# 772 Winston Churchill Boulevard Oakville, ON L6J 7X4

prepared for

# 772 Winston Churchill Limited General Partnership 2710-333 Bay Street Toronto, ON M5H 2R2

prepared by

**ISA© Certified Arborist** Zara Brown, ON-2252A PROJECT NO: 123558/141237

Submission Date: November 22, 2023 **Revision 8** 



200 East Wing-360 James Street North ARCADIS Hamilton ON L8L 1H5 Canada tel 905 546 1010 fax 905 546 1011 Arcadis.com

#### Introduction

Arcadis was retained by 772 Winston Churchill Limited General Partnership to conduct a Tree Inventory, and to prepare a Tree Preservation Plan and Arborist Report, as required by the Town of Oakville, and in support of the proposed industrial development. This report will provide:

- A tree inventory and visual assessment;
- Arborist Report;

Tree Protection Plans (TPP-1 to TPP-3) and Tree Protection Details (TPD-1 to TPD-2) accompany this report, updated November 2023 (Issue 5). Plans must be read in conjunction with this report

#### **Existing Site Conditions**

The report investigates the existing site (Appendix A) which comprises 38.53 acres (15.59 ha.) of undeveloped land. The subject lands are located on the west side of Winston Churchill Boulevard, south of the existing CN railway. To the west of the subject lands are Open Space and Low-Density Residential land uses. To the North is the CN railway and to the south is vacant land. To the east of the subject lands, across Winston Churchill Boulevard, there is an industrial building under construction. The subject site has no structures.

Construction on the subject lands requires utility connections in an 8.0m wide easement that currently has a crushed stone and concrete trail, a berm and vegetation that will tie-in to connections at Acacia Court.

## Methodology

Tree resources were assessed and are reported using the following attributes:

Tree No. or Groups	identifier assigned to the tree (s) corresponding to those indi-	cated in the
rree No. or Groups	identifier assigned to the tree (s) corresponding to those indi-	cated in the

Tree Protection Plans (TPP-1 to TPP-3).

**Botanical Name** formal scientific name.

**Common name** locally known English name.

**DBH** diameter at breast height, in centimetres, measured at 1.4m above the

adjacent ground.

**Condition** condition of the specimen based on the visual assessment of the tree

health reported as:

Good (G) - dead branches less than 10%; signs of good compartmentalization on any wounds; no structural defects

Fair (F) -10-30% dead branches; size or occurrence of wounds present

some concerns; minor structural defects

Poor (P) - more than 30% dead branches; weak compartmentalization; early leaf drop; presence of insects or disease; major structural defects

Dead (D) - tree shows no signs of life

Minimum Tree Tree Protection zone as defined in the Town of Oakville Procedure EN-TRE-

Protection Zone (MPTZ) 001-001 'Tree Protection During Construction Procedure' (TPD-2)

**Ownership** Ownership of the tree or tree group

S – Subject Property

A - Adjacent Property

M – Municipal Property

**Impacts of** determination of whether or not the specimen is impacted by the **Development** proposed construction:

None – no construction impact within the dripline

Limited – construction activity occurs at or within the dripline (less

than 30%) and requires precautionary measures.

Impacted – construction activity occurs within a significant portion of

the dripline or requires the removal of the specimen.

**Recommendation** determination to retain/preserve, remove or transplant the specimen.

**Comments** additional information on tree specimen

The tree inventory was conducted on May 13, 2021 and September 29, 2021, to include trees with a DBH of 10cm or more in the designated area. Trees were located using an android GIS application MapIt GIS Version 7.6.0.0Core – accuracy of tree locations are within 5m of the actual location. Tree locations have been updated using surveyed information provided by KRCMAR Surveyors Ltd dated October 25, 2022. This information is summarized in Existing Tree Identification Table (APPENDIX C & TPD-1).

## Tree Species

A total of eighty-eight (88) individual trees and twenty-five (25) tree groups were observed for a total of one hundred and fifty-nine (159) trees. Species include:

Trident Maple (Acer buergerianum)

Manitoba Maple (Acer negundo)

Norway Maple (Acer platanoides)

Freeman Maple (Acer x freemanii)

Yellow Birch (Betula alleghaniensis)

Hackberry (Celtis occidentalis)

Dogwood (Cornus spp.)

Honeylocust (Gleditsia triacanthos)

Black Walnut (Juglans nigra)

Eastern White Cedar (Juniperus virginiana)

Mulberry (Morus alba) (Picea glauca) White Spruce Blue Spruce (Picea pungens) Austrian Pine (Pinus nigra) Eastern White Pine (Pinus strobus) Cherry (Prunus spp.) White Oak (Quercus alba) Swamp White Oak (Quercus bicolor) (Quercus rubra) Red Oak Red Oak (Quercus rubra) Columnar Oak (Quercus spp.)

Common Buckthorn (Rhamnus cathartica)

Common Buckthorn (Rhamnus cathartica) Black Locust (Robinia pseudoacacia) Northern White Cedar (Thuja occidentalis) Basswood (Tilia americana) Siberian Elm (Ulmus pumila)

#### Proposed Development

772 Winston Churchill Limited Partnership has proposed to construct two (2) new industrial buildings on the 38.53 acre parcel. The proposed buildings are 34,490.92 m<sup>2</sup> and 28,972.27 m<sup>2</sup>, respectively, and the proposed use is industrial. Buildings have been located to act as an acoustical barrier for the adjacent residential uses. The proposed concept is shown in the Site Plan (A-1.0, date February 17, 2023).

The development requires utility connections through an existing easement with connections at Acacia Court.

#### Findings and Recommendations

The development impacts forty-seven (47) of the existing trees which will be removed due to impacts of construction, including, but not limited to, proposed buildings, roadway, retaining wall, grading and trenching for utilities. The remaining trees within five (5) metres of disturbance will be retained with tree protection measure in place, in good condition, for the duration of construction.

Management and Quality Assurance

#### Pre-Construction Phase

1. 2.	TPZ Fencing: TPZ Signage:	Tree Protection measures shall be installed prior to any site work Tree Protection Zone barriers shall be clearly marked with signs stating that the area within is a TPZ and that no one is allowed to enter or disturb this area without authorization from the project Arborist.
3.	Trunk Protection:	Where there is potential mechanical damage to the tree trunk or buttress, the exposed are should be protected by thick wood planks on a closed cell foam pad (or other protective material), bound in place by straps or wires.
4.	Root Pruning:	Standard arboricultural practices shall be employed where root pruning is necessary to maintain the tree health and structural stability. Hand excavation or other approved methods shall be used for the asphalt removal to minimize root damage.
5.	Grade Changes:	Every effort shall be made to maintain the existing grades after the removal of the asphalt
6.	Soil Decompaction:	New exposed soil shall be manually decompacted to prepare the soil to receive new topsoil and plant material
7.	Irrigation:	Areas within the TPZ shall be watered and maintained to an acceptable level.
8.	Pruning:	Removal of dead, diseased and dying branches before construction is recommended to reduce risk of failure within the subject site during

construction.

#### Construction Phase

Site Monitoring: Site monitoring is recommended to be completed at least three (3)

times during construction to detect any decline in plant health. These

inspections should be no more than six (6) months apart.

#### Post-Construction Phase:

1. TPZ Fencing Removal: All tree protection measures may be removed once all work on the

subject site is complete or in order to facilitate propose landscape plantings. All plant material, existing and new must be maintained

until the final inspection.

2. Plant Health Mitigation: If required, treatments should be prescribed where evidence

suggests that it may be beneficial.

3. Plant Replacement: Existing trees shall be maintained in an acceptable condition for

two (2) years after the completion of construction. Any tree that declines beyond acceptable depreciation, and fails to recover following treatment, shall be replaced with the same or alternate

local species appropriate to the site.

