	Fair	Site Grading &	REMOVE	PRIVATE
13	Juniper	15-21	Good	Site Grading &	REMOVE	PRIVATE
14	Juniper	40.0	Good	Site Grading &	REMOVE	PRIVATE
15	Juniper	31.0	Good	Site Grading &	REMOVE	PRIVATE
16	Juniper	23.0	Good	Site Grading &	REMOVE	PRIVATE
17	Juniper	9-28	Fair	Site Grading &	REMOVE	PRIVATE
18	Juniper	12-28	Fair	Site Grading &	REMOVE	PRIVATE
19	Juniper	22.5	Fair	Site Parking	REMOVE	PRIVATE
23	Norway Maple	20.0	Fair	Site Parking	REMOVE	PRIVATE
24	Norway Maple	23.0	Poor	Site Parking	REMOVE	PRIVATE
25	Norway Maple	24.0	Good	Site Parking	REMOVE	PRIVATE
26	Norway Maple	21.0	Poor	Site Parking	REMOVE	PRIVATE
34	Linden	22.5	Good	Building Envelope	REMOVE	PRIVATE
41	Honey locust	7.0	Fair	Building Envelope	REMOVE	CITY
42	Honey locust	9.0	Good	Building Envelope	REMOVE	CITY
43	Linden	19.5	Good	Building Envelope	REMOVE	CITY

#### Total of 26 Trees to be Removed

Tree Protection (Refer to Appendix C – 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 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.

# Appendix B - SITE PHOTOGRAPHS

# **Tree Compensation**

The City of Mississauga requires replacement trees be provided for one or more trees 15cm or greater on your property.

A Tree Replacement security deposit determined by the City is required to ensure that the replacement trees are planted on private property. If there is no sufficient space to accommodate the trees, you must pay to plant replacement trees on City property.

The requirements for replacement tree planting are:

- At least 1.8 m tall if it's a coniferous (evergreen) tree or at least 6 cm in diameter if it's a deciduous (leaved) tree
- One replacement tree is required for every 15 cm (6 inches) diameter of the private or public tree removed. For example, when a tree 45 cm (18 inches) diameter is removed, three replacement trees are required.

Based on the above, a total of forty-eight (48) trees are required for compensation.

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 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 Star Seeker Inc., C/O Glenn Schnarr & Associates Inc. to prepare an Arborist Report for the subject property in accordance with City of Mississauga tree bylaw requirements. The owner is proposing to demolish the existing commercial plaza and construct a new multi-use development on site. Due to the proposed construction, grading, and servicing constraints, twenty-six (26) trees, subject to the private tree bylaw require removal. A permit to remove these trees will be required. A total of forty-eight (48) trees are required for compensation. All other trees are to be preserved and protected in accordance with City of Mississauga tree protection standards.

Prepared By:

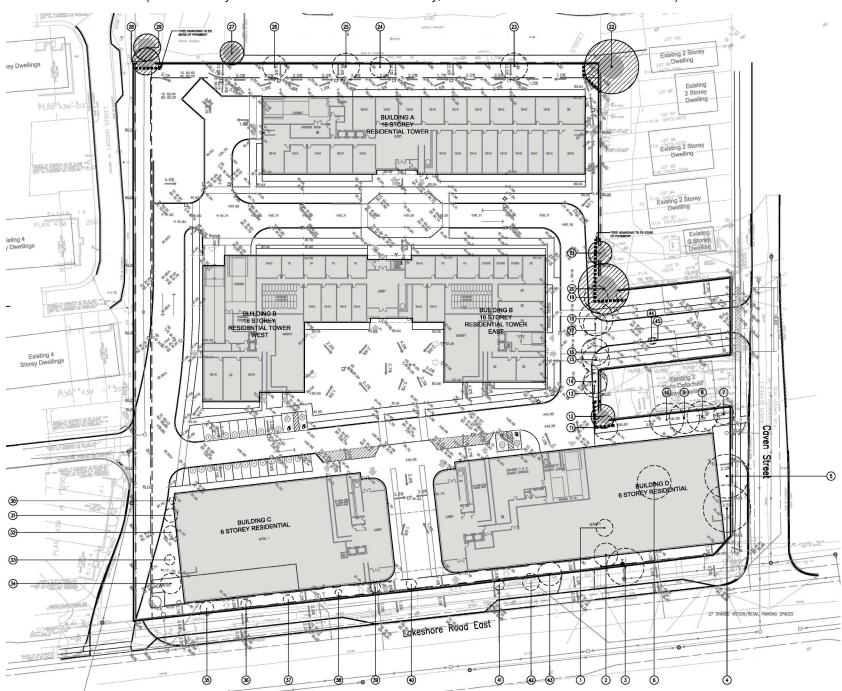
STRYBOS BARRON KING LTD.

