TREE ASSESSMENT REPORT

348 SUNNINGDALE ROAD, LONDON ONTARIO

Prepared

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Prepared by

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INTRODUCTION

Ron Koudys Landscape Architects (RKLA) was retained by Zelinka Priamo Ltd to conduct a tree inventory and assessment in conjunction with site plan development of the proposed development at 348 Sunningdale Road East in London, Ontario.

SUBJECT SITE

The subject site is located on the north side of Sunningdale Road East. The site was previously occupied by a single dwelling and out building. All buildings had been torn down and were no longer present at the time of the tree inventory (June 2017). The site is scattered with trees associated with the dwelling, with most of the trees concentrated heavily in the south end of the site, and loosely along the east and west edges.

The site is bound on the north, west, and east sides by 310 Sunningdale Road East. This property has active agricultural use on the northern three quarters, and open grass land with scattered trees on the south end where it surrounds the subject site.



Figure 1: Subject site – from City of London website NTS Green indicates tree protection area Red outlines the subject site

Note that the subject site and the land immediately around it is within a tree protection area as defined by the City of London.

LAWS AND BY-LAWS

Municipal By-laws - City of London Tree Protection By-law - 2016

Figure 1 shows the extent of the subject site that is within the City defined 'tree protection area'; however, because this development is under the umbrella of an exemption, the by-law will not apply.

Excerpt from City of London Tree Protection By-law C.P.-1515-228-Enacted August 30, 2016, passed by Council July 25, 2017.

Section 5 - Exemptions

1.1 (d) the Injuring or Destruction of Trees imposed after December 31, 2002, as a condition to the approval of a site plan, a plan of subdivision or a consent under section 41, 51 or 53, respectively, of the Planning Act, or as a requirement of a site plan agreement or subdivision agreement entered into under those sections;

Provincial Laws - Ontario Forestry Act, R.S.O. 1990, c. F.26

Trees whose trunks are located wholly within a property limit can be removed at the owner's discretion. Trees whose trunks are located wholly beyond a property limit cannot be harmed by actions beyond that property limit. Trees whose trunks are shared between two properties are considered boundary trees and require the consent of both property owners to remove or damage them.

Refer to the Ontario Tree Act section 10 for provincial regulations regarding boundary trees.

Excerpt from Ontario Forestry Act regarding boundary trees (shared trees) Boundary trees 10 (1) An owner of land may, with the consent of the owner of adjoining land, plant trees on the boundary between the two lands. 1998, c. 18, Sched. I, s. 21.

Trees common property

(2) Every tree whose trunk is growing on the boundary between adjoining lands is the common property of the owners of the adjoining lands. 1998, c. 18, Sched. I, s. 21.

Offence

(3) Every person who injures or destroys a tree growing on the boundary between adjoining lands without the consent of the land owners is guilty of an offence under this Act. 1998, c. 18, Sched. I, s. 21.

There are two trees in this inventory that were noted as boundary trees. They are tree 810 and 811 located along the west property line.

SCOPE OF SERVICE

Our firm was instructed to undertake an assessment of the existing trees located within the subject site and 3m beyond the subject site.

An RKLA Inc certified arborist undertook an assessment of the existing trees within the specified scope with respect to tree health and preservation. Assessment of all existing trees with a DBH ≥10cm was undertaken with consideration for the proposed development and associated site work. Inventoried trees include trees within the subject site, trees beyond the subject site, shared trees and trees within the City ROW,

> Site survey -The green dashed outline represents the tree inventory scope included in this report. NTS



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Methodology

Field work was completed by RKLA on June 19, 2017. The topographic survey prepared by AGM Lands Surveyors was used as the base for the field work.

A comprehensive inventory following ISA standard practices of all trees ≥10cm DBH (diameter at breast height) within the scope specified above was completed. Significant hedges were also identified. Accessible trees were tagged in the field with aluminum tags affixed to the tree with a nail. Tree tag numbers 737 - 786, and 788 - 852. Inaccessible trees (due to physical barriers or limit of property) were identified with letters in this report and on the tree preservation drawing and NOT identified in the field. Tree letters A - W.

The following information was recorded for each tree:

Tag number or letter Species Diameter at breast height (DBH) (centimeters) Crown radius (meters) Crown Condition (overall general vigour of crown) Structural Condition (good, fair, poor) General Comments Location based on survey

The tree data collected was analyzed in conjunction with the proposed site plan. This information was analyzed to make recommendations on which trees to preserve, which trees to remove and recommendations for preconstruction, during construction, and post construction strategies for minimizing damage for trees to be preserved.

Health Assessment Criteria

Crown Condition Classification

- 5 Healthy: less than 10% crown decline
- 4 Slight decline: 11% 30% crown decline
- 3 Moderate decline: 31% 60% crown decline
- 2 Severe decline: 61% 90% crown decline
- 1 Dead

Structural Condition Classification

Good: Defects if present are minor (e.g. twig dieback, small wounds); defective tree part is small (e.g. 5-8 cm diameter limb) providing little if any risk.

Fair: Defects are numerous or significant (e.g. dead scaffold limbs); defective parts are moderate in size (e.g. limb greater than 5-8 cm in diameter).

Poor: Defects are severe (trunk cavity in excess of 50%); defective parts are large (e.g. majority of crown).

Dead: Tree exhibits no signs of life.

INVENTORY DATA AND PRESERVATION/REMOVAL RECOMMENDATIONS

See appendix C.

Recommendations are based on a tree data and requirements of the site plan.

TREE PRESERVATION/REMOVAL ANALYSIS

The proposed building construction and required site work may impact existing trees to be preserved with respect to root and canopy zones. Tree Preservation measures will be implemented to mitigate these effects.

No construction, stockpiling, or heavy equipment will be permitted beyond the construction limit (see Tree Preservation Barrier locations on the attached drawings).

