ATTACHMENT 3

THOMSON WATSON CONSULTING ARBORISTS Inc.

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July 30, 2024

Cantam Group Ltd 850 Tapscott Road, Unit 51 Toronto, Ontario. M1X 1N4

RE: Tree Inventory and Preservation Plan for 65 Wallace Street, Vaughan

INTRODUCTION

Thomson Watson Consulting Arborist Inc. was engaged to prepare a Tree Inventory and Preservation Plan for 65 Wallace Street in Vaughan. It is proposed to demolish the existing dwelling and to rebuild with a larger footprint. This report provides information regarding trees on and adjacent to the subject property and should satisfy the City of Vaughan requirements.

INSPECTION

The trees were inspected on December 21, 2022. Trees on the municipal boulevard and private trees with diameters of 20 cm or more (basal diameter and/or diameter 1.4 metres from grade) on the subject property or within six metres of the subject property adjacent to the proposed construction activity, access or storage were examined and inventoried. The inventory information is provided on the attached excel spreadsheet titled Tree Inventory.

For each tree, the species was identified, diameter at breast height and at trunk base measured and the health and structural condition determined. Tree inspection was limited to visual on-ground examination without dissection, excavation, probing, or coring. Furthermore, any data and information collected is based on the conditions at the time of inspection. The number given each tree and its Tree Protection Zone were placed on the site plan and this plan is attached as Tree Preservation Plan. Photographs of the significant trees were taken and these are attached.

DOCUMENTS PROVIDED

The following documents were provided for the creation of the Tree Inventory and Preservation Plan:

-A1 Site Plan dated 07/02/2024 and

A2 Basement Floor Plan dated 04-04-2023 both by Cantam Group Ltd Site Services Plans were not provided

DISCUSSION

It is proposed to demolish the existing house, remove a gabion basket supported deck off the back of the house and rebuild with a house footprint that extends further back on the property.

To allow adequate construction access around the house and foundation excavation overdig, it is proposed to remove Trees 1, 2, 4, 24 and 25. Tree 1 is located on the south neighbour's property and its removal will require permission of the tree's owner.

Tree 5, which has 100 cm and 80 cm diameters, has been examined by Jordan Barker, ISA Certified Arborist and Butternut Health Assessor (663). He has determined that Tree 5 is a

Butternut hybrid. A Butternut Health Assessment report dated February 10, 2023 is available which outlines the assessment.

It is proposed to preserve Tree 5 but the tree will be injured as foundation excavation and limited construction access will occur within its 6.0 metre Tree Protection Zone. The following seven paragraphs describe how to protect the tree during the separate portions of the construction process.

Branches in Tree 5 within 2.0 metres of the proposed house and roof will need to be pruned for clearance. A tree care company which is acceptable to the owner of Tree 5 should be hired to prune the tree. A minimum amount of canopy should be removed to avoid excessive injury to the tree.

When the existing house is demolished, the house foundation within 6.0 metres of Tree 5 can be pulled into the footprint of the house but no additional excavation beyond the foundation can occur. Under the direct supervision of a qualified Arborist, the raised soil deck area and stones within the gabion baskets will be pulled into the footprint of the house. The soil will be removed in layers and the Arborist will stop of soil removal once the grade of the backyard is reached or significant roots are exposed within the soil.

Once the gabion basket and deck soil is removed, a Tree Protection Fence will be erected 2.0 metres north of the proposed house or 1.4 metres south of the north property line, within 6.0 metres of Tree 5. This solid Fence should be left in place for the duration of house construction.

Once the gabion basket and deck soil is removed, Horizontal Protection Boards with 10 cm of underlying wood chips will be placed over the exposed soil to the south of the Tree Protection Fence within 6.0 metres of Tree 5. The Boards do not need to be placed within the footprint of the existing house, as no roots will be within this area.

Prior to the machine excavation of the new house foundation, a trench will be dug along the northeast portion of the foundation under the direct supervision of a qualified Arborist; any Horizontal Protection Boards within the footprint of this trench will be cut to allow access. The foundation will be installed 6.0 metres south and 4.9 metres southwest of the tree. The overdig will be kept to a maximum width of 100 cm. The trench can be dug by hand, air spade or hydro-vac. It is proposed to cut all exposed roots on the tree side of the trench. The three piers which each measure 70 cm in width will be dug at the same time. These holes will not be dug larger than 70 cm in width; no footers at the bottom of the holes are proposed.

