Tree Inventory and Preservation Plan
514504 Second Line
Amaranth, Ontario

prepared for

The Cellular Connection Ltd.
78 Farnham Avenue
Toronto, Ontario
M4V 1H4

prepared by

KUNTZ
FORESTRY
CONSULTING Inc.

PO Box 1267 Lakeshore W PO
146 Lakeshore Road West
Oakville ON L6K 0B3
289.837.1871
www.kuntzforestry.ca
consult@kuntzforestry.ca

20 February 2024, revised 31 October 2024

KUNTZ FORESTRY CONSULTING INC. Project P3990

Introduction

Kuntz Forestry Consulting Inc. (KFCI) was retained by The Cellular Connection Ltd. to complete a Tree Inventory and Preservation Plan as part of a development application for the subject property located at 514504 Second Line in the Township of Amaranth, Ontario. The subject property is located on the west side of Second Line, east of Dufferin County Road 11, south of Side Road 20, and north of Side Road 15, within a rural area.

The work plan for this tree preservation study included the following:

- Prepare inventory of trees measuring over 10cm diameter at breast height (DBH) on and within six metres of the subject property with the potential to be impacted by the proposed works and trees of all sizes within the road right-of-way;
- Evaluate potential tree saving opportunities based on proposed development plans, and;
- Document the findings in a Tree Inventory and Preservation Plan.

The results of the evaluation are provided below.

Methodology

Trees measuring over 10cm DBH on and within six metres of the subject property with the potential to be impacted by the proposed works and trees of all sizes within the road right-of-way were included in the tree inventory. Trees were located using a backpack GPS unit (Trimble R2 GNSS receiver; accurate to +/- one metre) and estimations made from known points in the field. Individual trees included in the inventory were identified as Trees 165 – 241 and NT1 – NT47. Where appropriate, trees were tagged with their identification numbers. Trees that were not tagged were denoted with the letters “NT” preceding their identification number. Where trees of the same species occurred in groups, they were inventoried as polygons. Three polygons were included in the inventory and identified as Polygons P-1 – P-3.

Trees and polygons were visually assessed for condition utilizing the following parameters:

Tree # – Number assigned to trees that corresponds to Figure 1.
Species – Common and botanical names provided in the inventory table.
DBH – Diameter (cm) at breast height, measured at 1.4m above the ground.
Condition – Condition of tree considering trunk integrity (TI), crown structure (CS) and crown vigor (CV). Condition ratings include poor (P), fair (F), and good (G).
Crown Dieback – Percentage of dead branches within the crown.
Dripline – Crown radius (m).
Comments – Any other relevant tree condition information.

The preservation potential of a tree or polygon was assessed based on its minimum tree protection zone (mTPZ) distance. This method is commonly accepted by many nearby municipalities. The mTPZ of a tree is based on the tree’s diameter at breast height (DBH), as follows:

Diameter at Breast Height (cm)	Minimum Tree Protection Zone (m) (measured from edge of stem)
<10	1.2
10 – 29	1.8
30 – 40	2.4
41 – 50	3.0
51 – 60	3.6
61 – 70	4.2
71 – 80	4.8
81 – 90	5.4
91 – 100	6.0
101+	6cm of protection for each 1cm of diameter

Typically, where encroachment into the mTPZ of a tree is expected to be approximately 30% of the mTPZ area or more, the tree is identified for removal as it is unlikely that the tree will recover from the extent of injury. Where encroachment into the tree's mTPZ is expected but is to be less than 30% of the mTPZ area, special mitigation measures should be employed to minimize the extent of injury where possible.

Refer to Table 1 for the results of the tree inventory and Figure 1 for the locations of the trees and polygons included in the inventory.

Existing Site Conditions

The subject property is currently occupied by a multiple-storey dwelling within Lot 29, hydro equipment within Block 31, and vacant land. Tree resources included in the inventory exist in the form of landscape trees and naturally-occurring trees. It should be noted that many undersized transplanted trees also exist with the boundaries of the subject property. Refer to Figure 1 for the existing site conditions.

Individual Tree Resources

The tree inventory was conducted on 15 and 16 January 2024. The inventory documented 124 trees and three polygons on and adjacent to the subject property. Tree resources were comprised of Apple species (*Malus sp.*), Austrian Pine (*Pinus nigra*), Balsam Fir (*Abies balsamea*), Basswood (*Tilia americana*), Black Cherry (*Prunus serotina*), Blue Spruce (*Picea pungens*), Eastern White Cedar (*Thuja occidentalis*), Green Ash (*Fraxinus pennsylvanica*), Ironwood (*Ostrya virginiana*), Manitoba Maple (*Acer negundo*), Mountain Ash species (*Sorbus sp.*), Norway Spruce (*Picea abies*), Poplar species (*Populus sp.*), Sugar Maple (*Acer saccharum*), Tamarack (*Larix laricina*), White Birch (*Betula papyrifera*), White Elm (*Ulmus americana*), and White Spruce (*Picea glauca*).