Potential impacts on trees to be preserved may include:

- 2. Physical damage to branches, trunks, and roots of trees to be retained.
- 3. Local moisture loss which may result from a decline in the water table during and after construction.
- 4. Contamination of the soil from chemicals.
- 5. Increased sun/wind exposure which could result in scald or windthrow.
- 6. Placement of fill material on root zones resulting in stress and damage to the root structure.

The successful survival of the trees to be preserved is largely dependent on adhering to the recommendations that follow.

MITIGATION RECOMMENDATIONS

These recommendations are designed to enhance the survival of trees to be preserved. While it is always desirable to retain as many trees as possible on a site, some trees, because they are in poor condition or are undesirable species, cannot be saved for safety, aesthetic, or sylvicultural reasons.

There is no guarantee, however, that the trees to be preserved will not be impacted by the construction process. The following recommendations are supplied to ensure minimal impact on and to enhance the survival potential of the trees to be preserved:

A) <u>PRE-CONSTRUCTION RECOMMENDATIONS</u>

- 1. Prior to tree removal operations, the limit of the removals will be clearly marked (i.e. all trees designated for removal are to be marked with spray paint).
- 2. All removals must take place between September 1st and April 1st to avoid disturbing nesting migratory birds. Trees may be removed outside this window (between April 1st and August 31st) only if a qualified bird specialist/ecologist has determined there are no nesting birds in the trees. All cutting will be done by chain saw. These trees to be identified by the project landscape architect working in conjunction with a qualified arborist and ecologist. This requirement is in accordance with the Migratory Birds Convention Act, 1994.

- 3. Trees on site to be removed for sylvicultural, safety, or aesthetic reasons should be marked for removal (e.g. spray paint). All cutting will be done by chainsaw. These trees to be identified by the project Landscape Architect working in conjunction with a qualified arborist.
- 4. Undertake a tree education program for all contractors and put in place enforceable penalties for any damage resulting from neglect.
- 5. Care should be taken during the felling operation to avoid damaging the branches, stems, trunks, and roots of the trees to be preserved. Where possible, all trees are to be felled towards the construction zone to minimize impacts on adjacent vegetation.
- 6. Stem damage to trees from skidding operations during the removal process should be avoided. Trunks of trees to be preserved near the construction zone should be wrapped with three layers of snow fencing to provide protection.
- 7. Heavy equipment should not be allowed under the drip line (limit of branches) of the trees to be preserved.
- 8. Broken branches on trees to be preserved should be cleanly cut by a qualified arborist/horticulturalist as soon as possible after the damage has occurred. Do not apply wound dressings to the cut areas.
- 9. Final site grading should ensure that surface water is discharged from the site and that the existing soil moisture conditions are maintained.
- 10. Some trees may be candidates for pre-construction root pruning to help reduce stress and prepare the tree for nearby construction activity. These trees to be identified on tree preservation plan by landscape architect.
- 11. It is recommended that the existing ground-layer vegetation remain intact so as not to disturb the soil around the base of the existing trees.

B) RECOMMENDATIONS RELATED TO THE CONSTRUCTION PROCESS

- 1. Heavy duty protection fencing (see appendix A) is to be maintained until all heavy construction work is complete. No movement of equipment or dumping of solvents, gasoline, etc. is permitted beyond this fence line.
- 2. Where high-quality specimens exist adjacent to areas subject to intensive construction activity, wooden cribbing (e.g. planks, plywood constructions) should be erected to protect their trunks from damage.
- 3. During the excavation process, roots that are severed and exposed should be hand pruned to leave a clean-cut surface. This will reduce the opportunity for pests or disease to enter through the wounds. Wound dressing may be used in this process.
- 4. If grade changes are required in areas adjacent to trees to be preserved, work should be done to minimize the impact on the trees. Tree wells, retaining walls, or other site features should be used.
- 5. Form concrete sidewalk, if proposed, with fibre expansion material in place of wood forms where roots conflict with existing concrete sidewalks.
- 6. Avoid running above-ground wires and underground services near trees to be preserved. Avoid open trenching within the tree root zone. Utilize horizontal boring techniques to install utilities below root areas.
- 7. Regular monitoring of the site by the Landscape Architect will help to ensure proper procedures are followed and protection barriers are maintained.

C) POST-CONSTRUCTION REOMMENDATIONS

- 1. Avoid discharging rain water leaders adjacent to retained trees. This may result in an overly moist environment which will cause the tree roots to rot.
- 2. After all work is completed, snow fences and other barriers should be removed.
- 3. A final review must be undertaken by the Landscape Architect to ensure that all mitigation measures as described above have been met.

EXECUTIVE SUMMARY

General Summary

No rare, endangered, or unusual species were observed on site. No specimen trees in terms of species or quality were observed on site. All trees included in inventory are common to the geographic area and are typical of the previous and current land uses.

Species Breakdown

| Tree Species | Tree | Percentage |
|-----------------------|--------------|------------|
| | <u>Count</u> | of Species |
| Sugar Maple | 35 | 25.7% |
| Norway Spruce | 26 | 19.1% |
| Cherry | 20 | 14.7% |
| Black Cedar | 8 | 5.9% |
| Siberian Elm | 8 | 5.9% |
| Austrian Pine | 8 | 5.9% |
| Norway Maple | 8 | 5.9% |
| Basswood | 7 | 5.1% |
| Scotch Pine | 3 | 2.2% |
| Black Walnut | 3 | 2.2% |
| Colorado Spruce | 2 | 1.5% |
| Freeman Maple | 1 | 0.7% |
| Apple | 1 | 0.7% |
| Hawthorne | 1 | 0.7% |
| Silver Maple | 1 | 0.7% |
| Black Cherry | 1 | 0.7% |
| Tulip Tree | 1 | 0.7% |
| Black Maple | 1 | 0.7% |
| Colorado Bllue Spruce | 1 | 0.7% |
| | 136 | 100% |

