BEACON ENVIRONMENTAL

GUIDING SOLUTIONS IN THE NATURAL ENVIRONMENT

# Arborist Report
## 0 and 14259 Humber Station Road
## File # 21T-22002

*Prepared For:*

**Argo Humber Station Limited**

*Prepared By:*

**Beacon Environmental Limited**

*Date:* *Project:*

**May 2023** **221166**

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# 1. Introduction

Beacon Environmental Limited (Beacon) was retained by Argo Humber Station Limited to prepare an Arborist Report for properties located at 0 and 14259 Humber Station Road, which are legally describes as Part of the West Half of Lot 12, Conc. 5, Town of Caledon, Regional Municipality of Peel **(**ref. **Figure 1),** hereafter described as the subject lands. The Arborist Report is required to support the Humber Station Application for Draft Plan of Subdivision (ref. **Figure 2**).

This Arborist Report builds upon the tree inventory that included in the 2023 Comprehensive Environmental Impact Study and Management Plan (CEISMP) prepared in support of a Secondary Plan for the Caledon Station Community and authored by Beacon in collaboration with Glen Schnarr & Associates Inc., Urbantech Consulting and DS Consultants Ltd.

This Arborist Report was prepared in accordance with the *Terms of Reference for Arborist Reports, Tree Preservation Plans and Tableland Tree Removal Compensation* (Town of Caledon 2020).

The purpose of this Arborist Report is to:

- Identify and describe individual trees and tree groupings on the subject lands;
- Assess potential impacts to individual trees and tree groupings resulting from the proposed development including requirements for tree removals; and
- Provide recommendations for tree preservation and protection.

# 2. Methods

An inventory and evaluation of the existing individual trees and tree groupings on the subject lands was conducted on August 20, 2020, and May 16, 2023 by Arborists certified by the International Society of Arboriculture (ISA).

In general, individual trees ≥10 cm DBH (diameter at breast height, measured 1.4 m above grade) were tagged with numbered aluminum forestry tags and their locations were recorded with GPS. Trees of similar species that formed linear hedgerows were inventoried as groups. For each tree, the following information was recorded:

- Species;
- Trunk DBH (diameter at breast height, measured 1.4 m above grade);
- Health condition; and
- Structural condition rating.

Each tree was assigned a condition rating of good, fair, poor, or dead, based on the following criteria:

- ***Poor*** – Severe dieback, significant lean, missing leader, major defects, significant decay and/or disease presence;
- ***Fair*** – Moderate dieback and/or lean, limb defects, multiple stems, moderate foliage damage from stress;

- ***Good*** – Healthy vigorous growth, minor visible defects or damage; and
- ***Dead*** – No live growth.

Tree condition was assessed based on presence and severity of flaws, damage, evidence of pests or diseases, structural condition, dead or dying branches, or other decline indicators.

Limitations of the assessment are summarized in **Appendix A.**

# 3. Findings

A total of 79 individual trees were documented and assessed on and adjacent to the subject lands. Two of the trees are located within the municipal road allowance along Humber Station Road. Most of the inventoried trees are on adjacent properties. The findings of the tree inventory and assessment are provided in **Appendix B**.

# 4. Impact Assessment and Recommendations

## 4.1 Tree Removals

Based on consultation and review of the proposed development and grading plans (GSAI 2023; Urbantech 2023), all trees will need to be removed to facilitate development of the subject lands. Trees identified for removal are illustrated on the Tree Inventory and Preservation Plan (**Appendix C)**. Several trees are located on adjacent properties; therefore, approval must be obtained from the owner to remove the trees.

There are no Provincially Endangered or Threatened tree species on record for the subject lands, nor were any observed during the inventory.

The federal *Migratory Birds Convention Act* (1994) and provincial *Fish and Wildlife Conservation Act* (1997) protect the nests, eggs and young of most bird species from harm or destruction. As the peak breeding bird season in southern Ontario is generally from mid-May to early-July, and the more general breeding bird season is between early April and late August, vegetation clearing should occur outside of these periods (i.e., April 1$^{st}$ to August 31$^{st}$) whenever possible. For any proposed clearing of vegetation within these dates, or where birds may be suspected of nesting outside of these dates, an Ecologist or Avian Biologist should undertake detailed nest searches immediately prior to site alteration to ensure that no active nests are present. If active nests are confirmed, removal of the tree / vegetation will need to be delayed until the nest is no longer actively used.

## 4.2 Tree Protection

No trees have been identified for preservation due to their locations conflicting with grading and development.


**LEGEND**

- SUBJECT LANDS
- STUDY AREA (CEISMP)

BEACON ENVIRONMENTAL

DS CONSULTANTS LTD. Geotechnical ❖ Environmental ❖ Materials ❖ Hydrogeology

GSAI Glen Schnarr & Associates Inc.