4. Landscape Inspection: Upon completion of construction an arborist inspection shall be

completed to verify that plant health has been maintained. Inspections will be completed annually to the end of the two (2)

year warranty period

# Compensation Requirements

Replacement trees are required as a condition of all individual tree removals. The number of replacement trees required within the Town of Oakville will be determined by the DBH of the living tree to be removed, as determine by the Town of Oakville Replacement Trees and Security Deposit requirements. One replacement tree is required for every 10 cm diameter of the private removed. Summary is shown below:

DBH OF TREE TO BE REMOVED IN CENTIMETRES	NUMBER OF REPLACEMENT TREES REQUIRED	NUMBER OF TREES TO BE REMOVED	TREE REPLACEMENT COMPENSATION REQUIRED
6-15	1	7	7
16-25	2	18	36
26-35	3	6	18
36-45	4	1	4
>45	DBH*0.10	0	0

TOTAL 32 65

A tree valuation was calculated for the Town-owned trees, with dbh over 10cm, proposed for removal within the sanitary easement. The value was calculated using the Trunk Formula Technique as described in the Guide for Plant Appraisal, 10th Edition (CTLA, 2019).

COMPENSATION SUMMARY	
Number of trees removed > 10cm DBH (not including dead)	46
Number of <b>private</b> trees removed > 10cm DBH (not including dead)	32
Number of trees required for compensation	65
Number of <b>Town</b> trees removed > 10cm DBH (not including dead)	14
Final Appraised values of Town trees to be removed (Appendix G)	\$16,975.96

#### Additional Recommendations

- 1. Layout of the works should be staked out to verify the Impacts to existing trees. Where field adjustments can be made to accommodate tree preservation, it recommended that the adjustments be considered.
- Tree protection barriers shall be erected 1m outside of the minimum tree protection zones of trees proposed to be preserved. Barriers shall be erected prior to construction and shall remain in place, in good condition, for the duration of the project. Field verification is required to determine whether or not construction impact will occur within the MTPZ as shown in the Tree Protection Plans (TPP-1 to TPP-3).
- 3. Any pruning required for branches and roots that may extend past the TPZ must be carried out by a qualified Arborist or other tree professional, only as necessary to prevent damage from construction activity or to prune broken limbs or roots. All pruning of tree roots and branches must be in accordance with good arboricultural standards.
- 4. Construction must be maintained outside of the TPZ or dripline, whichever is greater, as shown on the Tree Protection Details (TPD-1).
- 5. Tree inventory and tree protection are not shown for trees greater than 10cm beyond 6m of the area proposed to be disturbed for construction. Should the works associated with construction more move more than 5m beyond its current proposed limit of disturbance an additional tree inventory will be taken to determine if additional tree protection will be required.
- 6. The site design provides opportunities for plantings along the right of way at Winston Churchill Boulevard, within the proposed landscaped areas on the site, and along the edges of the proposed disturbed areas (restoration/enhancement). For the areas adjacent to the creek (to the east and south) enhanced planting to support the existing creek edge and screening of the industrial complex from adjacent uses is recommended.

Regards,

Zara Brown, OALA, CSLA, RLA, PMP

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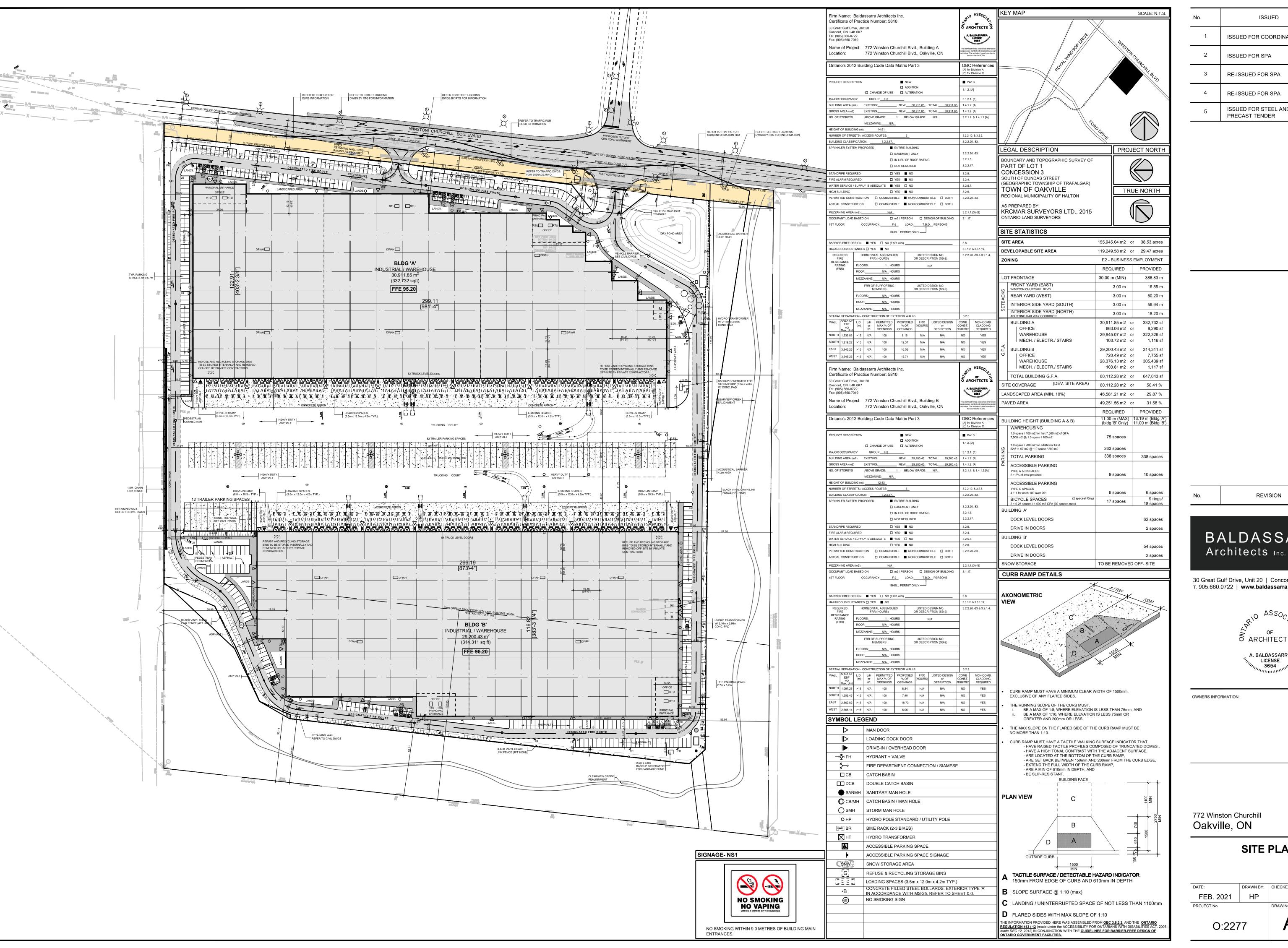
November 22, 2023

# APPENDIX A – EXISTING SITE



November 22, 2023

## APPENDIX B - SITE PLAN



No.	ISSUED	DATE
1	ISSUED FOR COORDINATION	MAR. 30, 2021
2	ISSUED FOR SPA	APR. 9, 2021
3	RE-ISSUED FOR SPA	DEC. 15, 2021
4	RE-ISSUED FOR SPA	DEC. 16, 2022
5	ISSUED FOR STEEL AND PRECAST TENDER	FEB. 17, 2023

BALDASSARRA

REVISION

30 Great Gulf Drive, Unit 20 | Concord ON | L4K 0K7 т. 905.660.0722 | www.baldassarra.ca



OWNERS INFORMATION:

772 Winston Churchill

SITE PLAN

DATE:	DRAWN BY:	CHECKED:	SCALE:
FEB. 2021	HP		1:1000
PROJECT No.	•	DRAWING No.	

