

December 21, 2022 BEL 217067

DVB Real Estate Investments Inc. 4918 King Street, P.O. Box 1194 Beamsville, ON LOR 1B0

Re: Revised Arborist Report for 3016-3032 Kirwin Avenue & 3031 Little John Lane,

Mississauga, ON

Beacon Environmental Limited (Beacon) is pleased to provide you with this Revised Arborist Report in support of the proposed redevelopment of properties located at 3016-3032 Kirwin Avenue & 3031 Little John Lane in the City of Mississauga.

The Arborist Report has been prepared in support of a re-development proposal in accordance with City of Mississauga standards. The Arborist Report summarizes the findings of the tree inventory and assessment of all trees ≥10 cm in diameter at breast height (DBH, measured 1.4 m above grade) located on or within 6.0 m of the subject property and identifies tree to be removed or preserved to accommodate the proposed development plan. The Arborist Report includes recommendations for tree protection, including establishing Tree Protection Zones and other measures to ensure trees identified for preservation are adequately protected.

Beacon had previously prepared Arborist Reports for these properties in December 2017, March 2019, and March 2021. This Revised Arborist Report has been updated to address agency comments and to reflect the latest versions of the Site Plan and Grading & Servicing Plans, as well as the City's new private tree bylaw.

Methods

All trees with stem diameters of ≥10 cm at breast height (DBH, measured 1.4 m above grade) located on the subject property, as well as trees within 6.0 m of the subject property boundary were inventoried and assessed by an International Society of Arboriculture (ISA) Certified Arborist on April 25, May 3, and October 20, 2017. A follow up site visit was conduced on September 30, 2022. Inventoried trees on the subject property were marked with numbered aluminum forestry tags. Trees on adjacent properties were also inventoried and assessed. All inventoried trees were surveyed by a registered Ontario Land Surveyor (O.L.S.).

The assessment included collecting data on tree species, trunk diameter (DBH), and health and condition as described below. Individual trees were assessed in terms of overall health and structural integrity based on indicators such as live buds, dead wood, decay, structural defects, and presence of disease. 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; or
- **Dead** No live crown (epicormic growth may be present)

Limitations of the assessment are included in **Attachment A**.

Findings

A total of 228 trees were originally inventoried and assessed. Based on a follow up site visit on September 30, 2022, it was noted that three dead trees located on the adjacent City Parkland had fallen over onto the subject property. A list and description of the trees is provided in **Attachment B**. Tree locations are illustrated in **Figure 1**, **Attachment C**). The majority of the trees occur on the western half of the subject properties on lands that are within the floodplain of Cooksville Creek that will remain undeveloped. The remainder of the trees occur on the eastern half of the property on former residential lands that are proposed to be redeveloped.

Trees sizes ranged from 10 cm to 80 cm DBH, with a median diameter of 20 cm DBH. The majority of the trees inventoried are invasive non-native species including Norway Maple, Manitoba Maple, Black Locust, and Siberian Elm.

Description of Proposed Redevelopment

The proposed redevelopment for the subject property consists of an 8-storey rental apartment building with a total of 152 units and associated aboveground and underground parking as well as an outdoor amenity space.

Tree Removals

A total of 74 trees will require removal to accommodate the proposed redevelopment and/or due to poor condition (37 are in poor or fair-poor condition and four are dead). The majority of trees proposed for removal are non-native invasive species (Norway Maple and Manitoba Maple).

Of 74 trees proposed for removal, 63 are located on-site and 11 are located off-site or on the property line. Of the 11 trees located off-site, three are associated with the municipally-owned parkland north of the subject properties (tree # 4299, 4290, 4294), one is located within the municipally-owned boulevard along Kirwin Avenue (tree #4001), six trees are located on adjacent private properties to the south (tree # 4005, 4006, 4008, 4010, 4011, 4084), and one is located on the property line along Kirwin Avenue (4002)

Removal of trees from adjacent lands or the property line requires written consent from the adjacent landowners (public or private).



Trees situated on private property are subject to the City of Mississauga's Private Tree Protection Bylaw (0021-2022). The proponent is required to obtain a Tree Removal Permit prior to removing any tree with a DBH greater than 15 cm.

Prior to tree clearing, all trees permitted for removal should be clearly marked in the field using spray paint or flagging tape.

Tree Preservation

A total of 151 trees are situated outside areas that will be affected by the proposed development and associated grading and servicing. These trees have been identified for preservation and will be protected using standard tree protection measures.

Recommended Tree Protection Measures

Tree health and structural integrity can be compromised by grade changes, soil compaction, root cutting, and mechanical damage to trunks and branches resulting from the operation of construction equipment.

Trees to be retained shall be protected through the establishment of a tree protection zone (TPZ). Standard TPZ is generally established at the dripline of the tree crown. In situations where it is may not be feasible to implement a standard TPZ, it is possible that a lesser TPZ could be established that could also provide sufficient protection but allow for tighter integration with the development. The minimum TPZ's are provided in **Table 1**, which is based on the general rule of applying 6 cm of protection for each cm of stem diameter as described in the City of Mississauga's *Tree Preservation & Protection Standards* (2019).

Table 1. Minimum Tree Protection Zones

Trunk Diameter (DBH)	Minimum Protection Distances ¹
10 – 30 cm	1.8 m
31 – 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

¹ to be measured from the outside edge of the base of the tree

The minimum TPZ for trees to protected are illustrated in **Figure 1**.



The TPZ should be demarcated with tree protection hoarding consisting of 1.2 m orange plastic fencing framed with solid top and bottom rail, or 1.2 m plywood (see **Figure 1** for fence location and hoarding details) or alternative as approved by the City. Fencing should be installed before any construction or site alteration takes place.

In general, no grading, soil disturbance, or surface treatments shall occur within the TPZ and no equipment or materials shall be stored inside the TPZ.

