## 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 $\geq 10 \mathrm{~cm}$ 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 $\geq 10 \mathrm{~cm}$ 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 ${ }^{\mathbf{1}}$ |
| :---: | :---: |
| $10-30 \mathrm{~cm}$ | 1.8 m |
| $31-40 \mathrm{~cm}$ | 2.4 m |
| $41-50 \mathrm{~cm}$ | 3.0 m |
| $51-60 \mathrm{~cm}$ | 3.6 m |
| $61-70 \mathrm{~cm}$ | 4.2 m |
| $71-80 \mathrm{~cm}$ | 4.8 m |
| $81-90 \mathrm{~cm}$ | 5.4 m |
| $91-100 \mathrm{~cm}$ | 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, 13060 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 $\mathrm{m}^{2}$. Instead of planting all trees of the same size, Beacon recommends planting a mix of large and
smaller caliper stock that is equivalent to 13060 mm caliper trees (i.e. a cumulative of 7800 mm trunk diameter). At a planting density of 1,200 trees per hectare, the $2,900 \mathrm{~m} 2$ area identified by the City could accommodate approximately 355 trees. For example: $3560 \mathrm{~mm}, 7230 \mathrm{~mm}, 10620 \mathrm{~mm}$, and 142 10 mm trees equals 355 trees with a cumulative stem diameter of 7800 mm equivalent to 13060 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.

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Beacon Environmental


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## 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 (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 |


| BEARIRONENTAL |  |  |  |  |  |  | Attachment B |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4061 | Acer negundo | Manitoba Maple | 21 | On-site | Poor | top broken, epicormic branching | 1.8 | Remove - development/poor 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 |


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| 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 |


| BEACON |  |  |  |  |  |  |  |  | Attachment B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |  | 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 |  |


| BEACON |  |  |  |  |  |  |  |  | Attachment B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |  |


| BENIRONMENTAL |  |  |  |  |  |  | Attachment B |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |



