

Arborist Report and Tree Preservation Plan

For: Rose Development Corporation

Regarding: Temporary Use Permit: 420 South Service Road East, Oakville ON.

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Arborist Report and Tree Preservation Plan

Rose Development 420 South Service Road East, Oakville ON.

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SUMMARY

The arborist was retained to prepare a tree inventory and protection plan, including tree removal application, for the application for temporary use of the property at 420 South Service Road East, Oakville ON. Temporary use proposed for the site includes the following:

- Parking/Storage use of the sites existing paved/concrete areas
- Parking/Storage use of the sites existing Open Lawn Areas (not incl. woodlot areas)

To allow for the temporary use proposed the site is proposed for the clearing of prior dumping refuse on the site as well as the potential placement of aggregate (clear stone/gravel) where required across the paved areas and open lawn areas of the site.

In addition, the arborist was retained to do a brief species assessment of the woodlot areas (note – not an inventory, nor count) specifically noting any species at risk that may be present through these areas (none discovered) as well as noting any invasive species (buckthorn) that may be present through the areas of "woodlot" or site. These wooded areas are denoted as Woodlot A1 & A2, and Woodlot B. In addition, the arborist noted other invasive species (phragmites) present through various areas of the site.

The following sections of this report detail the inventory of trees, and the trees to be removed to facilitate temporary use of the site, and compensation required. Further, recommendations for the protection of trees to remain (incl. hoarding to be placed as shown on the Tree Protection Plan drawings). Additionally, commentary regarding the woodlot areas is provided, denoting the species noted during the tree inventory site visit.

It should be noted that at this time, and for the temporary use application, no constructions, demolitions, or other works are proposed beyond that required for clearing areas of refuse or invasive phragmite where located in areas to be used for temporary use.

INTRODUCTION

Background and History

The site is that of the old GE factory lands, and this site is and has been barren and in process of environmental soil decontamination for the past years. Much of the site is currently either paved by asphalt or concrete areas (presumed to be areas of old factory buildings and driveways for site). The site contains a potentially historic building at the front of the site which is to remain undisturbed at this time.

Assignment

The arborist was retained in to prepare an Arborist Report and Tree Preservation Plan for the property located at 420 South Service Road East, Oakville ON. for submission to the Town of Oakville in regard to tree removal application and tree protection through temporary use, as required by the Town of Oakville. The report is to include an inventory and location (tree survey) including rating and comments (where required) regarding the current Health and Soundness of each subject tree. Additionally, plan drawings showing proposed construction and tree preservation fencing, any tpz area encroachments, and proposed tree removals, at minimum, are also included.

Limits of the Assignment

Unless specifically noted, all trees are rated by Limited Visual Assessment (Ground-based), and no exploratory excavation was, or is to be, conducted to verify the presence or absence of tree roots in a given area.

Trees were located by the arborist using GPS, and positions of trees adjusted by way of aerial imagery to decrease the dilution of precision of the GPS coordinates taken. All trees within the inventory are numbered as per the tag used for marking the tree.

Purpose and Use of This Report

This report is intended to outline all encroachments, tree injuries, and tree removals resulting from the proposed construction (or otherwise proposed by the client) as outlined in the subsequent sections for review and approval by the Town of Oakville. It should be noted that the approval, waiver, exemption, or denial of Approvals and/or any necessary Permits rests strictly with the Town of Oakville.

Methodology

For details regarding the onsite protocols and methods used in the creation of this report, please see Appendix II - Methodology

SITE

Current Site Characteristics

The site is that of the old GE factory lands, and this site is and has been barren and in process of environmental soil decontamination for the past years. Much of the site is currently either paved by asphalt or concrete areas (presumed to be areas of old factory buildings and driveways for site). Further, the site contains one building (the front portion of the building) at the front of the site which is to remain through the temporary use of the site.

In addition to the paved areas of the site, there are two treed woodlot areas (A and B) with woodlot A being subdivided in to A1 and A2. These wood lot areas contain primarily dense thickets of the invasive tree species Buckthorn. Additional individual trees noted include: Maple species, Ash (Many dead), Crack Willow, Poplar.

Proposed Construction

Although there is no proposed construction for the site, the property is proposed for temporary use as a parking/storage area on the existing open areas (open paved areas/areas of prior dumping of refuse/gravel). No work is proposed beyond the placement of gravel/clear stone for level and stable parking/storage areas, and no work is proposed to occur within either woodlot areas at this time.

Construction Phases and Anticipated Injury to Encroachment Ratios

TEMPORARY USE AREA – AREA TO BE USED FOR PARKING/STORAGE USE ON AREAS OF EXISTING PAVING/CONCRETE -CLEAR STONE TO BE PLACED TO PROVIDE SUITABLE AND LEVEL AGGREGATE BASE FOR PARKING/STORAGE

Initial Assumptions Regarding Proposed Work

Encroachment Type: General Access (may include vehicles and heavy equipment – on existing paved/concrete areas)

Maximum Excavation Depth (m): 0.3 Maximum Height or Clearance (m): 3

Assumed Ratio of Injury to Encroachment
(Injury = Ratio x Encroachment)

Root Zone: 0.25 Canopy: 0

REFUSE/DUMPING AREAS - CLEARING OF AREAS

Initial Assumptions Regarding Proposed Work

Encroachment Type: General Access and Clearing

Maximum Excavation Depth (m): 0.3 Maximum Height or Clearance (m): 0

Assumed Ratio of Injury to Encroachment
(Injury = Ratio x Encroachment)

Root Zone: 0.25 Canopy: 0

TREE INVENTORY SUMMARY

Tree Population

Overview

There were Eighty-Eight (88) trees of 10cm or greater inventoried within the scope of this survey.

The following outlines the distribution of all trees within the inventory presenting their deemed ownership (location), and further presents a species distribution for the site.

Ownership

• Client Tree 86

• Client/Neighbor Shared Ownership 2

Species Distribution

Species distribution, average DBH, and count are as follows:

Species Species	Count	Average DBH
		(cm)
boxelder, Ash-leaved Maple	1	23.0
Acer negundo		
Norway maple	12	31.8
Acer platanoides		
red maple, scarlet maple,	2	35.0
swamp maple		
Acer rubrum		
sugar maple, rock maple, hard	2	72.5
maple		
Acer saccharum		
European white birch	1	19.0
Betula pendula		
European hornbeam	2	38.0
Carpinus betulus		
white ash	8	35.2
Fraxinus americana		
Austrian pine	31	37.0
Pinus nigra		
London planetree	1	23.0
Platanus acerifolia		
Carolina poplar	5	22.0
Populus canadensis [deltoides		
× nigra]		
Lombardy poplar	4	22.5
Populus nigra		
black locust	1	27.0
Robinia pseudoacacia		
Sumac spp.	1	13.0
Rhus spp.		
crack willow	11	49.9
Salix fragilis		
Siberian elm	2	27.0
Ulmus pumila		
Red elm	4	13.0
Ulmus rubra		

Woodlot Areas A1 & A2, and B

During the tree inventory site visit, the woodlot areas were not included within the inventory as per the scope of the reporting, however they were assessed for species present through these areas. Within the Woodlot areas, the following species were noted:

Woodlot A1: Buckthorn (Invasive), Ash (many dead – thought to be White Ash), Norway Maple, Crack Willow, Red Elm

Woodlot A2: Buckthorn (Invasive), Phragmite (Invasive)

Woodlot B: Buckthorn (Invasive), Ash (many dead – thought to be White Ash), Maple species (predominantly Norway), Poplar species (predominantly Lombardy)

Species distribution through the woodlots contains a significant majority of Buckthorn, with woodlot areas being that of Buckthorn thickets/woods. In woodlot A1 and B there are individual trees of species as listed above scatted throughout the area, however, the large majority of each area is buckthorn In the area of Woodlot A2, the area is split between Buckthorn and Phragmite

In other areas of the site, there are significant growth of Phragmite, as well as other random grasses and shrubs that have grown through areas of prior illegal dumping on the site (areas of soil dumping and gravel/concrete refuse dumping).

Although for the purpose of the temporary use application, the woodlot areas will remain untouched and hoarded to prevent access through these areas, it is recommended that the client investigate these areas ultimately looking toward the removal of the invasive buckthorn and phragmite species throughout. At this time, it is recommended that the individual trees of other species through the area be assessed for viability of retention, however, it is the opinion of this arborist that the removal of the buckthorn and phragmite should not be hindered by the presence of these trees. It is to be noted that any work within these areas is not within the scope of this assignment, and all work that may occur in the future through these areas must only be conducted on approval by the Town of Oakville

Trees Receiving TPZ Encroachment or Proposed for Removal

This section lists all trees which will receive encroachment/injury or require removal as a result of the proposed construction activities, and/or their current condition. The Town of Oakville must approve proposed construction activities (including access) within the protected root zone area of a tree, or the proposed removal of a tree, which is:

15cm or larger in DBH located on private land, or

A tree of any size, which is located on Municipal/Public land.

Additionally, a permit to injure or a permit to remove may be required for trees proposed for injury or removal as per the municipal tree bylaws relevant to the area/site.

Trees located on Municipal land may be removed only with the consent of Town of Oakville, and may be subject to additional fees at the discretion of, the Municipality.

Additionally, any tree requiring a Permit to Remove may be subject to a Tree Replacement Requirement specifying the number of replacement trees to be planted on the site, or in some cases, 'cash-in-lieu' where such planting would be infeasible.

Trees Proposed to Receive Encroachment on the Protected Root Zone Area

The following trees are located with MTPZ areas bisected by the areas to be used for temporary use parking/storage. Although existing paving in these areas will prevent any significant root impact, these trees will receive encroachment within the technical mtpz radius from the follows:

- Potential Placement of Aggregate (clear stone/gravel) on Ex Paving Areas as may be Required for Stable Parking/Storage use.
- Parking/Storage through the duration of the Temporary Use of the site

Tree # Species Ownership	DBH (cm) Canopy Dia. (m)	Comments Regarding Injury
019 Norway Maple {Acer platanoides) Client Tree	35 cm 6.0 M	Encroachment (all phases): Major. Anticipated Injury: Negligible.
020 Norway Maple {Acer platanoides) Client Tree	36 cm 8.0 M	Encroachment (all phases): Minor. Anticipated Injury: Negligible.
021 European Hornbeam {Carpinus betulus} Client Tree	39 cm 4.0 M	Encroachment (all phases): Major. Anticipated Injury: Minor.
022 European Hornbeam {Carpinus betulus} Client Tree	37 cm 6.0 M	Encroachment (all phases): Major. Anticipated Injury: Minor.
023 Norway Maple {Acer platanoides) Client Tree	34 cm 6.0 M	Encroachment (all phases): Major. Anticipated Injury: Minor.
024 Norway Maple {Acer platanoides) Client Tree	32 cm 6.0 M	Encroachment (all phases): Major. Anticipated Injury: Minor.

025 Norway Maple {Acer platanoides) Client Tree	28 cm 6.0 M	Encroachment (all phases): Minor. Anticipated Injury: Negligible.
027 Norway Maple {Acer platanoides) Client Tree	26 cm 8.0 M	Encroachment (all phases): Minor. Anticipated Injury: Negligible.
029 Lombardy Poplar {Populus nigra) Client Tree	22 cm 8.0 M	Encroachment (all phases): Minor. Anticipated Injury: Negligible.
049 Austrian Pine (Pinus nigra) Client Tree	37 cm 10.0 M	Encroachment (all phases): Minor. Anticipated Injury: Negligible.
052 Austrian Pine (Pinus nigra) Client Tree	45 cm 8.0 M	Encroachment (all phases): Minor. Anticipated Injury: Negligible.
053 Crack Willow (Salix fragilis) Client Tree	68 cm 16.0 M	Encroachment (all phases): Minor. Anticipated Injury: Negligible.
054 Crack Willow {Salix fragilis} Client Tree	55 cm 14.0 M	Encroachment (all phases): Minor. Anticipated Injury: Negligible.

Please see subsequent section of this report for a detailed analysis of all of the above proposed injuries, as well as recommendations for the minimization of damages in these areas.

The following small-sized trees (not subject to Tree Protection Bylaw) may also incur some injury as a result of the proposed construction.

082 (Lombardy Poplar), 084 (Crack Willow),

Trees Proposed for Removal for Temporary Use

The following trees are proposed for removal within the application. These trees are proposed for removal for the following reasons:

- Proposed for removal due to Current Condition (poor and declining botanical condition/structurally unsound/dead)
- Proposed for removal due to their location within the central paved area of the site or open lawn areas where temp use is proposed (within Temporary Use Areas)

Trees Proposed for Removal in Open Lawn Areas

Tree #	DBH (cm)	Comments Regarding Removal
Species	Canopy	
Ownership	Dia. (m)	West and the second
001 Austrian Pine (Pinus nigra) Client Tree	50 10.0	Within open area (currently lawn w trees and phragmite at edge of property area) proposed for temp use parking/storage
002 Austrian Pine (Pinus nigra) Client Tree	42 8.0	Within open area (currently lawn w trees and phragmite at edge of property area) proposed for temp use parking/storage
003 Austrian Pine (Pinus nigra) Client Tree	29 6.0	Within open area (currently lawn w trees and phragmite at edge of property area) proposed for temp use parking/storage
004 Austrian Pine (Pinus nigra) Client Tree	40 8.0	Within open area (currently lawn w trees and phragmite at edge of property area) proposed for temp use parking/storage
005 Austrian Pine (Pinus nigra) Client Tree	35 8.0	Within open area (currently lawn w trees and phragmite at edge of property area) proposed for temp use parking/storage
006 Austrian Pine (Pinus nigra) Client Tree	35 8.0	Within open area (currently lawn w trees and phragmite at edge of property area) proposed for temp use parking/storage
007 Austrian Pine (Pinus nigra) Client Tree	31 8.0	Within open area (currently lawn w trees and phragmite at edge of property area) proposed for temp use parking/storage
008 Austrian Pine (Pinus nigra) Client Tree	47 10.0	Within open area (currently lawn w trees and phragmite at edge of property area) proposed for temp use parking/storage
009 Austrian Pine {Pinus nigra) Client Tree	37 8.0	Within open area (currently lawn w trees and phragmite at edge of property area) proposed for temp use parking/storage
010 Austrian Pine (Pinus nigra) Client Tree	34 8.0	Within open area (currently lawn w trees and phragmite at edge of property area) proposed for temp use parking/storage
011 Austrian Pine {Pinus nigra) Client Tree	40 8.0	Within open area (currently lawn w trees and phragmite at edge of property area) proposed for temp use parking/storage
012 Austrian Pine {Pinus nigra) Client Tree	42 8.0	Within open area (currently lawn w trees and phragmite at edge of property area) proposed for temp use parking/storage
013 Austrian Pine {Pinus nigra) Client Tree	35 8.0	Within open area (currently lawn w trees and phragmite at edge of property area) proposed for temp use parking/storage