Along the north side of the property, it is Beacon's understanding that minor grading (approx. 5-10 cm of cut) will occur within the TPZs of several mature Norway Spruce trees located in the City's parkland. It is recommended that during construction of the building, tree protection fencing be established at the limit of the TPZs as illustrated in **Figure 1**. Fencing may be removed after construction is complete in order to accommodate final site grading within the TPZs. It is recommended that grading within the TPZs be performed using hand tools or assisted with an Airspade or hydrovac to minimize root impacts. Grading with the TPZs should be supervised by a Certified Arborist.

Excavation for the building foundation is required within the TPZ of tree 4287 along the north side of the property. Prior to excavation, root pruning using a hydro vacuum unit or air powered soil excavation tools should be utilized. Root pruning should be conducted by a qualified arborist or under an arborist's supervision and completed to a depth of 30 cm.

In addition to the establishment of the TPZ, the following specifications are recommended to ensure the health and survival of any retained trees:

- Before beginning works, the contractor will arrange to meet on site with a certified Arborist to review work procedures, access routes, storage areas, and TPZ hoarding;
- Any required pruning for construction clearance shall be performed by a certified Arborist;
 and
- Some tree roots may extend beyond the identified TPZs. Any root damage occurring during
 construction should be cut cleanly with a hand saw or pruning shears and be inspected by
 a certified Arborist.

Tree Replacement/Compensation

To compensate for the loss of trees from the subject property and adjacent lands, replacement trees should be planted in accordance with the City's Terms of Reference for Arborist Reports, Tree Inventory/Survey & Tree Preservation Plans (Sept 2022).

- One replacement tree for every 15 cm (6 inches) diameter of healthy private or public tree removed; and
- Replacement trees must be at least 1.8 m tall if it's a coniferous tree or at least 6 cm in diameter if it's a deciduous tree.

The aggregate diameter of trees being removed is 1957 cm; therefore, 130 60 mm replacement trees are required. The City has identified three areas within the adjacent John C. Price park where replacement tees can be accommodated. These areas have a combined area of approximately 2,900 m². Instead of planting all trees of the same size, Beacon recommends planting a mix of large and



smaller caliper stock that is equivalent to 130 60 mm caliper trees (i.e. a cumulative of 7800 mm trunk diameter). At a planting density of 1,200 trees per hectare, the 2,900 m2 area identified by the City could accommodate approximately 355 trees. For example: 35 60mm, 72 30mm, 106 20mm, and 142 10mm trees equals 355 trees with a cumulative stem diameter of 7800 mm equivalent to 130 60 mm caliper trees. From an ecological perspective, planting a mix of tree sizes is recommended over planting all trees of the same size. Plantings within the adjacent parkland will be limited to native species approved by CVC and the City. Detailed planting plans will be prepared for these areas illustrating planting sites, species, stock size and planting specifications.

Report prepared by: **Beacon Environmental**

Dar Westerton

Dan Westerhof, B.Sc., M.E.S. Senior Terrestrial Ecologist,

ISA Certified Arborist (ON-1536A)

Report reviewed by: **Beacon Environmental**

Ken Ursic, B.Sc., M.Sc. Principal, Senior Ecologist



Attachment A



Attachment A

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.



Attachment B



Attachment B

Kirwin Tree Inventory

Tag #	Species	Common Name	DBH (cm)	Location	Condition	Comments	TPZ radius (m)	Recommendation
4001	Gleditsia triacanthos	Honey Locust	50	Off-site - Municipal Right of Way	Good		3.6	Remove - development
4002	Picea glauca	White Spruce	32	Property Boundary	Good		2.4	Remove - development
4003	Juniperus	Juniper	23	On-site	Fair	lean	1.8	Remove - development
4005	Acer platanoides	Norway Maple	28,17 (33)	Off-site - private	Good		2.4	Remove - development
4006	Acer platanoides	Norway Maple	17	Off-site - private	Fair	crowded	1.8	Remove - development
4008	Acer platanoides	Norway Maple	40,28 (49)	Off-site - private	Fair-Good		3.6	Remove - development
4010	Acer platanoides	Norway Maple	25	Off-site - private	Fair		1.8	Remove - development
4011	Acer platanoides	Norway Maple	29,11 (31)	Off-site - private	Fair		2.4	Remove - development
4012	Acer platanoides	Norway Maple	27	On-site	Fair	uneven crown, lean	1.8	Remove - development
4013	Acer platanoides	Norway Maple	16,22 (27)	On-site	Fair-Good		1.8	Remove - development
4017	Acer platanoides	Norway Maple	16	On-site	Fair	lean, uneven crown, crowded	1.8	Remove - development
4019	Acer platanoides	Norway Maple	21	On-site	Fair	uneven crown, crowded	1.8	Remove - development
4020	Acer platanoides	Norway Maple	18	On-site	Fair-Poor	crooked trunk, uneven crown, crowded	1.8	Remove - development/poor condition
4023	Acer negundo	Manitoba Maple	22	On-site	Fair	lean	1.8	Remove - development
4025	Acer platanoides	Norway Maple	20	On-site	Fair-Good	rubbing against adjacent tree	1.8	Remove - development
4026	Acer platanoides	Norway Maple	18	On-site	Good		1.8	Remove - development
4027	Acer platanoides	Norway Maple	18,10 (21)	On-site	Good		1.8	Remove - development
4029	Acer platanoides	Norway Maple	17	On-site	Fair	crooked trunk, vine in crown	1.8	Remove - development
4030	Acer negundo	Manitoba Maple	24,24 (34)	On-site	Poor	one stem dead, other stem very twisted/bent, several cavities 2-6 m	2.4	Remove - development/poor condition
4033	Acer platanoides	Norway Maple	10	On-site	Poor	vine throughout crown	1.8	Remove - development/poor condition
4046	Acer platanoides	Norway Maple	17	Off-site - Municipal Park	Fair-Good	uneven crown	1.8	Preserve
4050	Acer negundo	Manitoba Maple	31	On-site	Poor	fallen over	2.4	Remove - development/poor condition
4051	Acer platanoides	Norway Maple	24	Off-site - Municipal Park	Fair	codominant leaders, uneven crown, bend in trunk	1.8	Preserve
4052	Acer platanoides	Norway Maple	46	On-site	Fair	uneven crown, lean	3	Remove - development
4053	Acer negundo	Manitoba Maple	23	On-site	Poor	severe lean, nearly dead	1.8	Remove - development/poor condition
4055	Juglans nigra	Black Walnut	18	On-site	Poor	severe bend, poor form	1.8	Remove - development/poor condition
4056	Fraxinus americana	White Ash	19	On-site	Dead		-	Remove - development/dead
4057	Acer negundo	Manitoba Maple	22	On-site	Poor	fallen over	1.8	Remove - development/poor condition
4059	Acer negundo	Manitoba Maple	20	On-site	Poor	significant lean, poor form	1.8	Remove - development/poor condition
4060	Acer negundo	Manitoba Maple	19	On-site	Poor	significant lean, poor form	1.8	Remove - development/poor condition