The main construction access into the backyard will be kept to the south side of the house. No machinery will be moved or used along the north side of the house, due to the presence of gabion baskets and uneven grade in this area.

Once house construction is completed, no grade changes will be allowed within 6.0 metres of Tree 5. It is recommended that 4 inches of wood chips be left over the exposed soil within 6.0 metres of Tree 5.

Tree 3 is a 73 cm Siberian Elm (*Ulmus pumila*) growing in front of 57 Wallace Avenue. The tree requires a 4.8 metre Tree Protection Zone. A Tree Protection Fence must be placed 4.8 metres to the south of the tree on the subject property. It is expected that this Fence will be placed on the gabion baskets that hold up the grade on the north side of the property.

The trees in the rear yard can be adequately protected with a Tree Protection Fence placed 5 metres to the east of the proposed concrete deck foundation or 3.0 metres west of Tree 6 and minimum 1.8 metres west of Tree 19, extending across the width of the yard.

TREE PERMITS REQUIRED

It is proposed to remove Trees 1, 4, 24, and 25 which have diameters of 20 cm or greater. It is proposed to injure Tree 5. It is also proposed to remove Tree 2, which has a diameter of less than 20 cm. The following documents are required to process the permit application:

- Private Property Tree Removal & Protection: Construction or Infill Application. This form is available on-line.
- Written Consent from Neighbour for the removal of Tree 1 and injury of Tree 5
- Tree Planting Plan showing proposed trees to be planted.
- Application fee payable to the City of Vaughan, Tree Permit Section the required fee will be provided when the application form is submitted on-line.

REPLANTING REQUIREMENTS

The City of Vaughan calculates replacement trees as per the following table:

| DBH of Tree to be Cut or Removed | ' | | Total Replacement Trees Required |
|-------------------------------------|---|-------|----------------------------------|
| 20cm to 30cm | 1 | 4, 24 | 2 |
| 31cm to 40 cm | 2 | 25 | 2 |
| 51 cm or greater | 4 | 1 | 4 |
| | | | 8 trees |

The City of Vaughan will determine the final number of trees that must be replanted to replace the trees.

It is proposed to pay cash-in-lieu of planting these eight trees. At a fee of \$682.50 per tree not planted, a payment of \$5460.00 should be expected.

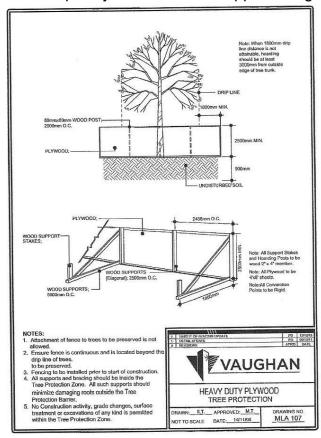
TREE PROTECTION SPECIFICATIONS

1.0 Adherence to Conditions from City of Vaughan

- 1.1 Compliance with all conditions specified by City of Vaughan is required.
- 1.2 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.
- 1.3 It is the property owner's responsibility to discuss potential impacts to trees located near or wholly on adjacent properties or on shared boundary lines with their neighbours. Should such trees be injured to the point of instability or death the applicant may be held responsible through civil action. The applicant would also be required to replace such trees to the satisfaction of City of Vaughan.

2.0 Installation of Tree Protection Fences

- 2.1 Tree Protection Fences must be installed prior to the commencement of any construction activities. Tree Protection Fences shall be erected to protect the trunk and root system of the trees that will remain on the construction site.
- 2.2 The Tree Protection Fences will be placed as shown on the Tree Preservation Plan as described:
- Tree 3 -minimum 4.8 metres south of tree on subject site
- Tree 5 1.4 metres south of north property line within 6.0 metres of Tree 5 once back deck removed
- Tree 6 -minimum 3.0 metres west of Tree 6
- Backyard extending across width of yard, minimum 1.8 metres west of Tree 19
- 2.3 The Fences will be constructed as shown in Standard Hoarding Detail (MLA 107), below.
- 2.4 To the tree side of the Tree Protection Fence, the following will be required:
- no construction:
- no altering of grade by adding fill, excavating, trenching, scraping, dumping or disturbance of any kind.
- no storage of construction materials, equipment, soil, construction waste or debris.
- no disposal of any liquids e.g. concrete sleuth, gas, oil, paint.
- no movement of vehicles, equipment or pedestrians.
- no parking of vehicles or machinery.
- no location of any utilities such as hydro, gas, phone, cable.
- no temporary attachment or support of signs, lights, cables etc.