014 Austrian Pine {Pinus nigra} Client Tree	54 12.0	Within open area (currently lawn w trees and phragmite at edge of property area) proposed for temp use parking/storage
015 Red Maple (Acer rubrum) Client Tree	41 8.0	Within open area (currently lawn w trees and phragmite at edge of property area) proposed for temp use parking/storage
016 Red Maple (Acer rubrum) Client Tree	29 6.0	Within open area (currently lawn w trees and phragmite at edge of property area) proposed for temp use parking/storage
030 Norway Maple {Acer platanoides} Client Tree	20 6.0	Within open area (currently lawn w trees) proposed for temp use parking/storage
031 Austrian Pine (Pinus nigra) Client Tree	40 8.0	Within open area (currently lawn w trees) proposed for temp use parking/storage
032 Austrian Pine (Pinus nigra) Client Tree	36 8.0	Within open area (currently lawn w trees) proposed for temp use parking/storage
033 Austrian Pine {Pinus nigra) Client Tree	29 8.0	Within open area (currently lawn w trees) proposed for temp use parking/storage
034 Austrian Pine (Pinus nigra) Client Tree	24 4.0	Within open area (currently lawn w trees) proposed for temp use parking/storage
035 Austrian Pine (Pinus nigra) Client Tree	6.0	Within open area (currently lawn w trees) proposed for temp use parking/storage
036 Austrian Pine (Pinus nigra) Client Tree	35 8.0	Within open area (currently lawn w trees) proposed for temp use parking/storage
037 Siberian Elm (Ulmus pumila) Client Tree	27 8.0	Within open area (currently lawn w trees) proposed for temp use parking/storage
038 Austrian Pine (Pinus nigra) Client Tree	50 10.0	Within open area (currently lawn w trees) proposed for temp use parking/storage
039 Austrian Pine (Pinus nigra) Client Tree	6.0	Within open area (currently lawn w trees) proposed for temp use parking/storage
040 Norway Maple {Acer platanoides) Client Tree	29 8.0	Within open area (currently lawn w trees) proposed for temp use parking/storage
041 Austrian Pine (Pinus nigra) Client Tree	37 8.0	Within open area (currently lawn w trees) proposed for temp use parking/storage
042 Austrian Pine (Pinus nigra) Client Tree	40 8.0	Within open area (currently lawn w trees) proposed for temp use parking/storage
043 Norway Maple {Acer platanoides) Client Tree	53 6.0	Within open area (currently lawn w trees) proposed for temp use parking/storage
044 Austrian Pine (Pinus nigra) Client Tree	35 8.0	Within open area (currently lawn w trees) proposed for temp use parking/storage
045 Austrian Pine (Pinus nigra) Client Tree	38 10.0	Within open area (currently lawn w trees) proposed for temp use parking/storage
046 Austrian Pine (Pinus nigra) Client Tree	31 8.0	Within open area (currently lawn w trees) proposed for temp use parking/storage
047 Austrian Pine (Pinus nigra) Client Tree	36 10.0	Within open area (currently lawn w trees) proposed for temp use parking/storage

Trees Proposed for Removal within Currently Paved Areas Proposed for Temp Use

The following trees are located growing within refuse piles from former dumping on site, or within cracks in paved surfaces. These trees are proposed for removal as the existing paved areas are to be used as Temp Use Areas.

Tree #	DBH (cm)	Comments Regarding Removal
Species	Canopy Dia.	
Ownership	(m)	
057	15	In Zone: Temporary Use Area. Encroachment (all
White Ash {Fraxinus	6.0	phases): Severe. Anticipated Injury: Not survivable.
americana)		Removal recommended.
Client Tree		
058	11	In Zone: Temporary Use Area. Encroachment (all
Carolina Poplar (Populus	2.0	phases): Severe. Anticipated Injury: Not survivable.
canadensis [deltoides ×		Removal recommended.
nigra])		
Client Tree		
059	10	In Zone: Temporary Use Area. Encroachment (all
Carolina Poplar {Populus	2.0	phases): Severe. Anticipated Injury: Not survivable.
canadensis [deltoides ×		Removal recommended.
nigra])		
Client Tree 060	21	In Zone, Temperatulise Area, Engraphment (all
Carolina Poplar {Populus	6.0	In Zone: Temporary Use Area. Encroachment (all phases): Severe. Anticipated Injury: Not survivable.
canadensis [deltoides ×	0.0	Removal recommended.
nigra])		Removal recommended.
Client Tree		
061	25	In Zone: Temporary Use Area. Encroachment (all
Carolina Poplar (Populus	4.0	phases): Severe. Anticipated Injury: Not survivable.
canadensis [deltoides ×		Removal recommended.
nigra])		
Client Tree		
062	20	In Zone: Temporary Use Area. Encroachment (all
Carolina Poplar {Populus	6.0	phases): Severe. Anticipated Injury: Not survivable.
canadensis [deltoides ×		Removal recommended.
nigra])		
Client Tree		
063	27	In Zone: Temporary Use Area. Encroachment (all
Black Locust (Robinia	8.0	phases): Severe. Anticipated Injury: Not survivable.
pseudoacacia)		Removal recommended.
Client Tree		
083	14	In Zone: Temporary Use Area. Encroachment (all
Lombardy Poplar {Populus	4.0	phases): Severe. Anticipated Injury: Not survivable.
nigra)		Removal recommended.
Client Tree		
086	11	In Zone: Temporary Use Area. Encroachment (all
White Ash {Fraxinus	2.0	phases): Severe. Anticipated Injury: Not survivable.
americana)		Removal recommended.
Client Tree		
087	23	In Zone: Temporary Use Area. Encroachment (all
Lombardy Poplar (Populus	6.0	phases): Severe. Anticipated Injury: Not survivable.
nigra)		Removal recommended.
Client Tree		

Trees Proposed for Removal due to Current Condition

		Current Condition
Tree #	DBH (cm)	Comments Regarding Removal
Species	Canopy Dia.	
Ownership	(m)	
017	26	Recommended for removal due to current condition
Norway Maple {Acer	4.0	(declining/structurally unsound)
platanoides)		
Client Tree		
026	59	Recommended for removal due to current condition
Sugar Maple {Acer	14.0	(declining/structurally unsound)
saccharum)		
Client Tree		
028	86	Recommended for removal due to current condition
Sugar Maple {Acer	16.0	(declining/structurally unsound)
saccharum)		, ,
Client Tree		
034	24	Recommended for removal due to current condition
Austrian Pine (Pinus nigra)	4.0	(Dead)
Client Tree		
043	53	Recommended for removal due to current condition
Norway Maple {Acer	6.0	(declining/structurally unsound)
platanoides)		(**************************************
Client Tree		
064	50	Recommended for removal due to current condition
White Ash {Fraxinus	12.0	(Dead)
americana)	1	, ,
Client Tree		
065	49	Recommended for removal due to current condition
White Ash {Fraxinus	10.0	(Dead)
americana)		,
Client Tree		
066	45	Recommended for removal due to current condition
White Ash {Fraxinus	10.0	(Dead)
americana)		(,
Client Tree		
088	10	Recommended for removal due to current condition
Siberian Elm (Ulmus	2.0	(declining condition)
pumila)	2.0	(deciming condition)
Client Tree		
OHER TICE		

Note:

It should be noted that the Private Tree Protection By-law 2017-038 (as amended) regulates all trees up until final Site Plan approval. During the Site Plan process trees shall not be removed as they are part of the formal submission(s). Once final Site Plan approval has been granted, the Private Tree Protection Bylaw is superseded by conditions that are set out in the approved Site Plan Agreement. This means that once Site Plan approval is granted the trees to be removed are not subject to the private tree bylaw procedure.

Regarding Compensation and/or Replacement Tree Plantings for Trees to be Removed

As per the Town of Oakville requirements for replacement of trees to be removed, the following presents the anticipated requirement for replacement trees to compensate for the tree removals proposed within this application. It should be noted that for properties under the site plan control process, any replacement planting or compensation will be set out as part of the final Site Plan Agreement and may differ from that presented below.

Replacement Trees and Security Deposit

"As a condition of the permit, one tree must be planted for every 10 cm DBH of healthy tree removed.

A \$300 security deposit is required for each tree to be planted. The security deposit will be refunded once a final inspection of the replacement plantings is complete.

Replacement trees must be planted on the same property as those removed. Where it is not possible to properly grow replacement trees on the site, the security deposit may be donated to the town to plant on nearby town property.

The minimum tree replacement size is a 30-mm caliper (3 cm width) deciduous tree, or a 150-cm high coniferous tree in a five-gallon container, balled in burlap, or in a wire basket"

For this application, there are Fifty-two(52) trees (all sizes and conditions) proposed to be removed outside of the woodlot areas (which are to be preserved for the current application) as outlined in the preceding section. It is expected that compensation would be required as follows:

Trunk Diameter (DBH) of Tree Removed	Required No. of Trees for Compensation
Tree #001: 50 cm DBH	5
Tree #002: 42 cm DBH	4
Tree #003: 29 cm DBH	2
Tree #004: 40 cm DBH	4
Tree #005: 35 cm DBH	3
Tree #006: 35 cm DBH	3
Tree #007: 31 cm DBH	3
Tree #008: 47 cm DBH	4
Tree #009: 37 cm DBH	3
Tree #010: 34 cm DBH	3
Tree #011: 40 cm DBH	4
Tree #012: 42 cm DBH	4
Tree #013: 35 cm DBH	3
Tree #014: 54 cm DBH	5
Tree #015: 41 cm DBH	4
Tree #016: 29 cm DBH	2
Tree #017: 26 cm DBH (Poor condition)	1
Tree #026: 59 cm DBH (Poor condition)	1
Tree #028: 86 cm DBH (Poor condition)	1
Tree #030: 20 cm DBH	2
Tree #031: 40 cm DBH	4
Tree #032: 36 cm DBH	3
Tree #033: 29 cm DBH	2
Tree #034: 24 cm DBH (Dead)	0
Tree #035: 28 cm DBH	2
Tree #036: 35 cm DBH	3
Tree #037: 27 cm DBH	2
Tree #038: 50 cm DBH	5
Tree #039: 27 cm DBH	2
Tree #040: 29 cm DBH	2
Tree #041: 37 cm DBH	3
Tree #042: 40 cm DBH	4
Tree #043: 53 cm DBH	5
Tree #044: 35 cm DBH	3
Tree #045: 38 cm DBH	3
Tree #046: 31 cm DBH	3
Tree #047: 36 cm DBH	3
Tree #034: 24 cm DBH (Dead)	0
Tree #043: 53 cm DBH (Poor Condition)	1
Tree #057: 15 cm DBH	1

Trunk Diameter (DBH) of Tree Removed	Required No. of Trees for Compensation
Tree #058: 11 cm DBH	1
Tree #059: 10 cm DBH	1
Tree #060: 21 cm DBH	2
Tree #061: 25 cm DBH	2
Tree #062: 20 cm DBH	2
Tree #063: 27 cm DBH	2
Tree #064: 50 cm DBH (Dead)	0
Tree #065: 49 cm DBH (Dead)	0
Tree #066: 45 cm DBH (Dead)	0
Tree #083: 14 cm DBH	1
Tree #085: 10cm DBH	1
Tree #086: 11 cm DBH	1
Tree #087: 23 cm DBH	2
Tree #088: 10 cm DBH (Poor Condition)	1

Total Anticipated Compensation: 130 Trees

It should be noted that the above assumes that replacement is required for all trees regardless of a poor condition rating. It assumes that dead trees will require no compensation, poor trees would require 1:1 compensation, and all other trees would require 1 tree per 10cm of DBH. Final total compensation required for the proposed removals (incl. any adjustments to due to condition of removals) is to be provided by the Town of Oakville on review of the application.

Replacement Tree Plantings are to be planted within a reasonable timeline (as specified by the municipality) upon completion of tree removal. For sites with development occurring it is the recommendation of this arborist that the planting occur during the first planting season post construction completion. For example, if construction finishes in the winter, planting of replacement trees is to be conducted in the Spring season immediately following construction conclusion. If construction finishes in the spring/summer, planting of replacement trees is to be conducted in the Fall of that same year.

It should be noted that replacement trees that may be required are to be of Native species, or other accepted species/varieties, as accepted by the Town of Oakville. Please refer to the Town of Oakville website for the current lists of suitable replacement trees. Please note that all replacement trees are subject to approval by the Town of Oakville.

ANALYSIS OF PROPOSED ENCROACHMENTS

The following sections outline the anticipated tree encroachments and injuries for each phase of the proposed construction. Please refer to the subsequent sections: Minimization of Damage Recommendations for recommendations for each phase of construction affecting trees, including Pre-Construction and Post-Construction recommendations.

Temporary Use Areas

The open areas of the site (those currently paved/refuse areas/within the open central areas of the site/open lawn areas) are proposed to be used for parking/storage in a temporary use. This temporary use is to be facilitated by the placement gravel/crushed stone through these areas (where required, such as in the open lawn areas) in order to provide a level and firm support for any vehicle parking and/or storage on the site area. Although these areas do not directly impact trees on the site, some trees located adjacent the parking area will have technical encroachment within the MTPZ extent as the MTPZ areas of these trees extend in to the existing parking areas.

As the existing concrete/paving through the site is not being removed at this time and may only being filled upon with aggregate to create stable and level surfacing where required, no actual impact to trees to be preserved is expected to occur with care taken during any placement of aggregate required. This care is to include the following:

- Placement of hoarding protection for the trees to remain on the site through temporary use, as shown on the Tree Protection Plan drawings provided. Note: hoarding is to remain in place and be maintained in good repair throughout the duration of Temporary use.
- 2. If placement of any aggregate through the areas of MTPZ extent is to be required, it is to be done only by light equipment. Heavy equipment such as dump trucks are to bring the aggregate to the site and smaller equipment (bobcat) is to be used to place any aggregate required in areas of MTPZ extent.

Assuming that the above care is taken to protect the existing trees to remain, as well as to prevent any heavier equipment from placement and access in MTPZ areas that extend under the existing paved areas, no significant impact to the trees to remain is expected. Although the work will present a technical encroachment on the MTPZ areas that transect paving areas, no actual impact will occur with care taken as the paving is to be maintained.

ARBORIST MINIMZATION OF DAMAGE RECOMMENDATIONS

The following presents recommendations for ensuring tree protection through construction. Further, this section presents some recommendations for prior to construction commencement, as well as recommendations for post construction.