URBANTECH

**ARBORIST REPORT**
**HUMBER STATION DRAFT PLAN OF SUBDIVISION**

PROJECT No. 221166

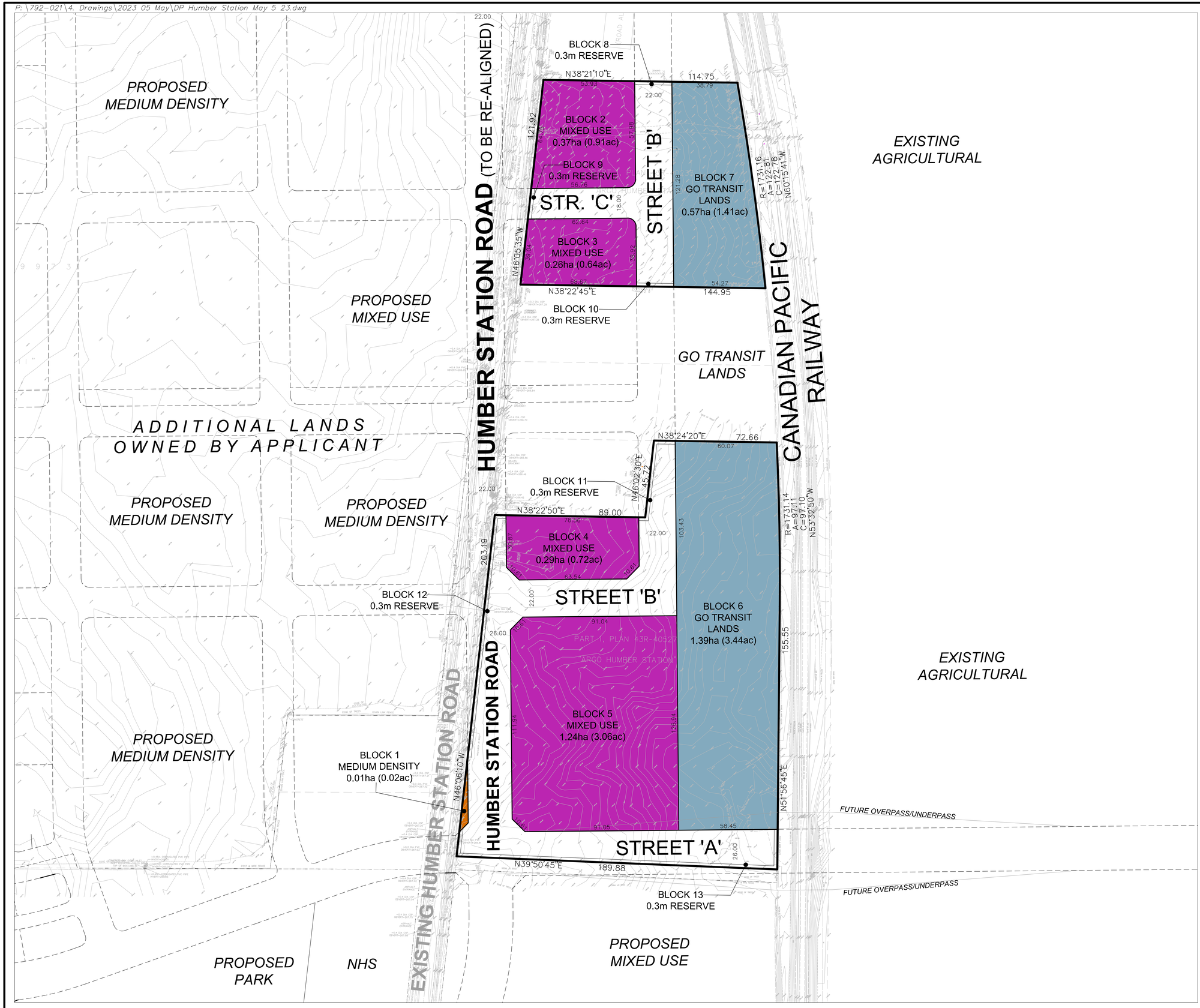
**FIGURE 1**

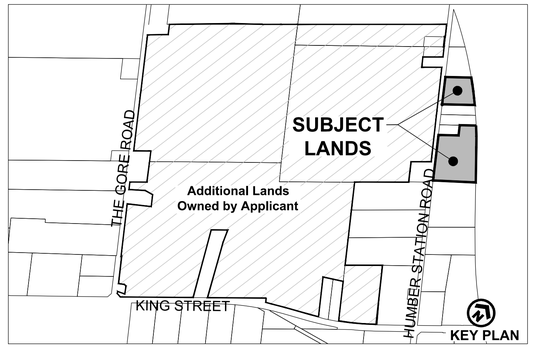
**SITE LOCATION**

May 2023 Scale 1:12,000

C:\ODB\OneDrive - Beacon Environmental\GeoSpatial\Geo Projects\2021\221166 Humber Draft Plan EIS\MXD\20230510_Figure01_SiteLocation_221166.mxd

P:\792-021\4. Drawings\2023 05 May\DP Humber Station May 5 23.dwg




# DRAFT PLAN OF SUBDIVISION
## ARGO HUMBER STATION LIMITED
## *FILE# 21T-22002*

*PART OF THE WEST HALF OF LOT 12,*
*CONCESSION 5*
*(TOWNSHIP OF ALBION)*
TOWN OF CALEDON
REGIONAL MUNICIPALITY OF PEEL

**SURVEYORS CERTIFICATE**

I HEREBY CERTIFY THAT THE BOUNDARIES OF THE LANDS TO BE SUBDIVIDED AS SHOWN ON THIS PLAN AND THEIR RELATIONSHIP TO ADJACENT LANDS ARE CORRECTLY AND ACCURATELY SHOWN.

SIGNED _____ DATE: MAY 15, 2023


**MONIKA BUDZIAK, OLS**
J. D. BARNES LIMITED
EMAIL: mbudziak@jdbarnes.com


**ADDITIONAL INFORMATION**

(UNDER SECTION 51(17) OF THE PLANNING ACT) INFORMATION REQUIRED BY CLAUSES A,B,C,D,E,F,G,J, & L ARE SHOWN ON THE DRAFT AND KEY PLANS.