2.5 Placement of the following items will be outside of the Tree Protection Fence: parking for construction workers, garbage bins, construction equipment, building supplies, lunch area,

and washroom facilities. The area inside of the Tree Protection Fence will not be used for any purpose except the protection of trees and their roots.

2.6 Signs shall be attached to the fence denoting the purpose of the Fence and indicating the Fence cannot be moved or removed without the consent of the City of Vaughan. The sign will read as follows:

Tree Protection Zone (TPZ)

No grade change, storage of materials or equipment is permitted within the TPZ. The Tree Protection Fence must not be removed without the written authorization of the City of Vaughan For information, call City of Vaughan at 905-832-8577

- 2.7 City of Vaughan will be contacted once the Fences have been erected so the Fences can be inspected.
- 2.8 The Fences are to be inspected daily, first thing in the morning, by the Site Supervisor. Any failure or breach of the Tree Protection Fence will be fixed immediately upon discovery.

3.0 Demolition of Existing House and Back Gabion Basket/Soil Deck

- 3.1 The house will be demolished with the walls pulled into the centre of the building.
- 3.2 The excavation machinery will be placed within the footprint of the house. No machinery will be allowed within 6.0 metres of Tree 5.
- 3.3 The gabion basket and soil deck will be removed under the direct supervision of a qualified Arborist, who will direct the removal of the deck to avoid damage to Tree 5.
- 3.4 The soil, stones and gabion baskets will be removed in thin layers within 6.0 metres of Tree 5. The deck will be removed to either the level of the backyard or will stop once significant roots are exposed.
- 3.5 Once the deck is removed, the Tree Protection Fence will be erected south of Tree 5.

4.0 Placement of Horizontal Protection Boards

- 4.1 After the erection of the Tree Protection Fence, Horizontal Protection Boards will be placed over the soil to the south of the Fence within 6.0 metres of Tree 5. The placement of the Horizontal Protection Boards is shown on Tree Preservation Plan.
- 4.2 The Horizontal Protection Boards will be created out of a double layer of 3/4-inch thick, 4-foot wide by 8-foot long solid wood, staggered and screwed together. The ends of the boards will be flush against the Tree Protection Fence, the foundation excavation and adjacent boards. All exposed soil outside of the Tree Protection Fence and within the Tree Protection Zone of Tree 5 will remain covered. The Boards must be adequately secured to the ground.
- 4.3 Ten (10) cm of wood chips must be placed under the Horizontal Protection Boards to help spread the load and reduce soil compaction
- 4.4 The Boards must remain in place throughout the entire project. The location of the Boards cannot be altered, moved or removed in any way without the written authorization of the City of Vaughan.

4.5 No grade change, storage or temporary storage of any materials or equipment, washing of equipment, nor the dumping of any debris is permitted within this area.

5.0 Foundation Excavations

- 5.1 Prior to the machine excavation of the proposed house, a trench will be dug 100 cm from the edge of the foundation wall within 6.0 metres of Tree 5.
- 5.2 The three pier holes will be dug to the required depth within 6.0 metres of Tree 5.
- 5.3 The trench and three pier holes will be dug by hand (alternatively by air spade or hydrovac machinery). These locations are shown on Tree Preservation Plan.
- 5.4 The trench will be dug under the direct supervision of a qualified Arborist. The Arborist will document the roots exposed and cut the exposed roots.
- 5.5 The soil excavated should be placed within the house footprint or removed off site immediately. The soil will not be spread out over the root system of the trees or stored on the Horizontal Protection Boards.