Refer to Table 1 for the results of the tree inventory and Figure 1 for the locations of the trees and polygons included in the inventory.

Proposed Development

The subject property is to be subdivided into 24 residential lots (Lots 1 – 24). Multiple new roads, a hydro equipment block (Block 26), and a nature trail block (Block 28) are also proposed. The existing dwelling located within Lot 24 is to be retained. Refer to Figure 1 for the proposed plan of subdivision.

Discussion

The following sections provide a discussion and analysis of tree impacts and tree preservation relative to the proposed development and existing conditions.

Development Impacts / Tree Removal

The removal of nine trees will be required to accommodate the proposed development. The trees and polygon identified for removal include Trees 179, 180, 183, 185, 186, 230, and 235 – 237. These trees either conflict directly with the proposed development or the level of encroachment into their mTPZs resulting from the proposed development would be at an intolerable level such that we would not expect the trees to overcome the injury.

The trees identified for removal are located within the boundaries of the subject property.

Tree Preservation

The preservation of the remaining 115 trees and three polygons will be possible with the use of appropriate tree protection measures, as indicated on Figure 1. The trees and polygons identified for preservation include Trees 165 – 178, 181, 182, 184, 187 – 229, 231 – 234, 238 – 241, and NT1 – NT47, and Polygons P-1, P-2, and P-3. Tree protection measures must be implemented prior to the commencement of the proposed works to ensure tree resources designated for retention are not impacted. Refer to Figure 1 for the location of required tree preservation fencing, general Tree Protection Plan Notes, and tree preservation fence details.

Tree preservation fencing has been prescribed at the dripline or mTPZ of trees, whichever is greater. Where the mTPZ of a tree cannot be fully respected, including for Trees 167, 173, 174, 176, 181, 182, 217, 218, 220, 229, 233, NT7, NT10, NT21, and NT23, special mitigation measures have been prescribed and are described below.

<u>Trees 167, 173, 174, 176, 181, 182, 217, 218, 220, 229, 233, NT7, NT10, NT21, and NT23</u>

Encroachment into the mTPZs of Trees 167, 173, 174, 176, 181, 182, 217, 218, 220, 229, 233, NT7, NT10, NT21, and NT23 will be required to accommodate the construction of the proposed nature trail (Block 33). Tree preservation fencing has been prescribed at the anticipated limit of disturbance within the mTPZs of these trees. If the following mitigation measures are employed, long-term adverse effects are not anticipated for these trees.

1. Tree preservation fencing should be installed as depicted in Figure 1 prior to the commencement of the proposed works and maintained throughout the proposed works.
2. Where cutting / excavation is required within the mTPZs of these trees, it should occur using small machinery (i.e. a skidsteer) and under the supervision of a Certified Arborist.
    a. Any roots exposed during the cutting process that require pruning should be pruned by a Certified Arborist in accordance with good arboricultural standards.
3. Where filling is required within the mTPZs of these trees, the depth of fill added should be minimized where possible.
4. Any branches that extend into the proposed trailway that require pruning should be pruned by a Certified Arborist or other tree professional in accordance with good arboricultural standards.

Should erosion and sediment control (ESC) fencing be installed in the same location as the prescribed tree preservation fencing, or in a location that provides *more* protection to the trees

than what would be achieved by the prescribed tree preservation fencing, the ESC fencing may serve as tree preservation fencing, pending approval by the Township of Amaranth.

It should be noted that tree preservation fencing has not been prescribed for trees located well-beyond the anticipated limit of disturbance, including the hydro equipment block. The existing driveway for lot 24 will be retained.

Within the boundaries of the subject property, there exist several hundred undersized (i.e. 10cm DBH or smaller) transplanted trees. These trees are smaller than the minimum size of tree that is captured within the scope of the report and as such, individual inventory information was not collected for these trees. Should the intention be to preserve these undersized trees throughout the proposed development, tree preservation fencing or ESC fencing should be installed at a distance of at least 1.2m from the bases of the trees and maintained throughout the proposed development.

Summary and Recommendations

Kuntz Forestry Consulting Inc. was retained by The Cellular Connection Ltd. to complete a Tree Inventory and Preservation Plan as part of a development application for the subject property located at 514504 Second Line in the Township of Amaranth, Ontario. A tree inventory was conducted and reviewed in the context of the proposed site plan.