H) MUNICIPAL AND PIPED WATER TO BE PROVIDED
I) SANDY LOAM AND CLAY LOAM
K) SANITARY AND STORM SEWERS TO BE PROVIDED

**LAND USE SCHEDULE**

| LAND USE | LOTS / BLOCKS | AREA (ha) | AREA (ac) | UNITS |
|---|---|---|---|---|
| MEDIUM DENSITY RESIDENTIAL | 1 | 0.01 | 0.02 | |
| MIXED USE | 2-5 | 2.16 | 5.34 | |
| GO TRANSIT LANDS | 6,7 | 1.96 | 4.84 | |
| 0.3m RESERVE | 8-13 | 0.01 | 0.02 | |
| 26.0m R.O.W. (Length - 300m) | | 0.67 | 1.66 | |
| 22m R.O.W. (Length - 312m) | | 0.68 | 1.68 | |
| 18.0m R.O.W. (Length - 63m) | | 0.12 | 0.30 | |
| **TOTAL** | **13** | **5.61** | **13.86** | |

**NOTES**

-STREET 'A' & STREET 'B' / HUMBER STATION ROAD DAYLIGHT TRIANGLE: 7.5m x 7.5m
-LOCAL / COLLECTOR DAYLIGHT ROUNDINGS: 5m
-ALL INTERSECTIONS ARE 90 DEGREES UNLESS OTHERWISE NOTED

SCALE 1:1000
*(24 x 36)*
MAY 5, 2023

ARGO DEVELOPMENT CORP
GSAI

# 5. Tree Replacement

The Town of Caledon requires compensation for trees removed in relation to draft pan and site plan applications as outlined in the *Terms of Reference for Arborist Reports, Tree Preservation Plans and Tableland Tree Removal Compensation* (Town of Caledon 2020). Compensation for removed trees is determined based on the cost to replace the trees that will be removed due to development. The Town of Caledon has developed a formula for calculating compensation values that is based on tree size. An analysis has been completed for the tree removals on this site using this formula, and it has been determined that the removal of 79 trees — of which 69 are in fair or better condition — would require planting 151 trees as seen in **Table 1**.

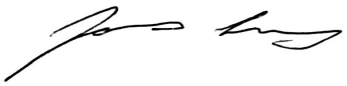
**Table 1. Calculate of Tree Compensation Planting**

| Diameter at Breast Height (cm) | Number of Trees in Fair or Good Condition to be Removed | Compensation Ratio | Number of Compensation Trees Required |
|---|---|---|---|
| 10-20 | 26 | 1:1 | 26 |
| 21-35 | 20 | 2:1 | 40 |
| 36-50 | 11 | 3:1 | 33 |
| 51-65 | 8 | 4:1 | 32 |
| >65 | 4 | 5:1 | 20 |
| | | **Total:** | **151** |

If there is in insufficient room to plant the required number of replacement trees on-site, then financial compensation (cash-in-lieu) may be accepted at rate (per tree) as determined by the Town.

Although every effort has been made to ensure that this assessment is reasonably accurate, it is recommended that trees be re-assessed after 5 years to identify changes in condition. Design or site plan changes may also necessitate re-assessment and/or revisions to this report. **The assessment presented in this report is valid at the time of the inspection and is intended for sole use of the client.** Any use of this report by a third party, and any decision based on this report, is the singular responsibility of the third party.

Report prepared by:
**Beacon Environmental**



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Report reviewed by:
**Beacon Environmental**

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Principal, Senior Ecologist

# 6. References

Beacon Environmental, Urbantech Consulting, Glen Schnarr & Associates Inc., DS Consultants Ltd. 2023.
Comprehensive Environmental Impact Study and Management Plan Caledon Station Community Secondary Plan. May 2023.

Government of Canada. 1994.
*Migratory Birds Convention Act,* 1994 (S.C. 1994, c.22).

Government of Ontario. 1997.
*Fish and Wildlife Conservation Act*, 1997 (S.O 1997, c. 41)

Town of Caledon. April 2020.
Terms of Reference for Arborist Reports, Tree Preservation Plans and Tableland Tree Removal Compensation. April 2020.

# Appendix A

## Tree Inventory and Assessment Methodology & Limitations of Tree Assessment

# Appendix A

## Tree Inventory and Assessment Methodology*

**Note that not all the tree descriptors contained herein may be used in a tree assessment and report.*

**DBH (cm):** Diameter at breast height, 1.4 m above ground, measured in centimeters. Two or more numbers denotes the DBH of each stem/trunk for trees with multiple stems/trunks. For multi-stemmed trees, for the purpose of determining the minimum tree protection zone DBH is calculated as the square root of the sum of the square DBH of each stem.

**Crown Reserve/Diameter (metres):** Crown diameter (tree's canopy) measured at intervals of 1 metre.

**Condition:** General Condition is recorded for standard tree inventories and assessments. For detailed tree inventories and assessments, when required the assessment of tree condition evaluates factors of Biological Health and Structural Condition separately.

The descriptors of health and structure attributed to a tree evaluate the individual specimen to what could be considered typical for that species growing in its location under current site and climatic conditions. For example, some species can display inherently poor branching architecture, such as multiple acute branch attachments with included bark. Whilst these structural defects may technically be considered arboriculturally poor, they are typical for the species and may not constitute an increased risk of failure. These trees may be assigned an intermediate structural rating of fair – poor (rather than poor) at the discretion of the assessor.