Pre-Construction Phase

Prior to the commencement of construction, tree preservation hoarding, as well as arboricultural work with regards to any removals and any required pruning for construction, should be implemented as follows:

- All Tree Preservation Hoarding is to be erected and placed as per the location
 presented on the attached Tree Preservation Plan Drawing: TPR 101.
 Note: Tree Protection Hoarding must be installed upon approval of the tree
 preservation plan, and prior to release of the permits regarding tree injury.
 Upon approval of the Arborist Report and Tree Preservation Plan, and
 conditions of permit release being sent to the client, the hoarding is to be
 erected.
- If it is determined by engineering that silt fencing be required for the site to prevent silt movement, it is the recommendation of the arborist that the silt fencing be placed following and on the construction side of tree protection hoarding.
- 3. If silt fencing is deemed required within hoarded areas of tree protection, it is not to be dug in in this area, but instead have a minimal amount of clear stone placed at the base. This will prevent impact to tree roots in area from the digging in of the silt fence base, while still allowing for the prevention of silt movement beyond the silt fence.
- 4. All tree protection hoarding (vertical and/or horizontal), and silt fencing (if required), is to be inspected for correct construction and placement as per the approved Tree Preservation Plan Drawing and Site Plan by a Certified Arborist, or other approved consultant, or by a member Town of Oakville Staff. If inspected by other than the Town of Oakville staff, the consultant will provide written certification to the municipality that all protective hoarding and sediment control measures (if/where required) have been satisfactorily installed
- 5. Any pruning of trees that is to occur, as approved and permitted by the Town of Oakville for significant size trees, should occur during this phase. No pruning of significant size trees may occur until such time as the pruning has been approved by Forestry and tree injury permits have been released and are present on site.
- 6. Any removal of trees of significant size, as approved and permitted by the Town of Oakville should occur during this phase. No removals of significant size trees may occur until such time as tree removal permits have been released and are present on site.

During and Post-Construction

Upon completion of the temporary use of the site, as well as during Temporary use, it is recommended that the following be undertaken to promote health and vigor of trees on the site as they recover from construction impacts.

- 1. Upon completion of construction and approval of such from the Town of Oakville, tree protection hoarding may be removed from the site.
- 2. Replacement Tree Plantings, where/if required for tree removals, and as per an approved Replacement Tree Planting Plan/Landscape Plan, are to be conducted. Any replacement tree planting should be conducted in the next planting season post application approval as follows:
 - If application completion occurs in the fall/winter, compensation planting is recommended to occur in the first spring season post completion.
 - If application completion occurs in the spring/summer, compensation planting is recommended to occur in the first fall season post construction completion.
- 3. Any replacement tree plantings installed while the site is still in temporary use are to be protected with hoarding protection. This hoarding protection should provide an MTPZ protection zone of no less than 1.8m in radius from all sides of the tree and is recommended to be of 2.4m radius from all sides of the tree.

It is recommended that a mulch bed be placed in the areas surrounding the base of existing trees, as well as any new trees planted in future planting seasons. This mulch area is recommended to be 6:1 of DBH at minimum, up to the size of the canopy area extent. Further, the mulch bed should be no greater than 2.5cm - 5cm (1 - 2 inches) in depth. A mulch layer in the root zone area will moderate soil temperature and moisture loss through evaporation, creating a better growing environment for roots.

GENERAL TREE PROTECTION GUIDELINES

Except as specifically stated in this report, all tree protection policies and zones are to be maintained in accordance with Town of Oakville Tree Protection Policy and Specifications.

Tree Protection Zones

All tree protection zones are to be implemented as shown in the arborist drawing. Tree protection barriers are shown and to be constructed not closer than specified in the table: Appendix I – Tree Inventory – (Minimum TPZ radius). Where practicable (and this cannot be anticipated in the drawing phase), these barriers may be increased in size up to the Recommended TPZ radius as described in that same table.

No construction activity including grade changes, surface treatments or excavations of any kind is permitted within the area identified on the plan as a Tree Protection Zone (TPZ). No root cutting is permitted. No storage of materials or fill is permitted within the TPZ. The areas identified as Tree Protection Zones must remain undisturbed at all times.

Tree Protection Barriers

Tree protection barriers should be constructed of solid plywood or equivalent, to a height of 1.2m around the front and sides of the construction envelope. In areas where visibility is of concern poly fencing may be used as a suitable tree protection-hoarding substitute. This will provide adequate tree protection while allowing for ample visibility.

All tree protection hoarding must be erected as shown in the attached arborist sketch TPR – 101.

General Note

Prior to the commencement of any site activity the tree protection barriers specified herein must be installed and written notice provided to the Town of Oakville. The tree protection barriers must remain in effective condition until all site activities including landscaping are complete. A sign as specified in Tree Protection Policy and Specification for Construction Near Trees must be attached to all sides of the barrier and at regular intervals for lengthy barriers. Written notice must be provided to Town of Oakville prior to the removal of the tree protection barriers.

Arboricultural Work

Any roots or branches extending beyond the tree protection zones indicated in this report and its associated drawings, which require pruning, must be pruned by a Qualified Arborist or other tree professional as approved by Town of Oakville. All pruning of tree roots and branches must be in accordance with good arboricultural standards. The Arborist must contact the Town of Oakville no less than 48 hours prior to conducting any specified work.

APPENDIX I – TREE INVENTORY AND SUMMARY TABLES

Tree Inventory

					0		Radius VI)	c	onditio	on			≤ TPZ 3 Encroachment 4 (Area/Area)		Anticipated Injury From Encroachment %				
Tree	Botanical/ Common Name	DВН	Trunk Lean and Direction	Canopy Diameter (M)	Critical Root Zone Radius (M	Base	Crown	Health (0-5)	Soundnes (0-1	(0-:	Comments – Condition Related		struction / nolition / Access	Minimum Distance From Phase (M)	Base	Crown	Base	Crown	Status
Num	Owner	(cm)	and ion	ĭ <u>M</u>	M)	ë	'n	Si 2	5)	S) 3	Comments – Construction Relate	d Phas	se	3 3	ë	3	ie	3	
001	Pinus nigra Austrian Pine	50		10.0	2.6	3.25	5.00	4	. 4	1	4 80% - Good		hin proposed temp area						Remove (within zone of construction)
	Client Tree										Located in slightly crowded grou Austrian pines	of							"
											Within open area (currently law and phragmite at edge of proper proposed for temp use parking/s	y area)							
002	Pinus nigra Austrian Pine	42		8.0	2.4	3.21	4.00	4	4	4	80% - Good		hin proposed temp area						Remove (within zone of construction)
	Client Tree										Located in slightly crowded grou Austrian pines	of							
											Within open area (currently law trees and phragmite at edge of p area) proposed for temp use parking/storage								
003	Pinus nigra Austrian Pine	29		6.0	2.0	2.54	3.00	3	3	3	60% - Fair		hin proposed temp area						Remove (within zone of construction)
	Client Tree										Located in slightly crowded grou Austrian pines. A bit thin from o w some DW and a slight bow								<u> </u>
											Within open area (currently law trees and phragmite at edge of p area) proposed for temp use parking/storage								

				1	TPZ Radius (M) Condit			on			Minimum	TPZ Encroachmei (Area/Area		chment Encroachment				
Tree	Botanical/ Common Name		Trunk Lean and Direction	Canopy Diameter (M	Critical Root Zone Radius (M	Base	Crown	Health (0-5)	Soundne (0-	Form (0-5)	Comments – Condition Related	Construction / Demolition / Access	Minimum Distance From Phase (M)	Base	Crown	Base	Crow	Status
Num	Owner	(cm)	ion	<u>₹</u>	one (≤	ě	3	5 h	5) 5)	5 m	Comments – Construction Related	Phase	≥ 3	ě	3	ő	3	
004	Pinus nigra Austrian Pine	40		8.0	2.4	3.20	4.00	3	4	4	72% - Good	Within proposed temp use area						Remove (within zone of construction)
	Client Tree										Located in slightly crowded group of Austrian pines - some minor DW							
											Within open area (currently lawn w trees and phragmite at edge of property area) proposed for temp use parking/storage	5						
005	Pinus nigra Austrian Pine	35		8.0	2.2	3.18	4.00	3	4	4	72% - Good	Within proposed temp use area						Remove (within zone of construction)
	Client Tree										Located in slightly crowded group of Austrian pines - some minor DW							
											Within open area (currently lawn w trees and phragmite at edge of property area) proposed for temp use parking/storage	5						
006	Pinus nigra Austrian Pine	35		8.0	2.2	3.18	4.00	3	4	4	72% - Good	Within proposed temp use area						Remove (within zone of construction)
	Client Tree										Located in slightly crowded group of Austrian pines							
											Within open area (currently lawn w trees and phragmite at edge of property area) proposed for temp use parking/storage							
007	Pinus nigra Austrian Pine	31		8.0	2.1	3.16	4.00	3	3	2	51% - Fair	Within proposed temp use area						Remove (within zone of construction)
	Client Tree										Located in slightly crowded group of Austrian pines - poor form - included union of leaders		•	•	•	•	•	
											Within open area (currently lawn w trees and phragmite at edge of property area) proposed for temp use parking/storage	5						

					0	1 (Radius M)	C	Condition	on			Minimum	Encroa	PZ chment /Area)	Injury Encroa	ipated / From chment %	
Tree	Botanical/ Common Name	DВН	Trunk Lean and Direction	Canopy Diameter (M)	Critical Root Zone Radius (M)		Crown	Health (0-5	Soundness (0-5)	Form (0-5)	Comments – Condition Related	Construction / Demolition / Access	Minimum Distance From Phase (M)	Base	Crown	Base	Crown	Status
Num 008	Owner Pinus nigra	(cm) 47	을 곱	<u> </u>	<u>솔 중</u> 2.6		5.00	3	4	4	Comments – Construction Related 72% - Good	Phase Within proposed temp	-	10		(0		Remove (within zone
008	Austrian Pine	47		10.0	2.0	3.24	5.00	3	4	4	72% - G000	use area						of construction)
	Client Tree										Located in slightly crowded group of Austrian pines			•	•		•	
											Within open area (currently lawn w trees and phragmite at edge of property area) proposed for temp use parking/storage	5						
009	Pinus nigra Austrian Pine	37		8.0	2.3	3.18	4.00	3	3	3	60% - Fair	Within proposed temp use area						Remove (within zone of construction)
	Client Tree										Located in slightly crowded group of Austrian pines - deadwood	use area	ļ	<u>.</u>		J		pr construction)
											Within open area (currently lawn w trees and phragmite at edge of property area) proposed for temp use parking/storage	5						
010	Pinus nigra Austrian Pine	34		8.0	2.2	3.17	4.00	4	4	4	80% - Good	Within proposed temp use area						Remove (within zone of construction)
	Client Tree										Within open area (currently lawn w trees and phragmite at edge of property area) proposed for temp use parking/storage	5						
011	Pinus nigra Austrian Pine	40		8.0	2.4	3.20	4.00	4	3	3	65% - Good	Within proposed temp use area						Remove (within zone of construction)
	Client Tree										Located in slightly crowded group of Austrian pines - crowded union of leaders w odd form		1	1	1	ı	I	
											Within open area (currently lawn w trees and phragmite at edge of property area) proposed for temp use parking/storage							

						(Radius M)		onditio	on			Minimum	Encroa	PZ achment a/Area)	Injury Encroa	ipated y From chment %	
Tree	Botanical/ Common Name	ДВН	Trunk Lean and Direction	Canopy Diameter (M)	Critical Root Zone Radius (M	Base	Crown	Healt (0-	Soundness (0-5)	(O-	Comments – Condition Related	Construction / Demolition / Access	Minimum Distance From Phase (M)	Base	Crown	Base	Crow	Status
Num	Owner	(cm)	ion	<u> </u>	Sne (≤)	ñ	3	5 3	5) 8	5) B	Comments – Construction Related	Phase	3 3	ě	3	ě	Š	
012	Pinus nigra Austrian Pine	42		8.0	2.4	3.21	4.00	4	4	4	80% - Good	Within proposed temp use area						Remove (within zone of construction)
	Client Tree										Located in slightly crowded group of Austrian pines							
											Within open area (currently lawn w trees and phragmite at edge of property area) proposed for temp use parking/storage	,						
013	Pinus nigra	35		8.0	2.2	3.18	4.00	4	4	4	80% - Good	Within proposed temp						Remove (within zone
	Austrian Pine										Located in slightly crowded group of	use area						of construction)
	Client Tree										Austrian pines							
											Within open area (currently lawn w tree and phragmite at edge of property area) proposed for temp use parking/storage)						
014	Pinus nigra Austrian Pine	54		12.0	2.7	3.87	6.00	4	4	4	80% - Good	Within proposed temp use area						Remove (within zone of construction)
	Client Tree										Located in slightly crowded group of Austrian pines							
											Within open area (currently lawn w tree and phragmite at edge of property area proposed for temp use parking/storage)						
015	Acer rubrum Red Maple	41		8.0	2.4	3.20	4.00	4	4	4	80% - Good	Within proposed temp use area						Remove (within zone of construction)
	Client Tree	1																
	Cheff free										Within open area (currently lawn w tree and phragmite at edge of property area) proposed for temp use parking/storage)						
016	Acer rubrum Red Maple	29		6.0	2.0	2.54	3.00	4	4	4	80% - Good	Within proposed temp use area						Remove (within zone of construction)
	Client Tree										Within open area (currently lawn w tree and phragmite at edge of property area) proposed for temp use parking/storage							

					C	1 (Radius M)		Conditi	on			Minimum	Encroa	PZ achment a/Area)	Inju	cipated ry From achment	
Tree Num	Botanical/ Common Name	DBH (cm)	Trunk Lean and Direction	Canopy Diameter (M)	Critical Root Zone Radius (M)	Base	Crown	Health (0-5)	Soundness (0-5)	(0-5)	Comments – Condition Related	Construction / — Demolition / Access Phase	Minimum Distance From Phase (M)	Base	Crown	base	Crown	Status
017	Acer platanoides	26	3 0	4.0	1.9	2.53	2.00	2	2	2	40% - Poor	Within proposed temp						Remove (health or
	Norway Maple Client Tree										Declining condition w dieback from top occurring. DW and Decay through canopy - Removal recommended due to condition							soundness)
018	Betula pendula European White Birch	19		8.0	1.6	2.50	4.00	4	4	4	80% - Good	Within proposed temp						Protected (significant size)
	European white Birch	-									Masons weeping birch	use area			1			size)
	Client Tree										Protected.							
019	Acer platanoides	35		6.0	2.2	3.18	3.00	3	3	3	60% - Fair	Temporary Use Area	1.8	17.6%	15.9%	4.4%	0.0%	Injured (major
	Norway Maple										DW and minor decay sites through tree	Totals:		17.6%	15.9%	4.4%	0.0%	encroachment on BTPZ)
	Client Tree										appears stressed with signed of poor upper canopy growth							
											Encroachment (all phases): Major. Anticipated Injury: Negligible.							
020	Acer platanoides	36		8.0	2.2	3.18	4.00	3	3	3	60% - Fair	Temporary Use Area	2.1	12.6%	19.4%	3.2%	0.0%	Injured (minor encroachment on
	Norway Maple Client Tree										DW and minor decay sites through tree appears stressed with signed of poor upper canopy growth	Totals:		12.6%	19.4%	3.2%	0.0%	BTPZ)
											Encroachment (all phases): Minor. Anticipated Injury: Negligible.							
021	Carpinus betulus	39		4.0	2.3	3.20	2.00	3	3	4	65% - Good	Temporary Use Area	1.3	26.6%	14.1%	6.6%	0.0%	Injured (major
	European Hornbeam Client Tree										Deadwood north side	Totals:		26.6%	14.1%	6.6%	0.0%	encroachment on BTPZ)
	Client free										Encroachment (all phases): Major. Anticipated Injury: Minor.							

						1 (Radius M)	C	Conditio	on			Minimum	Encroa	PZ achment a/Area)	Injur Encro	cipated ry From achment %	
Tree	Botanical/ Common Name	—DBH	Trunk Lean and Direction	Canopy Diameter (M)	Critical Root Zone Radius (M	Base	Crown	Health (0-5)	Soundness (0-5)	Form (0-5)	Comments – Condition Related	Construction / Demolition / Access	Minimum Distance From Phase (M)	Base	Crown	Base	Crown	Status
Num 022	Owner Carpinus betulus	(cm) 37	3 5	<u> </u>	2.3	3.18	3.00	3	3	3	Comments – Construction Related 60% - Fair	Phase Temporary Use Area	1.5	22.2%	20.6%	5.5%	0.0%	Injured (major
	European Hornbeam											Totals:	1.0	22.2%	20.6%	5.5%	0.0%	encroachment on
	Client Tree										Deadwood north side Crack with fluxing south side	Totals.		22.270	20.070	3.370	0.070	BTPZ)
											Encroachment (all phases): Major. Anticipated Injury: Minor.							
023	Acer platanoides Norway Maple	34		6.0	2.2	3.17	3.00	3	3	3	60% - Fair	Temporary Use Area	1.5	22.4%	20.9%	5.6%	0.0%	Injured (major
	Client Tree										DW and minor decay sites through tree appears stressed with signed of poor upper canopy growth	Totals:		22.4%	20.9%	5.6%	0.0%	encroachment on BTPZ)
											Encroachment (all phases): Major. Anticipated Injury: Minor.							
024	Acer platanoides	32		6.0	2.1	3.16	3.00	2	3	3	51% - Fair	Temporary Use Area	1.3	25.2%	23.9%	6.3%	0.0%	Injured (major
	Norway Maple										DW and decay sites through tree -	Totals:		25.2%	23.9%	6.3%	0.0%	encroachment on BTPZ)
	Client Tree										stressed with signed of poor upper canopy growth and loss of viability of some branches							
											Encroachment (all phases): Major. Anticipated Injury: Minor.							
025	Acer platanoides	28		6.0	2.0	2.54	3.00	3	3	3	60% - Fair	Temporary Use Area	1.7	10.9%	16.1%	2.7%	0.0%	Injured (minor
	Norway Maple										DW and minor decay sites through tree	Totals:		10.9%	16.1%	2.7%	0.0%	encroachment on BTPZ)
	Client Tree										appears stressed with signed of poor upper canopy growth			•	•	•	•	-
											Encroachment (all phases): Minor. Anticipated Injury: Negligible.							
026	Acer saccharum Sugar Maple	59		14.0	2.9	3.90	7.00	1	2	2	30% - Poor	Construction activities (including access) do not						Remove (health or soundness)
	Client Tree										Dying back from top. 30-50% dead. Declining condition and decay throughout dead branches - Recommended for removal due to condition	encroach upon the protected root zone, or crown of this tree.						soundriess)

						1 (Radius M)		Conditi	on			Minimum	Encro	PZ achment a/Area)	Injur Encro	cipated y From achment %	
Tree	Botanical/ Common Name		Trunk Lean and Direction	Canopy Diameter (M)	Critical Root Zone Radius (M	Base	Crown	Healt (0-	Soundness (0-5)	(0-! (0-!	Comments – Condition Related	Construction / Demolition / Access	Minimum Distance From Phase (M)	Base	Crown	ваѕе	Crown	Status
Num	Owner	(cm)	ion)			<u> </u>	_			Phase		ő	3	ě	3	
027	Acer platanoides	26		8.0	1.9	2.53	4.00	3	3	3	60% - Fair	Temporary Use Area	2.3	1.9%	9.8%	0.5%	0.0%	Injured (minor
	Norway Maple										DW and minor decay sites through tree -	Totals:		1.9%	9.8%	0.5%	0.0%	encroachment on BTPZ)
	Client Tree										appears stressed with signed of poor		1	I	ı			DIFZ)
											growth							
											Encroachment (all phases): Minor. Anticipated Injury: Negligible.							
028	Acer saccharum	86		16.0	3.5	5.83	8.00	2	1	3	33% - Poor	Construction activities	1		1			Remove (health or
020	Sugar Maple			10.0	3.3	3.03	0.00		1		33% 1 001	(including access) do not						soundness)
											Dying back in upper canopy and declining	,						,
	Client Tree										condition - past failures of	protected root zone, or						
											primary/secondary branches. Decay	crown of this tree.						
											throughout. Recommend removal due t declining condition and structural	0						
											defects.							
												_						
029	Populus nigra	22		8.0	1.8	2.51	4.00	3	3	3	60% - Fair	Temporary Use Area	2.2	3.3%	17.7%	0.8%	0.0%	Injured (minor
	Lombardy Poplar										No. deinte and an annual by fair and distant	Totals:		3.3%	17.7%	0.8%	0.0%	encroachment on
	Client Tree										Multistem poplar growth - fair condition			ı	J			BTPZ)
	Cheffe free										Encroachment (all phases): Minor.							
											Anticipated Injury: Negligible.							
030	Acer platanoides	20		6.0	1.7	2.50	3.00	3	4	4	72% - Good	Within proposed temp						Remove (within zone
	Norway Maple											use area						of construction)
	Client Tree										Some signs of stress but otherwise good							
	Client Tree										condition							
											Within open area (currently lawn w							
											trees) proposed for temp use							
											parking/storage							
031	Pinus nigra	40		8.0	2.4	3.20	4.00	4	4	4	80% - Good	Within proposed temp						Remove (within zone
	Austrian Pine											use area						of construction)
	Client Tree																	
	Chefft 1166										Within open area (currently lawn w							
											trees) proposed for temp use							
											parking/storage							

					0	1 (Radius M)		Conditi	on			Minimum	Encroa	PZ achment /Area)	Injury Encroa	ipated / From chment %	
Tree	Botanical/ Common Name		Trunk Lean and Direction	Canopy Diameter (M)	Critical Root Zone Radius (M)	Base	Crown	Health (0-5)	Soundness (0-5)	(0-5	Comments – Condition Related	Construction / —Demolition / Access	Minimum Distance From Phase (M)	Base	Crown	Base	Crow	Status
Num	Owner	(cm)	on a	<u>₹</u>				<u> </u>	<u>5. 8</u>	<u>.</u>	Comments – Construction Related	Phase	23	ñ	3	ñ	3	
032	Pinus nigra Austrian Pine	36		8.0	2.2	3.18	4.00	4	4	3	72% - Good	Within proposed temp use area						Remove (within zone of construction)
	Client Tree										Stunted (topped)		'	•	•	•		
											Within open area (currently lawn w trees) proposed for temp use parking/storage							
033	Pinus nigra Austrian Pine	29		8.0	2.0	2.54	4.00	4	4	4	80% - Good	Within proposed temp use area						Remove (within zone of construction)
	Client Tree										Within open area (currently lawn w trees) proposed for temp use parking/storage							
034	Pinus nigra Austrian Pine	24		4.0	1.8	2.52	2.00	0	2	0	0% - Dead/Dying	Within proposed temp use area						Remove (dead tree)
	Client Tree										Dead Tree - recommended for removal							
											Within open area (currently lawn w trees) proposed for temp use parking/storage							
035	Pinus nigra Austrian Pine	28		6.0	2.0	2.54	3.00	4	4	3	72% - Good	Within proposed temp use area						Remove (within zone of construction)
	Client Tree										crowded with neighboring pine and son lower DW, but otherwise good condition	ne			I			
											Within open area (currently lawn w trees) proposed for temp use parking/storage							
036	Pinus nigra Austrian Pine	35		8.0	2.2	3.18	4.00	4	4	4	80% - Good	Within proposed temp use area						Remove (within zone of construction)
	Client Tree										Within open area (currently lawn w trees) proposed for temp use parking/storage							

					0	1 0	Radius M)	1	Conditi	on			Minimum	T Encroa (Area	PZ achment a/Area)	Injury Encroa	ipated r From chment	
Tree Num	Botanical/ Common Name Owner	DBH (cm)	Trunk Lean and Direction	Canopy Diameter (M)	Critical Root Zone Radius (M)	Base	Crown	Health (0-5)	Soundness (0-5)	(0-5)	Comments – Condition Related Comments – Construction Related	Construction / — Demolition / Access Phase	Minimum Distance From Phase (M)	Base	Crown	Base	Crown	Status
037	Ulmus pumila Siberian Elm	27		8.0	1.9	2.54	4.00	4	4	4	80% - Good	Within proposed temp use area						Remove (within zone of construction)
	Client Tree										Within open area (currently lawn w trees) proposed for temp use parking/storage							
038	Pinus nigra Austrian Pine	50		10.0	2.6	3.25	5.00	4	4	4	80% - Good	Within proposed temp use area						Remove (within zone of construction)
	Client Tree										Within open area (currently lawn w trees) proposed for temp use parking/storage							
039	Pinus nigra Austrian Pine	27		6.0	1.9	2.54	3.00	4	4	4	80% - Good	Within proposed temp us	se area					Remove (within zone of construction)
	Client Tree										Within open area (currently lawn w trees) proposed for temp use parking/storage							
040	Acer platanoides Norway Maple	29		8.0	2.0	2.54	4.00	4	4	4	80% - Good	Within proposed temp use area						Remove (within zone of construction)
	Client Tree										Within open area (currently lawn w trees) proposed for temp use parking/storage							
041	Pinus nigra Austrian Pine	37		8.0	2.3	3.18	4.00	4	4	4	80% - Good	Within proposed temp use area						Remove (within zone of construction)
	Client Tree										Within open area (currently lawn w trees) proposed for temp use parking/storage							

						(Radius M)		Conditi	on			Minimum	Encroa	PZ chment /Area)	Injur Encroa	ipated y From achment %	
Tree	Botanical/ Common Name	DВН	Trunk Lean and Direction	Canopy Diameter (M)	Critical Root Zone Radius (M	Base	Crown	Health (0-5)	Soundness (0-5)	(0-5	Comments – Condition Related	Construction / Demolition / Access	Minimum Distance From Phase (M)	Base	Crown	Base	Crown	Status
Num	Owner	(cm)	음 곱)							Phase		10		10		
042	Pinus nigra Austrian Pine	40		8.0	2.4	3.20	4.00	4	4	4	80% - Good	Within proposed temp use area						Remove (within zone of construction)
	Client Tree										Within open area (currently lawn w trees) proposed for temp use parking/storage							
043	Acer platanoides Norway Maple	53		6.0	2.7	3.86	3.00	1	2	2	30% - Poor	Within proposed temp use area						Remove (health or soundness)
	Client Tree										Hollows with decay. Upper canopy dieback/decline - past failures. Recommended for removal due to condition							
											Within open area (currently lawn w trees) proposed for temp use parking/storage							
044	Pinus nigra Austrian Pine	35		8.0	2.2	3.18	4.00	4	4	4	80% - Good	Within proposed temp us	se area					Remove (within zone of construction)
	Client Tree										Within open area (currently lawn w trees) proposed for temp use parking/storage							
045	Pinus nigra Austrian Pine	38		10.0	2.3	3.19	5.00	4	4	4	80% - Good	Within proposed temp use area						Remove (within zone of construction)
	Client Tree										Within open area (currently lawn w trees) proposed for temp use parking/storage							
046	Pinus nigra Austrian Pine	31		8.0	2.1	3.16	4.00	4	4	4	80% - Good	Within proposed temp us	se area					Remove (within zone of construction)
	Client Tree										Within open area (currently lawn w trees) proposed for temp use parking/storage							

					٥	1 0	Radius M)		onditi	on			Minimum	Encroa	PZ achment a/Area)	Inju	cipated ry From achment %	
Tree Num	Botanical/ Common Name	DBH (cm)	Trunk Lean and Direction	Canopy Diameter (M)	Critical Root Zone Radius (M	Base	Crown	Health (0-5)	Soundness (0-5)	Form (0-5)	Comments – Condition Related Comments – Construction Related	Construction / Demolition / Access Phase	Minimum Distance From Phase (M)	Base	Crown	base	Crown	Status
047	Pinus nigra Austrian Pine	36	3 0	_	2.2	3.18	5.00	4	4	4	80% - Good	Within proposed temp us	e area					Remove (within zone of construction)
	Client Tree										Wire around trunk.							or construction,
											Within open area (currently lawn w trees) proposed for temp use parking/storage							
048	Acer platanoides Norway Maple	33		12.0	2.1	3.16	6.00	4	4	4	80% - Good	Construction activities (including access) do not encroach upon the						Protected (significant size)
	Client Tree										Protected.	protected root zone, or crown of this tree.						
049	Pinus nigra Austrian Pine	37		10.0	2.3	3.18	5.00	4	4	3	72% - Good	Temporary Use Area	2.7	4.6%	19.5%	1.1%	0.0%	Injured (minor encroachment on
	Client Tree	+										Totals:		4.6%	19.5%	1.1%	0.0%	ВТРΖ)
											Encroachment (all phases): Minor. Anticipated Injury: Negligible.							
050	Pinus nigra Austrian Pine	28		6.0	2.0	2.54	3.00	4	4	4	80% - Good	Construction activities (including access) do not						Protected (significant size)
	Client Tree											encroach upon the protected root zone, or						
051	Salix fragilis	35		8.0	2.2	3.18	4.00	3	3	4	Protected. 65% - Good	crown of this tree. Construction activities						Protected (significant
001	Crack Willow					0.120						(including access) do not						size)
	Client Tree										Some deadwood and minor decay sites but otherwise fair condition	encroach upon the protected root zone, or crown of this tree.						
											Protected.			_				
052	Pinus nigra Austrian Pine	45		8.0	2.5	3.22	4.00	4	4	3	72% - Good	Temporary Use Area Totals:	2.9	2.6%	9.2%	0.6%	0.0%	Injured (minor encroachment on
	Client Tree											-						BTPZ)
											Encroachment (all phases): Minor. Anticipated Injury: Negligible.							

						1 (Radius M)		Conditi	on			Minimum	Encroa	PZ achment a/Area)	Injur Encroa	ipated y From achment %	
Tree	Botanical/ Common Name		Trunk Lean and Direction	Canopy Diameter (M)	Critical Root Zone Radius (M	Base	Crown	Health (0-5)	Soundnes (0-5	(0-5)	Comments – Condition Related	Construction / Demolition / Access	Minimum Distance From Phase (M)	Base	Crown	Base	Crow	Status
Num	Owner	(cm)	ion a	_				1				Phase				ñ		
053	Salix fragilis Crack Willow	68		16.0	3.1	4.54	8.00	3	3	4	65% - Good	Temporary Use Area	3.7	4.9%	21.9%	1.2%	0.0%	Injured (minor encroachment on
	Crack Willow										Some deadwood and minor decay sites	Totals:		4.9%	21.9%	1.2%	0.0%	BTPZ)
	Client Tree										but otherwise fair condition					•		
											Encroachment (all phases): Minor. Anticipated Injury: Negligible.							
054	Salix fragilis	55		14.0	2.8	3.88	7.00	3	3	3	60% - Fair	Temporary Use Area	3.2	5.0%	22.5%	1.2%	0.0%	Injured (minor
	Crack Willow										Some deadwood and minor decay sites	Totals:		5.0%	22.5%	1.2%	0.0%	encroachment on BTPZ)
	Client Tree										but otherwise fair condition		1	II.	1	1	I .	
											Encroachment (all phases): Minor. Anticipated Injury: Negligible.							
055	Salix fragilis Crack Willow	43		10.0	2.4	3.22	5.00	3	3	3	60% - Fair	Construction activities (including access) do not						Protected (significant size)
	Ol: 4 T	-									Some deadwood and minor decay sites	encroach upon the						
	Client Tree										but otherwise fair condition	protected root zone, or crown of this tree.						
											Protected.	crown or this tree.	1		1	1		<u></u>
056	Salix fragilis	69		14.0	3.1	4.54	7.00	3	3	3	60% - Fair	Construction activities						Protected (significant
	Crack Willow										Some deadwood and minor decay sites	(including access) do not encroach upon the						size)
	Client Tree										but otherwise fair condition	protected root zone, or						
											Bushastad	crown of this tree.						」
057	Fraxinus americana	15		6.0	1.4	2.48	3.00	3	3	3	Protected. 60% - Fair	Temporary Use Area	0.0	100.0%	100.0%	25.0%	0.0%	Remove (within zone
]	White Ash			3.0			3.00					Totals:	0.0		100.0%		0.0%	of construction)
	Client Tree	-									Young ash in fair condition at this time	Totals.	<u> </u>	100.0%	100.0%	23.070	0.076	<u> </u>
	Chefit free										In Zone: Temporary Use Area. Encroachment (all phases): Severe. Anticipated Injury: Not survivable. Removal recommended.							

					C	1 (1	Radius M)		onditio	on			Minimum	Encroa	PZ chment /Area)	Injur Encro	cipated y From achment %	
Tree Num	Botanical/ Common Name	DBH (cm)	Trunk Lean and Direction	Canopy Diameter (M	Critical Root Zone Radius (M	Base	Crown	Health (0-5)	Soundness (0-5)	(0-5)	Comments – Condition Related	Construction / —Demolition / Access Phase	Minimum Distance From Phase (M)	Base	Crown	Ваѕе	Crown	Status
058	Populus canadensis	11	3 0	6.0	<u>— в</u> 1.2	2.46	3.00	3	4	3	65% - Good	Temporary Use Area	0.0	100.0%	100.0%	25.0%	0.0%	Remove (within zone
	[deltoides × nigra] Carolina Poplar										Fair-good condition - growing among phragmites	Totals:		100.0%	100.0%	25.0%	0.0%	of construction)
	Client Tree										In Zone: Temporary Use Area. Encroachment (all phases): Severe. Anticipated Injury: Not survivable. Removal recommended.							
059	Populus canadensis	10		4.0	1.2	2.45	2.00	3	4	3	65% - Good	Temporary Use Area	0.0	100.0%	100.0%	25.0%	0.0%	Remove (within zone
	[deltoides × nigra] Carolina Poplar										Fair-good condition - growing among phragmites	Totals:		100.0%	100.0%	25.0%	0.0%	of construction)
	Client Tree										In Zone: Temporary Use Area. Encroachment (all phases): Severe. Anticipated Injury: Not survivable. Removal recommended.							
060	Populus canadensis	21		6.0	1.7	2.50	3.00	3	3	3	60% - Fair	Temporary Use Area	0.0	100.0%	100.0%	25.0%	0.0%	Remove (within zone
	[deltoides × nigra] Carolina Poplar										Fair condition although location poor an appears stressed	Totals:		100.0%	100.0%	25.0%	0.0%	of construction)
	Client Tree										In Zone: Temporary Use Area. Encroachment (all phases): Severe. Anticipated Injury: Not survivable. Removal recommended.							
061	Populus canadensis	25		4.0	1.9	2.52	2.00	3	3	3	60% - Fair	Temporary Use Area	0.0	100.0%	100.0%	25.0%	0.0%	Remove (within zone
	[deltoides × nigra] Carolina Poplar										Fair condition - growing in poor location	Totals:		100.0%	100.0%	25.0%	0.0%	of construction)
	Client Tree										In Zone: Temporary Use Area. Encroachment (all phases): Severe. Anticipated Injury: Not survivable. Removal recommended.							

					0	1 (Radius M)		onditio	on			Minimum	Encroa	PZ ichment /Area)	Injur Encroa	ipated y From achment %	
Tree	Botanical/ Common Name	DВН	Trunk Lean and Direction	Canopy Diameter (M	Critical Root Zone Radius (M	Base	Crown	Health (0-5)	Soundness (0-5)	(0-5	Comments – Condition Related	Construction / —Demolition / Access	Minimum Distance From Phase (M)	Base	Crown	Base	Crown	Status
Num	Owner	(cm)	을 곱	_)				_			Phase						
062	Populus canadensis [deltoides × nigra]	20		6.0	1.7	2.50	3.00	3	3	3	60% - Fair	Temporary Use Area	0.0	100.0%	100.0%		0.0%	Remove (within zone of construction)
	Carolina Poplar										Fair condition - although appears	Totals:		100.0%	100.0%	25.0%	0.0%	J. 3011341 deti-01.1,
	Ol: 4 T	-									somewhat stressed over past season							
	Client Tree										In Zone: Temporary Use Area. Encroachment (all phases): Severe. Anticipated Injury: Not survivable. Removal recommended.							
063	Robinia pseudoacacia	27		8.0	1.9	2.54	4.00	3	3	3	60% - Fair	Temporary Use Area	0.0	100.0%	100.0%	25.0%	0.0%	Remove (within zone
	Black Locust										Fair condition - growing in poor location	Totals:		100.0%	100.0%	25.0%	0.0%	of construction)
	Client Tree										however			II.	1	II.		1
											In Zone: Temporary Use Area. Encroachment (all phases): Severe. Anticipated Injury: Not survivable. Removal recommended.							
064	Fraxinus americana	50		12.0	2.6	3.25	6.00	0	1	0	0% - Dead/Dying	Temporary Use Area	0.0	100.0%	100.0%	25.0%	0.0%	Remove (dead tree)
	White Ash										Dead Ash - Recommended for removal	Totals:		100.0%	100.0%	25.0%	0.0%	
	Client Tree										In Zone: Temporary Use Area. Encroachment (all phases): Severe Dead Tree							
065	Fraxinus americana	49		10.0	2.6	3.24	5.00	0	1	0	0% - Dead/Dying	Temporary Use Area	0.0	100.0%	100.0%	25.0%	0.0%	Remove (dead tree)
	White Ash	-									Dead Ash - Recommended for removal	Totals:		100.0%	100.0%	25.0%	0.0%	
	Client Tree										In Zone: Temporary Use Area. Encroachment (all phases): Severe Dead Tree							
066	Fraxinus americana	45		10.0	2.5	3.22	5.00	0	1	0	0% - Dead/Dying	Temporary Use Area	0.0	100.0%	100.0%	25.0%	0.0%	Remove (dead tree)
	White Ash										Dead Ash - Recommended for removal	Totals:		100.0%	100.0%	25.0%	0.0%]
	Client Tree										In Zone: Temporary Use Area. Encroachment (all phases): Severe Dead Tree							

						TPZ Radius (M)		Condition					Minimum	TPZ Encroachment (Area/Area)		Anticipated Injury From Encroachment %		
Tree	Botanical/ Common Name	ДВН	Trunk Lean and Direction	Canopy Diameter (M)	Critical Root Zone Radius (M)	Base	Crown	Health (0-5)	Soundness (0-5)	(0-5	Comments – Condition Related	Construction / —Demolition / Access	Minimum Distance From Phase (M)	Base	Crown	Base	Crowr	Status
Num	Owner	(cm)	을 곱	<u>≥</u> ≥)					_		Phase	<u> </u>	(U		(0		
067	Ulmus rubra Red Elm	10		4.0	1.2	2.45	2.00	4	4	4	80% - Good Good condition although growing in po	Construction activities (including access) do not						Protected (significant size)
	Client/Neighbor Shared Ownership Tree	k									location directly abutting fence	protected root zone, or crown of this tree.						
											Protected.							
068	Ulmus rubra Red Elm	10		4.0	1.2	2.45	2.00	4	4	4	80% - Good	Construction activities (including access) do not						Protected (significant size)
	Client/Neighbor Shared Ownership Tree										Good condition although growing in po location directly abutting fence	protected root zone, or crown of this tree.						
											Protected.							
069	Acer platanoides Norway Maple	30		8.0	2.0	2.55	4.00	4	4	4	80% - Good	Construction activities (including access) do not encroach upon the						Protected (significant size)
	Client Tree											protected root zone, or						
											Protected.	crown of this tree.						
070	Ulmus rubra Red Elm	10		4.0	1.2	2.45	2.00	3	4	4	72% - Good	Construction activities (including access) do not encroach upon the						Protected (significant size)
	Client Tree											protected root zone, or						
											Protected.	crown of this tree.						
071	Acer negundo Boxelder	23		6.0	1.8	2.52	3.00	4	4	4	80% - Good	Construction activities (including access) do not encroach upon the						Protected (significant size)
	Client Tree										Protected.	protected root zone, or						
072	Ulmus rubra	19		8.0	1.6	2.50	4.00	4	4	4	80% - Good	crown of this tree. Construction activities		1				Protected (significant
072	Red Elm	19		8.0	1.0	2.50	4.00	4	4	4	80% - G000	(including access) do not encroach upon the						size)
	Client Tree										Protected.	protected root zone, or crown of this tree.						
073	Fraxinus americana White Ash	14		6.0	1.4	2.47	3.00	4	4	4	80% - Good	Construction activities (including access) do not encroach upon the						Protected (significant size)
	Client Tree											protected root zone, or						
											Protected.	crown of this tree.						

					0	TPZ Radi			Condition				Minimum	TPZ Encroachment (Area/Area)		Anticipated Injury From Encroachment %		
Tree	Botanical/ Common Name		Trunk Lean and Direction	Canopy Diameter (M	Critical Root Zone Radius (M	Base	Crown	Health (0-5)	Soundness (0-5	(0-5)	Comments – Condition Related	Construction / —Demolition / Access	Minimum Distance From Phase (M)	Base	Crown	Base	Crowr	Status
Num	Owner	(cm)	3 로	_	— е			4	4			Phase	-	.,,	_			
074	Fraxinus americana White Ash Client Tree	17		6.0	1.5	2.48	3.00	4	4	4	Appears healthy at this time - Adjacent small size group of ash (additional small trees) extends into woodlot east. All 5-7 cm	Construction activities (including access) do not encroach upon the protected root zone, or crown of this tree.						Protected (significant size)
											Protected.							
075	Fraxinus americana White Ash	10		4.0	1.2	2.45	2.00	3	3	2	51% - Fair	Construction activities (including access) do not						Protected (significant size)
	Client Tree										Under tree 49 - trunk slightly twisted/kinked and defect on trunk	encroach upon the protected root zone, or crown of this tree.						
											Protected.							
076	Salix fragilis Crack Willow	34		10.0	2.2	3.17	5.00	4	4	4	80% - Good	Construction activities (including access) do not encroach upon the						Protected (significant size)
	Client Tree										Protected.	protected root zone, or						
077	Salix fragilis	38		10.0	2.3	3.19	5.00	4	2	4	60% - Fair	crown of this tree. Construction activities						Protected (significant
077	Crack Willow			10.0	2.5	3.13	3.00	-	_	7	All regrowth from downed limb.	(including access) do not encroach upon the						size)
	Client Tree										Collapsed codominant of tree 78	protected root zone, or crown of this tree.						
											Protected.							
078	Salix fragilis Crack Willow	60		14.0	2.9	3.90	7.00	4	3	4	72% - Good	Construction activities (including access) do not						Protected (significant size)
	Client Tree										Decay and some deadwood present - otherwise fair condition	encroach upon the protected root zone, or crown of this tree.						
											Protected.							-
079	Salix fragilis Crack Willow	14		4.0	1.4	2.47	2.00	4	4	3	72% - Good	Construction activities (including access) do not						Protected (significant size)
	Client Tree										Understory to other Willow in area	encroach upon the protected root zone, or						
080	Salix fragilis	47		8.0	2.6	3.24	4.00	4	3	4	Protected. 72% - Good	crown of this tree. Construction activities						Protected (significant
	Crack Willow										Some decay sites present	(including access) do not encroach upon the						size)
	Client Tree										Protected.	protected root zone, or crown of this tree.						

						(Radius M)		onditi	on			Minimum	Encroa	PZ chment /Area)	Inju	cipated ry From achment %	
Tree	Botanical/ Common Name		Trunk Lean and Direction	Canopy Diameter (M)	Critical Root Zone Radius (M	Base	Crown	Health (0-5)	Soundne (0-	Form (0-5)	Comments – Condition Related	Construction / Demolition / Access	Minimum Distance From Phase (M)	Base	Crown	base	Crow	Status
Num	Owner	(cm)	ion		<u> </u>			5 5	5 s	_		Phase	≥ 3	ě	3	ě	3	
081	Rhus spp Sumac Species	13		6.0	1.3	2.46	3.00	4	4	4	80% - Good	Construction activities (including access) do not						Protected (significant size)
	Client Tree										Sumac - understory in area of willows	encroach upon the protected root zone, or						
082	Populus nigra	14		2.0	1.4	2.47	1.00	4	4	4	Protected. 80% - Good	crown of this tree. Temporary Use Area	2.5	0.1%		0.0%		Injured (minor
002	Lombardy Poplar	14		2.0	1.4	2.47	1.00		Ī	_	80% - 0000	· · ·	2.3		0.00/		0.00/	encroachment on
	OI: T											Totals:		0.1%	0.0%	0.0%	0.0%	BTPZ)
	Client Tree										Encroachment (all phases): Minor. Anticipated Injury: Negligible.							
083	Populus nigra	14		4.0	1.4	2.47	2.00	4	4	4	80% - Good	Temporary Use Area	0.0	100.0%	100.0%	25.0%	0.0%	Remove (within zone
	Lombardy Poplar										Located abutting C/L fence	Totals:		100.0%	100.0%	25.0%	0.0%	of construction)
	Client Tree										In Zone: Temporary Use Area. Encroachment (all phases): Severe. Anticipated Injury: Not survivable. Removal recommended.							
084	Salix fragilis	10		2.0	1.2	2.45	1.00	4	4	4	80% - Good	Temporary Use Area	1.8	9.5%		2.4%		Injured (minor
	Crack Willow											Totals:		9.5%	0.0%	2.4%	0.0%	encroachment on BTPZ)
	Client Tree										Encroachment (all phases): Minor. Anticipated Injury: Negligible.					•		,
085	Platanus acerifolia	23		8.0	1.8	2.52	4.00	4	4	4	80% - Good	Temporary Use Area	1.0	26.3%	41.5%	6.6%	0.0%	Remove (within zone
	London Planetree										Located abutting C/L fence	Totals:		26.3%	41.5%	6.6%	0.0%	of construction)
	Client Tree										At edge of open area (lawn w trees and phragmite at edge of property area) proposed for temp use parking/storage			1			•	
086	Fraxinus americana	11		2.0	1.2	2.46	1.00	2	2	2	40% - Poor	Temporary Use Area	0.0	100.0%	100.0%	25.0%	0.0%	Remove (within zone
	White Ash										Growing through fence.	Totals:		100.0%	100.0%	25.0%	0.0%	of construction)
	Client Tree										In Zone: Temporary Use Area. Encroachment (all phases): Severe. Anticipated Injury: Not survivable. Removal recommended.		•		•	•	•	