6.0 Construction Phase Tree Protection

- 6.1 Soil that is dug up from the building foundation will be removed off site. A small amount of soil may be stockpiled outside of the Tree Protection Fences for backfilling the foundation. Any additional soil will be brought in when needed.
- 6.2 No pruning of the crowns of any tree is permitted by construction staff. If branches are found to be in the way of construction activities or traffic, pruning of trees should be arranged by the Site Supervisor with ISA or Ontario Certified Arborist.

7.0 Post Construction Tree Maintenance

- 7.1 When all construction has ceased and grading outside the Tree Protection Fences is complete, City of Vaughan will be contacted to arrange a site visit. Completeness of the project will be determined.
- 7.2 Once permission from City of Vaughan is granted, the Tree Protection Fences and Horizontal Protection Boards may be removed.

I trust that this report provides the information you require. If you have any questions or concerns, please contact me.

Yours truly,

Patricia Thomson, B.Sc.F.

I.S.A. Certified Arborist ON-0132A

Attachments: Tree Photographs (2 pages)

Tree Inventory

Tree Condition Notes
Tree Preservation Plan



Tree 1 – 67 cm Norway Maple

Tree 2 – 14.5 cm Colorado Spruce



Tree 3 – 73 cm Siberian Elm

Gabion baskets at front of house



Tree 4 – Manitoba Maple



Tree 5 – Butternut



Base of Tree 5 with gabion basket supported patio to south

Base of Trees 24 (left) and 25 (right)

Inventory Date
December 21, 2022

TREE INVENTORY 65 Wallace Street, Vaughan, Ontario

Arborist : Patricia Thomson Thomson Watson Consulting Arborist Inc.

| Tree No. | Tree Species | Diameter (cm) | Condition | Ownership | Protection Distance Required | Future on Site and Reason for Removal |
|-------------|-----------------|------------------|-------------------------------------|--------------|------------------------------------|--|
| 1 | Norway Maple | 67 | fair | neighbours | 4.2 m | remove - excavation for foundation up to base of trunk |
| 2 | Colorado Spruce | 14.5 | fair-good | private | n | remove - construction access on front yard |
| 3 | Siberian Elm | 73 | fair | neighbours | 4.8 m | preserve |
| 4 | Manitoba Maple | 17, 11 | fair | private | 1.8 m | remove - too close to foundation excavation and access route |
| 5 | Butternut | 100, 80 | fair | neighbours | 6.0 m | injure with foundation excavation and access |
| 6 | Norway Spruce | 49.5 | fair | private | 3.0 m | preserve |
| 7 | Norway Maple | 48 | poor-fair | private | 3.0 m | preserve |
| 8 | Norway Maple | 53 | fair | private | 3.6 m | preserve |
| 9 | Norway Maple | 28.5 | good | private/park | 1.8 m | preserve |
| 10 | Norway Spruce | 53.5 | poor-fair | private | 3.6 m | preserve |
| 11 | Manitoba Maple | 47.5 | poor structure | park | 3.0 m | preserve |
| 12 | Manitoba Maple | 42.5 | poor-fair | park | 3.0 m | preserve |
| 13 | Manitoba Maple | 19.8 | poor | park | 1.8 m | preserve |
| 14 | Manitoba Maple | 28, 23 | poor structure, poor-fair health | private | 1.8 m | preserve |
| 15 | Manitoba Maple | 18.5 | fair | private | | preserve |
| 16 | Manitoba Maple | .31 | poor structure, fair health | private | 2.4 m | preserve |
| 17 | Manitoba Maple | 46.5 | fair | private | 3.0 m | preserve |
| 18 | White Cedar | 23.5 | poor-fair | private | 1.8 m | preserve |
| 19 | White Cedar | 18 | fair | private | | preserve |
| 20 | White Cedar | 28 | fair | private | 1.8 m | removed by homeowner after inventory |
| 21 | White Cedar | 24.5 | fair | private | 1.8 m | removed by homeowner after inventory |
| 22 | White Cedar | 24.5 | poor-fair | private | 1.8 m | removed by homeowner after inventory |
| 23 | White Cedar | 27 | fair | private | 1.8 m | removed by homeowner after inventory |
| 24 | Norway Maple | 21 | fair | private | 1.8 m | remove - too close to proposed foundation excavation |
| 25 | Norway Maple | 40 | fair | private | 2.4 m | remove - too close to proposed foundation excavation |