The findings of the study indicate a total of 124 trees and three polygons on and adjacent to the subject property. The removal of nine trees will be required to accommodate the proposed development. All remaining trees and polygons can be preserved with the use of appropriate tree protection measures, as outlined in Figure 1.

The following recommendations are suggested to minimize impacts to trees identified for preservation. Refer to Figure 1 for tree preservation fencing locations, general Tree Protection Plan Notes, and tree preservation fence details.

- Tree protection barriers and fencing should be erected at locations as prescribed on Figure 1. All tree protection measures should follow the guidelines as set out in the tree preservation plan notes and the tree preservation fencing detail.

- No construction activity including surface treatments, excavations of any kind, storage of materials or vehicles, unless specifically outlined above, is permitted within the area identified on Figure 1 as a tree protection zone (TPZ) at any time during or after construction.

- Special mitigation measures have been prescribed for select trees, as outlined in the *Tree Preservation* section of this report.

- Branches and roots that extend beyond prescribed tree protection zones that require pruning must be pruned by a qualified Arborist or other tree professional. All pruning of tree roots and branches must be in accordance with Good Arboricultural Standards.

- Site visits pre, during, and post construction are recommended by either a certified consulting arborist (I.S.A.) or registered professional forester (R.P.F.) to ensure proper utilization of tree protection barriers. Trees should also be inspected for damage incurred during construction to ensure appropriate pruning or other measures are implemented.

Respectfully Submitted,

Kuntz Forestry Consulting Inc.

Kaylee Harper

Kaylee Harper, B.Sc.Env. Ecology
Ecologist, ISA Certified Arborist #ON-2749A
Tree Risk Assessment Qualified
Email: kaylee.harper@kuntzforestry.ca
Office: 289-837-1871 ext. 24
Cell: 519-572-5949

Limitations of Assessment

Only the tree(s) identified in this report were included in the inventory. The assessment of the trees presented in this report has been made using accepted arboricultural techniques. These may include a visual examination taken from the ground of all the above-ground parts of the tree for structural defects, scars, external indications of decay such as fungal fruiting bodies, evidence of attack by insects, discoloured foliage, the condition of any visible root structures, the degree of lean (if any), the general condition of the trees and the identification of potentially hazardous trees or recommendations for removal (if applicable). Where trees could not be directly accessed (i.e. due to obstructions, and/or on neighbouring properties), trees were assessed as accurately as possible from nearby vantage points.

Locations of trees provided in the report are determined as accurately as possible based on the best information available. If official survey information is not provided, tree locations in the report may not be exact. Where KFCI's in-house GPS unit is used (if applicable), tree locations are accurate only to the extent that the technology allows, which can be variable based on satellite available, RTK network / cell coverage, canopy coverage, and/or projection transformation limitations. In this case, if trees occur on or near property boundaries, an official site survey may be required to determine ownership utilizing specialized survey protocol to gain precise location.

Furthermore, recommendations made in this report are based on the development plans that have been provided at the time of reporting. These recommendations may no longer be applicable should changes be made to the development plan and/or grading, servicing, or landscaping plans following report submission.

Notwithstanding the recommendations and conclusions made in this report, it must be recognized that trees are living organisms, and their health and vigor constantly change over time. They are not immune to changes in site conditions or seasonal variations in the weather conditions. Any tree will fail if the forces applied to the tree exceed the strength of the tree or its parts.

Although every effort has been made to ensure that this assessment is reasonably accurate, the trees should be re-assessed periodically. The assessment presented in this report is valid at the time of inspection.

Table 1. Tree Inventory

Location: 514504 Second Line, Amaranth Date: 15 and 16 January 2024 Surveyor: KNH