**General Condition:** Outlined below are the detailed guidelines utilized for the classification of general condition rating:

- **Excellent**: (Healthy)
  No major branch mortality: crown is typical with less than 10% branch or twig mortality; no signs of decay.
- **Good**: (Light Decline)
  Branch mortality, twig dieback in 11-25% of the crown: broken branches or crown missing based on presence of old snags is less than 26%; minor evidence of decay.
- **Fair**: (Moderate Decline)
  Branch mortality, twig dieback in 26-50% of the crown: broken branches or crown area missing based on presence of old snags is 50% or less; decay evident.
- **Poor**: (Severe Decline)
  Branch mortality, 50% or more of the crown dead: broken branches or crown area missing based on presence of old snags in more than 50%; decay resulting in high hazard assessment.
- **Dead**: (due to Natural or Human Causes)
  Tree is dead, either standing or down: phloem under bark has brown streaks: few epicormic shoots may be present.

**Biological Health:** Related to presence and extent of various attributes to describe the overall health and vigour of the tree.

| Biological Health Category* | Vigour, Extension, & Growth | Decline symptoms, Deadwood, & Dieback | Foliage density, colour, size, & intactness | Pests and/or Disease |
|---|---|---|---|---|
| **Excellent** | Above typical. Excellent. Full canopy density. | None or negligible. | Above typical. No deficiencies or defects detected. | None or negligible. |
| **Good** | Above typical. Full canopy density. | Negligible. | Typical. Minor deficiencies or defects could be present. | Negligible. |
| **Fair** | Typical vigour. >80% canopy density. | More than typical. Small sub-branch dieback. | Exhibiting deficiencies. Could be thinning, or foliage smaller. | Minor, within damage thresholds. |
| **Poor** | Below typical or minimal – declining. | Excessive, large, and/or prominent amount and size of dead wood. | Exhibiting severe deficiencies. Thinning foliage, generally smaller or deformed. | Exceeds damage thresholds and contributing to decline. |
| **Dead** | Tree is dead | n/a | n/a | n/a |

*Note that intermediate ratings can be applied, at the discretion of the arborist, in cases where biological health attributes fall within closely related categories, e.g. Good-Fair.

**Structural Condition:** Related to defects in a tree's structure, (i.e., lean, codominant trunks). Structural rating will also consider general branching architecture, stem taper, live crown ratio, crown symmetry, and crown position such as a tree being suppressed by more dominant trees. Tree structure zones listed below are adapted from Coder, Construction damage assessments: trees and sites, 1996 University of Georgia, USA.

| Structure Category* | Root plate & Lower stem | Trunk | Primary branch support | Outer crown & Roots |
|---|---|---|---|---|
| **Good** | No obvious damage, disease or decay; obvious basal flare / stable in ground. | No obvious damage, disease, or decay; well tapered. | Well formed, attached, spaced and tapered. No history of failure. | No obvious damage, disease, decay, or structural defect. No history of failure. |
| **Fair** | Moderate-Minor damage or decay. Basal flare present. | Minor damage or decay. | Generally well-attached, spaced and tapered branches. Minor structural deficiencies may be present or developing. No history of branch failure. | Minor damage, disease, or decay; minor branch end-weight or over-extension. No history of branch failure. |
| **Poor** | Moderate - major damage, disease or decay; fungal fruiting bodies present. Excessive lean placing pressure on root plate. | Moderate - major damage, disease, or decay; exceeds recognized thresholds; fungal fruiting bodies present. Acute lean. Stump re-sprout. | Weak, decayed, cavities or has acute branch attachments with included bark; excessive compression flaring; failure likely. Evidence of major branch failure. | Moderate - major damage, disease or decay; fungal fruiting bodies present; major branch end-weight or over-extension. Branch failure evident. |

*Note that intermediate ratings can be applied, at the discretion of the arborist, in cases where biological health attributes fall within closely related categories, e.g. Good-Fair.

**Height (metres):** Height of tree from ground to top of crown. Height is estimated from visual ground observations.

**Position on Site: AP** - above-ground planter; **ED** - Edge, e.g., forest, woodland; **IN** - Interior, e.g., forest, woodland; **HR** - hedgerow, row/linear group of trees; **OG** - open-grown; **PI** - planting island; **GP** - group/cluster

**On-site Tree:** Tree trunk located completely within the property boundary of the subject property.

**Off-site Tree:** Tree trunk located completely outside of the property boundary of the subject property.

**Public Tree:** Tree is located on the property of the municipality/region, e.g., within Right-of-Way.

**Shared Tree:** Tree shared between the subject property and adjacent private or public property (i.e. tree trunk located partially within the boundary of the subject property). Documented as '**S**' in off-site tree or municipal tree data columns.

**Recommended Action:** A recommendation of the following three categories is assigned to preserve or remove a tree:

i. The tree's current biological health and structural condition
ii. The anticipated impacts from proposed development
iii. The summary of the previous two categories.

Note: Only trees having a recommendation of preserve for both health and structure, and impacts from the proposed development are assigned a final recommendation of preserve.

**P** (Preserve) - Tree has a moderate to high biological health AND moderate to high structural condition, AND is likely to survive impact from the proposed development (if present). The tree is likely to survive for at least 3 to 5 years.