	Acor pogundo	 Manitoba Maple	21	On-site	Poor	top broken, epicormic branching		Remove - development/poor
4061	Acer negundo	Maniloba Mapie	21	OII-Site	P001	top broken, epiconnic branching	1.8	condition
4062	Acer negundo	Manitoba Maple	32	On-site	Fair-Poor	lean, large broken branch stub	2.4	Remove - development/poor condition
4063	Acer negundo	Manitoba Maple	42	On-site	Poor	severe lean, large cavity at 2 m	3	Remove - development/poor condition
4066	Acer negundo	Manitoba Maple	20	On-site	Dead		-	Remove - development/dead
4067	Juglans nigra	Black Walnut	25	On-site	Good	vine in crown	1.8	Remove - development
4068	Juglans nigra	Black Walnut	30	On-site	Fair-Good	uneven crown, vines	2.4	Remove - development
4070	Acer platanoides	Norway Maple	29	On-site	Fair-Good		1.8	Remove - development
4071	Juglans nigra	Black Walnut	16	On-site	Good		1.8	Remove - development
4072	Acer negundo	Manitoba Maple	10	On-site	Poor	poor form	1.8	Remove - development/poor condition
4074	Acer platanoides	Norway Maple	24	On-site	Fair	fair form, vines, branch dieback	1.8	Remove - development
4076	Juglans nigra	Black Walnut	25	On-site	Good	vines in crown	1.8	Remove - development
4078	Acer platanoides	Norway Maple	16	On-site	Good	vines in crown	1.8	Remove - development
4079	Acer negundo	Manitoba Maple	24	On-site	Fair-Poor	significant lean, broken branches	1.8	Remove - development/poor condition
4080	Acer platanoides	Norway Maple	19	On-site	Fair-Good	slight lean	1.8	Remove - development
4081	Juglans nigra	Black Walnut	21	On-site	Fair	significant bend in trunk (corrected)	1.8	Remove - development
4082	Acer negundo	Manitoba Maple	18	On-site	Poor	severe lean, overhanging fence and adjacent parking lot	1.8	Remove - development
4083	Acer platanoides	Norway Maple	24	On-site	Fair-Good	codominant leaders with included bark	1.8	Remove - development
4084	Acer platanoides	Norway Maple	20	Off-site - private	Fair	leaning over adjacent parking lot, fence embedded in trunk	1.8	Remove - development
4086	Acer negundo	Manitoba Maple	11,17,17 (26)	On-site	Fair-Poor	leaning over adjacent parking lot, poor form, good vigour	1.8	Remove - development/poor condition
4088	Acer platanoides	Norway Maple	19	On-site	Fair-Good		1.8	Remove - development
4089	Acer negundo	Manitoba Maple	11,13 (17)	On-site	Poor	poor form, branch dieback	1.8	Remove - development/poor condition
4090	Juglans nigra	Black Walnut	31	On-site	Good	small cavity @ 8 m	2.4	Remove - development
4091	Acer platanoides	Norway Maple	20	On-site	Fair	uneven crown, crowded	1.8	Remove - development
4092	Acer negundo	Manitoba Maple	50	On-site	Fair-Poor	forked @ 2m, one dead/broken leader	3.6	Remove - development/poor condition
4093	Acer negundo	Manitoba Maple	18	On-site	Poor	bent over, horizontal trunk	1.8	Remove - development/poor condition
4094	Acer negundo	Manitoba Maple	18	On-site	Fair-Poor	significant lean	1.8	Remove - development/poor condition
4095	Acer negundo	Manitoba Maple	34	On-site	Poor	two dead/broken leaders, top of live stem dead, trunk damage	2.4	Remove - development/poor condition
4096	Acer negundo	Manitoba Maple	39	On-site	Fair-Poor	open wound at base, crooked trunk, uneven crown	2.4	Remove - development/poor condition
4097	Acer negundo	Manitoba Maple	34	On-site	Fair-Poor	lean, uneven crown, cavity @ 2 m	2.4	Remove - development/poor condition
4099	Ulmus pumila	Siberian Elm	40	On-site	Poor	poor form, extensive dieback, large cavity @ 2 m	3	Remove - development/poor condition
4100	Ulmus pumila	Siberian Elm	31,28 (42)	On-site	Fair-Poor	many epicormics, branch dieback, codominant leaders with included bark	3	Remove - development/poor condition
4101	Ulmus pumila	Siberian Elm	31	On-site	Poor	poor form, epicormics, twig dieback	2.4	Remove - development/poor condition
4102	Ulmus pumila	Siberian Elm	26	On-site	Poor	uneven crown, twig dieback, extensive epicormics	1.8	Preserve
4104	Acer negundo	Manitoba Maple	17	On-site	Poor	significant lean, think crown	1.8	Remove - development/poor condition