Tree #	Common Name	Scientific Name	DBH	Multistem DBH	TI	CS	CV	CDB	DL	mTPZ	Comments	Owner	Action
165	Poplar species	*Populus sp.*	21.5	-	PF	PF	PF	30	2.5	1.8	Asymmetrical crown (L), burls (H), epicormic branching (M)	Subject	Preserve
166	White Birch	*Betula papyrifera*	20	-	G	G	FG		2.5	1.8		Subject	Preserve
167	Sugar Maple	*Acer saccharum*	30	-	F	FG	F		3.0	2.4	V-union at base with one leader cut at 0.5m	Subject	Preserve (Injure)
168	Mountain Ash species	*Sorbus sp.*	20.5	-	F	F	F		3.0	1.8	Lean (L), sap sucker holes (M), asymmetrical crown (M)	Subject	Preserve
169	White Spruce	*Picea glauca*	10.5	-	FG	G	G		1.5	1.8	Lean (L)	Subject	Preserve
170	White Spruce	*Picea glauca*	10.5	-	G	G	G		1.5	1.8		Subject	Preserve
171	White Spruce	*Picea glauca*	10.5	-	G	G	G		1.5	1.8		Subject	Preserve
172	White Spruce	*Picea glauca*	11	-	F	F	F	20	1.5	1.8	Stem wounds (M)	Subject	Preserve
173	Apple species	*Malus sp.*	34	-	F	F	F		2.5	2.4	Sweep (M), pruning wounds (L), epicormic branching (L), poor branch unions	Subject	Preserve (Injure)
174	Apple species	*Malus sp.*	~34, 30, 24, 14, 12	~54.5	F	PF	PF	50	4.0	3.6	V-union at base and 1m with included bark	Subject	Preserve (Injure)
175	Mountain Ash species	*Sorbus sp.*	17.5	-	FG	FG	FG		2.5	1.8	Lean (L), epicormic branching (L)	Subject	Preserve
176	Apple species	*Malus sp.*	30.5, 27	40.5	F	F	F	20	3.5	2.4	V-union at base with included bark, lean (L), pruning wounds (M), epicormic branching (M)	Subject	Preserve (Injure)
177	Tamarack	*Larix laricina*	12	-	F	G	G		1.5	1.8	Stem wounds (L), lean (L)	Subject	Preserve
178	Tamarack	*Larix laricina*	12	-	FG	G	G		1.5	1.8	Stem wounds (L)	Subject	Preserve
179	White Elm	*Ulmus americana*	47.5	-	F	PF	PF	20	4.5	3.0	Stem wounds (M), epicormic branching (L), broken branches (L)	Subject	Remove
180	Sugar Maple	*Acer saccharum*	47.5	-	F	PF	PF	30	5.0	3.0	Broken branches (M), stem wounds (M)	Subject	Remove
181	Sugar Maple	*Acer saccharum*	28	-	G	G	G		3.0	1.8		Subject / Neighbour	Preserve (Injure)
182	Sugar Maple	*Acer saccharum*	15	-	FG	G	FG		2.5	1.8	Stem wounds (L)	Subject	Preserve (Injure)
183	Black Cherry	*Prunus serotina*	61	-	F	PF	PF	40	5.0	4.2	V-union at 1.5m with included bark, lean (L), broken branches (M)	Subject	Remove
184	Ironwood	*Ostrya virginiana*	14	-	FG	FG	G		2.5	1.8	Stem wounds (L), asymmetrical crown (L)	Subject	Preserve
185	Austrian Pine	*Pinus nigra*	19	-	FG	G	G		2.5	1.8	Sweep (L)	Subject	Remove
186	Austrian Pine	*Pinus nigra*	14	-	G	FG	F	10	2.0	1.8		Subject	Remove
187	Tamarack	*Larix laricina*	10.5	-	F	G	FG		1.5	1.8	Bow (M)	Subject	Preserve

188	Eastern White Cedar	*Thuja occidentalis*	~14	-	G	G	G		2.5	1.8		Subject	Preserve
189	White Spruce	*Picea glauca*	11	-	G	G	F		1.5	1.8		Subject	Preserve
190	White Elm	*Ulmus americana*	40	-	FG	F	PF	20	4.0	2.4	Pruning wounds (L), epicormic branching (M)	Subject	Preserve
191	White Spruce	*Picea glauca*	13	-	G	G	G		2.0	1.8		Subject	Preserve
192	White Birch	*Betula papyrifera*	36.5	-	FG	FG	G		4.0	2.4	Pruning wounds (L), poor branch unions	Subject	Preserve
193	Manitoba Maple	*Acer negundo*	17	-	PF	PF	PF	40	3.0	1.8	V-union at base with one leader cut, lean (M), epicormic branching (M), cavities (L)	Subject	Preserve
194	Black Cherry	*Prunus serotina*	15.5	-	PF	PF	PF	40	3.0	1.8	Decay (H) in trunk, crook (M)	Subject	Preserve
195	Mountain Ash species	*Sorbus sp.*	27.5, 20, 16.5, 11, 11	41	PF	PF	PF	30	3.0	3.0	V-union at base with included bark, seam (H) with decay (H), pruning wounds (M), cavities (L)	Subject	Preserve
196	White Elm	*Ulmus americana*	26, 19, 17	36.5	F	F	PF	30	4.0	2.4	V-union at base with included bark, epicormic branching (L)	Subject	Preserve
197	Mountain Ash species	*Sorbus sp.*	12.5, 12	17.5	PF	F	F	20	2.5	1.8	Lean (H), v-union at 1m with included bark, pruning wounds (M)	Subject	Preserve
198	Mountain Ash species	*Sorbus sp.*	24, 17.5, 16	33.5	PF	PF	PF	30	3.5	2.4	V-union at base with included bark, pruning wounds (L), epicormic branching (M), decay (L) in trunk	Subject	Preserve
199	White Spruce	*Picea glauca*	13	-	FG	G	G		2.0	1.8	Lean (L)	Subject	Preserve
200	White Spruce	*Picea glauca*	12.5	-	G	G	G		2.0	1.8		Subject	Preserve
201	Apple species	*Malus sp.*	23, 21, 17	35.5	PF	F	PF	30	3.5	2.4	V-union at base and 0.5m with included bark, lean (M)	Subject	Preserve
202	Black Cherry	*Prunus serotina*	26	-	F	PF	PF	30	4.0	1.8	V-union at 2m with included bark, lean (L), broken branches (M)	Subject	Preserve
203	Apple species	*Malus sp.*	32, 29	43	PF	PF	PF	30	3.5	3.0	V-union at 1m with included bark, stem wounds (H), asymmetrical crown (L)	Subject	Preserve
204	White Spruce	*Picea glauca*	11	-	G	G	G		1.5	1.8		Subject	Preserve
205	Mountain Ash species	*Sorbus sp.*	19.5, 14	24	P	P	P	50	2.5	1.8	V-union at base with included bark, lean (L), decay (H) in trunk, broken branches (H)	Subject	Preserve
206	White Spruce	*Picea glauca*	14	-	G	G	G		1.5	1.8		Subject	Preserve
207	White Spruce	*Picea glauca*	12	-	G	G	G		1.5	1.8		Subject	Preserve
208	White Spruce	*Picea glauca*	10.5	-	G	G	G		1.5	1.8		Subject	Preserve
209	White Elm	*Ulmus americana*	40.5	-	FG	PF	PF	30	3.5	2.4	Epicormic branching (M), stem wounds (L)	Subject	Preserve
210	Tamarack	*Larix laricina*	13	-	G	G	G		2.0	1.8		Subject	Preserve
211	Tamarack	*Larix laricina*	10.5	-	G	G	G		1.5	1.8		Subject	Preserve
212	Tamarack	*Larix laricina*	11	-	FG	FG	G		2.0	1.8	Lean (L), poor form (L)	Subject	Preserve
213	Tamarack	*Larix laricina*	10.5	-	G	G	G		1.5	1.8		Subject	Preserve
214	White Spruce	*Picea glauca*	11	-	F	G	G		1.5	1.8	Lean (M)	Subject	Preserve
215	Sugar Maple	*Acer saccharum*	16	-	G	FG	F		3.0	1.8	Asymmetrical crown (L)	Subject	Preserve