**R** (Remove) - Tree has low biological health, AND/OR low structural condition, AND/OR will not survive the proposed development impacts (if present). The tree is not likely to survive more than 1-3 years.

**C** (Conditional) - In some situations a tree's preservation or removal is related to potential relocation/modification of the limit of construction, and/or known arboricultural treatments that will likely improve the biological health and/or structural condition of the tree. This may include review of a tree's condition, e.g., roots, at time of construction/excavation.

**Site Development Impact:** Impact to tree is anticipated from proposed development (e.g., road, building) at or near the tree, and/or grade changes (cut/fill).

**Transplant Potential:** A transplantation recommendation of **Y**es or **N**o based on a tree's size, species, and condition, and present and future site conditions (e.g. near adjacent trees/objects, on slopes, soil type).

**Codes of Damage Descriptions**
BA - branch attachment poor
BB - burlap, basket, wire present on/in tree/root ball
BC - bark crack
BI - bark included
BN - bark necrosis
BS - basal trunk sprouts
CA – crown asymmetrical
CB - crown broken
CD - crown dieback
CK - canker (abnormal growth from disease or damage)
CL - crown live, CL20 - 20% live crown
CS - crown sprouts
CT - crown thin (having reduced foliage)
CV - crown vines
DW - deadwood
ES - Epicormic sprouts
FB - fungal bodies present
LC - leaves chlorotic (yellow)
LD - leaves defoliated
LP - leader poor/problem
MB - multiple branches from same point of attachment
ML - multiple leaders
PH - planted high
PI - improper pruning
PL - planted low
RC - root crown damage/abnormality
RE - roots exposed
RG - roots girdling
SC - stems co-dominant
SG - stem girdled
ST - soil on trunk
TB - trunk bent
TC - trunk cavity
TK - trunk crooked
TD - trunk decay
TE - trunk base enlarged abnormally
TF - trunk basal flair lacking / abnormal
TG - trunk/stem girdling
TL - trunk lean (L< 5°), (M 5-20°), (H>20°)
TM - trunks multiple from at or below ground level
TS - trunk split
TT - trunk twisted
TW - trunk wound
WW - wet wood

**Quantified Tree Conditions (defects, diseases)**
L (low, minor), M (moderate), H (high, severe)
e.g. TK(H) = severe crooked trunk
TD(L) = minor trunk decay
TF(H) = severely poor basal trunk flare

**Cardinal Coordinates (N, S, E, W)**
e.g., LN(L-S) = minor lean to the south

**Codes of Recommendations**
A - Add mulch
B - Remove attachments (burlap, wire, stake, guard)
C - Cable
F - Fertilize
L - lower soil level
M - Monitor
N - None Needed
P - Prune
R - Remove
S - Soil bulk density (compaction) lower
V - soil volume (increase)
W - Water

**Priority**: An action priority schedule (i.e. general timing) to provide arboricultural treatment(s).
E - Extremely Urgent (within a week)
U - Urgent (within 3 months)
H - High (within a year)
M - Moderate (within 3 years)
L - Low (little or no action required for at least 5 years)

# Limitations of Tree Assessment

It is the policy of Beacon Environmental Ltd. to attach the following clause regarding limitations of the tree assessment. The intent is to ensure that the client is aware of what is technically and professionally realistic in assessing and/or retaining trees.

The assessment of the trees presented in this report has been made using accepted arboricultural techniques. These techniques include a visual examination of the above-ground parts of each tree for structural defects, scars, external indications of decay such as fungal fruiting bodies, evidence of insect attack, crown dieback, discoloured foliage, the condition of any visible root structures, the degree and direction of lean (if any), the general condition of the tree(s) and the surrounding site, and the proximity of property and people. Except where specifically noted in the report, none of the trees examined were dissected, cored, probed, or climbed, and detailed root crown examinations involving excavation were not undertaken.

Notwithstanding the recommendations and conclusions made in this report, it must be recognized that trees are living organisms and their health and vigour constantly change over time. They are not immune to changes in site conditions, pests, or variations in the weather conditions including severe storms with high-speed winds. Furthermore, some symptoms may only be visible seasonally; the extent of observations that can be made may be limited by the time of year in which the inspection took place.

While reasonable efforts have been made to ensure that the trees recommended for retention are healthy unless stated otherwise within the report, no warranty or guarantees are offered, or implied, that these trees, or any parts of them, will have continued health or structure as noted in the report. It is both professionally and practically impossible to predict with absolute certainty the behaviour of any single tree or group of trees or their component parts in all circumstances. Inevitably, a standing tree will always pose some risk. Most trees have the potential for failure if provided with the necessary combinations of stresses and elements. This risk can only be eliminated if the tree is removed.

Although every effort has been made to ensure that this assessment is reasonably accurate, it is recommended that trees be re-assessed periodically to identify changes in condition. Design or site plan changes may also necessitate re-assessment and/or revisions to this report. **The assessment presented in this report is valid at the time of the inspection and is intended for sole use of the client.** Any use of this report by a third party, and any decision based on this report, is the singular responsibility of the third party.