## APPENDIX C – EXISTING TREE IDENTIFICATION TABLE

TREE NO. OR GRP	BOTANICAL NAME	COMMON NAME	n)	(2)	n) EE	(3)	IMPACTS OF DEVELOPMENT (4)	(5	COMMENTS (6)
THEE NO. ON ON	SOMMOLE NAME	Commential	ОВН (сш)	CONDITION <sup>(2</sup>	MINIMUM TREE PROTECTION ZONE (MTPZ) (m)	OWNERSHIP <sup>(3</sup>	IMPACIS OF DEVELOPMENT	RECOMMENDATION <sup>(5</sup>	COMMENTS
690	ULMUS PUMILA	SIBERIAN ELM	15.5	F	2.0	S	IMPACTED: TRUCKING COURT	R	ANIMAL DAMAGE
691	CORNUS SPP.	DOGWOOD TREE	12.0	F	2.4	S	IMPACTED: ROADWAY	R	SEVERE LEAN
692	ULMUS PUMILA	SIBERIAN ELM	19.0	G	2.4	S	IMPACTED: ROADWAY, GRADING	R	
693	RHAMNUS CATHARTICA	COMMON BUCKTHORN	12.0	G	2.4	S	IMPACTED: GRADING	R	
694	PRUNUS SPP	CHERRY TREE	11.5	F	2.4	S	NONE	Р	MINOR TRUNK DAMAGE
695	PRUNUS SPP	CHERRY TREE	12.0	G	2.4	S	NONE	P	
740	THUJA OCCIDENTALIS	WHITE CEDAR	20.0	G	2.4	М	IMPACTED: UTILITY EASEMENT	R	
741	ACER NEGUNDO	MANITOBA MAPLE	23.1	F	2.4	М	IMPACTED: UTILITY EASEMENT	R	
742	JUGLANS NIGRA	BLACK WALNUT	27.0	G	2.4	М	IMPACTED: UTILITY EASEMENT	R	
743	ACER SACCHARINUM	SILVER MAPLE	23.1	F	2.4	M	IMPACTED: UTILITY EASEMENT	R	CLUMPS
744	ACER X FREEMANII	FREEMAN MAPLE	18.0	G	2.4	M	IMPACTED: UTILITY EASEMENT	R	02011110
745	JUGLANS NIGRA	BLACK WALNUT	12.0	F	2.4	M	IMPACTED: UTILITY EASEMENT	R	
746	JUGLANS NIGRA	BLACK WALNUT	22.0	G	2.4	M	IMPACTED: 5m CONSTRUCTION EASEMENT	R	
747	ACER X FREEMANII	FREEMAN MAPLE	16.5	G	2.4	M	IMPACTED: UTILITY EASEMENT	R	
748	ACER X FREEMANII	FREEMAN MAPLE	12.5	G	2.4	M	NONE	P	
749	QUERCUS RUBRA	RED OAK	27.0	G	2.4	M	IMPACTED: UTILITY EASEMENT	R	
751	CELTIS OCCIDENTALIS	HACKBERRY	12.5	G	2.4	M	NONE	P	
752	PINUS NIGRA	AUSTRIAN PINE	15.0	G	2.4	M	NONE	P	2 HARD NEEDLES
753	PINUS NIGRA		15.0	G	2.4			P	Z HARD NEEDLES
754		AUSTRIAN PINE				M	NONE	P	
	ACER X FREEMANII	FREEMAN MAPLE	14.5	G	2.4	M	NONE	P	
755	ACER X FREEMANII	FREEMAN MAPLE	13.5	G	2.4	M	NONE	<u>_</u>	
756 757	QUERCUS ALBA	WHITE OAK	25.1	G F	2.4	M	IMPACTED: 5m CONSTRUCTION EASEMENT	R R	
	ULMUS PUMILA	SIBERIAN ELM	21.5		2.4	M	IMPACTED: 5m CONSTRUCTION EASEMENT		
758	PRUNUS VIRGINIANA	CHOKECHERRY	31.3	G	3.0	М	NONE	P	
759	TILIA AMERICANA	BASSWOOD	11.0	G	2.4	M	NONE	P	
760	CELTIS OCCIDENTALIS	HACKBERRY	10.5	G	2.4	М	NONE	P	
761	CELTIS OCCIDENTALIS	HACKBERRY	11.0	F	2.4	М	NONE	P	
762	CELTIS OCCIDENTALIS	HACKBERRY	11.0	G	2.4	М	NONE	P	
763	ULMUS PUMILA	SIBERIAN ELM	28.5	F	2.4	М	NONE	P	
764	QUERCUS ALBA	WHITE OAK	14.5	F	2.4	М	NONE	P	
765	ACER X FREEMANII	FREEMAN MAPLE	26.0	F	2.4	М	IMPACTED: 5m CONSTRUCTION EASEMENT	R	
766	MORUS ALBA	MULBERRY	40.0	F	3.0	Α	NONE	Р	PRUNED
767	QUERCUS ALBA	WHITE OAK	15.0	F	2.4	Α	NONE	P	
768	ULMUS AMERICANA	WHITE ELM	17.5	F	2.4	Α	NONE	Р	
769	QUERCUS RUBRA	RED OAK	13.0	F	2.4	М	NONE	Р	
770	ACER X FREEMANII	FREEMAN MAPLE	19.0	F	2.4	М	NONE	Р	
771	ACER X FREEMANII	FREEMAN MAPLE	14.5	G	2.4	М	IMPACTED: 5m CONSTRUCTION EASEMENT	R	
772	ACER NEGUNDO	MANITOBA MAPLE	42.0	G	3.0	М	IMPACTED: 5m CONSTRUCTION EASEMENT	R	MODERATE LEAN
773	ACER NEGUNDO	MANITOBA MAPLE	43.4	G	3.0	М	NONE	Р	
774	ACER NEGUNDO	MANITOBA MAPLE	97.0	D	6.0	М	NONE	Р	
1000	ACER NEGUNDO	MANITOBA MAPLE	31.0	F	3.0	Α	IMPACTED: ROADWAY, RETAINING WALL	R	
1001	ACER NEGUNDO	MANITOBA MAPLE	35.0	F	3.0	Α	IMPACTED: ROADWAY, RETAINING WALL	R	
1002	ACER NEGUNDO	MANITOBA MAPLE	40.0	F	3.0	Α	IMPACTED: ROADWAY, RETAINING WALL	R	
1003	ACER NEGUNDO	MANITOBA MAPLE	20.0	F	2.4	Α	IMPACTED: ROADWAY, RETAINING WALL	R	EMBEDDED IN FENCE
1004	ACER NEGUNDO	MANITOBA MAPLE	19.0	F	2.4	Α	IMPACTED: ROADWAY, RETAINING WALL	R	
1005	ACER NEGUNDO	MANITOBA MAPLE	22.0	F	2.4	Α	IMPACTED: ROADWAY, RETAINING WALL	R	
1006	ACER NEGUNDO	MANITOBA MAPLE	14.5	F	2.4	Α	IMPACTED: ROADWAY, RETAINING WALL	R	
1007	ACER NEGUNDO	MANITOBA MAPLE	32.0	F	3.0	Α	IMPACTED: ROADWAY, RETAINING WALL	R	