					0	1 (1	Radius VI)		Conditi	on			Minimum	Encroa	PZ ichment /Area)	Injur Encro	cipated y From achment	
Tree Num	Botanical/ Common Name	-DBH (cm)	Trunk Lean and Direction	Canopy Diameter (M)	Critical Root Zone Radius (M)	Base	Crown	Health (0-5)	Soundness (0-5)	Form (0-5)	Comments – Condition Related Comments – Construction Related	Construction / Demolition / Access Phase	Distance From Phase (M)	Base	Crown	Base	Crown	Status
087	Populus nigra	23		6.0	1.8	2.52	3.00	4	4	4	80% - Good	Temporary Use Area	0.0	63.4%	61.3%	15.9%	0.0%	Remove (within zone
	Lombardy Poplar Client Tree	-										Totals:		63.4%	61.3%	15.9%	0.0%	of construction)
											In Zone: Temporary Use Area. Encroachment (all phases): Severe. Anticipated Injury: Not survivable. Removal recommended.							
088	Ulmus pumila	10		2.0	1.2	2.45	1.00	2	2	2	40% - Poor	Temporary Use Area	1.4	17.2%		4.3%		Remove (health or
	Siberian Elm Client Tree										Bark beetle and poor condition - removal recommended due to condition	Totals:		17.2%	0.0%	4.3%	0.0%	soundness)

APPENDIX II – ARBORIST'S DECLARATIONS

This report represents a fair and accurate assessment of the number, type, size, and condition of the tree(s) on the aforementioned property.

Certificate of Performance

I, Michael Plowman, certify that:

- I have personally inspected the trees and the property referred to in this
 report and have stated my findings accurately. The extent of the
 evaluation or appraisal is stated in the attached report and the Terms of
 Assignment.
- I have no current or prospective interest in the vegetation or the property that is the subject of this report and have no personal interest or bias with respect to the parties involved.
- The analysis, opinions, and conclusions stated herein are my own and are based on current scientific procedures and facts.
- My analysis, opinions, and conclusions were developed, and this report
 has been prepared in accordance with commonly accepted arboricultural
 practices.
- No one provided significant professional assistance to me, except as indicated within this report.
- My compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party nor upon the results of the assessment, the attainment of stipulated results, or the occurrence of any subsequent events.
- I further certify that I am a member in good standing of the International Society of Arboriculture, and that I carry the designation of ISA Certified Arborist ON-1118A I have been involved in the field of Arboriculture in a full-time capacity for a period of more than 15 years.

Michael R. Plowman

Assoc. Dipl. Horticulture

ISA Certified Arborist: ON-1118A

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Assumptions and Limiting Conditions

- Any legal description provided to the consultant is assumed to be correct.
 Any titles and ownerships to any property are assumed to be good and marketable. No responsibility is assumed for matters legal in character.
 Any and all property is appraised or evaluated as free and clear, under responsible ownership and competent management.
- Care has been taken to obtain all information from reliable sources. All
 data has been verified insofar as possible; however, the consultant can
 neither guarantee nor be responsible for the accuracy of information
 provided by others.
- The consultant shall not be required to give testimony or attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services as described in the fee schedule and contract of engagement.
- Loss or alteration of any part of this report invalidates the entire report.
- Possession of this report or a copy thereof does not imply right of
 publication or use for any purpose by any other than the person to whom
 it is addressed, without the prior expressed written consent or verbal
 consent of the consultant.
- Neither all nor any part of the contents of this report, nor copy thereof, shall be conveyed by anyone, including the client, to the public through advertising, public relations, news, sales or other media, without the prior expressed written or verbal consent of the consultant particularly as to value conclusions, identity of the consultant, or any reference to any professional society or institute or to any initialed designations conferred upon the consultant as stated in his qualifications.
- This report and values expressed herein represent the opinion of the
 consultant, and the consultant's fee is in no way contingent upon the
 reporting of a specified value, a stipulated result, the occurrence of a
 subsequent event, nor upon any finding to be reported.
- Sketches, diagrams, graphs, and photographs in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys.
- Unless expressed otherwise:
 - 1. Information contained in this report covers only those items that were examined and reflects the condition of those items at the time of inspection; and
 - 2. The inspection is limited to visual examination of accessible items without dissection, excavation, probing or cutting.
 - 3. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.

Disclaimer

This report is based upon Land Survey drawings (with tree locations marked) provided by the client and prepared by a professional Land Surveyor. No grading information was provided at the time of preparation of this report.

The arborist is not a professional Land Surveyor, and as such can make no claim as to the accuracy of the provided drawings.

3 December 2023

Michael R. Plowman

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ISA Certified Arborist: ON-1118A

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APPENDIX III - METHODOLGY

Location

Unless otherwise specified, this Tree Survey is based upon Land Survey drawings for tree locations. Where additional trees are located, by the arborist, the locations of these trees are approximate only, to within 30cm. This dilution of precision is sufficient for most Tree Preservation requirements but should not be used to determine ownership of the subject tree. Additionally, where additional trees are located by GPS positioning (GIS) although without use of Differential GPS equipment, positional accuracy is limited to 3-5m (not sufficient for most tree preservation calculations).

Measurements

DBH (D140/D150)

The Tree Survey (inventory and location) will encompass any trees on the client site having a DBH of 10cm or greater; trees of any size on adjacent municipal lands and situated within 6m of the client site, or zone of construction; trees having a DBH of 10cm or greater on adjacent private lands and situated within 6m of the client site. Trunk diameters are measured using a diameter tape and rounded upwards to the nearest centimeter. In the case of a multi-stemmed tree, nominal DBH will be calculated as the square root of the sum of the squares of the stem diameters. In the case of hedges, the nominal DBH will be considered to be the diameter of the largest tree.

Canopy

Canopy diameters are representative of the greatest distance from canopy edge to trunk, and should be accurate to ± 50 cm, unless otherwise specified. In the case of hedges, the nominal canopy radius will be considered to be the greatest extent perpendicular to the line of the hedge.

Other Measurements

Where applicable, Height (measured by clinometer and accounting for grade), Trunk Lean (measured by angle protractor), with compass direction, and Canopy Offset (distance and compass direction), may also be recorded for some or all subject trees.

Evaluation of Tree Condition

All trees are evaluated based on Health, Structure and Form. These individual ratings are then combined into one overall Condition Rating. All ratings are based on criteria as shown below.

RATING	HEALTH	STRUCTURE	FORM
0	Dead	Dead	Dead
1 (Very Poor)	Appears to be dying and in last stages of life. Little live foliage	Single or multiple severe defects. Failure is probable or imminent.	Visually unappealing. Provides little or no function in the landscape
2 (Poor)	Unhealthy and declining in appearance. Extensive twig or branch dieback.	Single serious or multiple significant defects. Recent changes in orientation. Uncorrectable. Failure may occur at any time.	Largely asymmetrical or abnormal. Detracts from intended use or aesthetics to a significant degree.
3 (Fair)	Reduced vigor. Damage due to insects or diseases may be significant, but unlikely to be fatal. Dieback, defoliation, or dead branches may comprise up to 50% of the crown.	Single defect of significant or multiple moderate defects. Defects are not practical to correct or would require multiple treatments over several years.	Major asymmetries or deviations from either species norms or intended use. Function or aesthetics are compromised.

4 (Good)	Normal vigor. No significant damage from insects or diseases. Twig dieback, defoliation or discoloration is minor.	Well-developed structure. Defects are minor and can be corrected.	Minor asymmetries or deviations from species norms. Mostly consistent with intended use. Function and aesthetics are not compromised.
5 (Excellent)	High vigor and nearly perfect health. Little or no twig dieback, defoliation, or discoloration.	Nearly ideal and free from defects.	Nearly ideal for the species. Consistent with intended use.

Unless otherwise specified, tree condition is determined by Limited Visual Assessment (ground based), and is determined on site, as separate Health, Structural, and Form score according to the above ratings as per Guide for Plant Appraisal 10th Edition.

Overall Condition Rating is calculated as the Harmonic Mean of the Health, Structure and Form Ratings.

Appraisal

Where required, some or all of the inventoried trees will be Appraised (monetarily valued). All appraisals are conducted in accordance with the Guide for Plant Appraisal 10th Edition.

Assessment of TPZ Encroachment and Anticipated Impact

All trees are evaluated for root impact potential where a TPZ encroachment is proposed. To provide an anticipated impact, the following assumptions are made:

- Unless otherwise specified, root distribution on all sides of the tree is equal. For purposes of root assessment, the rooting area is assumed to be an equally distributed disc of rooting around the tree.
- 2. Unless otherwise specified, rooting profile depth is anticipated to be 1.2m. as is consistent with the rooting profile of trees in average soil profile conditions.
- 3. Encroachment is calculated using Area x Area method unless otherwise specified (such as for bisecting trenches).
- 4. Anticipated Root Impact takes in to account the area of encroachment, depth of excavations/fill required, and any mitigating factors (such as a limited rooting profile – e.g. foundation preventing rooting beyond wall extent) to determine an expected root mass injury to the tree

From the anticipated root mass impact, a designation regarding the impact to botanical health is assigned. This is separated in to four categories as follows:

1. 0.5% - 10% Anticipated Impact: Minimal Impact

- No Significant Dieback anticipated, however, some branch tip/branchlet dieback may occur in impacts approaching 10%
- Minimal reduction in growth rate through recovery post impact (1-2 seasons)
- -Sensitive Species may have a minor increase in susceptibility to biotic/abiotic disorders (insect/disease/environmental)
- No long-term detriment to the botanical health, or structural integrity of the tree. The tree is expected to fully recover from injury.

2. 11% - 19% Anticipated Impact: Moderate Impact

- Branch Dieback anticipated, however, it is expected to be minimal to moderate, affecting no greater than 15% of the total canopy area
- Reduction in growth rate through recovery of post impact (2 5 seasons)
- Reduced Canopy Density
- Increase in susceptibility to biotic/abiotic disorders (insect/disease/environmental)

- No significant detriment to the function of the tree anticipated long term, however, botanical health will receive impact for multiple seasons.
- No Impact to structural integrity is expected
- The tree is expected to recover from injury to its' pre construction impact health rating (approximately), however, monitoring is recommended post construction to provide treatment through recovery including (but not limited to): fertilization, treatment of disorders as may arise (abiotic/biotic), compaction alleviation (where applicable), maintenance pruning, etc.

3. 20% - 25% Anticipated Impact: Major Impact

- Branch Dieback anticipated to be major and significant but tolerable with after care, affecting no greater than 25% of the total canopy area
- Significantly reduced growth rate through recovery post impact (>5 seasons)
- Reduced Canopy Density
- Increase in susceptibility to biotic/abiotic disorders (insect/disease/environmental)
- Long term (>5yr) detriment to the function of the tree anticipated. Botanical health will receive impact for multiple seasons, if not be impacted permanently.
- The tree is expected to recover from injury and tolerate the impact, however, it is expected that it will be reduced in botanical health as compared to its' pre construction impact health rating. Additionally, form will be permanently impacted by either dieback or required pruning. Monitoring is recommended post construction to provide treatment through recovery and ensure survival including (but not limited to): fertilization, treatment of disorders as may arise (abiotic/biotic), compaction alleviation (where applicable), maintenance pruning/deadwood removal (as required), etc.
- Specialized fertilization or insect/disease treatments may be required due to total root mass injury through recovery, such as direct stem injection.
- Note: Where Major impact tree are to be preserved, no significant impact to stability of the root plate is expected to occur.

4. > 25% Anticipated Impact or Stability Impact to Root Plate: Critical Impact – Tree to be Removed due to Construction Impact

- Botanical impact not anticipated to be tolerable (Tree anticipated to have a 50% or less chance of survival from impact), or
- Impacted stability of root plate from construction
- Tree to be proposed for removal

APPENDIX IV - DRAWING REFERENCE

Based upon the information obtained in the tree survey, the trees are to be plotted, to scale. Depending on the intended use of the drawings, these will be overlayed on: Survey, Site Plan or Grading Plan provided by others. The arborist is not responsible for deficiencies in drawings prepared by others.

For most purposes, drawings will be published at a scale of 1:200 (metric) with dimensions in metric and imperial units, on a standard sheet size of Arch-D (24x36). Where permitted by the recipient, drawings may be produced at a scale of 1:250, or in a larger sheet size of Arch-E (36x48). Should multiple sheets be required, an index drawing (TPR-100) will be provided at a smaller scale (e.g., 1:500, 1:1000).