**Matthew Gehres** 

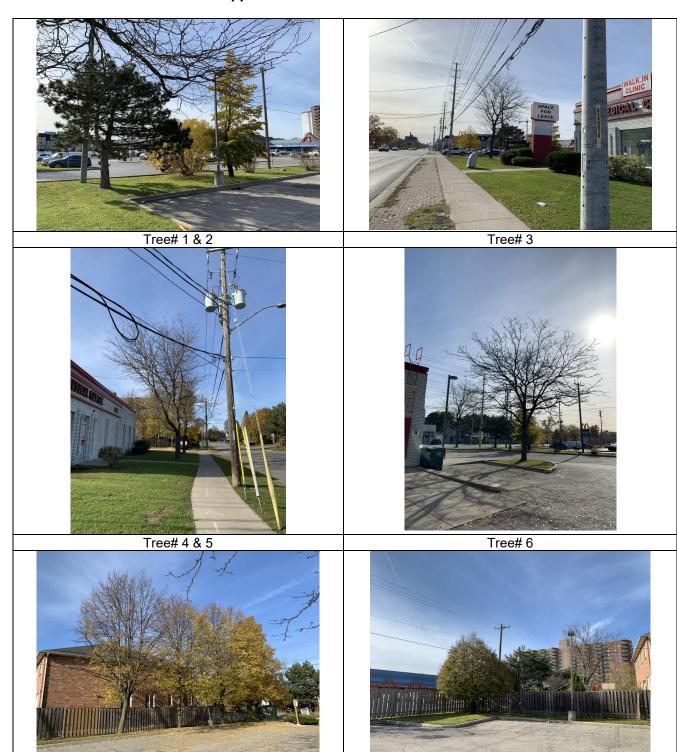
ISA Certified Arborist ON-1114A Senior Landscape Technologist

# Appendix A - COTEXTUAL TREE INVENTORY & PRESERVATION PLAN

(for context only - refer to full size V100 Tree Inventory, Preservation and Removals Plan for details)



Tree# 7-10

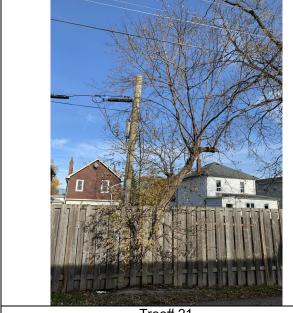


Tree# 11 & 12











Tree# 21 Tree# 22





Tree# 23-26 Tree# 27





Tree# 28 & 29 Tree# 30-34



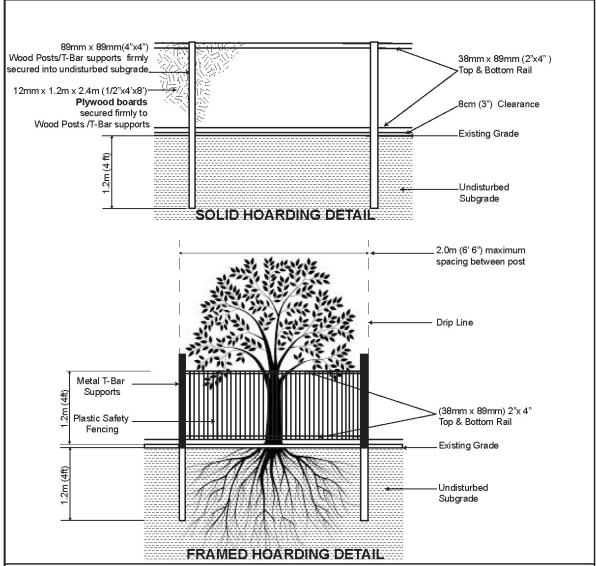


Tree# 41-43 Tree# 35-40



Tree# 44 & 45

# Appendix C - 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

MISSISSAUGA

SCALE : N.T.S DATE : June 2017