# Appendix B

## Tree Inventory Data

# Appendix B

## Tree Inventory Data

### Table B-1. Summary of Individual Trees

| Tree No. | Scientific Name | Common Name | DBH (cm) | Condition | Comments |
|---|---|---|---|---|---|
| 928 | *Salix x sepulcralis* | Weeping Willow | 13 | Good | Good form and vigour. |
| 929 | *Salix x sepulcralis* | Weeping Willow | 26 | Good | Good form and vigour; Active bird nest. |
| 930 | *Salix x sepulcralis* | Weeping Willow | 13, 8 | Good | Good vigour; Stems fork near ground; Included bark. |
| 931 | *Salix x sepulcralis* | Weeping Willow | 27 | Fair | Full healthy crown; Wire fence gridling stem. |
| 931B | *Salix x sepulcralis* | Weeping Willow | 35, 35 | Fair | Leaders broken off; Stems fork near ground; Included bark; Inaccessible due to standing water, DBH measurement estimated. |
| 932 | *Salix x sepulcralis* | Weeping Willow | 15 | Good | Good vigour. |
| 933 | *Salix x sepulcralis* | Weeping Willow | 10 | Good | Good vigour. |
| 934 | *Salix x sepulcralis* | Weeping Willow | 39 | Fair | Moderate dieback and thinning; Epicormic shoots along stem. |
| 935 | *Salix x sepulcralis* | Weeping Willow | 40 | Fair | Leader broken off; Epicormic shoots along stem; Tree growing in standing water. |
| 936 | *Populus tremuloides* | Trembling Aspen | 14 | Good | Good form and vigour. |
| 937 | *Malus pumila* | Common Apple | 25, 25, 23, 15, 15 | Fair-Good | Minor dieback and thinning; Stems fork near ground; Included bark. |
| 938 | *Morus alba* | White Mulberry | 18 | Good | Good form and vigour. |
| NT15 | *Salix x sepulcralis* | Weeping Willow | 70 @ 1 m | Fair | |
| NT16 | *Salix x sepulcralis* | Weeping Willow | 30, 25 | Fair | |
| NT17 | *Salix x sepulcralis* | Weeping Willow | 45 | Poor | Rot at base and strong lean |
| NT18 | *Salix x sepulcralis* | Weeping Willow | 60 | Fair-Good | Fork |
| NT19 | *Salix x sepulcralis* | Weeping Willow | 50, 40 | Fair | Split in upper crown |
| NT20 | *Salix x sepulcralis* | Weeping Willow | 80 | Fair | Dead limb with cavities |

### Table B-2. Summary of Trees in Group M1

| Scientific Name | Common Name | DBH (cm) | Crown Radius (m) | Condition | Comments |
|---|---|---|---|---|---|
| *Picea glauca* | White Spruce | 20 | 2 | Good | On neighbouring property; Good form and vigour. |
| *Picea abies* | Norway Spruce | 40 | 3 | Good | On neighbouring property; Good form and vigour. |
| *Fraxinus pennsylvanica* | Green Ash | 30 | 3 | Dead | On neighbouring property; Standing snag. |
| *Fraxinus pennsylvanica* | Green Ash | 40 | 3 | Dead | On neighbouring property; Standing snag. |
| *Picea glauca* | White Spruce | 20 | 3 | Good | On neighbouring property; Good form and vigour. |
| *Picea glauca* | White Spruce | 35 | 3 | Good | On neighbouring property; Good form and vigour. |
| *Picea pungens* | Blue Spruce | 20 | 2 | Good | On neighbouring property; Good form and vigour. |
| *Fraxinus pennsylvanica* | Green Ash | 30 | 3 | Dead | On neighbouring property; Standing snag. |
| *Fraxinus pennsylvanica* | Green Ash | 40 | 3 | Dead | On neighbouring property; Standing snag. |
| *Pinus nigra* | Austrian Pine | 15 | 2 | Poor | On neighbouring property; Thin crown |
| *Picea abies* | Norway Spruce | 20 | 2 | Good | On neighbouring property; Good form and vigour. |
| *Pinus nigra* | Austrian Pine | 20 | 2 | Fair | On neighbouring property; Crown with some dieback. |

## Table B-3. Summary of Trees in Group M2

| Scientific Name | Common Name | DBH (cm) | Crown Radius (m) | Condition | Comments |
|---|---|---|---|---|---|
| *Acer platanoides* | Norway Maple | 20 | 3 | Good | On neighbouring property; Good form and vigour. |
| *Thuja occidentalis* | Eastern White Cedar | Approx 20 stems 10–15 | 2 | Good | On neighbouring property; Dense hedge |
| *Acer platanoides* | Norway Maple | 12 | 2 | Fair | On neighbouring property; Included bark in unions; good vigour otherwise. |
| *Thuja occidentalis* | Eastern White Cedar | 15 | 2 | Good | On neighbouring property; Good form and vigour. |

## Table B-4. Summary of Trees in Group M3

| Scientific Name | Common Name | DBH (cm) | Crown Radius (m) | Condition | Comments |
|---|---|---|---|---|---|
| *Fraxinus pennsylvanica* | Green Ash | 35 | 3 | Dead | On neighbouring property; Standing snag. |
| *Picea glauca* | White Spruce | 15 | 2 | Good | On neighbouring property; Good form and vigour. |