Drawing Indexing and Content

TPR-1xx series

- All surveyed trees, with Tree Number, Species, DBH, Minimum TPZ, and Canopy extents plotted.
- Any trees which are proposed to be removed.
- Trees which will potentially be subject to Injury because of the proposed site work are not uniquely identified.
- Hatching to clearly identify areas of Tree Protection Zone encroachment by the proposed construction. (Hatching may be omitted for clarity)
- Locations for prescribed Tree Protection Fencing.
- Minimization of Damage notes.
- Scale 1:100 (small sites only), 1:200, 1:250

TPR-9xx series (on smaller sites, photos may be included in TPR-101 drawing)

- Photo Reference Drawings, providing photo records of each tree.
- Photos are indexed by Tree and (per tree) Photo letter.
- Scale as listed above (*TPR-1xx series*)

If required, additional drawings may be rendered as follows:

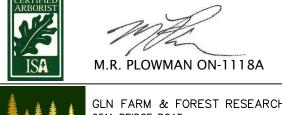
- TPR-2xx Section views
- TPR-3xx Elevation views
- TPR-5xx Detail views
- TPR-6xx Schedules and/or Diagrams

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					TDEE INV	(ENTORY	
Tree	Species		DBH	Condition	Ownership	VENTORY Status	Reason/Comments
#	Botanical	Common	(cm)	%	OWNERSTIND .	Status	Reasony comments
1	Pinus nigra	Austrian pine	50	80 - Good	Client Tree	Remove (within zone of construction)	
2	Pinus nigra	Austrian pine	42	80 - Good	Client Tree	Remove (within zone of construction)	
3	Pinus nigra	Austrian pine	29	60 - Fair	Client Tree	Remove (within zone of construction)	
4	Pinus nigra	Austrian pine	40	72 - Good	Client Tree	Remove (within zone of construction)	
5	Pinus nigra	Austrian pine	35	72 - Good	Client Tree	Remove (within zone of construction)	
6	Pinus nigra	Austrian pine	35	72 - Good	Client Tree	Remove (within zone of construction)	
7	Pinus nigra	Austrian pine	31	51 - Fair	Client Tree	Remove (within zone of construction)	
8	Pinus nigra	Austrian pine	47	72 - Good	Client Tree	Remove (within zone of construction)	
9	Pinus nigra	Austrian pine	37	60 - Fair	Client Tree	Remove (within zone of construction)	Within open area (currently lawn w trees and phragmite at edge of property area) proposed for temp use parking/storage
10	Pinus nigra	Austrian pine	34	80 - Good	Client Tree	Remove (within zone of construction)	
11	Pinus nigra	Austrian pine	40	65 - Good	Client Tree	Remove (within zone of construction)	
12	Pinus nigra	Austrian pine	42	80 - Good	Client Tree	Remove (within zone of construction)	
13	Pinus nigra	Austrian pine	35	80 - Good	Client Tree	Remove (within zone of construction)	
14	Pinus nigra	Austrian pine	54	80 - Good	Client Tree	Remove (within zone of construction)	
15	Acer rubrum	red maple, scarlet maple, swamp maple	41	80 - Good	Client Tree	Remove (within zone of construction)	
16	Acer rubrum	red maple, scarlet maple, swamp maple	29	80 - Good	Client Tree	Remove (within zone of construction)	
17	Acer platanoides	Norway maple	26	40 - Poor	Client Tree	Remove (health or soundness)	Removal Recommended due to condition
18	Betula pendula	European white birch	19	80 - Good	Client Tree	Protected (significant size)	
19	Acer platanoides	Norway maple	35	60 - Fair	Client Tree	Injured (major encroachment on BTPZ)	Encroachment (all phases): Major. Anticipated Injury: Negligible.
20	Acer platanoides	Norway maple	36	60 - Fair	Client Tree	Injured (minor encroachment on BTPZ)	Encroachment (all phases): Minor. Anticipated Injury: Negligible.
21	Carpinus betulus	European hornbeam	39	65 - Good	Client Tree	Injured (major encroachment on BTPZ)	Encroachment (all phases): Major. Anticipated Injury: Minor.
22	Carpinus betulus	European hornbeam	37	60 - Fair	Client Tree	Injured (major encroachment on BTPZ)	Encroachment (all phases): Major. Anticipated Injury: Minor.
23	Acer platanoides	Norway maple	34	60 - Fair	Client Tree	Injured (major encroachment on BTPZ)	Encroachment (all phases): Major. Anticipated Injury: Minor.
24	Acer platanoides	Norway maple	32	51 - Fair	Client Tree	Injured (major encroachment on BTPZ)	Encroachment (all phases): Major. Anticipated Injury: Minor.
25	Acer platanoides	Norway maple	28	60 - Fair	Client Tree	Injured (minor encroachment on BTPZ)	Encroachment (all phases): Minor. Anticipated Injury: Negligible.
26	Acer saccharum	sugar maple, rock maple, hard maple	59	30 - Poor	Client Tree	Remove (health or soundness)	Removal Recommended due to condition
27	Acer platanoides	Norway maple	26	60 - Fair	Client Tree	Injured (minor encroachment on BTPZ)	Encroachment (all phases): Minor. Anticipated Injury: Negligible.
28	Acer saccharum	sugar maple, rock maple, hard maple	86	33 - Poor	Client Tree	Remove (health or soundness)	Removal Recommended due to condition
29	Populus nigra	Lombardy poplar	22	60 - Fair	Client Tree	Injured (minor encroachment on BTPZ)	Encroachment (all phases): Minor. Anticipated Injury: Negligible.
30	Acer platanoides	Norway maple	20	72 - Good	Client Tree Client Tree	Remove (within zone of construction)	
31	Pinus nigra	Austrian pine	40	80 - Good	Client Tree Client Tree	Remove (within zone of construction)	
32	Pinus nigra Pinus nigra	Austrian pine Austrian pine	36	72 - Good	Client Tree Client Tree	Remove (within zone of construction)	Within open area (currently lawn w trees) proposed for temp use parking/storage
33	Pinus nigra	Austrian pine Austrian pine	29	80 - Good	Client Tree Client Tree	Remove (within zone of construction)	
34	Pinus nigra	Austrian pine	24	0 - Dead/Dying	Client Tree	Remove (dead tree)	Remove - Dead Tree
25	Pinus nigra	Austrian pine	29	72 - Good	Client Tree	Remove (within zone of construction)	Remove - Dead Tree
36	Pinus nigra	Austrian pine	35	80 - Good	Client Tree	Remove (within zone of construction)	
37	Ulmus pumila	Siberian elm	27	80 - Good 80 - Good	Client Tree	Remove (within zone of construction)	
38	Pinus nigra	Austrian pine	50	80 - Good	Client Tree	Remove (within zone of construction)	
39	Pinus nigra	Austrian pine	27			Remove (within zone of construction)	Within open area (currently lawn w trees) proposed for temp use parking/storage
40	Acer platanoides	Norway maple	27	80 - Good 80 - Good	Client Tree Client Tree	Remove (within zone of construction)	
	·		27		+		
41	Pinus nigra	Austrian pine	3/	80 - Good	Client Tree	Remove (within zone of construction)	
42	Pinus nigra	Austrian pine	40	80 - Good	Client Tree	Remove (within zone of construction)	Demonstration 1997
43	Acer platanoides	Norway maple	53	30 - Poor	Client Tree	Remove (health or soundness)	Removal Recommended due to condition
44	Pinus nigra	Austrian pine	35	80 - Good	Client Tree	Remove (within zone of construction)	
45	Pinus nigra	Austrian pine	38	80 - Good	Client Tree	Remove (within zone of construction)	Within open area (currently lawn w trees) proposed for temp use parking/storage
46	Pinus nigra	Austrian pine	31	80 - Good	Client Tree	Remove (within zone of construction)	
47	Pinus nigra	Austrian pine	36	80 - Good	Client Tree	Remove (within zone of construction)	
48	Acer platanoides	Norway maple	33	80 - Good	Client Tree	Protected (significant size)	
49	Pinus nigra	Austrian pine	37	72 - Good	Client Tree	Injured (minor encroachment on BTPZ)	Encroachment (all phases): Minor. Anticipated Injury: Negligible.
50	Pinus nigra	Austrian pine	28	80 - Good	Client Tree	Protected (significant size)	
51	Salix fragilis	crack willow	35	65 - Good	Client Tree	Protected (significant size)	
52	Pinus nigra	Austrian pine	45	72 - Good	Client Tree	Injured (minor encroachment on BTPZ)	Encroachment (all phases): Minor. Anticipated Injury: Negligible.
53	Salix fragilis	crack willow	68	65 - Good	Client Tree	Injured (minor encroachment on BTPZ)	Encroachment (all phases): Minor. Anticipated Injury: Negligible.
54	Salix fragilis	crack willow	55	60 - Fair	Client Tree	Injured (minor encroachment on BTPZ)	Encroachment (all phases): Minor. Anticipated Injury: Negligible.
55	Salix fragilis	crack willow	43	60 - Fair	Client Tree	Protected (significant size)	
56	Salix fragilis	crack willow	69	60 - Fair	Client Tree	Protected (significant size)	
57	Fraxinus americana	white ash	15	60 - Fair	Client Tree	Remove (within zone of construction)	In Zone: Temporary Use Area. Encroachment (all phases): Severe. Anticipated Injury: Not survivable. Removal recommended.
58	Populus canadensis [deltoides × nigra]	Carolina poplar	11	65 - Good	Client Tree	Remove (within zone of construction)	In Zone: Temporary Use Area. Encroachment (all phases): Severe. Anticipated Injury: Not survivable. Removal recommended.
59	Populus canadensis [deltoides × nigra]	Carolina poplar	10	65 - Good	Client Tree	Remove (within zone of construction)	In Zone: Temporary Use Area. Encroachment (all phases): Severe. Anticipated Injury: Not survivable. Removal recommended.
60	Populus canadensis [deltoides × nigra]	Carolina poplar	21	60 - Fair	Client Tree	Remove (within zone of construction)	In Zone: Temporary Use Area. Encroachment (all phases): Severe. Anticipated Injury: Not survivable. Removal recommended.
61	Populus canadensis [deltoides × nigra]	Carolina poplar	25	60 - Fair	Client Tree	Remove (within zone of construction)	In Zone: Temporary Use Area. Encroachment (all phases): Severe. Anticipated Injury: Not survivable. Removal recommended.
62	Populus canadensis [deltoides × nigra]	Carolina poplar	20	60 - Fair	Client Tree	Remove (within zone of construction)	In Zone: Temporary Use Area. Encroachment (all phases): Severe. Anticipated Injury: Not survivable. Removal recommended.
63	Robinia pseudoacacia	black locust	27	60 - Fair	Client Tree	Remove (within zone of construction)	In Zone: Temporary Use Area. Encroachment (all phases): Severe. Anticipated Injury: Not survivable. Removal recommended.
64	Fraxinus americana	white ash	50	0 - Dead/Dying	Client Tree	Remove (dead tree)	Remove - Dead Tree
65	Fraxinus americana	white ash	49	0 - Dead/Dying	Client Tree	Remove (dead tree)	Remove - Dead Tree
66	Fraxinus americana	white ash	45	0 - Dead/Dying	Client Tree	Remove (dead tree)	Remove - Dead Tree
67	Ulmus rubra	Red elm	10	80 - Good	Client/Neighbor Shared Ownership Tree	Protected (significant size)	
68	Ulmus rubra	Red elm	10	80 - Good	Client/Neighbor Shared Ownership Tree	Protected (significant size)	
69	Acer platanoides	Norway maple	30	80 - Good	Client Tree	Protected (significant size)	
70	Ulmus rubra	Red elm	10	72 - Good	Client Tree	Protected (significant size)	
71	Acer negundo	boxelder, Ash-leaved Maple	23	80 - Good	Client Tree	Protected (significant size)	
72	Ulmus rubra	Red elm	19	80 - Good	Client Tree	Protected (significant size)	
73	Fraxinus americana	white ash	14	80 - Good	Client Tree	Protected (significant size)	
74	Fraxinus americana	white ash	17	80 - Good	Client Tree	Protected (significant size)	
75	Fraxinus americana	white ash	10	51 - Fair	Client Tree	Protected (significant size)	
76	Salix fragilis	crack willow	34	80 - Good	Client Tree	Protected (significant size)	
77	Salix fragilis	crack willow	38	60 - Fair	Client Tree	Protected (significant size)	
78	Salix fragilis	crack willow	60	72 - Good	Client Tree	Protected (significant size)	
79	Salix fragilis	crack willow	14	72 - Good	Client Tree	Protected (significant size)	
80	Salix fragilis	crack willow	47	72 - Good	Client Tree	Protected (significant size)	
81	Rhus spp	Sumac Species	13	80 - Good	Client Tree	Protected (significant size)	
82	Populus nigra	Lombardy poplar	14	80 - Good	Client Tree	Injured (minor encroachment on BTPZ)	Encroachment (all phases): Minor. Anticipated Injury: Negligible.
83	Populus nigra	Lombardy poplar	14	80 - Good	Client Tree	Remove (within zone of construction)	In Zone: Temporary Use Area. Encroachment (all phases): Severe. Anticipated Injury: Not survivable. Removal recommended.
84	Salix fragilis	crack willow	10	80 - Good	Client Tree	Injured (minor encroachment on BTPZ)	Encroachment (all phases): Minor. Anticipated Injury: Negligible.
85	Platanus acerifolia	London planetree	23	80 - Good	Client Tree	Remove (within zone of construction)	Encroachment (all phases): Major. Anticipated Injury: Minor.
86	Fraxinus americana	white ash	11	40 - Poor	Client Tree	Remove (within zone of construction)	In Zone: Temporary Use Area. Encroachment (all phases): Severe. Anticipated Injury: Not survivable. Removal recommended.
87	Populus nigra	Lombardy poplar	23	80 - Good	Client Tree	Remove (within zone of construction)	In Zone: Temporary Use Area. Encroachment (all phases): Severe. Anticipated Injury: Not survivable. Removal recommended.
	· · · · · ·	Siberian elm	10	40 - Poor	Client Tree	Remove (health or soundness)	Removal Recommended due to condition
88	Ulmus pumila	onseriair eiiii	'		· 1	·	

General Notes

Revision/Issue Date



GLN FARM & FOREST RESEARCH CO. LTD. 2511 BRIDGE ROAD OAKVILLE, ON L6L 2H3 TEL: 905-827-1134

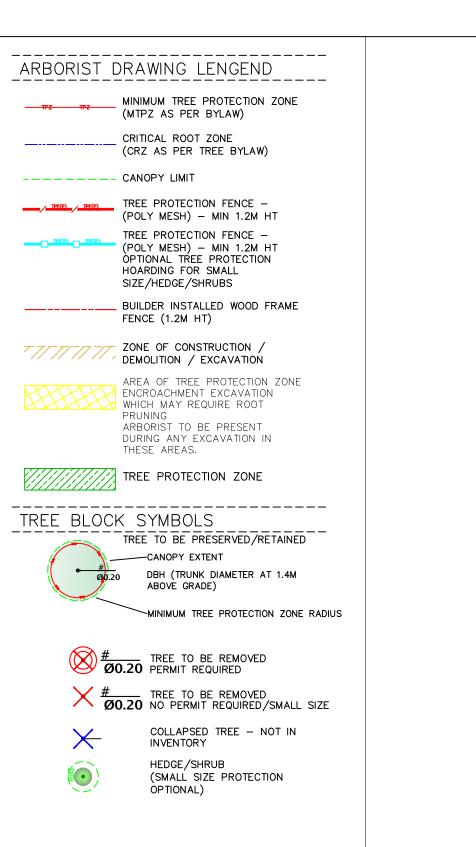
Client:
ROSE DEVELOPMENT

420 SOUTH SERVICE RD EAST OAKVILLE

TREE INVENTORY TABLE — FOR REFERENCE W TREE PROTECTION PLAN DRAWINGS







SCHEDULE 1 TREE PROTECTION BARRIER

Tree protection barriers must be 1.2m (4ft) high, waferboard □ hoarding or an equivalent approved by Urban Forestry Services.

3) Where some excavate or fill has to be temporarily located near a tree protection barrier, plywood must be used to ensure no material enters the Tree Protection Zone.

4) All supports and bracing should be outside the Tree Protection Zone. All such supports should minimize damaging roots outside the Tree Protection Barrier.

(5) No construction activity, grade changes, surface treatment or excavations of any kind is permitted within the Tree Protection Zone.

for further information).

Tree Protection Zone *3

2) Tree protection barriers for trees situated on the Town road allowance where visibility must be maintained can be 1.2m (4ft.) high and consist of plastic web snow fencing on

OAKVILLE

Tree Protection Barriers

a wood frame made of 2"x 4"s .