Vegetation Units

Siberian Elmstand of trees north of subject siteBlack Cedarloose hedge at NW corner of siteHoneysuckle Shrublarge shrub on SE edge of site

Summary of findings

| Tree Recommendations | Qty | Tree Identification |
|---|-----|---------------------------------------|
| Number of trees included in inventory | 136 | |
| Number of trees to be preserved | 61 | 751 - 767, 772 - 776, 778, 779, 781 - |
| | | 785, 788 - 797, 817, 818, 821 - 825, |
| | | 825B, 826, 827, C, D, M, N, O, P, Q, |
| | | R, S, T, V, W |
| Number of trees to be removed from subject | 60 | 739 - 748, 768 - 771, 777, 780, 798 - |
| site for construction and/or tree | | 809, 812 - 816, 819, 820, 828 - 852 |
| health/condition | | |
| Number of boundary trees recommended for | 2 | 810, 811 |
| removal due to poor health/condition and/or | | |
| construction (CONSENT REQUIRED) | | |
| Number of trees located on private property | 6 | E, F, G, H, I, J |
| beyond the subject site recommended for | | |
| removal due to poor health/condition and/or | | |
| construction (CONSENT REQUIRED) | | |
| Number of trees recommended for removal | 3 | 737, A, B |
| from the CURRENT City ROW (CONSENT | | |
| REQUIRED) | | |
| Number of trees recommended for removal | 4 | 738, 749, 750, 786 |
| within the PROPOSED City ROW (CONSENT | | |
| REQUIRED) | | |

| Vegetation Unit Recommendations | Qty | Veg Unit Identification |
|--|-----|-------------------------|
| Number of vegetation units included in | 3 | |
| inventory | | |
| Number of vegetation units to be preserved | 2 | K, L |
| Number of vegetation units to be removed | 1 | U |

RKLA recommends the following:

- 1. Removal of trees where there is conflict with the proposed development as indicated within this report and associated tree preservation drawing.
- 2. Removal of trees in poor condition that pose a potential threat to health and safety during and post construction.
- 3. Obtain written consent from neighbouring land owner for removal of boundary trees and trees wholly beyond the subject site.
- 4. Obtain written consent from the City of London for removal of trees within the current and proposed City ROW.
- 5. Installation and maintenance of tree preservation fencing as per the details and specifications on the tree preservation drawing.
- 6. Follow the pre, during, and post construction recommendations outlined in this report to prevent damage to trees to be preserved.

DISCLAIMER

The assessment of the trees presented within this report has been made using accepted arboricultural techniques. These include a visual examination of the above-ground parts of each tree for structural defects, scars, external indications of decay, evidence of insect presence, discoloured foliage, the general condition of the trees and the surrounding site, as well as the proximity of property and people. 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 realized that trees are living organisms and their health and vigour is constantly changing. They are not immune to changes in site conditions or seasonal variations in the weather.

While reasonable efforts have been made to ensure the trees recommended for retention are healthy, no guarantees are offered or implied, that these trees or any part of them will remain standing.

APPENDIX A - TREE PROTECTION ZONE FENCE DETAILS



APPENDIX B - TREE PRESERVATION DRAWING





APPENDIX C - INVENTORY DATA AND PRESERVATION/REMOVAL RECOMMENDATIONS

| | GENER | AL INFORMATION | ١ | SIZE | | BIOLOGICAL HEALTH | | | RECOMMENDATION | | |
|------|-------------------|----------------|----------------------------------|-------------|-------------------------|--------------------------|-------------------------|---|--------------------|--|----------------------------------|
| TAG# | BOTANICAL NAME | COMMON NAME | LOCATION | DBH (cm) | CANOPY RADIUS (m) | CROWN CONDITION | STRUCTURAL CONDITION | COMMENTS | PROPOSED ACTION | RATIONALE | Consent Required? |
| 737 | Acer saccharum | Sugar Maple | within current City ROW | 55 | 8 | 5 | fair | City ROW along east edge of existing driveway, wide trunk flare, basal scar, minor dieback, codominant stems, trunk cavity | remove | construction of driveway | Consent Required from City |
| 738 | Acer saccharum | Sugar Maple | within proposed road widening | 55 | 5 | 5 | good | along east edge of existing driveway, no trespassing sign nailed to tree, several nails in trunk, bulging due to damage from abutting fence, low branching | remove | construction of driveway | Consent Required from City |
| 739 | Prunus spp. | Cherry | within subject site | 51 | 6 | 3 | fair | along east edge of existing driveway, recently pruned, no trespassing sign nailed to tree, crooked upper stem, large exposed/damaged roots, girdling roots, damage from abutting fence | remove | construction of driveway | no |
| 740 | Acer saccharum | Sugar Maple | within subject site | 33 | | 5 | good | along east edge of existing driveway, recently pruned, limbed up, grade change at base, along edge of existing driveway | remove | construction of driveway | no |
| 741 | Acer platanoides | Norway Maple | within subject site | 22 | 5 | 5 | fair | along east edge of existing driveway, sealing pruning cuts, supressed, exposed/damaged roots, girdling roots | remove | construction of driveway and south building | no |
| 742 | Acer platanoides | Norway Maple | within subject site | 32 | 5.5 | 5 | fair | along east edge of existing driveway, sealing pruning cuts, codominant stems, exposed/damaged roots, grade change at base | remove | construction of south building | no |
| 743 | Acer saccharum | Sugar Maple | within subject site | 79 | 7 | 5 | poor | along east edge of existing driveway, loose bark, lateral branch larger than main stem, internal rot at base, burly main stem, cavity, instects at base | remove | construction of south building | no |
| 744 | Pinus nigra | Austrian Pine | within subject site | 78 | 9 | 5 | fair | along west edge of existing driveway, unbalanced crown - heavy towards SW, insect holes in trunk, limbed up to approx. 50' | remove | construction of south building | no |
| 745 | Picea abies | Norway Spruce | within subject site | 78 | 4 | 4 | fair | along west edge of existing driveway, grade change at tunk due to driveway, codominant stems, included bark, butressing from branches to base, limbed up to approx. 30' | remove | construction of south building and proximity to existing driveway | no |
| 746 | Pinus nigra | Austrian Pine | within subject site | 64 | 6 | 4 | poor | along west edge of existing driveway, no root flare, codominant leaders, fused leaders, included bark, butressing on west side of base, uneven crown - heavy to the W, limbed up to approx. 30' | remove | construction impacts - proximity to existing driveway | no |
| 747 | Pinus sylvestris | Scotch Pine | within subject site | 43 | 3 | 4 | fair | along west edge of existing driveway, grade change at trunk due to driveway, insect holes in trunk, no root flare, limbed up to approx. 30' | remove | construction impacts - proximity to existing driveway | no |
| 748 | Picea abies | Norway Spruce | within subject site | 51 | 3 | 5 | fair | along west edge of existing driveway, supressed, droopy habit, grade change at base due to driveway | remove | construction impacts - proximity to existing driveway | no |
| 749 | Pinus nigra | Austrian Pine | within proposed road widening | 46 | 7 | 3 | poor | along west edge of existing driveway, bowed trunk, trunk cavity, thin crown, supressed, no root flare | remove | construction impacts proximity to existing driveway and proposed driveway | no |
| 750 | Acer saccharum | Sugar Maple | within proposed road widening | 58 | 7 | 5 | poor | along west edge of existing driveway, girdling/exposed/damaged roots along driveway edge, limbed up, cavity, no root flare on S side, damage from abutting fence | remove | construction impacts proximity to existing driveway and proposed driveway | no |