216	Sugar Maple	*Acer saccharum*	12	-	F	F	F		3.0	1.8	Asymmetrical crown (M), stem wounds (M)	Subject	Preserve
217	Sugar Maple	*Acer saccharum*	72.5	-	F	F	F	10	7.0	4.8	Poor branch unions, multiple branch attachments, stem wounds (L), pruning wounds (L)	Subject	Preserve (Injure)
218	Sugar Maple	*Acer saccharum*	91	-	PF	F	PF	20	7.0	6.0	Multiple branch attachments, poor branch unions, decay (L) in trunk	Subject	Preserve (Injure)
219	Sugar Maple	*Acer saccharum*	34	-	F	F	FG	10	4.5	2.4	Multiple branch attachments, poor branch unions	Subject / Neighbour	Preserve
220	Green Ash	*Fraxinus pennsylvanica*	72	-	P	P	P	60	7.0	4.8	Emerald Ash Borer (H), broken branches (L), pruning wounds (L)	Subject / Neighbour	Preserve (Injure)
221	Green Ash	*Fraxinus pennsylvanica*	27, 26, 21	43	P	P	P	80	3.0	3.0	V-union at base with included bark, Emerald Ash Borer (H)	Subject	Preserve
222	Black Cherry	*Prunus serotina*	12	-	FG	G	G		2.0	1.8	Lean (L)	Subject / Neighbour	Preserve
223	Black Cherry	*Prunus serotina*	25.5	-	F	FG	FG		3.0	1.8	V-union at 1.5m with included bark, asymmetrical crown (L)	Subject	Preserve
224	Green Ash	*Fraxinus pennsylvanica*	22	-	P	P	P	50	2.5	1.8	Emerald Ash Borer (H), asymmetrical crown (M), lean (L)	Subject	Preserve
225	White Spruce	*Picea glauca*	12.5	-	F	F	G		1.5	1.8	Lean (L), top lost at 3.5m	Subject	Preserve
226	Sugar Maple	*Acer saccharum*	25	-	FG	F	F		3.5	1.8	Burls (L), asymmetrical crown (M)	Subject	Preserve
227	Sugar Maple	*Acer saccharum*	62	-	F	F	F	20	6.0	4.2	Multiple branch attachments, poor branch unions	Subject	Preserve
228	Sugar Maple	*Acer saccharum*	55	-	F	PF	PF	30	5.0	3.6	Multiple branch attachments, poor branch unions, asymmetrical crown (M)	Subject	Preserve
229	Sugar Maple	*Acer saccharum*	67	-	F	PF	F	20	6.0	4.2	Multiple branch attachments, poor branch unions, asymmetrical crown (M)	Subject	Preserve (Injure)
230	Sugar Maple	*Acer saccharum*	60, 43	74	PF	PF	PF	30	5.0	4.8	V-union at base with included bark, lean (M), leaders fused at 2m, asymmetrical crown (M), broken branches (M), cavities (M)	Subject	Remove
231	Sugar Maple	*Acer saccharum*	32	-	FG	PF	F	20	4.0	2.4	Asymmetrical crown (M), lean (L)	Subject	Preserve
232	Sugar Maple	*Acer saccharum*	63.5	-	P	PF	PF	40	5.0	4.2	Asymmetrical crown (M), cavities (H)	Subject	Preserve
233	Sugar Maple	*Acer saccharum*	63	-	PF	P	PF	50	4.0	4.2	Asymmetrical crown (M), poor branch unions, cavities (L)	Subject	Preserve (Injure)
234	Sugar Maple	*Acer saccharum*	41.5, 25	48.5	F	PF	PF	40	3.0	3.0	V-union at base with included bark	Subject	Preserve
235	Sugar Maple	*Acer saccharum*	54	-	FG	F	F	10	4.5	3.6	Asymmetrical crown (L), broken branches (L), crook (L)	Subject	Remove
236	Ironwood	*Ostrya virginiana*	28.5	-	F	F	F		4.5	1.8	Lean (L), asymmetrical crown (M), fused to Tree 237 at base	Subject	Remove
237	Sugar Maple	*Acer saccharum*	51, 24	56.5	PF	PF	PF	30	4.5	3.6	Fused to Tree 236 at base, v-union at base with included bark, lean (L), asymmetrical crown (M), leaders fused in crown	Subject	Remove
238	White Spruce	*Picea glauca*	10.5	-	FG	G	F		1.0	1.8	Lean (L)	Subject	Preserve