## Table B-5. Summary of Trees in Group N1

| Scientific Name | Common Name | DBH (cm) | Crown Radius (m) | Condition | Comments |
|---|---|---|---|---|---|
| *Carya cordiformis* | Bitternut Hickory | 15 | 4 | Good | Good form and vigour, Off site. |
| *Carya cordiformis* | Bitternut Hickory | 15 | 4 | Good | Good form and vigour, Off site. |
| *Carya cordiformis* | Bitternut Hickory | 10 | 3 | Good | Good form and vigour, Off site. |
| *Carya cordiformis* | Bitternut Hickory | 12 | 4 | Good | Good form and vigour, Off site. |
| *Carya cordiformis* | Bitternut Hickory | 23 | 6 | Good | Good form and vigour. |
| *Carya cordiformis* | Bitternut Hickory | 22 | 5 | Good | Good form and vigour. |
| *Carya cordiformis* | Bitternut Hickory | 25 | 6 | Good | Good form and vigour, Off site. |
| *Carya cordiformis* | Bitternut Hickory | 22 | 5 | Good | Good form and vigour. |
| *Carya cordiformis* | Bitternut Hickory | 25 | 6 | Good | Good form and vigour, Off site. |
| *Carya cordiformis* | Bitternut Hickory | 30 | 8 | Good | Good form and vigour, Boundary tree. |
| *Carya cordiformis* | Bitternut Hickory | 26 | 6 | Good | Good form and vigour, Boundary tree. |
| *Carya cordiformis* | Bitternut Hickory | 35 | 8 | Good | Good form and vigour, Off site. |
| *Carya cordiformis* | Bitternut Hickory | 36 | 8 | Good | Good form and vigour, Off site. |
| *Carya cordiformis* | Bitternut Hickory | 32 | 7 | Good | Good form and vigour, Off site. |
| *Carya cordiformis* | Bitternut Hickory | 31 | 6 | Good | Good form and vigour, Boundary tree. |
| *Ulmus americana* | American Elm | 35 | N/A | Dead | Standing snag. |
| *Ulmus americana* | American Elm | 44 | N/A | Dead | Standing snag. |
| *Malus pumila* | Common Apple | 12 | 4 | Good | Good vigour. |
| *Malus pumila* | Common Apple | 22 | 6 | Fair-Good | Minor dieback and thinning, Off site. |
| *Malus pumila* | Common Apple | 32 | 8 | Fair-Good | Minor dieback and thinning, Off site. |
| *Malus pumila* | Common Apple | 33 | 7 | Fair-Good | Minor dieback and thinning, Off site. |
| *Malus pumila* | Common Apple | 34 | 7 | Fair-Good | Minor dieback and thinning, Off site. |
| *Tilia americana* | Basswood | 30, 45 | 8 | Good | Good vigour; Stems for near ground; Included bark. |
| *Ulmus americana* | American Elm | 33 | N/A | Dead | Standing snag. |
| *Tilia americana* | Basswood | 38, 38 | 9 | Good | Good vigour; Stems for near ground; Included bark, Off site. |
| *Malus pumila* | Common Apple | 37 | 8 | Good | Good vigour, Off site. |
| *Prunus serotina* | Black Cherry | 45 | 8 | Good | Good form and vigour, Off site. |
| *Acer negundo* | Manitoba Maple | 45, 35 | 10 | Fair-Good | Minor dieback and thinning; Stems fork near ground; Included bark, Off site. |
| *Tilia americana* | Basswood | 55, 50 | 11 | Good | Good vigour; Stems for near ground; Included bark; Full healthy crown. |
| *Tilia americana* | Basswood | 36 | 7 | Good | Good form and vigour. |
| *Tilia americana* | Basswood | 37 | 8 | Fair-Good | Minor dieback and thinning. |