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| | GENERAL INFORMATION | | | | SIZE | | BIOLO | GICAL HEALTH | RECOMMENDATION | | |
|------|----------------------------|-----------------|----------------------------------|-------------|-------------------------|--------------------|-------------------------|---|--------------------|-----------------------------------|----------------------|
| TAG# | BOTANICAL NAME | COMMON NAME | LOCATION | DBH (cm) | CANOPY RADIUS (m) | CROWN CONDITION | STRUCTURAL CONDITION | COMMENTS | PROPOSED ACTION | RATIONALE | consent Required? |
| 751 | Thuja occidentalis | Black Cedar | within proposed | 42, 42 | 2.5 | 5 | fair | Multistem 2, exposed roots, minor interior dieback low branched | preserve | | |
| 752 | Thuja occidentalis | Black Cedar | within proposed | 18 | 3 | 5 | fair | supressed, low branched, minor dieback, uneven crown | preserve | | |
| 753 | Prunus spp. | Cherry | within proposed road widening | 15, 8 | 4 | 5 | fair | Multistem 2, curling leaves, epicormic growth, cavity, scrubby habit, SI in small stem | preserve | | |
| 754 | Picea pungens | Colorado Spruce | within subject site | 24 | 2 | 3 | good | supressed, dieback, limbed up to approx. 20' | preserve | | |
| 755 | Picea abies | Norway Spruce | within subject site | 9 | 2 | 5 | good | hedge row, thin crown, low branched | preserve | | |
| 756 | Picea abies | Norway Spruce | within subject site | 16 | 2.5 | 5 | good | hedge row, thin lower branches, low branched, Adelges abietis (pineapple spruce gall) | preserve | | |
| 757 | Picea abies | Norway Spruce | within subject site | 16 | 2.5 | 5 | good | hedge row, thin lower branches, low branched, Adelges abietis (pineapple spruce gall) | preserve | | |
| 758 | Picea abies | Norway Spruce | within subject site | 13 | 2.5 | 4 | good | hedge row, thin lower branches, low branched | preserve | | |
| 759 | Picea abies | Norway Spruce | within subject site | 20 | 2.5 | 5 | good | hedge row, thin lower branches, low branched | preserve | | |
| 760 | Picea abies | Norway Spruce | within subject site | 13 | 2 | 5 | good | hedge row, low branched | preserve | | |
| 761 | Picea abies | Norway Spruce | within subject site | 8 | 2 | 5 | good | hedge row, low branched | preserve | | |
| 762 | Liriodendron tulipefera | Tulip Tree | within subject site | 55 | 8 | 5 | fair | uneven crown - heavy to SE due to a torn off scaffold branch in crown | preserve | | |
| 763 | Acer saccharum | Sugar Maple | within proposed road widening | 19, 13 | 7 | 5 | fair | Multistem 2, exposed roots, partial root rot, remnants of previous third stem, excellent condition | preserve | | |
| 764 | Acer saccharum | Sugar Maple | within subject site | 38 | 7 | 5 | fair | codominant stems, included bark, butressing, supressed on NW side, dead | preserve | | |
| 765 | Acer saccharum | Sugar Maple | within subject site | 34 | 7 | 5 | fair | vertical cavity, sealing wounds, discolouration at base, minor dead branches | preserve | | |
| 766 | Acer saccharum | Sugar Maple | within subject site | 43 | 7 | 5 | good | low branches on E side, minor dead branches, excellent condition | preserve | | |
| 767 | Acer saccharum | Sugar Maple | within subject site | 19 | 6 | 5 | good | open crown, supressed, minor dead branches | preserve | | |
| 768 | Picea abies | Norway Spruce | within subject site | 45 | 3 | 4 | good | large vertical wound on N side, basal scar, previously supressed, limbed up to approx. 30' | remove | construction of north building | no |
| 769 | Picea abies | Norway Spruce | within subject site | 47 | 3 | 5 | good | wide root flare | remove | construction of north building | no |
| 770 | Acer saccharum | Sugar Maple | within subject site | 17 | 3.5 | 5 | good | minor dead wood, abutting large stump | remove | construction of north building | no |
| 771 | Acer saccharum | Sugar Maple | within subject site | 15 | 4 | 5 | good | excellent condition | remove | construction of north building | no |
| 772 | Prunus serotina | Black Cherry | within subject site | 13 | 2 | 5 | good | crooked at base - self corrected, high crown | preserve | | |
| 773 | Acer saccharum | Sugar Maple | within subject site | 10 | 2.5 | 5 | good | high crown, supressed on NW | preserve | | |
| 774 | Acer saccharum | Sugar Maple | within subject site | 13 | 3 | 5 | good | supressed | preserve | | |
| 775 | Acer platanoides | Norway Maple | within subject site | 17 | 4.5 | 5 | fair | crook at base, clustered upper crown, supressed | preserve | | |
| 776 | Acer saccharum | Sugar Maple | within subject site | 10 | 2 | 5 | good | supressed, high crown, epicormic along trunk | preserve | | |
| 777 | Pinus nigra | Austrian Pine | within subject site | 71 | 5.5 | 4 | poor | lean E, dead branches, natural limb drop, codominant stems, included bark with dead stem, high/small crown, small fungal fruiting body at root flare | remove | condition of tree | no |

| | GENER | RAL INFORMATION | 1 | | SIZE | | BIOLOG | GICAL HEALTH | RECOMMENDATION | | | |
|------|-------------------|-----------------|----------------------------------|-------------|-------------------------|--------------------|-------------------------|--|--------------------|-----------------------------------|----------------------------------|--|
| TAG# | BOTANICAL NAME | COMMON NAME | LOCATION | DBH (cm) | CANOPY RADIUS (m) | CROWN CONDITION | STRUCTURAL CONDITION | COMMENTS | PROPOSED ACTION | RATIONALE | Consent Required? | |
| 778 | Acer saccharum | Sugar Maple | within subject site | 10 | 3 | 5 | good | supressed, epicormic | preserve | | | |
| 779 | Juglans nigra | Black Walnut | within subject site | 14 | 3.5 | 5 | good | high crown, dead branches, supressed | preserve | | | |
| 780 | Juglans nigra | Black Walnut | within subject site | 16 | 3.5 | 4 | poor | Cavity at 7' from grade, several major wounds/burls, ants | remove | condition of tree | NO | |
| 781 | Tilia americana | Basswood | within proposed road widening | 21 | 3 | 5 | good | crook in upper stem, insect damage to leaves, 1 mature epicormic sprout from base, minor dieback, supressed on N, young virginia creeper on trunk | preserve | | | |
| 782 | Juglans nigra | Black Walnut | within proposed road widening | 29 | 6.5 | 5 | good | supressed, uneven crown - heavy to the S, young virginia creeper on trunk | preserve | | | |
| 783 | Acer saccharum | Sugar Maple | within proposed road widening | 10 | 2.5 | 5 | fair | low branched, vertical crack in bark, supressed | preserve | | | |
| 784 | Acer saccharum | Sugar Maple | within proposed road widening | 11 | 2.5 | 5 | good | rodent protection present, minor dieback, supressed, epicormic growth | preserve | | | |
| 785 | Pinus sylvestris | Scotch Pine | within proposed road widening | 40 | 3 | 4 | fair | insect holes, dead/drooping branches, thin crown, bulbous root flare | preserve | | | |
| 786 | Acer saccharum | Sugar Maple | within proposed road widening | 95 | 10 | 4 | poor | MAJOR cavity, codominant stems, dieback in upper crown, thin crown, buckthorn understory | remove | condition of tree | Consent Required from City | |
| 787 | no tag - no tree | 6 11 1 | | 20 | | | <i>.</i> | | | | | |
| /88 | Acer saccharum | Sugar Maple | within subject site | 28 | 6 | 4 | tair | large lower dead branches, supressed, dieback, epicormic growth | preserve | | | |
| 789 | Pinus nigra | Austrian Pine | within subject site | 75 | 5 | 4 | fair | elevated root plate, high crown, thin crown, 3 codominant stems, major dead branches | preserve | | | |
| 790 | Acer saccharum | Sugar Maple | within subject site | 12 | 3 | 4 | fair | supressed, abutting tree no. 789, leaf spot, dieback in lower branches | preserve | | | |
| 791 | Prunus spp. | Cherry | within subject site | 14 | 4 | 3 | fair | supressed, dead lower branches | preserve | | | |
| 792 | Acer saccharum | Sugar Maple | within subject site | 10 | 4 | 5 | good | supressed, minor die back | preserve | | | |
| 793 | Prunus spp. | Cherry | within subject site | 18 | 4 | 4 | poor | vertical cavity/wound below crown, dead lower branches, supressed, crooked - self corrected | preserve | | | |
| 794 | Tilia americana | Basswood | within subject site | 14 | 5 | 5 | fair | insect damage to leaves, lean SW, supressed, included bark, lean | preserve | | | |
| 795 | Tilia americana | Basswood | within subject site | 18 | 5 | 5 | good | insect damage to leaves | preserve | | | |
| 796 | Tilia americana | Basswood | within subject site | 23 | 5 | 5 | good | insect damage to leaves | preserve | | | |
| 797 | Tilia americana | Basswood | within subject site | 23, 22 | 7 | 5 | poor | Multistem 2, major cavities on one stem, included bark, insect damage to leaves, buckthorn understory | preserve | | | |
| 798 | Prunus spp. | Cherry | within subject site | 12 | 3 | 5 | fair | wound 2' from grade, supressed, lean SW | remove | construction of south building | no | |
| 799 | Prunus spp. | Cherry | within subject site | 10 | 3 | 5 | fair | supressed, minor die back, lean SW | remove | construction of south building | NO | |
| 800 | Prunus spp. | Cherry | within subject site | 9 | 2 | 5 | fair | supressed, large epicormic sprout from base | remove | construction of south building | no | |
| 801 | Tilia americana | Basswood | within subject site | 85 | 6 | 5 | poor | several large wounds at 5' from grade and at unions, wide spreading root flare, 3 codominant stems, large dead limbs, minor dieback, burls, basal wound/rot | remove | construction of south building | no | |
| 802 | Prunus spp. | Cherry | within subject site | 12 | 2 | 5 | good | dead lower branches, supressed | remove | construction of south building | no | |
| 803 | Acer saccharum | Sugar Maple | within subject site | 74 | 9 | 5 | fair | exposed/damaged roots, minor root girdling, cavity, one large low branch, uneven crown-heavy on SW, previously supressed | remove | construction of south building | no | |

| | GENERAL INFORMATION | | | | SIZE | | BIOLOG | SICAL HEALTH | RECOMMENDATION | | | |
|------|---------------------|---------------|---------------------------------------|-------------------|-------------------------|--------------------|-------------------------|---|--------------------|---|--|--|
| TAG# | BOTANICAL NAME | COMMON NAME | LOCATION | DBH (cm) | CANOPY RADIUS (m) | CROWN CONDITION | STRUCTURAL CONDITION | COMMENTS | PROPOSED ACTION | RATIONALE | consent Required? | |
| 804 | Prunus spp. | Cherry | within subject site | 18 | 3 | 5 | good | supressed, canopy heavy to SW, dead lower branches | remove | construction of south building | no | |
| 805 | Prunus spp. | Cherry | within subject site | 18 | 3 | 5 | good | supressed, canopy heavy to W, dead lower branches | remove | construction of south building | no | |
| 806 | Prunus spp. | Cherry | within subject site | 16 | 2 | 5 | good | supressed, canopy heavy to N, dead lower branches | remove | construction of south building | no | |
| 807 | Prunus spp. | Cherry | within subject site | 40 | 4 | 4 | fair | burly growth at 20' from grade, dead lower branches, butressing | remove | construction of south building | no | |
| 808 | Prunus spp. | Cherry | within subject site | 33 | 4 | 4 | fair | large butress root on N side, dead lower branches, supressed | remove | construction of south building | no | |
| 809 | Prunus spp. | Cherry | within subject site | 20 | 4 | 4 | fair | Lean to SE, lower canopy dieback | remove | construction of south | no | |
| 810 | Prunus spp. | Cherry | boundary tree with 310 Sunningdale | 22 | 4 | 5 | fair | Lean to SW, lower canopy dieback | remove | construction of south building | Consent Required from Land owner | |
| 811 | Acer saccharum | Sugar Maple | boundary tree with 310 Sunningdale | 77 | 10 | 5 | good | Weeping wound, minor interior dieback, low union, clothesline hardware attached to trunk | remove | construction of south building | Consent Required from Land owner | |
| 812 | Thuja occidentalis | Black Cedar | within subject site | 24 | 3 | 5 | fair | supressed, lean N, previous codominant stem removed at 1' from grade | remove | construction of south building | no | |
| 813 | Picea abies | Norway Spruce | within subject site | 53 | 5 | 5 | fair | dead interior canopy, supressed, drooping habit, exposed/damaged roots, limbed up to approx.15' | remove | construction of south building | no | |
| 814 | Picea abies | Norway Spruce | within subject site | 48 | 5 | 5 | fair | dead interior canopy, supressed, drooping habit, exposed/damaged roots, limbed up to approx.15', Adelges abietis (pineapple spruce gall), soil/debris piled against base | remove | construction of south building | no | |
| 815 | Picea abies | Norway Spruce | within subject site | 51 | 5 | 5 | fair | dead interior canopy, supressed, drooping habit, exposed/damaged roots, limbed up to approx.15', Adelges abietis (pineapple spruce gall), soil/debris piled against base | remove | construction of south building | no | |
| 816 | Ulmus pumila | Siberian Elm | within subject site | 70 | 7 | 3 | fair | on slope, codominant stems, dead wood | remove | proximity to north building and condition of tree | no | |
| 817 | Ulmus pumila | Siberian Elm | within subject site | 34 | 3 | 2 | fair | on slope, supressed, dieback | preserve | 1111 () | | |
| 818 | Ulmus pumila | Siberian Elm | within subject site | 45 | 4 | | dead | fully dead | remove | condition of tree (dead) | | |
| 819 | Ulmus pumila | Siberian Elm | within subject site | 55, 35 | 11 | 4 | poor | Multistem 2, on slope, significant lean NE, significant cavity at base, codominant stem, major dead limbs, epicormic growth, one major limb to the W, virginia creeper on trunk | remove | condition of tree | no | |
| 820 | Ulmus pumila | Siberian Elm | within subject site | 65 | 10 | 3 | poor | Hazard, major dead limbs, major vertical scar at base, supressed, lean, codominant stems | remove | condition of tree | no | |
| 821 | Thuja occidentalis | Black Cedar | within subject site | 28, 21, 18, 14 | 4 | 3 | fair | Multistem 4, hedgerow, dead interior | preserve | | | |
| 822 | Thuja occidentalis | Black Cedar | within subject site | 32, 28, 15, 9 | 3.5 | 4 | fair | Multistem 4, hedgerow, dead interior, included bark | preserve | | | |
| 823 | Ulmus pumila | Siberian Elm | beyond subject site | 15 | 3.5 | 4 | fair | Property of Lot 15 dead lower branches, supressed, lean N | preserve | | | |
| 824 | Ulmus pumila | Siberian Elm | beyond subject site | 21 | 2.5 | 4 | fair | Property of Lot 15 dead lower branches, supressed, girdling roots, epicormic growth | preserve | | | |
| 825 | Ulmus pumila | Siberian Elm | beyond subject site | 28, 19 | 3 | 4 | fair | Multistem 2, Property of Lot 15 uneven crown - heavy to W, dieback of lower branches | preserve | | | |

| | GENER | AL INFORMATION | N | | SIZE | | BIOLOG | GICAL HEALTH | RECOMMENDATION | | | |
|------|--------------------------|----------------|----------------------|-------------|-------------------------|--------------------|-------------------------|--|--------------------|-----------------------------------|----------------------|--|
| TAG# | BOTANICAL NAME | COMMON NAME | LOCATION | DBH (cm) | CANOPY RADIUS (m) | CROWN CONDITION | STRUCTURAL CONDITION | COMMENTS | PROPOSED ACTION | RATIONALE | Consent Required? | |
| 825B | Acer saccharum | Sugar Maple | withing subject site | 14 | 2.5 | 5 | good | Codominant leaders with included bark High canopy | preserve | | | |
| 826 | Acer platanoides | Norway Maple | within subject site | 30 | 6 | 5 | good | low scaffold branches, exposed roots, minor dieback | preserve | | | |
| 827 | Acer saccharinum | Silver Maple | within subject site | 18, 13 | 4.5 | 5 | fair | Multistem 2, butressing at union, cavity halfway up smaller stem | preserve | | | |
| 828 | Acer platanoides | Norway Maple | within subject site | 28 | 5 | 5 | good | low branching, minor interior dieback | remove | proximity to north building | NO | |
| 829 | Acer platanoides | Norway Maple | within subject site | 46 | 5 | 5 | fair | multiple branch union cluster at 4' from grade, fused branches at union, minor interior dieback | remove | construction of north building | no | |
| 830 | Acer platanoides | Norway Maple | within subject site | 31 | 4.5 | 3 | good | significant interior dieback, thin crown, low branches, low vigor | remove | construction of north building | no | |
| 831 | Picea abies | Norway Spruce | within subject site | 22 | 3.5 | 3 | good | supressed, thin crown, branched to grade | remove | construction of north building | no | |
| 832 | Acer saccharum | Sugar Maple | within subject site | 18 | 4 | 2 | good | highly supressed, low vigor | remove | construction of north building | no | |
| 833 | Picea abies | Norway Spruce | within subject site | 16 | 4 | 4 | good | supressed, thin crown, branched to grade | remove | construction of north building | NO | |
| 834 | Acer platanoides | Norway Maple | within subject site | 38 | 6 | 4 | fair | included bark, exposed roots, low union, double codominant stems, low branched | remove | construction of north building | NO | |
| 835 | Picea abies | Norway Spruce | within subject site | 12 | 3 | 5 | good | lower dead branches, minor Adelges abietis (pineapple spruce gall) | remove | construction of north building | NO | |
| 836 | Picea abies | Norway Spruce | within subject site | 22 | 3 | 5 | good | lower dead branches | remove | construction of parking lot | no | |
| 837 | Pinus nigra | Austrian Pine | within subject site | 25 | 3 | 3 | fair | lean NE, natural limb drop - remnant stubs up to approx 10' codominant stems | remove | construction of parking lot | no | |
| 838 | Pinus nigra | Austrian Pine | within subject site | 25 | 3 | 3 | fair | browning foliage, dead lower limbs, codominant stems, low union, included bark | remove | construction of parking lot | no | |
| 839 | Picea abies | Norway Spruce | within subject site | 12 | 1.5 | 5 | fair | supressed, branched to grade, minor Adelges abjetis (pineapple spruce gall) | remove | construction of parking lot | no | |
| 840 | Picea abies | Norway Spruce | within subject site | 15 | 1.5 | 2 | fair | only upper 30' of canopy is living | remove | construction of parking lot | no | |
| 841 | Malus spp. | Apple | within subject site | 62 | 5 | 4 | poor | wood pecker damage, twisting trunk, bark splitting, thin crown, major dead limbs, cavity | remove | construction of parking lot | NO | |
| 842 | Acer saccharum | Sugar Maple | within subject site | 18 | 4 | 5 | fair | supressed, uneven crown - heavy to NE, low union, low branched | remove | construction of parking lot | no | |
| 843 | Acer saccharum nigrum | Black Maple | within subject site | 50 | 7 | 5 | fair | low scaffold branches, cupped/discolourd leaves, woodpecker damage, exposed/girdling roots, butressing | remove | construction of driveway | no | |
| 844 | Pinus nigra | Austrian Pine | within subject site | 10 | 2 | 4 | fair | twisted/crooked trunk, supressed, low branched, browning needles | remove | construction of driveway | no | |
| 845 | Prunus spp. | Cherry | within subject site | 20 | 3.5 | 5 | good | exposed roots, low branched, supressed | remove | construction of driveway | NO | |
| 846 | Pinus sylvestris | Scotch Pine | within subject site | 25 | 4 | 4 | good | dead lower branches, thin canopy | remove | construction of driveway | NO | |
| 847 | Prunus spp. | Cherry | within subject site | 11 | 2 | 5 | fair | lean NE, supressed | remove | construction of driveway | NO | |
| 848 | Acer x freemanii | Freeman Maple | within subject site | 16, 11 | 5 | 5 | good | Multistem 2, uneven crown - heavy to W, root flare butressing | remove | construction of driveway | no | |
| 849 | Thuja occidentalis | Black Cedar | within subject site | 30, 12 | 2.5 | 5 | good | Multistem 2, hedgerow, dead lower branches | remove | construction of driveway | no | |
| 850 | Thuja occidentalis | Black Cedar | within subject site | 13, 10 | 2 | 5 | good | Multistem 2, hedgerow, dead lower branches | remove | construction of driveway | no | |
| 851 | Thuja occidentalis | Black Cedar | within subject site | 32, 15 | 3 | 5 | good | Multistem 2, hedgerow, dead lower branches | remove | construction of driveway | no | |
| 852 | Prunus spp. | Cherry | within subject site | 9 | 3 | 5 | good | crook in trunk, supressed, lean E, minor dieback | remove | construction of driveway | no | |

| GENERAL INFORMATION | | | | SIZE | | | BIOLO | GICAL HEALTH | RECOMMENDATION | | |
|---------------------|---|-----------------------|---|-------------|-------------------------|--------------------|-------------------------|---|--------------------|---|--|
| TAG# | BOTANICAL NAME | COMMON NAME | LOCATION | DBH (cm) | CANOPY RADIUS (m) | CROWN CONDITION | STRUCTURAL CONDITION | COMMENTS | PROPOSED ACTION | RATIONALE | consent Required? |
| Trees n | ot tagged during tree i | nventory - beyond sub | ject site or inaccessible | e | | | | | | | |
| A | Acer saccharum | Sugar Maple | within current City ROW | 70 | 7 | 5 | poor | City ROW major root damage along road side, epicormic growth, large burl, large exposed/girdling root, on slope, pruned, cavity | remove | condition of tree and proximity to proposed driveway | Consent Required from City |
| В | Acer saccharum | Sugar Maple | within current City ROW | 65 | 8 | 5 | poor | City ROW severed roots on street side, pruned, major dead wood, adjacent to hydro line | remove | condition of tree and proximity to proposed driveway | Consent Required from City |
| C | Acer saccharum | Sugar Maple | within current City ROW | 65 | 8 | 5 | fair | City ROW slight lean N, lilac shrub growing from roots, girdling roots, large dead branches, minor dieback | preserve | | |
| D | Crataegus spp. | Hawthorne | within current City ROW | 12 | 2 | 4 | good | City ROW insect damage to leaves, supressed, uneven crown, scrubby habit, slight lean S | preserve | | |
| E | Acer saccharum | Sugar Maple | 310 Sunningdale Rd & proposed road widening | 85 | 7 | 3 | poor | cavities in branches, weeping wound, crown dieback, major dead limbs, fused leaders, clustered branching, girdling roots | remove | poor tree condition | Consent Required from Land owner |
| F | Tilia americana | Basswood | 310 Sunningdale Rd | 75 | na | 1 | dead | completely dead | remove | dead tree - potential risk for workers during construction and building/tenants | Consent Required from Land owner |
| G | Acer saccharum | Sugar Maple | 310 Sunningdale Rd | 85 | 8 | 1 | dead | completely dead | remove | dead tree - potential risk for workers during construction and building/tenants | Consent Required from Land owner |
| H | Acer saccharum | Sugar Maple | 310 Sunningdale Rd | 86 | 10 | 5 | poor | low crotch, cavity at base, minor dead branching, cavity in upper crown | remove | poor health - potential risk for workers during construction and building/tenants | Consent Required from Land owner |
| I | Acer saccharum | Sugar Maple | 310 Sunningdale Rd | 80 | 9 | 5 | poor | burls on roots, low crotch, ants present, butressing, near existing pile of debris | remove | poor health - potential risk for workers during construction and building/tenants | Consent Required from Land owner |
| J | Acer saccharum | Sugar Maple | 310 Sunningdale Rd | 80 | 10 | 5 | fair | girdling roots, low scaffold branches, dieback to main branches | remove | poor health - potential risk for workers during construction, nearby tree removal and building/tenants | CONSENT REQUIRED FROM LAND OWNER |
| К | <u>Vegetation unit</u> - Thuja occidentalis group | Black Cedar | within subject site | +-15 | +-2 | 4 | good | Subject site property good condition, low area | preserve | | |
| L | <u>Vegetation unit</u> - Ulmus pumila | Siberian Elm | 310 Sunningdale Rd | +-15 | | 4 | fair | Property of Lot 15 stand of trees along entire north property line - beyond subject site boundary | preserve | | |
| М | Picea pungens | Colorado Spruce | within subject site | 7 | 1 | 5 | good | Subject site property hedgerow, branched to ground | preserve | | |

| | GENER | AL INFORMATION | ١ | | SIZE | | BIOLO | GICAL HEALTH | RECOMMENDATION | | | |
|------|---|--------------------------|---------------------|---------------|-------------------------|--------------------|-------------------------|---|--------------------|-----------------------------|----------------------|--|
| TAG# | BOTANICAL NAME | COMMON NAME | LOCATION | DBH (cm) | CANOPY RADIUS (m) | CROWN CONDITION | STRUCTURAL CONDITION | COMMENTS | PROPOSED ACTION | RATIONALE | Consent Required? | |
| N | Picea pungens var. glauca | Colorado Bllue Spruce | within subject site | 8 | 1.5 | 5 | good | Subject site property hedgerow, branched to ground | preserve | | | |
| 0 | Picea abies | Norway Spruce | within subject site | 25 | 4.5 | 5 | good | Subject site property hedgerow, low branched | preserve | | | |
| Р | Picea abies | Norway Spruce | within subject site | 21 | 4.5 | 5 | good | Subject site property hedgerow, branched to ground | preserve | | | |
| Q | Picea abies | Norway Spruce | within subject site | 21 | 4.5 | 5 | good | Subject site property hedgerow, branched to ground | preserve | | | |
| R | Picea abies | Norway Spruce | within subject site | 32 | 4.5 | 5 | good | Subject site property hedgerow, branched to ground | preserve | | | |
| S | Picea abies | Norway Spruce | within subject site | 12 | 1 | 5 | good | Subject site property hedgerow, branched to ground, supressed | preserve | | | |
| Ţ | Picea abies | Norway Spruce | within subject site | 25 | 4.5 | 5 | good | Subject site property hedgerow, branched to ground | preserve | | | |
| U | <u>Vegetation unit -</u> Lonicera spp. | Honeysuckle Shrub | within subject site | na | 4 | 4 | good | Subject site property large shrub | remove | construction of driveway | no | |
| V | Prunus spp. | Cherry | 310 Sunningdale Rd | 23, 20, 15 | 4 | 4 | fair | Multiestem 3, large cavity in 20cmDBH stem, gall, open crown, dieback | preserve | | | |
| W | Prunus spp. | Cherry | 310 Sunningdale Rd | 52 | 6 | 5 | fair | lower canopy dieback, supressed, lean E | preserve | | | |