4106	Ulmus pumila	Siberian Elm	17	On-site	Poor	uneven crown, twig dieback, extensive epicormics	1.8	Preserve
4108	Ulmus pumila	Siberian Elm	30	On-site	Fair	twig dieback, epicormics	2.4	Preserve
4109	Catalpa sp.	Catalpa	53	On-site	Fair	cavity at base, dead branches, small cavity @ 8 m	3.6	Remove - development
4110	Acer negundo	Manitoba Maple	17	On-site	Poor	fallen over	1.8	Preserve
4112	Catalpa sp.	Catalpa	80	On-site	Fair-Poor	full crown; large, over-extended branch; large crack/cavity in trunk from branch crotch to base	5.2	Preserve
4113	Ulmus pumila	Siberian Elm	22	On-site	Fair-Good	twig dieback	1.8	Preserve
4114	Ulmus pumila	Siberian Elm	20	On-site	Fair	twig dieback	1.8	Preserve
4115	Ulmus pumila	Siberian Elm	20	On-site	Fair	twig dieback	1.8	Preserve
4116	Ulmus pumila	Siberian Elm	28	On-site	Fair-Poor	extensive twig dieback, vine in crown	1.8	Preserve
4117	Ulmus pumila	Siberian Elm	21	On-site	Fair	twig dieback, vine in crown	1.8	Preserve
4118	Ulmus pumila	Siberian Elm	22	On-site	Fair	uneven crown, twig dieback	1.8	Preserve
4121	Ulmus pumila	Siberian Elm	20	On-site	Fair	twig dieback, vine in crown	1.8	Preserve
4123	Ulmus pumila	Siberian Elm	17	On-site	Fair	twig dieback	1.8	Preserve
4124	Ulmus pumila	Siberian Elm	18	On-site	Fair	twig dieback	1.8	Preserve
4127	Acer negundo	Manitoba Maple	16	On-site	Fair	leaning, vine in crown	1.8	Preserve
4128	Ulmus pumila	Siberian Elm	16	On-site	Fair-Poor	uneven crown, twig dieback, vine in crown	1.8	Preserve
4129	Ulmus pumila	Siberian Elm	20	On-site	Fair	dead leader	1.8	Preserve
4130	Ulmus pumila	Siberian Elm	14	On-site	Fair	uneven crown, epicormics	1.8	Preserve
4131	Ulmus pumila	Siberian Elm	18	On-site	Fair-Poor	codominant leaders, branch and twig dieback	1.8	Preserve
4132	Ulmus pumila	Siberian Elm	18	On-site	Fair	twig dieback	1.8	Preserve
4133	Ulmus pumila	Siberian Elm	18	On-site	Fair	twig dieback, uneven crown	1.8	Preserve
4134	Ulmus pumila	Siberian Elm	18	On-site	Fair	twig dieback, uneven crown	1.8	Preserve
4136	Ulmus pumila	Siberian Elm	22	On-site	Fair	twig dieback, vine in crown	1.8	Preserve
4137	Acer negundo	Manitoba Maple	14	On-site	Fair	lean, branch dieback	1.8	Preserve
4142	Acer negundo	Manitoba Maple	19	On-site	Fair-Poor	significant lean, twig dieback	1.8	Preserve
4144	Acer negundo	Manitoba Maple	14	On-site	Fair	lean, twig dieback	1.8	Preserve
4145	Acer negundo	Manitoba Maple	11	On-site	Poor	lean, crooked trunk, branch dieback	1.8	Preserve
4146	Acer negundo	Manitoba Maple	14	On-site	Fair-Poor	lean, branch dieback	1.8	Preserve
4147	Acer negundo	Manitoba Maple	16	On-site	Fair	dieback, crooked trunk	1.8	Preserve
4148	Acer negundo	Manitoba Maple	21	On-site	Fair	lean, branch dieback	1.8	Preserve
4149	Acer negundo	Manitoba Maple	16	On-site	Fair	lean, branch dieback	1.8	Preserve
4152	Acer negundo	Manitoba Maple	14	On-site	Fair	lean	1.8	Preserve
4153	Acer negundo	Manitoba Maple	16	On-site	Fair-Poor	lean, bend in trunk, vine in crown, dieback	1.8	Preserve
4154	Acer negundo	Manitoba Maple	15	On-site	Fair		1.8	Preserve
4155	Acer negundo	Manitoba Maple	17	On-site	Fair	lean, twig dieback	1.8	Preserve
4156	Acer negundo	Manitoba Maple	19,16	On-site	Poor	significant lean, top broken off one stem	1.8	Preserve
4157	Acer negundo	Manitoba Maple	12	Off-site - Municipal Park	Poor	severe lean	1.8	Preserve
4158	Acer negundo	Manitoba Maple	13,18,19,10,10	Off-site - Municipal Park	Fair	lean, uneven crown	2.4	Preserve
4159	Ulmus pumila	Siberian Elm	14	Off-site - Municipal Park	Fair	lean, uneven crown	1.8	Preserve
4160	Acer negundo	Manitoba Maple	15	Off-site - Municipal Park	Fair	uneven crown, branch dieback	1.8	Preserve
4161	Acer negundo	Manitoba Maple	25	Property Boundary	Poor	main trunk removed, very poor form	1.8	Preserve
4162	Acer negundo	Manitoba Maple	17,14	On-site	Fair	lean, branch dieback	1.8	Preserve
4163	Acer negundo	Manitoba Maple	24	On-site	Poor	lean, significant branch dieback	1.8	Preserve