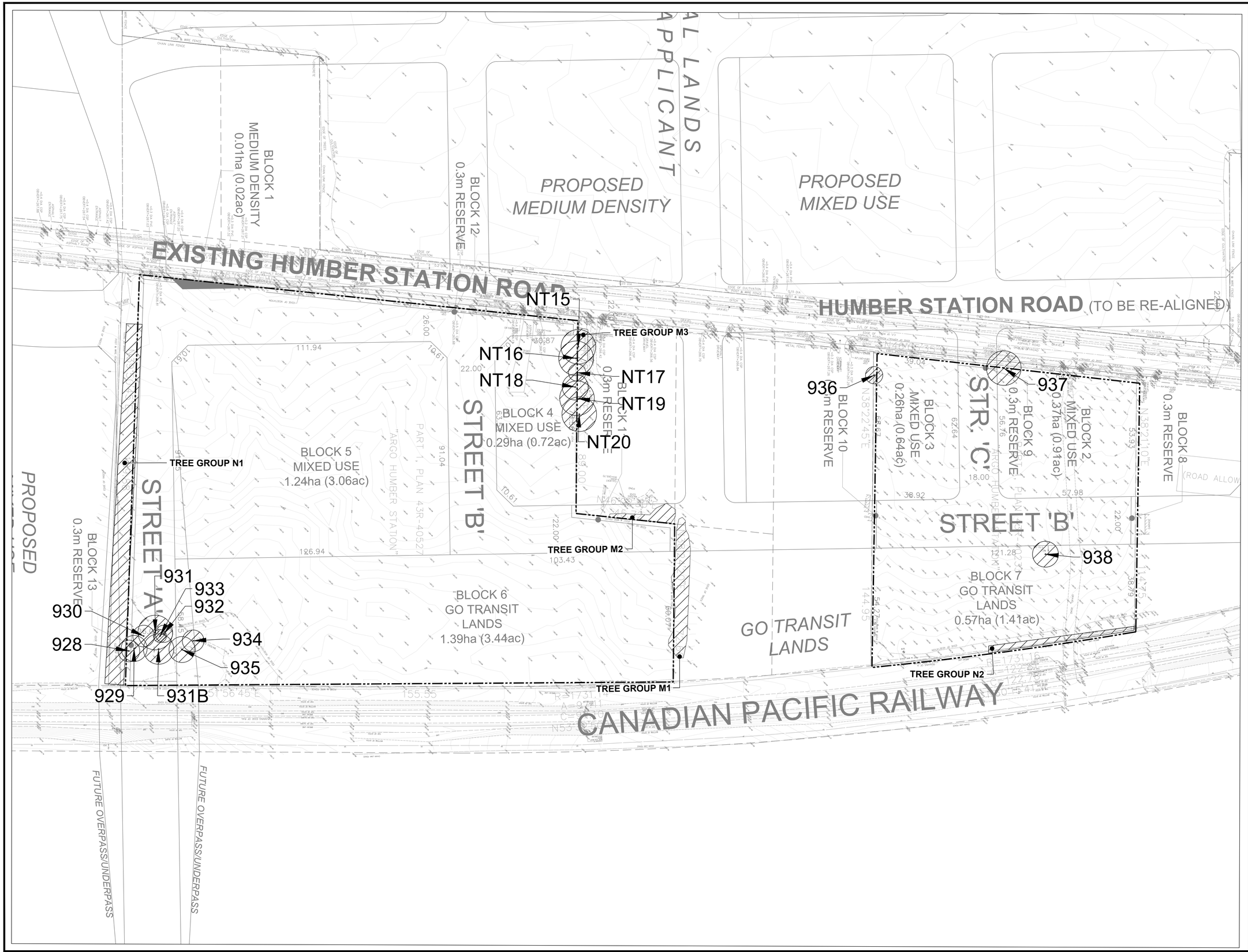
| Scientific Name | Common Name | DBH (cm) | Crown Radius (m) | Condition | Comments |
|---|---|---|---|---|---|
| *Tilia americana* | Basswood | 50, 55, 44 | 10 | Fair-Good | Minor dieback and thinning; Stems fork near ground; Included bark; Full healthy crown, Off site. |
| *Tilia americana* | Basswood | 22 | 5 | Good | Good form and vigour, Off site. |
| *Tilia americana* | Basswood | 35 | 8 | Good | Good form and vigour, Off site. |
| *Tilia americana* | Basswood | 55 | 10 | Good | Good form and vigour, Off site. |
| *Tilia americana* | Basswood | 53 | 9 | Good | Good form and vigour, Off site. |
| *Tilia americana* | Basswood | 28 | 5 | Good | Good form and vigour, Off site. |

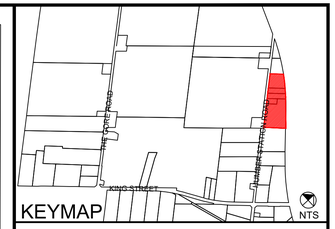
**Table B-6. Summary of Trees in Group N2**

| Scientific Name | Common Name | DBH (cm) | Crown Radius (m) | Condition | Comments |
|---|---|---|---|---|---|
| *Morus alba* | White Mulberry | 13 | 4 | Good | Good vigour. |
| *Malus pumila* | Common Apple | 13 | 3 | Fair-Good | Minor dieback and thinning. |
| *Malus pumila* | Common Apple | 13 | 3 | Fair-Good | Minor dieback and thinning. |
| *Malus pumila* | Common Apple | 12 | 3 | Fair-Good | Minor dieback and thinning, Boundary tree. |
| *Ulmus pumila* | Siberian Elm | 18, 15 | 7 | Fair-Good | Minor dieback and thinning; Stems fork below breast height; Included bark. |
| *Acer negundo* | Manitoba Maple | 35, 38 | 10 | Fair | Moderate dieback and thinning; Stems fork near ground; Included bark. |
| *Populus tremuloides* | Trembling Aspen | 18, 6 | 7 | Good | Good vigour; Stems for near ground; Included bark, Boundary tree. |
| *Populus tremuloides* | Trembling Aspen | 23, 6 | 6 | Good | Good vigour; Stems for near ground; Included bark, Boundary tree. |

# Appendix C

## Tree Inventory Preservation Plan




## LEGEND

- Property Boundary
- 1678 Tree tag
- Tree Crown
- Minimum Tree Protection Zone
- Tree Location
- Tree to be Preserved
- Tree to be Removed

Notes: Scale shown is for an 36" x 24" page.
For illustrative purposes. Do not scale

| Nº | REVISIONS | DATE: | BY: |
|---|---|---|---|
| 6 | | | |
| 5 | | | |
| 4 | | | |
| 3 | | | |
| 2 | | | |
| 1 | ISSUED FOR DRAFT PLAN OF SUBDIVISION | 2023/05/17 | JS |

SCALE: 1:750 (0 10 20m)

NORTH ARROW

CERTIFIED ARBORIST ISA
JAMES SEERY
#ON-2350A

BEACON ENVIRONMENTAL

CLIENT
ARGO HUMBER STATION LIMITED

PROJECT
0 HUMBER STATION ROAD, LOT 12, CONC. 5, TWP., ALB

SHEET TITLE
TREE INVENTORY AND PRESERVATION PLAN

| | |
|---|---|
| DESIGN BY: -- | PROJECT Nº: 221166 |
| DRAWN BY: AD | FIGURE Nº: TP-1 |
| CHECKED BY: DW | |
| DATE: 17 May 2023 | |