239	Norway Spruce	*Picea abies*	11	-	FG	G	F		1.5	1.8	Lean (L)	Subject	Preserve
240	Norway Spruce	*Picea abies*	13	-	G	G	F		1.5	1.8		Subject	Preserve
241	Norway Spruce	*Picea abies*	14.5	-	G	G	FG		1.5	1.8		Subject	Preserve
NT1	Balsam Fir	*Abies balsamea*	~12	-	G	F	F		1.5	1.8	Asymmetrical crown (L), pruning wounds (L)	Neighbour	Preserve
NT2	White Birch	*Betula papyrifera*	~42	-	F	PF	F		3.0	3.0	Broken branches (H), asymmetrical crown (M)	Neighbour	Preserve
NT3	White Elm	*Ulmus americana*	~14	-	G	F	F	10	2.0	1.8	Epicormic branching (M)	Neighbour	Preserve
NT4	White Elm	*Ulmus americana*	~18	-	F	PF	PF	40	2.5	1.8	Crook (L), bow (L), epicormic branching (M)	Neighbour	Preserve
NT5	Sugar Maple	*Acer saccharum*	~38	-	FG	F	F	20	3.0	2.4	Broken branches (L), stem wounds (L)	Neighbour	Preserve
NT6	Sugar Maple	*Acer saccharum*	~46	-	F	F	F	10	3.5	3.0	V-union at 2m with included bark, asymmetrical crown (L)	Neighbour	Preserve
NT7	Sugar Maple	*Acer saccharum*	~70	-	P	PF	P	40	6.0	4.2	Cavities (H), decay (H) in trunk, asymmetrical crown (H)	Neighbour	Preserve (Injure)
NT8	Sugar Maple	*Acer saccharum*	~52	-	F	F	F	20	4.5	3.6	Poor branch unions, multiple branch attachments, union at 2m	Neighbour	Preserve
NT9	Sugar Maple	*Acer saccharum*	~44	-	P	PF	P	10	4.0	3.0	Cavities (H), decay (H) in trunk, asymmetrical crown (H)	Neighbour	Preserve
NT10	Sugar Maple	*Acer saccharum*	~66	-	P	PF	P	30	5.0	4.2	Cavities (H), decay (H) in trunk, broken branches (M), asymmetrical crown (H)	Neighbour	Preserve (Injure)
NT11	White Elm	*Ulmus americana*	~20	-	G	G	F		2.0	1.8		Neighbour	Preserve
NT12	Sugar Maple	*Acer saccharum*	~76	-	G	F	PF	30	5.0	4.8	Broken branches (L)	Neighbour	Preserve
NT13	Black Cherry	*Prunus serotina*	~32, 28	~42.5	FG	PF	PF	30	4.0	3.0	Union at 0.5m, pruning wounds (M), asymmetrical crown (M), epicormic branching (M)	Neighbour	Preserve
NT14	Apple species	*Malus sp.*	~20, 16, 14	~29	F	F	F		2.5	1.8	V-union at base with included bark, stem wounds (M), epicormic branching (L)	Neighbour	Preserve
NT15	Apple species	*Malus sp.*	~28, 26, 26, 18, 14	~51.5	F	F	F	20	4.0	3.6	V-union at 0.5m with included bark, pruning wounds (L), epicormic branching (M), asymmetrical crown (L)	Neighbour	Preserve
NT16	Apple species	*Malus sp.*	~30, 28, 28, 14	~51.5	F	F	PF	20	3.5	3.6	V-union at base and 1m with included bark, epicormic branching (M)	Neighbour	Preserve
NT17	Black Cherry	*Prunus serotina*	~30	-	PF	PF	PF	30	3.0	2.4	Stem wounds (M), decay (M) in trunk, epicormic branching (M)	Neighbour	Preserve
NT18	Sugar Maple	*Acer saccharum*	~14	-	PF	FG	F	10	2.0	1.8	Stem wounds (M), decay (M) in trunk	Neighbour	Preserve
NT19	Apple species	*Malus sp.*	~22, 20, 14	~33	PF	F	F		3.5	2.4	V-union at 0.5m and 1 with included bark, epicormic branching (M), pruning wounds (M), crook (M)	Neighbour	Preserve
NT20	Apple species	*Malus sp.*	~30, 28	~41	PF	PF	PF	40	3.0	3.0	V-union at base with included bark and one leader dead, lean (L), epicormic branching (M), decay (L) in trunk	Neighbour	Preserve
NT21	Apple species	*Malus sp.*	~46, 30, 26	~61	P	PF	PF	20	4.0	4.2	V-union at base with included bark and cavities (H), decay (H) in trunk, epicormic branching (M), stem wounds (M), broken branches (M)	Neighbour	Preserve (Injure)

