# 772 Winston Churchill Boulevard Oakville, ON L6J 7X4 

prepared for

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

prepared by

## ISA© Certified Arborist

Zara Brown, ON-2252A
PROJECT NO: 123558/141237

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Revision 9

## 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-4) and Tree Protection Details (TPD-1 to TPD-3) accompany this report, updated May 2024 (Issue 6). 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 8.0 m 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 indicated in the Tree Protection Plans (TPP-1 to TPP-4). |
| :---: | :---: |
| Botanical Name | formal scientific name. |
| Common name | locally known English name. |
| DBH | diameter at breast height, in centimetres, measured at 1.4 m above the adjacent ground. |
| Condition | condition of the specimen based on the visual assessment of the tree health reported as: <br> 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 <br> 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-3) |
| Ownership | Ownership of the tree or tree group |

S - Subject Property
A - Adjacent Property
M - Municipal Property

## Impacts of Development

## Recommendation

Comments
determination of whether or not the specimen is impacted by the 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.
determination to retain/preserve, remove or transplant the specimen.
additional information on tree specimen

The tree inventories were conducted on May 13, 2021, September 29, 2021 and May 2, 2024 to include all trees within the disturbed area -10 cm dbh and greater on private lands and all tree regardless of DBH on public lands. Trees were located using an android GIS application MapIt GIS Version 7.6.0.0Core accuracy of tree locations are within 5 m of the actual location, for the first two inventories. Tree locations were updated using surveyed information provided by KRCMAR Surveyors Ltd dated October 25, 2022. The final inventory was complete using the iPhone 14 Field Maps application with an accuracy of 2 m . This information is summarized in Existing Tree Identification Table (TPD-1 \& TPD-2).

## Tree Species

A total of one hundred eighty-five (185) individual trees and fifty-four (54) tree groups were observed for a total of three hundred and forty (340) trees. Species include:

| Balsam Fir | (Abies balsamea) <br> Trident Maple |
| :--- | :--- |
| (Acer buergerianum) |  |
| Manitoba Maple | (Acer negundo) |
| Norway Maple | (Acer platanoides) |
| Freeman Maple | (Acer x freemanii) |
| Red Maple | (Acer rubrum) |
| Silver Maple | (Acer saccharinum) |
| Amur Maple | (Acer ginnala) |
| Ohio Buckeye | (Aesculus glabra) |
| Yellow Birch | (Betula alleghaniensis) |
| Hackberry | (Celtis occidentalis) |
| Dogwood | (Cornus spp.) |
| Honeylocust | (Gleditsia triacanthos) |
| Kentucky Coffeetree | (Gymnocladus dioicus) |
| Black Walnut | (Juglans nigra) |
| Eastern White Cedar | (Juniperus virginiana) |
| Tamarack | (Larix laricina) |
| Tulip Tree | (Liriodendron tulipifera) |
| Mulberry | (Morus alba) |
| Norway Spruce | (Picea abies) |
|  |  |


| White Spruce | (Picea glauca) |
| :--- | :--- |
| Blue Spruce | (Picea pungens) <br> Austrian Pine |
| (Pinus nigra) |  |
| Eastern White Pine | (Pinus strobus) |
| American Sycamore | (Platanus occidentalis) |
| Trembling Aspen | (Populus tremuloides) |
| Cherry | (Prunus spp.) |
| Pear | (Pyrus spp.) |
| White Oak | (Quercus alba) |
| Swamp White Oak | (Quercus bicolor) |
| Red Oak | (Quercus rubra) |
| Columnar Oak | (Quercus spp.) |
| Common Buckthorn | (Rhamnus cathartica) |
| Black Locust | (Robinia pseudoacacia) |
| Japanese Tree Lilac | (Syringa reticulata) |
| 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 $34,490.92 \mathrm{~m}^{2}$ and $28,972.27 \mathrm{~m}^{2}$, 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 (Appendix B A-1.0, dated December 19, 2023).

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

## Findings and Recommendations

The development impacts one hundred fifty-six (156) existing trees. Of the one hundred fifty-six (156) trees impacted one hundred eighteen (118) are to be removed and thirty-eight (38) trees are proposed to be transplanted. The remaining trees within five (5) metres of disturbance will be retained with tree protection measures in place, in good condition, for the duration of construction.

## Management and Quality Assurance

## Pre-Construction Phase

1. TPZ Fencing: Tree Protection measures shall be installed prior to any site work
2. TPZ Signage: 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: $\quad$ 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:
2. Plant Health Mitigation: If required, treatments should be prescribed where evidence tion. 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 private 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 |
| :---: | :---: | :---: | :---: |
| <10 | 0 | 36 | 0 |
| 10-15 | 1 | 28 | 28 |
| 16-25 | 2 | 20 | 40 |
| 26-35 | 3 | 8 | 24 |
| >35 | DBH*0.10 | 0 | 0 |
| TOTAL 9292 |  |  |  |

A tree valuation was calculated for the public trees proposed for removal within the sanitary easement. The value was calculated using the Trunk Formula Technique as described in the CTLA Guide for Plant Appraisal, 10th Edition (ISA, 2019).

## COMPENSATION SUMMARY

| Number of dead trees | 8 |
| :--- | ---: |
| Number of private trees removed < 10 cm DBH (not including dead) | 36 |
| Number of private trees removed $>10 \mathrm{~cm}$ DBH (not including dead) | 56 |
| Number of trees required for compensation | $\mathbf{9 2}$ |
| Number of public trees removed (not including dead) | 18 |
| Final appraised values of public trees to be removed (Appendix D) | $\mathbf{\$ 1 9 , 1 1 5 . 2 1}$ |

## 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.
2. Tree protection barriers shall be erected 1 m 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 10 cm beyond 6 m of the area proposed to be disturbed for construction. Should the works associated with construction
more move more than 5 m 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,

## T KعMP

Taylor Kemp
ISAC Certified Arborist \# ON-2921A
Taylor.Kemp@Arcadis.com


Zara Brown, OALA, CSLA, RLA, PMP
ISA© Certified Arborist \# ON-2252A, Landscape
Architect
Zara.Brown@Arcadis.com

# Arcadis 

Arborist Report- 772 Winston Churchill Boulevard, Oakville ON

APPENDIX A - EXISTING SITE


# Arcadis 

Arborist Report- 772 Winston Churchill Boulevard, Oakville ON

APPENDIX B - SITE PLAN


# Arcadis 

Arborist Report- 772 Winston Churchill Boulevard, Oakville ON

APPENDIX C - SITE PHOTOS


|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \#1000 |  | \#692 |  | \#693 |  |


|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| \#744 | \#751 |  | \#1030 |  |
|  |  |  |  |  |
| G-08 | G-10 |  | \#774 |  |



# Arcadis 

Arborist Report- 772 Winston Churchill Boulevard, Oakville ON

APPENDIX D - TREE VALUATION TABLE


1. TA $=0.785$ (DBH) ${ }^{2}$.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, 9 th Edition (2000)
2. Based on a 10 cm DBH replacement tree size
3. Values based on unit tree costs outlined in Ontario Supplement CTLA Guide for Plant Appraisal, 10th Edition (2021). Species not included
4. Species rating based on Ontario Supplement CTLA Guide for Plant Appraisal, 8th Edition (2003)
5. For trees with appraisal values less than $\$ 744.00$ (Town of Oakville's minimum value per tree), values were set to $\$ 744.00$.