4164	Acer negundo	Manitoba Maple	16,23	Off-site - Municipal Right of Way	Fair	lean, uneven crown	1.8	Preserve
4165	Acer negundo	Manitoba Maple	13	On-site	Fair-Poor	significant lean, branch dieback	1.8	Preserve
4166	Acer negundo	Manitoba Maple	17	On-site	Fair-Poor	lean, branch dieback	1.8	Preserve
4167	Acer negundo	Manitoba Maple	11	On-site	Poor	poor form	1.8	Preserve
4168	Acer negundo	Manitoba Maple	11,12	On-site	Fair	branch dieback	1.8	Preserve
4173	Acer negundo	Manitoba Maple	10	On-site	Poor	significant dieback	1.8	Preserve
4174	Acer negundo	Manitoba Maple	11,12	On-site	Fair-Poor	significant lean, branch dieback	1.8	Preserve
4175	Acer negundo	Manitoba Maple	11,12,12	On-site	Fair	branch dieback	1.8	Preserve
4176	Acer negundo	Manitoba Maple	11,12	Off-site - Municipal Right of Way	Fair	lean, branch dieback	1.8	Preserve
4177	Acer negundo	Manitoba Maple	11	Off-site - Municipal Right of Way	Fair-Poor	significant lean	1.8	Preserve
4178	Ulmus pumila	Siberian Elm	15	Off-site - Municipal Right of Way	Poor	dead leader, twig dieback, poor form	1.8	Preserve
4179	Ulmus americana	White Elm	18	On-site	Fair	uneven crown	1.8	Preserve
4180	Salix x rubens	Hybrid Crack Willow	50	On-site	Good		3.6	Preserve
4181	Ulmus americana	White Elm	22,22	On-site	Fair		1.8	Preserve
4182	Ulmus americana	White Elm	24	On-site	Fair		1.8	Preserve
4185	Acer negundo	Manitoba Maple	17	On-site	Fair	lean, dieback	1.8	Preserve
4187	Acer negundo	Manitoba Maple	15	On-site	Fair	,	1.8	Preserve
4188	Acer negundo	Manitoba Maple	10	On-site	Fair	lean, minor dieback	1.8	Preserve
4189	Acer negundo	Manitoba Maple	15	On-site	Fair	lean, minor dieback	1.8	Preserve
4190	Ulmus pumila	Siberian Elm	16	On-site	Poor	Poor form, dieback	1.8	Preserve
4191	Ulmus pumila	Siberian Elm	18,11,10	On-site	Fair	epicormics, branch/twig dieback	1.8	Preserve
4192	Ulmus pumila	Siberian Elm	14	On-site	Fair-Poor	branch dieback	1.8	Preserve
4193	Ulmus pumila	Siberian Elm	18	On-site	Fair-Poor	branch dieback	1.8	Preserve
4194	Ulmus pumila	Siberian Elm	15	On-site	Fair	twig dieback	1.8	Preserve
4195	Ulmus pumila	Siberian Elm	18	On-site	Fair	twig dieback	1.8	Preserve
4196	Ulmus pumila	Siberian Elm	18,18	On-site	Fair	epicormics, branch/twig dieback	1.8	Preserve
4197	Robinia pseudo-acacia	Black Locust	31	On-site	Fair	3	2.4	Preserve
4198	Robinia pseudo-acacia	Black Locust	33	On-site	Fair	vine in crown	2.4	Preserve
4199	Robinia pseudo-acacia	Black Locust	14	On-site	Fair		1.8	Preserve
4200	Robinia pseudo-acacia	Black Locust	22	On-site	Fair		1.8	Preserve
4201	Robinia pseudo-acacia	Black Locust	28	On-site	Fair		1.8	Preserve
4202	Robinia pseudo-acacia	Black Locust	28,28	On-site	Fair		2.4	Preserve
4203	Robinia pseudo-acacia	Black Locust	23	On-site	Fair		1.8	Preserve
4204	Robinia pseudo-acacia	Black Locust	21	On-site	Fair		1.8	Preserve
4205	Robinia pseudo-acacia	Black Locust	25	On-site	Fair		1.8	Preserve
4206	Ulmus pumila	Siberian Elm	16	On-site	Fair		1.8	Preserve
4207	Ulmus pumila	Siberian Elm	13	On-site	Poor	poor form, extensive epicormics	1.8	Preserve
4208	Robinia pseudo-acacia	Black Locust	32	On-site	Fair	codominant leaders	2.4	Preserve
4209	Acer negundo	Manitoba Maple	17	On-site	Poor	severe lean	1.8	Preserve
4210	Robinia pseudo-acacia	Black Locust	15	On-site	Poor	poor form	1.8	Preserve
4211	Acer negundo	Manitoba Maple	13	On-site	Fair		1.8	Preserve
4212	Robinia pseudo-acacia	Black Locust	24	On-site	Fair		1.8	Preserve
4213	Robinia pseudo-acacia	Black Locust	24,17	On-site	Fair		2.4	Preserve
4214	Robinia pseudo-acacia	Black Locust	10	On-site	Fair-Poor		1.8	Preserve
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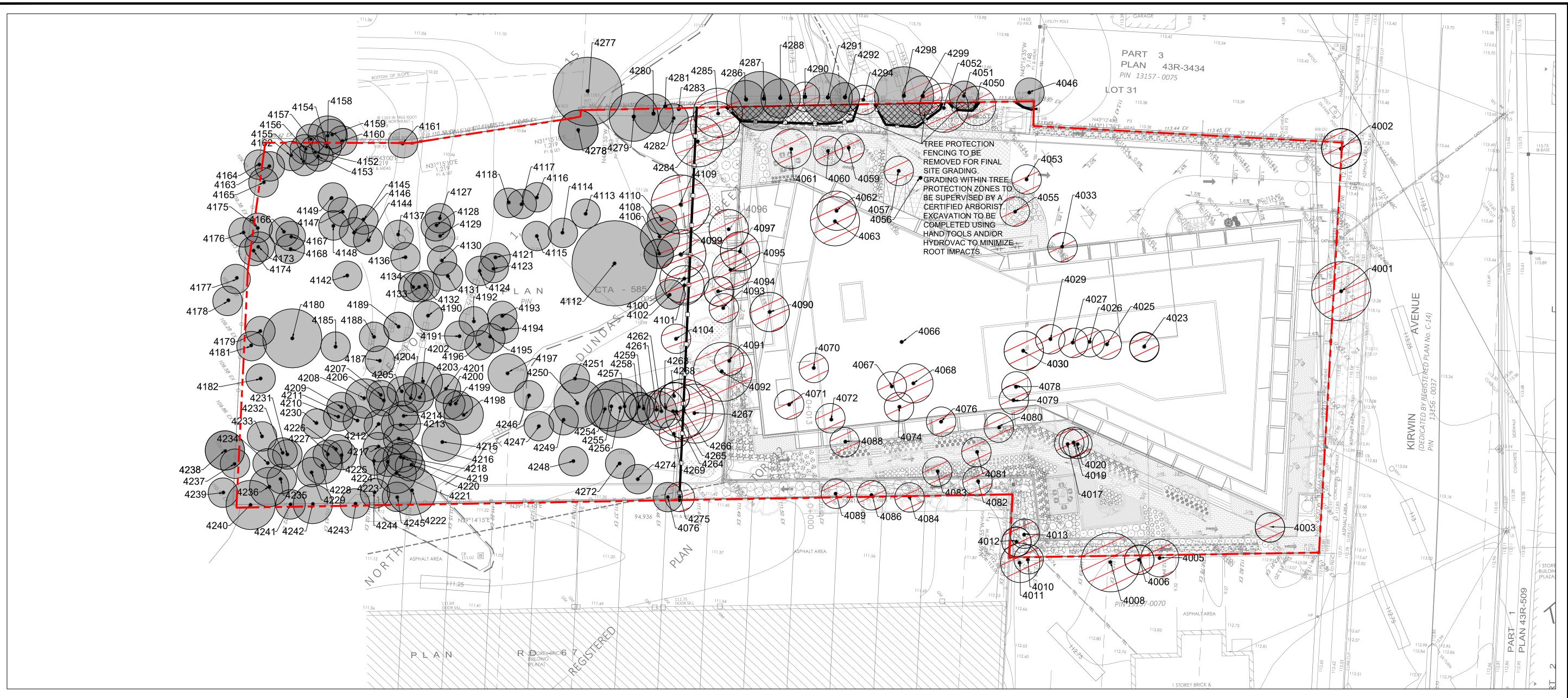
4215	Ulmus pumila	Siberian Elm	30	On-site	Poor	extensive dieback	2.4	Preserve