TREE NO. OR GRP	BOTANICAL NAME	COMMON NAME	n)	(2)	H E E	(3)	IMPACTS OF DEVELOPMENT (4)	(5	COMMENTS (6)
			ОВН (сш)	CONDITION <sup>(2</sup>	MINIMUM TREE PROTECTION ZONE (MTPZ) (m)	OWNERSHIP <sup>(3</sup>	INIT ACTS OF BEVELOT MENT	RECOMMENDATION <sup>(5</sup>	COMMENTS
1008	ACER NEGUNDO	MANITOBA MAPLE	25.0	F	2.4	Α	LIMITED: RETAINING WALL	P	
1009	ACER NEGUNDO	MANITOBA MAPLE	34.0	F	3.0	A	IMPACTED: ROADWAY, RETAINING WALL	R	
1010	ACER NEGUNDO	MANITOBA MAPLE	15.0	F	2.4	Α	IMPACTED: ROADWAY, RETAINING WALL	R	SEVERE LEAN
1011	JUNIPERUS VIRGINIANA	EASTERN WHITE CEDAR	10.0	F	2.4	S	IMPACTED: ROADWAY, RETAINING WALL	R	SEVERE LEAN
1012	PINUS STROBUS	EASTERN WHITE PINE	15.0	F	2.4	S	IMPACTED: ROADWAY, RETAINING WALL	R	SEVERE LEAN
1013	ACER BUERGERIANUM	TRIDENT MAPLE	25.0	G	2.4	A	NONE	P	SEVERIC EEP IIV
1014	ACER BUERGERIANUM	TRIDENT MAPLE	41.4	G	3.0	A	NONE	P	
1015	PICEA GLAUCA	WHITE SPRUCE	25.0	G	2.4	Α	NONE	P	
1016	GLEDITSIA TRIACANTHOSE VAR. INERMIS	HONEYLOCUST	20.0	F	2.4	Α	NONE	P	
1017	GLEDITSIA TRIACANTHOSE VAR. INERMIS	HONEYLOCUST	25.0	F	2.4	A	NONE	P	
1018	TILIA AMERICANA	BASSWOOD	35.0	G	3.0	A	NONE	P	
1019	MALUS TREE	CRABAPPLE TREE	15.0	G	2.4	A	NONE	P	
1020	ACER PLATANOIDES	NORWAY MAPLE	35.0	G	3.0	A	NONE	P	
1021	ACER PLATANOIDES	NORWAY MAPLE	30.0	G	2.4	A	IMPACTED: UTILITY EASEMENT	R	
1022	GLEDITSIA TRIACANTHOSE VAR. INERMIS	HONEYLOCUST	35.0	G	3.0	A	IMPACTED: UTILITY EASEMENT	R	
1023	GLEDITSIA TRIACANTHOSE VAR. INERMIS	HONEYLOCUST	30.0	G	2.4	A	NONE	P	
1024	ACER PLATANOIDES	NORWAY MAPLE	30.0	G	2.4	A	NONE	P	
1025	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	25.0	F	2.4	A	NONE	P	
			_	P				P	MILICY CAD
1026 1027	ACER PLATANOIDES	NORWAY MAPLE	90.0		5.4	M	NONE	P	MILKY SAP
1027	ACER BUERGERIANUM	TRIDENT MAPLE	85.0	F	5.4	M	NONE	P	
	QUERCUS RUBRA	RED OAK	100.0	G	6.0	M	NONE		
1029	QUERCUS RUBRA	RED OAK	110.0	G	6.0	M	NONE	P	
1030	QUERCUS RUBRA	RED OAK	90.0	G	5.4		NONE		
1475	QUERCUS ALBA	WHITE OAK	21.5	G	2.4	M	NONE	P	
1476	QUERCUS ALBA	WHITE OAK	34.5	G	3.0	M	NONE	P	
1477	QUERCUS RUBRA	RED OAK	34.5	G	3.0	M	NONE	P	CEVEDE CAN (ET/A) A A A A A A A A A A A A A A A A A A
1478	BETULA ALLEGHANIENSIS	YELLOW BIRCH	65.0	F	4.2	M	NONE	P	SEVERE CAVITY IN MAIN LEADER
1481	MORUS ALBA	MULBERRY	13.0	F	2.4	A	NONE	P	
1482	PRUNUS VIRGINIANA	CHOKECHERRY	13.5	F	2.4	M	NONE	P	
1483	MORUS ALBA	MULBERRY	21.5	F	2.4	M	NONE	P	
1484	QUERCUS BICOLOR	SWAMP WHITE OAK	54.0	F	3.6	M	NONE	P	
1485	QUERCUS BICOLOR	SWAMP WHITE OAK	27.5	F	2.4	M	NONE	P	
1486	MORUS ALBA	MULBERRY	23.0	F	2.4	M	NONE	P	
1487	QUERCUS BICOLOR	SWAMP WHITE OAK	52.0	F	3.6	M	NONE	P	
1488	QUERCUS BICOLOR	SWAMP WHITE OAK	49.5	F	3.0	M	NONE	P	
1489	ACER	MAPLE	45.7	F	3.0	M	NONE		
1491	QUERCUS BICOLOR	SWAMP WHITE OAK	28.0	F	2.4	M	NONE	P	
1492	QUERCUS BICOLOR	SWAMP WHITE OAK	35.5	F	3.0	M	NONE	P	
1493	QUERCUS BICOLOR	SWAMP WHITE OAK	30.0	F	2.4	M	NONE	P	
1494	QUERCUS BICOLOR	SWAMP WHITE OAK	42.5	F	3.0	M	NONE CRADING	P	CHIMAD
G-01 a	RHAMNUS CATHARTICA	COMMON BUCKTHORN	20.0	G	2.4	S	IMPACTED: GRADING	R	CLUMP
b	RHAMNUS CATHARTICA	COMMON BUCKTHORN	18.5	G	2.4	S	IMPACTED: PARKING LOT	R	CLUMP
c	RHAMNUS CATHARTICA	COMMON BUCKTHORN	14.0	G	2.4	S	IMPACTED: BUILDING CONSTRUCTION	R	CLUMP
d	RHAMNUS CATHARTICA	COMMON BUCKTHORN	16.0	G	2.4	S	IMPACTED: BUILDING	R	CLUMP
G-02 a	RHAMNUS CATHARTICA	COMMON BUCKTHORN	23.5	G	2.4	S	IMPACTED: BUILDING, CONCRETE APRON	R	CODOMINANT (2 STEMS); INVASIVE SPECIES
b	RHAMNUS CATHARTICA	COMMON BUCKTHORN	19.0	G	2.4	S	IMPACTED: BUILDING	R	INVASIVE SPECIES
lc.	RHAMNUS CATHARTICA	COMMON BUCKTHORN	15.5	G	2.4	S	IMPACTED: BUILDING	R	INVASIVE SPECIES