TREE CONDITION NOTES 65 Wallace Street, Vaughan, Ontario

| | | | | ¥ |
|------|--------------------------|---------------|-------------|--|
| Tree | | Diameter | | |
| No. | Tree Species | (cm) | Condition | Health and Structure Comments |
| | | | | gravel driveway to north, underground girdling roots to east and south, tree |
| | | | | splits into three stems at 2 metres with included bark in union, storm breaks |
| 1 | Norway Maple | 67 | fair | in canopy, poorly pruned to north over driveway and house |
| _ | Colorado | 44.5 | | |
| 2 | Spruce | 14.5 | fair-good | lower trunk deadwood, Pitch Mass Borer on trunk, 3 inch growth rate |
| _ | O:1 : | 70 | | topped and tipped back, tree splits into two stems at 4 m with included bark |
| 3 | Siberian Elm Manitoba | 73 | fair | in union - open crack at union, slime flux infection in wounds |
| , | | 17 11 | foir | hazal diameter of 20 am |
| 4 | Maple | 17, 11 | fair | basal diameter of 20 cm + |
| | | | | tree splits into three stems at 80 cm with south stem cut and decayed |
| 5 | Buttornut | 100 90 | foir | (wound could not be seen due to fence), branch wounds with some wound |
| 5 | Butternut | 100, 80 | fair | decay, few black spots on trunk |
| 6 | Norway Spruce | 49.5 | foir | 2 to 2 inch growth rate approachabling conony at the an leaves to the |
| 0 | Spruce | 49.5 | fair | 2 to 3 inch growth rate, sparse looking canopy, stubs on lower trunk girdling roots over west flare, no flare to south base, one shear plane |
| 7 | Norway Maple | 48 | poor-fair | fracture on northwest branch, extensive interior deadwood, slow growth |
| 8 | Norway Maple | 53 | fair | wound at south base with wood decay, small deadwood |
| 9 | Norway Maple | 28.5 | good | trunk deadwood |
| | Norway | 20.5 | good | li ulik deadwood |
| 10 | Spruce | 53.5 | poor-fair | extensive lower trunk deadwood, slow growth |
| 10 | Manitoba | 33.3 | poor | l |
| 11 | Maple | 47.5 | structure | in park, trunk on 45 degree lean to east and then grows upright |
| | Manitoba | 47.0 | Structure | in park, trunk on 45 degree lean to northeast and then grows upright, metal |
| 12 | Maple | 42.5 | poor-fair | in trunk |
| | Manitoba | 12.0 | poor ium | an a dank |
| 13 | Maple | 19.8 | poor | in park, trunk has growth thru wood and metal fence |
| | | | poor | and the second s |
| | | | structure, | |
| | Manitoba | | poor-fair | trunk girdling at 80 cm from grade with metal fencing, trunk splits into two |
| 14 | Maple | 28, 23 | health | stems at 80 cm with included bark in union, on lean to east |
| | Manitoba | | | |
| 15 | Maple • | 18.5 | fair | cavity at east base, trunk splits into two stems at 3 m |
| | | | poor | , |
| | Manitoba | | structure, | |
| 16 | Maple | 31 | fair health | wound at west base, trunk on lean to east |
| | Manitoba | | | underground girdling root to east, trunk splits into two stems at 2.5 m, stubs |
| 17 | Maple | 46.5 | fair | on trunk |
| 18 | White Cedar | 23.5 | poor-fair | old stem removed at north base, thin canopy, trunk deadwood |
| 19 | White Cedar | 18 | fair | thin canopy |
| | | | | |
| 20 | White Cedar | 28 | fair | column of dead bark up south side of trunk from ground to 2 m, thin canopy |
| 21 | White Cedar | 24.5 | fair | thin canopy |
| | | | | trunk touching neighbour's shed roof, trunk on lean to south over shed, thin |
| 22 | White Cedar | 24.5 | poor-fair | canopy, trunk deadwood |
| 23 | White Cedar | 27 | fair | thin canopy, trunk deadwood |
| 24 | Norway Maple | 21 | fair | in understorey of Tree 25 |
| 25 | Norway Maple | 40 | fair | tag 217970 on trunk, on slope, poorly pruned |

Tree Inventory - December 21, 2022 Page 1 of 1