4216	Robinia pseudo-acacia	Black Locust	24	On-site	Fair		1.8	Preserve
4217	Ulmus pumila	Siberian Elm	17	On-site	Poor	extensive epicormics	1.8	Preserve
4218	Robinia pseudo-acacia	Black Locust	20	On-site	Fair-Poor	crowded, uneven crown	1.8	Preserve
4219	Robinia pseudo-acacia	Black Locust	24,25	On-site	Fair		2.4	Preserve
4220	Acer negundo	Manitoba Maple	27	On-site	Poor	poor form, crowded	1.8	Preserve
4221	Robinia pseudo-acacia	Black Locust	38	On-site	Fair		2.4	Preserve
4222	Robinia pseudo-acacia	Black Locust	41	On-site	Fair		3	Preserve
4223	Robinia pseudo-acacia	Black Locust	27	On-site	Fair		1.8	Preserve
4224	Robinia pseudo-acacia	Black Locust	25	On-site	Fair		1.8	Preserve
4225	Acer negundo	Manitoba Maple	11	On-site	Poor	trunk bent over, very poor form	1.8	Preserve
4226	Robinia pseudo-acacia	Black Locust	13,15	On-site	Fair	diverging trunks	1.8	Preserve
4227	Robinia pseudo-acacia	Black Locust	21,16	On-site	Fair	diverging trunks	1.8	Preserve
4228	Robinia pseudo-acacia	Black Locust	24,16	On-site	Fair	diverging trunks	2.4	Preserve
4229	Ulmus pumila	Siberian Elm	20	On-site	Fair-Poor	twig dieback, uneven crown	1.8	Preserve
4230	Acer negundo	Manitoba Maple	13	On-site	Fair	lean	1.8	Preserve
4231	Robinia pseudo-acacia	Black Locust	26	On-site	Fair		1.8	Preserve
4232	Robinia pseudo-acacia	Black Locust	16	On-site	Poor	poor form, severe bend	1.8	Preserve
4233	Acer negundo	Manitoba Maple	14	On-site	Fair-Poor	severe lean	1.8	Preserve
4234	Acer negundo	Manitoba Maple	16	On-site	Fair-Poor	lean, crooked trunk, twig dieback	1.8	Preserve
4235	Robinia pseudo-acacia	Black Locust	11	On-site	Fair		1.8	Preserve
4236	Robinia pseudo-acacia	Black Locust	35	On-site	Fair-Good		2.4	Preserve
4237	Acer negundo	Manitoba Maple	10	Off-site - Municipal Right of Way	Fair	crooked trunk	1.8	Preserve
4238	Acer negundo	Manitoba Maple	28,23	Off-site - Municipal Right of Way	Poor	significant lean, one trunk cracked, poor form	2.4	Preserve
4239	Ulmus americana	White Elm	16	Off-site - Municipal Right of Way	Fair-Poor	poor form, crowded	1.8	Preserve
4240	Acer negundo	Manitoba Maple	30,34,15	On-site	Fair-Poor	fence embedded through trunk, heavily pruned, several trunks removed, old wounds at base, lean	3	Preserve
4241	Acer negundo	Manitoba Maple	14,14	On-site	Fair	embedded fence	1.8	Preserve
4242	Acer negundo	Manitoba Maple	17,15,14,12	On-site	Fair-Poor	poor form	2.4	Preserve
4243	Acer negundo	Manitoba Maple	19,23	On-site	Fair-Poor	poor form	1.8	Preserve
4244	Robinia pseudo-acacia	Black Locust	10	On-site	Fair		1.8	Preserve
4245	Acer negundo	Manitoba Maple	15	On-site	Poor	poor form, embedded fence	1.8	Preserve
4246	Ulmus pumila	Siberian Elm	18	On-site	Fair-Poor	one leader dead	1.8	Preserve
4247	Ulmus pumila	Siberian Elm	20	On-site	Poor	very poor form, nearly dead	1.8	Preserve
4248	Acer negundo	Manitoba Maple	11	On-site	Poor	overtopped by grape vine	1.8	Preserve
4249	Acer negundo	Manitoba Maple	27	On-site	Fair	fenced embedded in base of trunk, slight lean, uneven crown	1.8	Preserve
4250	Acer negundo	Manitoba Maple	30,23	On-site	Poor	one steam dead, poor form, uneven crown, branch dieback, split at base	3	Preserve
4251	Ulmus pumila	Siberian Elm	17,18	On-site	Fair-Poor	extensive epicormics, branch/twig dieback	1.8	Preserve
4254	Ulmus pumila	Siberian Elm	38	On-site	Fair-Poor	large dead branch, twig dieback, uneven crown	2.4	Preserve
4255	Ulmus pumila	Siberian Elm	44	On-site	Fair-Poor	crowded, uneven crown, branch dieback	3	Preserve
4256	Ulmus pumila	Siberian Elm	52	On-site	Fair	several large dead branches, twig dieback	3.6	Preserve
4257	Ulmus pumila	Siberian Elm	25	On-site	Poor	poor form, uneven crown, branch dieback	1.8	Preserve