NT22	Apple species	*Malus sp.*	~30, 28	~41	F	F	PF	20	2.5	3.0	Union at base, pruning wounds (M), epicormic branching (M)	Neighbour	Preserve
NT23	Apple species	*Malus sp.*	~30, 28, 20	~45.5	F	F	F	20	3.0	3.0	V-union at 0.5m with included bark, epicormic branching (M), stem wounds (L)	Neighbour	Preserve (Injure)
NT24	Apple species	*Malus sp.*	~22, 16, 14	~30.5	F	F	F	20	3.0	2.4	V-union at base and 0.5m with included bark, epicormic branching (M)	Neighbour	Preserve
NT25	Apple species	*Malus sp.*	~16, 14, 12, 8	~25.5	PF	PF	PF	30	2.5	1.8	Union and v-union at base, epicormic branching (M), stem wounds (M)	Neighbour	Preserve
NT26	Apple species	*Malus sp.*	~24, 20, 14, 14	~37	F	PF	PF	30	3.0	2.4	V-union at 1m with included bark, epicormic branching (M), pruning wounds (M), asymmetrical crown (M), broken branches (M)	Neighbour	Preserve
NT27	Apple species	*Malus sp.*	~30	-	FG	F	F	20	3.0	2.4	Pruning wounds (M), epicormic branching (M)	Neighbour	Preserve
NT28	Apple species	*Malus sp.*	~18, 16, 10, 8	~27.5	F	F	F	20	2.5	1.8	V-union at base and 1m with included bark, epicormic branching (L)	Neighbour	Preserve
NT29	Sugar Maple	*Acer saccharum*	~18	-	G	G	G		2.5	1.8		Neighbour	Preserve
NT30	Sugar Maple	*Acer saccharum*	~12, 12	~17	F	FG	FG		1.5	1.8	V-union at base with included bark, asymmetrical crown (L)	Neighbour	Preserve
NT31	Sugar Maple	*Acer saccharum*	~16	-	G	FG	G		3.0	1.8	Asymmetrical crown (L)	Neighbour	Preserve
NT32	Sugar Maple	*Acer saccharum*	~12	-	F	G	F		1.0	1.8	Sweep (L)	Neighbour	Preserve
NT33	Sugar Maple	*Acer saccharum*	~11	-	G	PF	PF	40	1.0	1.8		Neighbour	Preserve
NT34	Sugar Maple	*Acer saccharum*	~82	-	PF	PF	PF	40	7.0	5.4	Lean (L), broken branches (H), cavities (H), v-union at 1.2m with included bark	Neighbour	Preserve
NT35	Sugar Maple	*Acer saccharum*	~48	-	G	F	F	20	4.0	3.0	Broken branches (L)	Neighbour	Preserve
NT36	Sugar Maple	*Acer saccharum*	~52	-	PF	PF	PF	30	4.0	3.6	Cavities (M), asymmetrical crown (M)	Neighbour	Preserve
NT37	Sugar Maple	*Acer saccharum*	~48	-	G	PF	PF	20	4.0	3.0	Epicormic branching (M), broken branches (L)	Neighbour	Preserve
NT38	Sugar Maple	*Acer saccharum*	~26	-	F	FG	F	10	3.0	1.8	Asymmetrical crown (L), crook (L), stem wounds (L)	Neighbour	Preserve
NT39	Sugar Maple	*Acer saccharum*	~48, 38, 22	~65	PF	P	PF	40	4.5	4.2	V-union at base with included bark, broken branches (M), leaders fused in crown, asymmetrical crown (M)	Neighbour	Preserve
NT40	Sugar Maple	*Acer saccharum*	~26	-	FG	F	F	20	3.5	1.8	Lean (L), asymmetrical crown (L), broken branches (L)	Neighbour	Preserve
NT41	Sugar Maple	*Acer saccharum*	~16	-	PF	PF	PF	30	2.5	1.8	Crook (H), poor form (H)	Neighbour	Preserve
NT42	Sugar Maple	*Acer saccharum*	~46	-	G	F	F	20	4.0	3.0		Neighbour	Preserve
NT43	Sugar Maple	*Acer saccharum*	~38	-	G	F	F	20	3.5	2.4		Neighbour	Preserve
NT44	Sugar Maple	*Acer saccharum*	~36	-	F	F	FG		5.0	2.4	Asymmetrical crown (M), lean (L)	Neighbour	Preserve
NT45	Sugar Maple	*Acer saccharum*	~40	-	G	F	F	20	4.0	2.4	Asymmetrical crown (M)	Neighbour	Preserve
NT46	Basswood	*Tilia americana*	~42	-	PF	PF	PF	30	2.5	3.0	Bow (M), cavities (L), burls (L), broken branches (L)	Neighbour	Preserve
NT47	White Elm	*Ulmus americana*	~20	-	F	F	G		1.0	1.8	Bow (M), asymmetrical crown (M)	Neighbour	Preserve

P-1	Blue Spruce	*Picea pungens*	~10.5 - 12	-	G	G	G		1.0	1.8	Approximately 33 trees measuring 10.5cm DBH and greater, many trees smaller than 10.5cm DBH	Subject	Preserve
P-2	Blue Spruce	*Picea pungens*	~10.5 - 12	-	G	G	G		1.0	1.8	Approximately 14 trees measuring 10.5cm DBH and greater, a few trees smaller than 10.5cm DBH	Subject	Preserve
P-3	Blue Spruce	*Picea pungens*	~10.5 - 12	-	G	G	G		1.0	1.8	Approximately five trees measuring 10.5cm DBH and greater, a few trees smaller than 10.5cm DBH	Subject	Preserve

Codes		
DBH	Diameter at Breast Height	(cm)
TI	Trunk Integrity	(G, F, P)
CS	Crown Structure	(G, F, P)
CV	Crown Vigor	(G, F, P)
CDB	Crown Dieback	(%)
DL	Dripline (Radius)	(m)
mTPZ	Minimum Tree Protection Zone, as measured from edge of tree	(m)
Owner	Ownership of Tree	Subject, Neighbour
D = dead, P = poor, F = fair, G = good, ~ = estimate, (L) = light, (M) = moderate, (H) = heavy		