TREE NO.	OR GRP	BOTANICAL NAME	COMMON NAME	n)	(2)	n)	(3)	IMPACTS OF DEVELOPMENT (4)	RECOMMENDATION <sup>(5</sup>	COMMENTS (6)
				ОВН (ст)	CONDITION <sup>(2</sup>	MINIMUM TREE PROTECTION ZONE (MTPZ) (m)	OWNERSHIP <sup>(3</sup>	IMPACTS OF DEVELOPMENT		COMMENTS
le	<u> </u>	RHAMNUS CATHARTICA	COMMON BUCKTHORN	20.5	G	2.4	S	IMPACTED: BUILDING	R	INVASIVE SPECIES
f	•	RHAMNUS CATHARTICA	COMMON BUCKTHORN	23.5	G	2.4	S	IMPACTED: BUILDING	R	INVASIVE SPECIES
g		RHAMNUS CATHARTICA	COMMON BUCKTHORN	23.5	G	2.4	S	IMPACTED: TRUCKING COURT	R	INVASIVE SPECIES
h	1	RHAMNUS CATHARTICA	COMMON BUCKTHORN	22.5	G	2.4	S	IMPACTED: TRUCKING COURT	R	INVASIVE SPECIES
i		RHAMNUS CATHARTICA	COMMON BUCKTHORN	17.0	G	2.4	S	IMPACTED: TRUCKING COURT, TRAILER PARKING	R	INVASIVE SPECIES
j		RHAMNUS CATHARTICA	COMMON BUCKTHORN	22.5	G	2.4	S	IMPACTED: TRUCKING COURT	R	INVASIVE SPECIES
G-03 a		PINUS STROBUS	EASTERN WHITE PINE	15.0	F	2.4	S	NONE	Р	
b	)	PINUS STROBUS	EASTERN WHITE PINE	15.0	G	2.4	S	NONE	Р	
c		PINUS STROBUS	EASTERN WHITE PINE	12.0	Р	2.4	S	NONE	Р	
G-04 a	1	PINUS STROBUS	EASTERN WHITE PINE	15.0	G	2.4	S	NONE	Р	
b	)	PINUS STROBUS	EASTERN WHITE PINE	15.0	G	2.4	S	NONE	Р	
c		PINUS STROBUS	EASTERN WHITE PINE	15.0	G	2.4	S	NONE	Р	
G-05 a		PINUS STROBUS	EASTERN WHITE PINE	15.0	G	2.4	S	NONE	Р	
b	)	PINUS STROBUS	EASTERN WHITE PINE	15.0	G	2.4	S	NONE	Р	
С		PINUS STROBUS	EASTERN WHITE PINE	10.0	G	2.4	S	NONE	Р	
G-06 a	l	PINUS STROBUS	EASTERN WHITE PINE	10.0	G	2.4	S	NONE	Р	
b	)	PINUS STROBUS	EASTERN WHITE PINE	10.0	G	2.4	S	NONE	Р	
G-07 a	1	PICEA GLAUCA	WHITE SPRUCE	10.0	G	2.4	М	NONE	P	
b	)	PICEA GLAUCA	WHITE SPRUCE	10.0	G	2.4	М	NONE	Р	
752)G-08 a		PINUS	PINE	10.0	G	2.4	М	NONE	Р	
b	)	PINUS	PINE	11.0	G	2.4	М	NONE	Р	
'57)G-09 a	l	ULMUS PUMILA	SIBERIAN ELM	34.0	F	3.0	М	NONE	Р	
b	)	ULMUS PUMILA	SIBERIAN ELM	25.0	F	2.4	М	NONE	P	
C		ULMUS PUMILA	SIBERIAN ELM	21.50	P	2.4	M	NONE	P	
0	l	ULMUS PUMILA	SIBERIAN ELM	25.50	P	2.4	М	NONE	Р	
G-10 a				35.0	G	3.0	Α	NONE	P	
b	)			35.0	G	3.0	Α	NONE	P	
G-11 a		PICEA PUNGENS	BLUE SPRUCE	20.0	G	2.4	Α	NONE	P	
0	)	PICEA PUNGENS	BLUE SPRUCE	20.0	G	2.4	Α	NONE	P	
G-12 a		PICEA ABIES	NORWAY SPRUCE	20.0	G	2.4	Α	NONE	P	
D	)	PICEA ABIES	NORWAY SPRUCE	20.0	G	2.4	A	NONE	P	WITH COMPANY TO A PART OF THE
G-13 a		GLEDITSIA TRIACANTHOSE VER. INERMIS	HONEYLOCUST	21.5	G	2.4	M	NONE	P	WITH SPINES/THORNS
6.44	)	GLEDITSIA TRIACANTHOSE VER. INERMIS	HONEYLOCUST	17.0	G	2.4	M	NONE		WITH SPINES/THORNS
G-14 a		PICEA PICEA	SPRUCE SPRUCE	11.0 11.0	G G	2.4	M	NONE NONE	P P	
C 15 a		CELTIS OCCIDENTALIS	HACKBERRY	11.0	G	2.4	M	NONE	P	
G-15 a	\	CELTIS OCCIDENTALIS  CELTIS OCCIDENTALIS	HACKBERRY	11.5	G	2.4	M	NONE	P	
752)G-16 a	,	PINUS	PINE	12.0	G	2.4	M	NONE	P	
/52)G-16 a	\	PINUS	PINE	13.0	G	2.4	M	NONE	P	
G-17 a	,	TILIA AMERICANA	BASSWOOD	11.5	G	2.4	M	NONE	P	
G-1/ d	1	TILIA AMERICANA TILIA AMERICANA	BASSWOOD	12.0	G	2.4	M	NONE	P	
-	, :	TILIA AMERICANA	BASSWOOD	13.5	G	2.4	M	NONE	P	
G-18 a		ROBINIA PSEUDOACACIA	BLACKLOCUST	18.5	G	2.4	M	NONE	P	
0-10 9	)	ROBINIA PSEUDOACACIA  ROBINIA PSEUDOACACIA	BLACKLOCUST	13.5	G	2.4	M	NONE	P	
2		ROBINIA I SEODOACACIA	BLACKLOCUST	20.0	G	2.4	M	NONE	P	
764)G-19 a		QUERCUS ALBA	WHITE OAK	18.5	G	2.4	M	NONE	P	
0-10-13 d		QUERCUS ALBA	WHITE OAK	16.0	G	2.4	M	NONE	P	

EXISTING	G TREE	IDENTIFICATION TABLE								
TREE NO	. OR GRP	BOTANICAL NAME	COMMON NAME	DBH (cm)	CONDITION (2)	MINIMUM TREE PROTECTION ZONE (MTPZ) (m)	OWNERSHIP <sup>(3)</sup>	IMPACTS OF DEVELOPMENT <sup>(4)</sup>	RECOMMENDATION <sup>(5</sup>	COMMENTS <sup>(6)</sup>
	С	QUERCUS ALBA	WHITE OAK	12.5	F	2.4	М	NONE	Р	
	d	QUERCUS ALBA	WHITE OAK	11.5	F	2.4	М	NONE	Р	
G-20	a	ULMUS	ELM	11.5	F	2.4	М	NONE	Р	
	b	ULMUS	ELM	27.0	F	2.4	М	NONE	Р	
	С	ULMUS	ELM	16.0	F	2.4	М	NONE	Р	
G-21	a	QUERCUS ALBA	WHITE OAK	15.5	F	2.4	М	NONE	Р	
	b	QUERCUS ALBA	WHITE OAK	21.0	F	2.4	М	NONE	Р	
G-22	a	FRAXINUS AMERICANA	WHITE ASH	15.5	F	2.4	М	NONE	Р	
	b	FRAXINUS AMERICANA	WHITE ASH	15.0	F	2.4	М	NONE	Р	
G-23	a	ACER X FREEMANII	FREEMAN MAPLE	14.0	G	2.4	М	NONE	Р	
G-24	a	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	21.6	F	2.4	М	NONE	Р	
	b	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	17.3	F	2.4	М	NONE	P	
	С	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	22.5	F	2.4	М	NONE	Р	
G-25	a	MORUS ALBA	MULBERRY	13.0	F	2.4	Α	NONE	P	
	b	MORUS ALBA	MULBERRY	14.5	F	2.4	Α	NONE	P	
	С	MORUS ALBA	MULBERRY	21.5	F	2.4	Α	NONE	Р	

(1) Trees recommended for PRESERVING in SHADED BOXES

(2) Condition: Good (G) - dead branches less than 10%; signs of good compartmentalization on any wounds; no structural defects

Fair (F) -10-30% dead branches; size or occurrence of wounds present some concerns; minor structural defects

Poor (P) - more than 30% dead branches; weak compartmentalization; early leaf drop; presence of insects or disease; major structural defects

Dead (D) - tree shows no signs of life

(3) Ownership: S - Subject Property
A - Adjacent Property

M - Municipal Property

(4) Impacts: NONE - no construction activity occurs at or within the dripline of a tree.

LIMITED: XXX - construction activity occurs at or within the dripline of a tree, but is not likely to lead to tree death in the short term (5-10 years) if precautionary measures are taken; this may require root pruning.