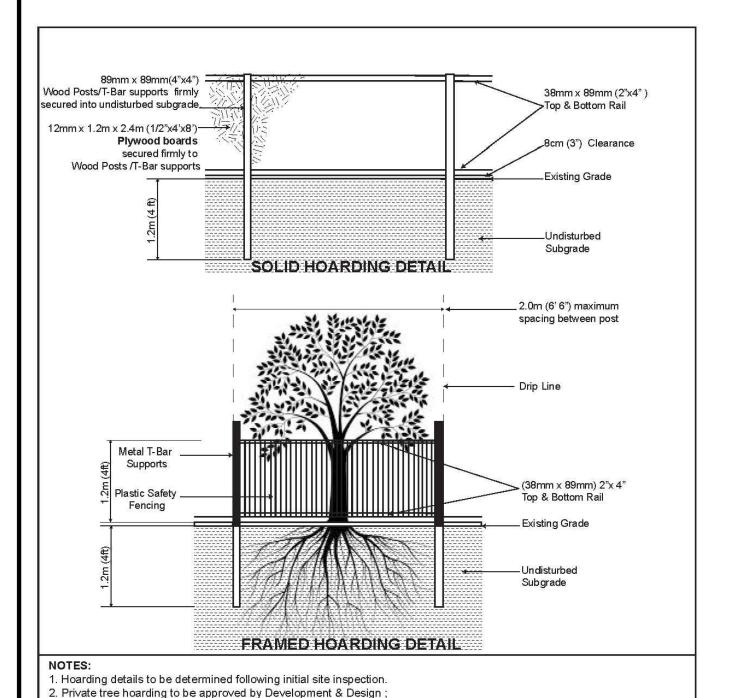


4258	Ulmus pumila	Siberian Elm	18	On-site	Poor	poor form, twig dieback, epicormics	1.8	Preserve
4259	Ulmus pumila	Siberian Elm	22	On-site	Poor	poor form, twig dieback, epicormics	1.8	Preserve
4261	Ulmus pumila	Siberian Elm	32	Off-site - Municipal Park	Fair-Poor		2.4	Preserve
4262	Ulmus pumila	Siberian Elm	15	On-site	Poor		1.8	Preserve
4263	Ulmus pumila	Siberian Elm	36	On-site	Fair-Poor	uneven crown, twig dieback	2.4	Preserve
4264	Ulmus pumila	Siberian Elm	27	On-site	Poor	trunk arched over	1.8	Remove - development/poor condition
4265	Ulmus pumila	Siberian Elm	52	On-site	Fair-Poor	many broken branches, twig dieback, uneven crown	3.6	Remove - development/poor condition
4266	Ulmus pumila	Siberian Elm	50	On-site	Poor	extensive epicormics, reduced crown, broken branches	3.6	Remove - development/poor condition
4267	Ulmus pumila	Siberian Elm	50	On-site	Poor	extensive epicormics, reduced crown, broken branches	3.6	Remove - development/poor condition
4268	Acer platanoides	Norway Maple	17	On-site	Fair-Poor	uneven crown, thin crown	1.8	Remove - development/poor condition
4269	Acer platanoides	Norway Maple	18,12 (22)	On-site	Poor	crowded, poor form, tops bent	1.8	Remove - development/poor condition
4272	Ulmus pumila	Siberian Elm	20	On-site	Fair	uneven crown, twig dieback	1.8	Preserve
4274	Acer negundo	Manitoba Maple	26	On-site	Poor	severe lean over adjacent parking lot	1.8	Preserve
4275	Acer negundo	Manitoba Maple	22	On-site	Poor	severe lean over adjacent parking lot	1.8	Remove - development/poor condition
4276	Acer negundo	Manitoba Maple	27	On-site	Poor	poor form, significant bend in trunk	1.8	Preserve
4277	Acer negundo	Manitoba Maple	50,35	Off-site - Municipal Park	Fair-Poor	significant lean, widely diverging trunks, branch dieback	4.2	Preserve
4278	Acer negundo	Manitoba Maple	33	On-site	Poor	poor form, branch dieback, cavity @ 6 m	2.4	Preserve
4279	Pinus resinosa	Red Pine	40	On-site	Dead		3	Preserve
4280	Pinus sylvestris	Scotch Pine	32	On-site	Dead		2.4	Preserve
4281	Pinus sylvestris	Scotch Pine	28	Off-site - Municipal Park	Dead		-	Preserve
4282	Acer negundo	Manitoba Maple	22	On-site	Poor	significant lean	1.8	Preserve
4283	Pinus sylvestris	Scotch Pine	25	On-site	Dead		-	Preserve
4284	Acer negundo	Manitoba Maple	26,34 (42)	On-site	Poor	severe lean/fallen over	3	Remove - development/poor condition
4285	Acer negundo	Manitoba Maple	42	On-site	Fair-Poor	dead/broken leaders, lean, uneven crown, four woodpecker holes at top of dead leader	3	Remove - development/poor condition
4286	Picea abies	Norway Spruce	30	Off-site - Municipal Park	Fair-Poor	uneven crown, crowded, twig dieback	2.4	Preserve
4287	Picea abies	Norway Spruce	50	Off-site - Municipal Park	Fair	uneven crown, crowded	3.6	Preserve
4288	Picea abies	Norway Spruce	36	Off-site - Municipal Park	Fair	uneven crown, crowded	2.4	Preserve
4290	Picea abies	Norway Spruce	20	Off-site - Municipal Park	Dead		-	Remove - dead
4291	Picea abies	Norway Spruce	46	Off-site - Municipal Park	Fair	uneven crown, crowded	3	Preserve
4292	Picea abies	Norway Spruce	29	Off-site - Municipal Park	Fair	uneven crown, crowded	1.8	Preserve
4294	Acer negundo	Manitoba Maple	19	Off-site - Municipal Park	Poor	severe lean/fallen over	1.8	Remove - development/poor condition
4298	Picea abies	Norway Spruce	50	Off-site - Municipal Park	Fair-Good		3.6	Preserve
4299	Picea abies	Norway Spruce	34	Off-site - Municipal Park	Dead	uneven crown, crowded	2.4	Remove - dead