Diameter of Trunk (DBH) *2 in centimetres

Prior to the commencement of construction, tree preservation hoarding, as well as arboricultural work with regards to any removals and any required pruning for construction, should be implemented as follows: All Tree Preservation Hoarding is to be erected and placed as per the location presented on the attached Tree Preservation Plan Drawing: TPR 101.

Note: Tree Protection Hoarding must be installed upon approval of the tree preservation plan, and prior to release of the permits regarding tree injury. Upon approval of the Arborist Report and Tree Preservation Plan, and conditions of permit release being sent to the client, the hoarding is to be erected. If it is determined by engineering that silt fencing be required for the site to prevent silt movement, it is the recommendation of the arborist that the silt fencing be placed following and on the construction side of tree protection hoarding. 3. If silt fencing is deemed required within hoarded areas of tree protection, it is not to be dug in in this area, but instead have a minimal amount of clear stone placed at the base. This will prevent impact to tree roots in area from the digging in of the silt fence base, while still allowing for the prevention of silt movement beyond the silt fence. 4. All tree protection hoarding (vertical and/or horizontal), and silt fencing (if required), is to be inspected for correct construction and placement as per the approved Tree Preservation
Plan Drawing and Site Plan by a
Certified Arborist, or other approved
consultant, or by a member Town of Oakville Staff. If inspected by other than the Town of Oakville staff, the consultant will provide written certification to the municipality that all protective hoarding and sediment control measures (if/where required) have been satisfactorily installed 5. Any pruning of trees that is to occur, as approved and permitted by the Town of Oakville for significant size trees, should occur during this phase. No pruning of significant size trees may occur until such time as the pruning has been approved by Forestry and tree injury permits have been released and are present on site. 6. Any removal of trees of significant size, as approved and permitted by the Town of Oakville should occur during this phase. No removals of significant size trees may occur until such time as tree removal permits have been released and are present on site. **During and Post-Construction**

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420SOUTHSERVICE

3/4 - Nov - 2023 | TPR -103

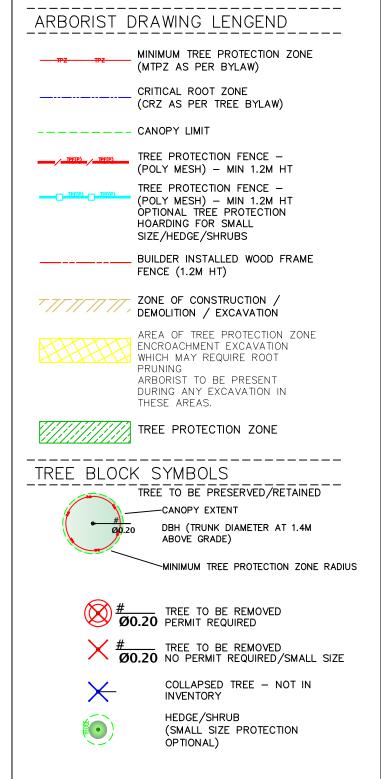
Tree Survey Date:

Total Drawings:

1. For trees over 100 cm. DBH, add 10 cm. to the TPZ for every one centimetre of DBH.

2. Roots can extend from the trunk to 2-3 times the distance of the drip line (see Detail TP-1 (SCHEDULE 4) 3. Diameter at breast height (DBH) measurement of tree trunk taken at 1.37 metres above ground.

4. Tree Protection Zone distances are to be measured from the outside edge of the tree base towards the drip line and may be limited by an existing paved surface, provided the existing paved surface remains intact throughout the construction work.



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General Notes TREE PROTECTION PLAN NOTES PRIOR TO SITE DISTURBANCE THE OWNER MUST CONFIRM THAT NO MIGRATORY BIRDS ARE MAKING USE OF THE SITE FOR NESTING. THE OWNER MUST ENSURE THAT THE WORKS ARE IN CONFORMANCE WITH THE MIGRATORY BIRD CONVENTION ACT AND THAT NO MIGRATORY BIRD NESTS WILL BE IMPACTED BY THE PROPOSED WORK.

IT IS THE APPLICANTS RESPONSIBILITY TO DISCUSS POTENTIAL TREE INJURY OF TREES ON SHARED PROPERTY LINES WITH THEIR NEIGHBOURS. SHOULD SUCH TREES BE INJURED TO THE POINT OF INSTABILITY OR DEATH THE APPLICANT MAY BE HELD RESPONSIBLE FOR REMOVAL AND SUCH ISSUES WOULD BE DEALT WITH IN CIVIL COURT OR THROUGH NEGOTIATION. THE APPLICANT WOULD BE REQUIRED TO REPLACE SUCH TREES TO THE SATISFACTION OF URBAN FORESTRY. TREE PROTECTION ZONE(S):
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CAN BE 1.2M (4FT.) HIGH AND CONSIST OF CHAIN LINK, OR
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> TREE PROTECTION PLAN NORTHWEST AREA OF SITE

> > 3/4/-Nov-2023

Tree Survey Date:

Total Drawings:

420SOUTHSERVICE

TPR -104

Tree Protection Barriers Tree protection barriers must be 1.2m (4ft) high, waferboard □ hoarding or an equivalent approved by Urban Forestry Services. 2 Tree protection barriers for trees situated on the Town road allowance where visibility must be maintained can be 1.2m (4ft.) high and consist of plastic web snow fencing on a wood frame made of 2"x 4"s . 3) Where some excavate or fill has to be temporarily located near a tree protection barrier, plywood must be used to ensure no material enters the Tree Protection Zone. 4) All supports and bracing should be outside the Tree Protection Zone. All such supports should minimize damaging roots outside the Tree Protection Barrier. (5) No construction activity, grade changes, surface treatment or excavations of any kind is permitted within the Tree Protection Zone. Diameter of Trunk (DBH) *2 in centimetres Tree Protection Zone *3 1. For trees over 100 cm. DBH, add 10 cm. to the TPZ for every one centimetre of DBH.
2. Roots can extend from the trunk to 2-3 times the distance of the drip line (see Detail TP-1 (SCHEDULE 4) for further information).

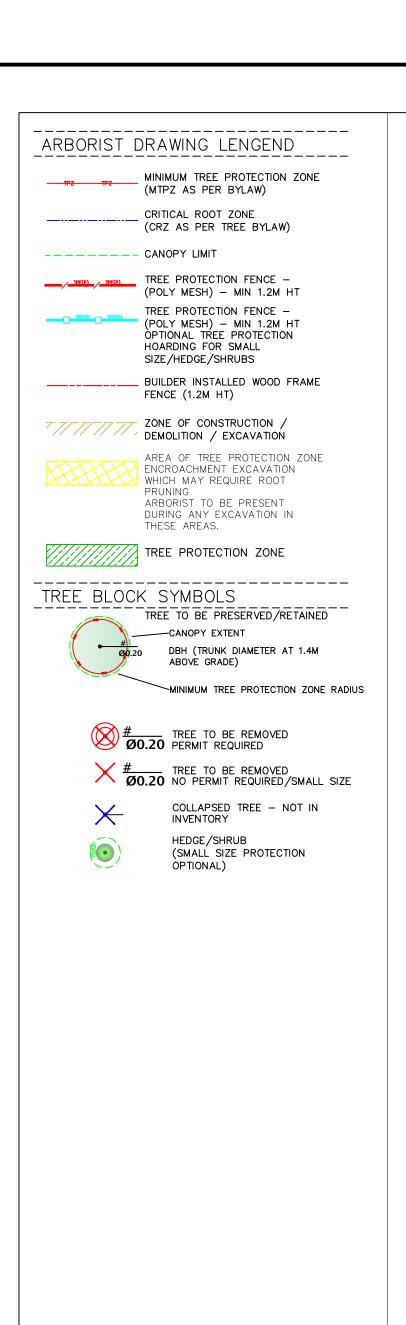
SCHEDULE 1 TREE PROTECTION BARRIER

OAKVILLE

for further information).

3. Diameter at breast height (DBH) measurement of tree trunk taken at 1.37 metres above ground.

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construction completion.

SCHEDULE 1 TREE PROTECTION BARRIER

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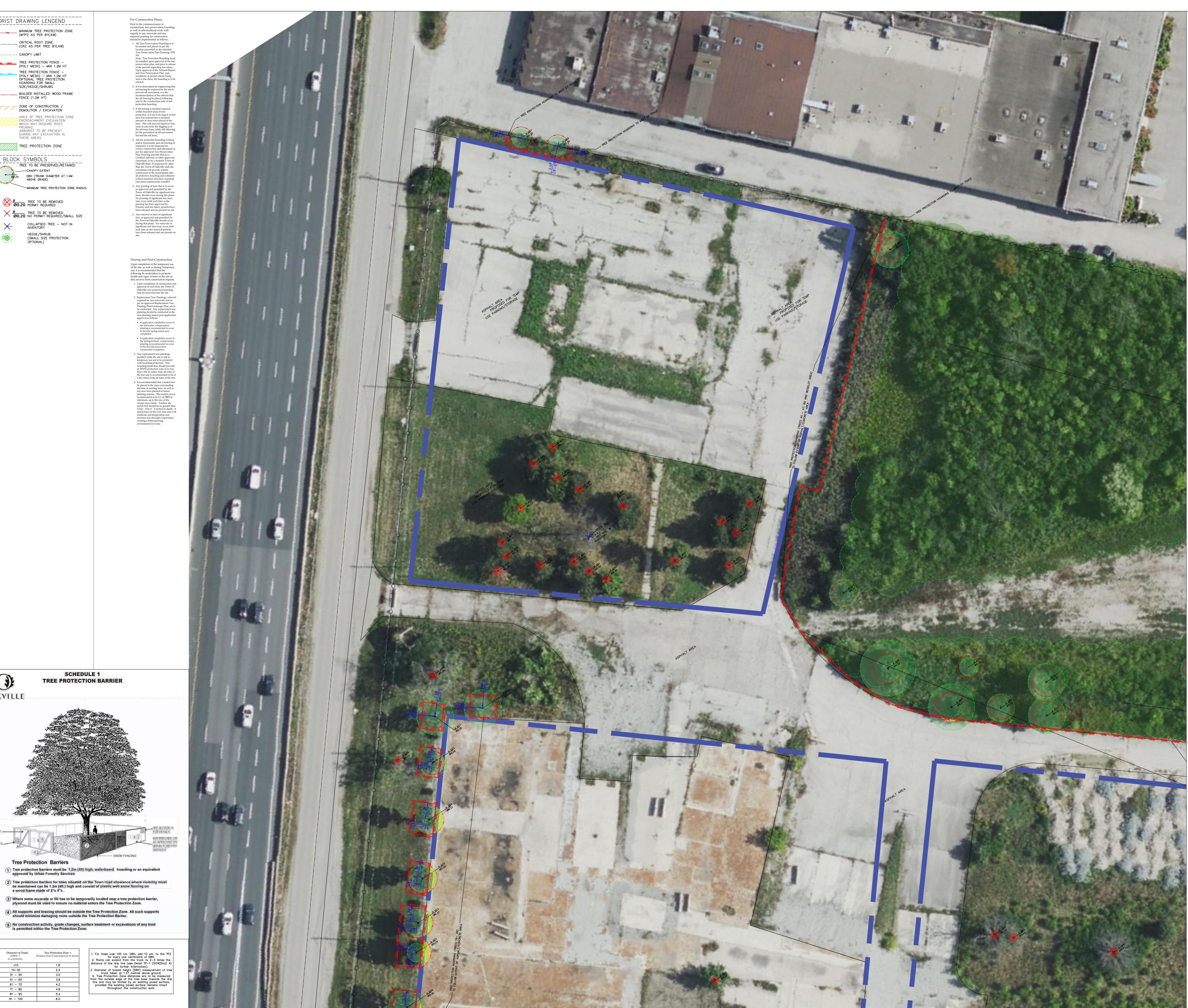
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Tree Protection Zone *3

OAKVILLE

Tree Protection Barriers



General Notes

TREE PROTECTION PLAN NOTES

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Revision/Issue

GLN FARM & FOREST RESEARCH CO. LTD. OAKVILLE, ON L6L 2H3

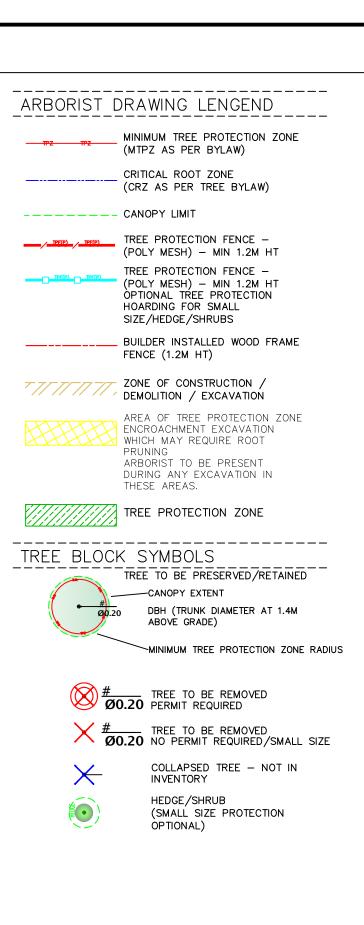
ROSE DEVELOPMENT 420 SOUTH SERVICE RD EAST OAKVILLE

TREE PROTECTION PLAN

NORTH AREA OF SITE

420SOUTHSERVICE Tree Survey Date: TPR -105 3/4-Nov-2023 Total Drawings:





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GLN FARM & FOREST RESEARCH CO. LTD.

SOUTH AND SOUTHWEST PORTION OF SITE

420SOUTHSERVICE

Diameter of Trunk (DBH) *2 in centimetres

Tree Protection Barriers

a wood frame made of 2"x 4"s .

OAKVILLE

Tree Protection Zone *3 1. For trees over 100 cm. DBH, add 10 cm. to the TPZ for every one centimetre of DBH.

2. Roots can extend from the trunk to 2-3 times the distance of the drip line (see Detail TP-1 (SCHEDULE 4) for further information). 3. Diameter at breast height (DBH) measurement of tree trunk taken at 1.37 metres above ground.

4. Tree Protection Zone distances are to be measured from the outside edge of the tree base towards the drip line and may be limited by an existing paved surface, provided the existing paved surface remains intact throughout the construction work.

Tree protection barriers must be 1.2m (4ft) high, waferboard □ hoarding or an equivalent approved by Urban Forestry Services.

3) Where some excavate or fill has to be temporarily located near a tree protection barrier, plywood must be used to ensure no material enters the Tree Protection Zone.

(4) All supports and bracing should be outside the Tree Protection Zone. All such supports

(5) No construction activity, grade changes, surface treatment or excavations of any kind is permitted within the Tree Protection Zone.

should minimize damaging roots outside the Tree Protection Barrier.

2) Tree protection barriers for trees situated on the Town road allowance where visibility must be maintained can be 1.2m (4ft.) high and consist of plastic web snow fencing on

SCHEDULE 1 TREE PROTECTION BARRIER