IMPACTED: XXX - construction activity (XXX = structures, fencing, trenching, grading, etc) which requires the direct removal of a tree or occurs within a significant portion of the canopy/root zone, such that the activity will significantly affect tree health leading to death in the short term

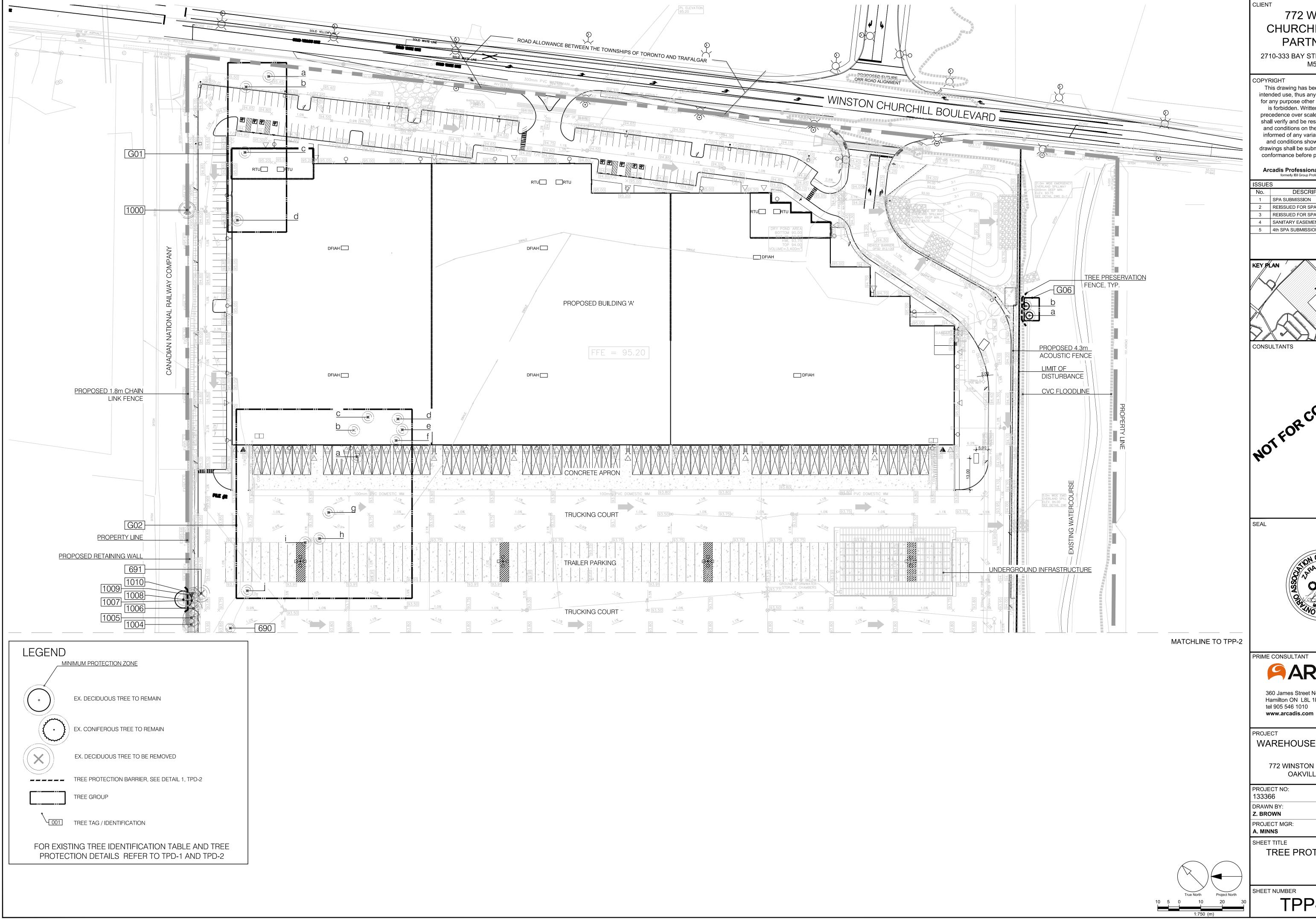
(5) Recommendation: P - Preserve

R - Remove

T - Transplant

(6) Comments based on tree health, condition, structure and existing physical constraints; recommendations for pruning or decompaction.

## APPENDIX D - TREE PROTECTION PLAN



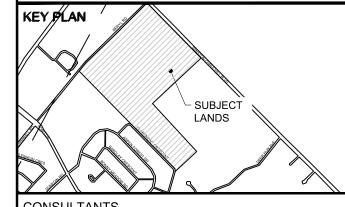
772 WINSTON CHURCHILL LIMITED PARTNERSHIP

2710-333 BAY STREET TORONTO, ON M5H 2R2

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Arcadis Professional Services (Canada) Inc. formerly IBI Group Professional Services (Canada) Inc.

ISSUES								
No.	DESCRIPTION	DATE						
1	SPA SUBMISSION	2021-05-31						
2	REISSUED FOR SPA	2021-11-10						
3	REISSUED FOR SPA	2022-12-15						
4	SANITARY EASEMENT SUBMISSION	2023-09-26						
5	4th SPA SUBMISSION	2023-11-30						