Attachment C





Hoarding must be supplied, installed and maintained by the applicant throughout all phases of construction.

T-bar supports are acceptable alternative to 4x4 posts. U-shaped metal supports will not be accepted

Inspection must be conducted by the Development and Design Division prior to removing any/all private hoarding.

Mississauga

i. Plywood must be utilized for 'solid' hoarding, OSB/Chipboard will not be accepted for solid hoarding, Plywood sheets

. Applicant is responsible to ensure utility locates are completed within city boulevard prior to installing framed hoarding.

City tree hoarding to be approved by Community Services Dep

must be installed on "construction" side of frame.

TREE PRESERVATION HOARDING

CALE: N.T.S DATE: June 2017

GENERAL NOTES:

- Drawings may be scaled for layout measurement but dimensions and elevations shown are subject to verification on site. All dimensions are in meters unless otherwise noted.
- Tree locations are derived from Survey Plan.
- Tree Inventory and Assessment details are from Arborist Report (Beacon Environmental December 2020). This Plan is to be read in conjunction with the Arborist Report (Beacon Environmental December 2020).
- The Contractor is to familiarize themselves with the locations of legal property boundaries, easements, and utilities (above and below ground locates) prior to commencing works and mark, or have marked by others, as necessary.

 Contractor to contact local utility service companies to obtain utility locates and identification prior to commencing work.

 Contractor to review the Plan, Details and Arborist Report prior to proceeding with any work on site.

- Any discrepancies between the Plan and Arborist Report are to be brought to the attention of the Arborist.

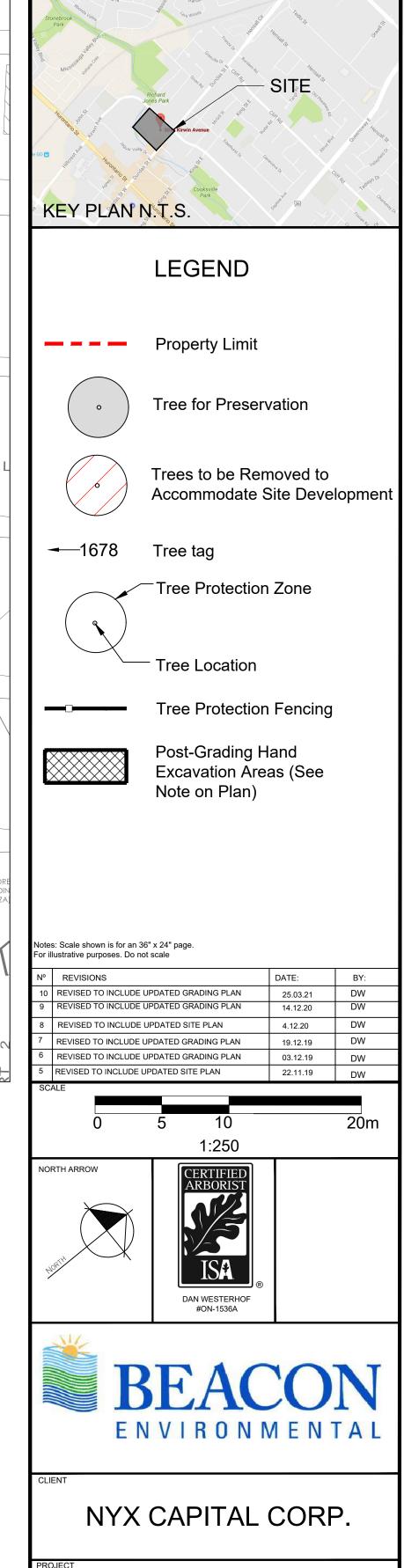
 If there is any uncertainty in interpreting the plan and/or scope of work, the Contractor is to refrain from commencing work until clarification is received from the Arborist.
- The Contractor is to obtain permission from all adjacent property owners prior to performing any work on boundary trees (i.e. those with limbs, trunks or roots that may overlap with adjacent properties)

 11. The Contractor must verify whether a Permit from the Municipality is required to proceed with tree removal.

- 12. The Contractor shall obtain a Permit if necessary and execute the conditions therein. A copy should be maintained on site at all times.

 13. The Contractor shall install Tree Protection Zone Hoarding as per the specification details in this Plan or as per Municipal Standards, where applicable.
- 14. The Contractor must notify the project Arborist a minimum of 5 (five) days prior to the commencement of any works on site, including equipment staging.
- 15. All trees identified for protection on the Plan shall be fully protected with hoarding as specified on Sheet TP-1.

 16. Hoarding to be installed in accordance with the details on Sheet TP-1.
- 17. The Contractor is responsible for ensuring that tree protection hoarding is maintained throughout the construction phases.



3016-3034 KIRWIN AVE **MISSISSAUGA**

TREE INVENTORY AND PRESERVATION PLAN

217067 FIGURE Nº: CHECKED BY:

03 October 2022