PRIME CONSULTANT



360 James Street North - Suite 200 Hamilton ON L8L 1H5 Canada tel 905 546 1010

WAREHOUSE DEVELOPMENT

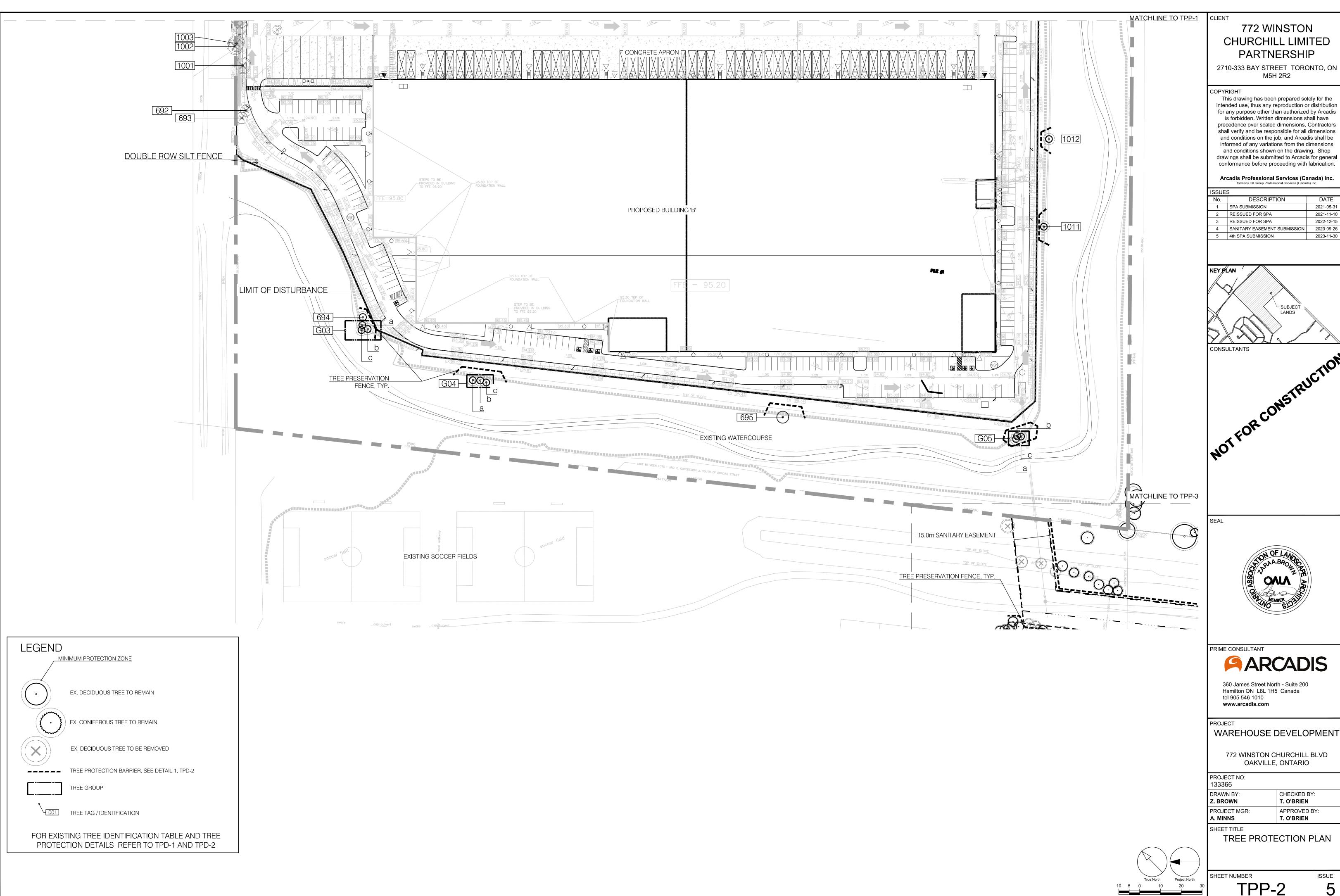
772 WINSTON CHURCHILL BLVD OAKVILLE, ONTARIO

CHECKED BY: T. O'BRIEN PROJECT MGR: APPROVED BY: T. O'BRIEN

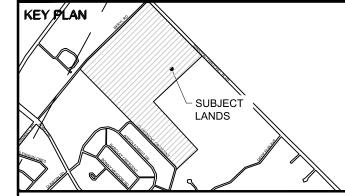
TREE PROTECTION PLAN

SHEET NUMBER

ISSUE 5



	lormeny ibi Group Froiessional Services (Cana-	Ja) IIIC.
ISSUE		
No.	DESCRIPTION	DATE
1	SPA SUBMISSION	2021-05-31
2	REISSUED FOR SPA	2021-11-10
3	REISSUED FOR SPA	2022-12-15
4	SANITARY EASEMENT SUBMISSION	2023-09-26
5	4th SPA SUBMISSION	2023-11-30







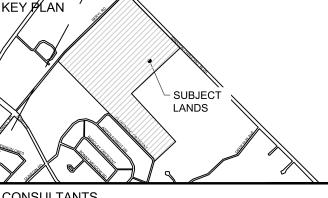
772 WINSTON CHURCHILL LIMITED PARTNERSHIP

2710-333 BAY STREET TORONTO, ON M5H 2R2

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360 James Street North - Suite 200 Hamilton ON L8L 1H5 Canada

WAREHOUSE DEVELOPMENT

772 WINSTON CHURCHILL BLVD

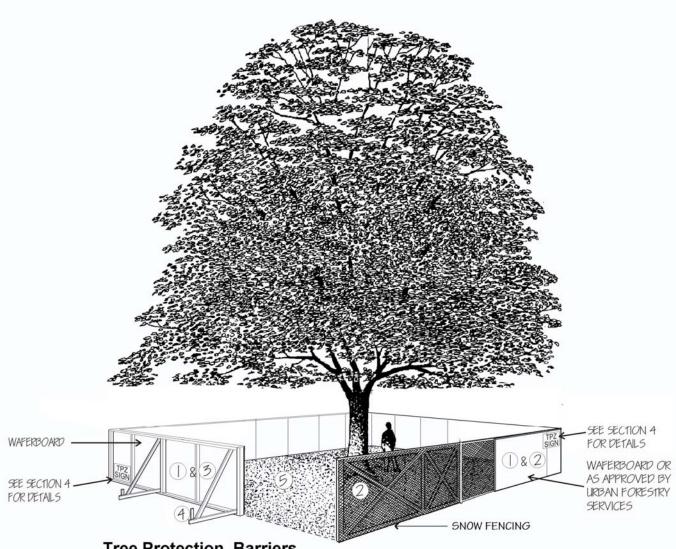
CHECKED BY: T. O'BRIEN APPROVED BY:

T. O'BRIEN

## APPENDIX E - TOWN OF OAKVILLE TREE PROTECTION DETAIL



# SCHEDULE 1 TREE PROTECTION BARRIER

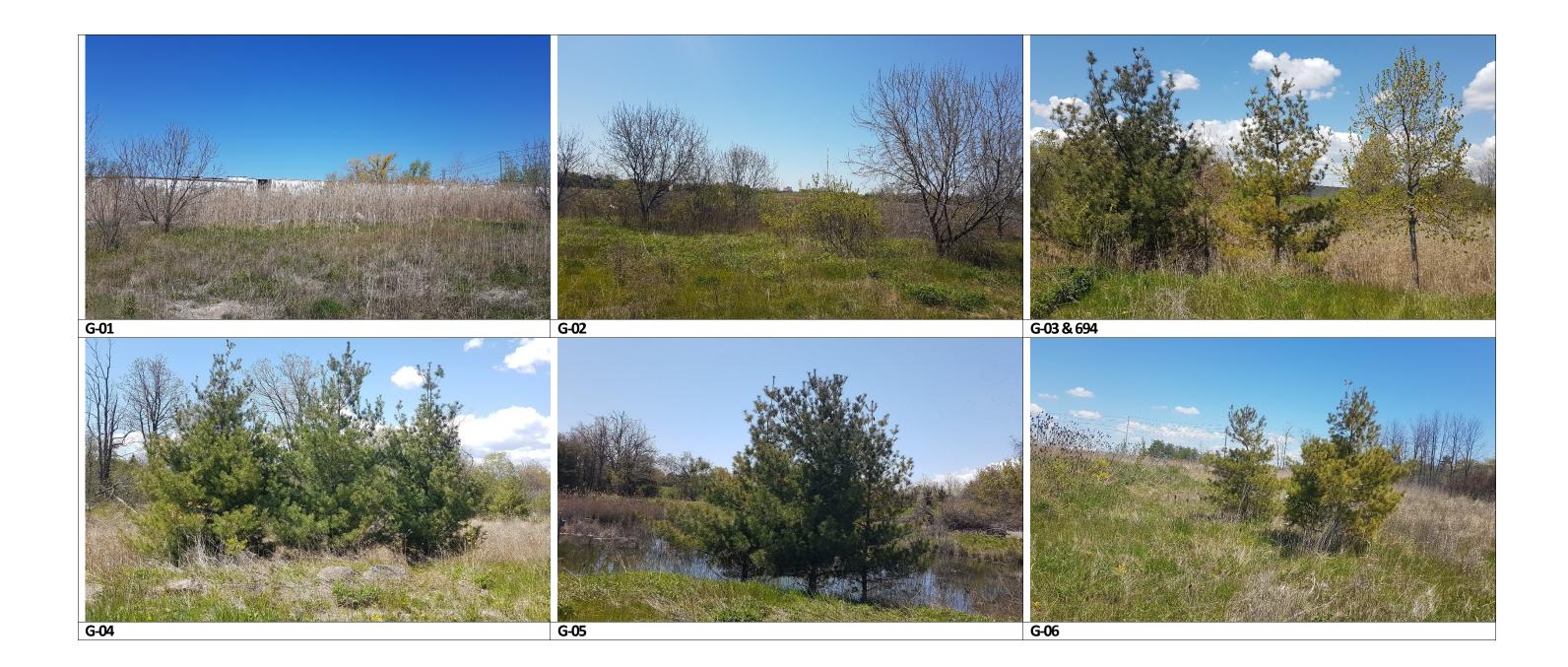


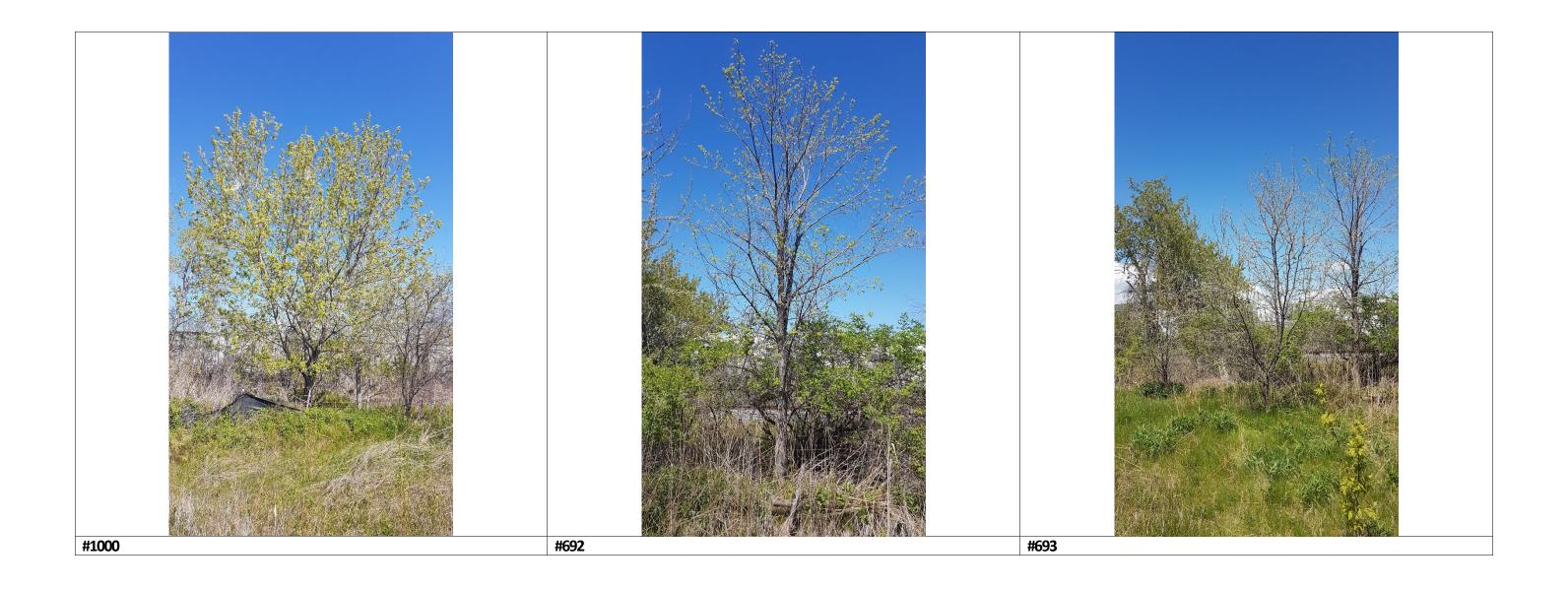
Tree Protection Barriers

PLYWOOD

- 1 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.

## APPENDIX F – SITE PHOTOS













Concrete pathway at Acacia Court looking north

Existing trail (at tree #741) looking west

North of the easement/berm looking west

## APPENDIX G – TREE VALUATION TABLE

#	BOTANICAL NAME	COMMON NAME	DBH (cm)	TRUNK AREA <sup>1</sup>	AREA OF REPLACEMENT TREE (SQ CM) <sup>2</sup>	APPRAISED TREE TRUNK INCREASE		TALLED OST <sup>3</sup>	BASIC TREE COST	SPECIES RATING <sup>4</sup>	CONDITION	COND. RATING	LOCATION RATING	PRAISED VALUE	APF	FINAL PRAISED /ALUE <sup>5</sup>
740	THUJA OCCIDENTALIS	WHITE CEDAR	20.0	314.0	79.0	235.0	1529.9	\$ 607.50	\$ 2,137.35	0.70	G	0.85	0.75	\$ 953.79	\$	953.79
741	ACER NEGUNDO	MANITOBA MAPLE	23.1	418.9	79.0	339.9	2212.6	\$ 250.53	\$ 2,463.17	0.39	F	0.7	0.75	\$ 504.33	\$	744.00
742	JUGLANS NIGRA	BLACK WALNUT	27.0	572.3	79.0	493.3	3211.2	\$ 716.67	\$ 3,927.83	0.67	G	0.85	0.75	\$ 1,677.67	\$	1,677.67
743	ACER SACCHARINUM	SILVER MAPLE	23.1	418.9	79.0	339.9	2212.6	\$ 877.50	\$ 3,090.14	0.61	F	0.7	0.75	\$ 989.62	\$	989.62
744	ACER X FREEMANII	FREEMAN MAPLE	18.0	254.3	79.0	175.3	1141.5	\$ 925.00	\$ 2,066.46	0.65	G	0.85	0.75	\$ 856.29	\$	856.29
745	JUGLANS NIGRA	BLACK WALNUT	12.0	113.0	79.0	34.0	221.6	\$ 716.67	\$ 938.27	0.67	F	0.7	0.75	\$ 330.04	\$	744.00
746	JUGLANS NIGRA	BLACK WALNUT	22.0	379.9	79.0	300.9	1959.1	\$ 716.67	\$ 2,675.79	0.67	G	0.85	0.75	\$ 1,142.90	\$	1,142.90
747	ACER X FREEMANII	FREEMAN MAPLE	16.5	213.7	79.0	134.7	877.0	\$ 925.00	\$ 1,802.00	0.65	G	0.85	0.75	\$ 746.70	\$	746.70
749	QUERCUS RUBRA	RED OAK	27.0	572.3	79.0	493.3	3211.2	\$ 1,055.00	\$ 4,266.16	0.81	G	0.85	0.75	\$ 2,202.94	\$	2,202.94
756	QUERCUS ALBA	WHITE OAK	25.1	494.6	79.0	415.6	2705.3	\$ 1,137.50	\$ 3,842.78	0.79	G	0.85	0.75	\$ 1,935.32	\$	1,935.32
757	ULMUS PUMILA	SIBERIAN ELM	21.5	362.9	79.0	283.9	1848.0	\$ 250.53	\$ 2,098.50	0.39	F	0.7	0.75	\$ 429.67	\$	744.00
765	ACER X FREEMANII	FREEMAN MAPLE	26.0	530.7	79.0	451.7	2940.3	\$ 925.00	\$ 3,865.31	0.65	F	0.7	0.75	\$ 1,319.04	\$	1,319.04
771	ACER X FREEMANII	FREEMAN MAPLE	14.5	165.0	79.0	86.0	560.2	\$ 925.00	\$ 1,485.16	0.65	G	0.85	0.75	\$ 615.41	\$	744.00
772	ACER NEGUNDO	MANITOBA MAPLE	42.0	1384.7	79.0	1305.7	8500.4	\$ 250.53	\$ 8,750.90	0.39	G	0.85	0.75	\$ 2,175.69	\$	2,175.69

FINAL VALUE \$ 16,975.96

<sup>1.</sup> TA = 0.785(DBH)<sup>2</sup>. Formula based on Table 4.6 Metric Units. Trunk Areas (TA) and Adjusted Trunk Areas (ATA) based on trunk diameter (d) at 1.4m. CTLA Guide for Plant Appraisal, 9th Edition (2000)

<sup>2.</sup> Based on a 10cm DBH replacement tree size

<sup>3.</sup> Values based on unit tree costs outlined in Ontario Supplement CTLA Guide for Plant Appraisal, 10th Edition (2021). Species not included

<sup>4.</sup> Species rating based on Ontario Supplement CTLA Guide for Plant Appraisal, 8th Edition (2003)

<sup>5.</sup> For trees with appraisal values less than \$744.00 (Town of Oakville's minimum value per tree), values were set to \$744.00.