Tree Inventory and Preservation Plan for 274 King St. E., Cobourg, Ontario

May 5, 2021

Prepared for: Mina Mekhaiel
MGM Developments Inc.
10 Milner Business Court
3RD Floor, Suite 362
Scarborough, ON
M1B 3C6

Visit: mgmdreamhomes.com
Office: (647) 777-8405
Direct: (647) 777-8404
Cell: (647) 303-3224

Prepared by: Michael Richardson
Richardson Tree Care and Landscaping
P.O. Box 8
Brighton, ON
K0K 1H0

613-475-2877
richardsontreecare@gmail.com

Introduction

At the request of Mina Mekhaiel, I completed a tree inventory of all trees greater than 15 cm 60 mm DBH, on 274 King St. East, Cobourg.

A total of nine trees was inventoried.

Limits of the Assignment

- This report is based on visual inspection alone;
- Trees were located by surveyors (except for one);
- This report does not seek to determine ownership. Ownership of any tree is determined by Ontario Land Surveyors and lawyers, not the consultant.
- This report does not provide any guarantee to stability or survivability of the tree;
- This report is not prepared for use in any legal proceeding.

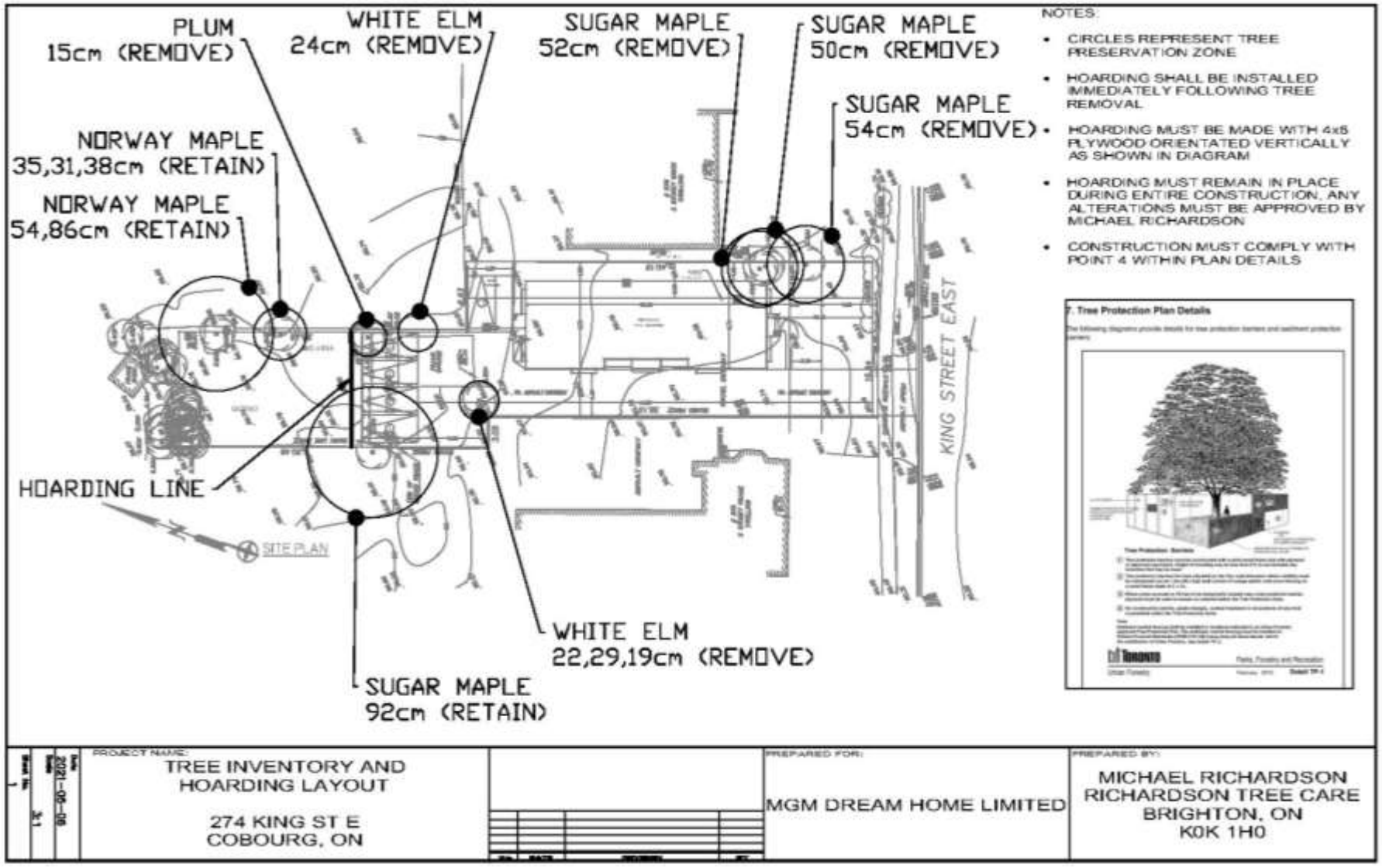
Documents Examined

- Site Plan A1.0, February 19, 2021 by K&K Architects Inc.

Inventory

Tree Locations for 274 King St. E. are located on the Tree Inventory and Hoarding Layout

Tree	DBH (cm)	Owner	Tree Condition	RZ	TI	CS	CV	TPZ	
Sugar Maple	54	274 King	Good	Good	Good	Good	Good	3.6m	Remove Cannot maintain TPZ with construction
Sugar Maple	50	274 King	Poor	Fair	Fair	Poor	Poor	3.0m	Remove Top of crown dying
Sugar Maple	52	274 King	Poor	Fair	Poor	Poor	Poor	3.6m	Remove Only one live limb
White Elm	22-29-19	274 King	Good	Fair	Fair	Fair	Good	1.8m	Remove Cannot maintain TPZ with construction
Sugar Maple	92	Neighbour	Fair	Fair	Good	Fair	Fair	6m	Retain
White Elm	24	?	Good	Fair	Good	Good	Good	1.8m	Remove Cannot maintain TPZ with construction
Plum	15	274 King	Good	Good	Good	Good	Good	1.8m	Remove Cannot maintain TPZ with construction
Norway Maple	35-31-38	Boundary	Fair	Fair	Fair	Fair	Good	2.4m	Retain
Norway Maple	54-86	Boundary	Fair	Fair	Fair	Fair	Good	5.4m	Retain


PLUM
15cm (REMOVE)
WHITE ELM
24cm (REMOVE)
SUGAR MAPLE
52cm (REMOVE)
SUGAR MAPLE
50cm (REMOVE)
SUGAR MAPLE
54cm (REMOVE)
NORWAY MAPLE
35,31,38cm (RETAIN)
NORWAY MAPLE
54,86cm (RETAIN)
HOARDING LINE
SITE PLAN
KING STREET EAST
WHITE ELM
22,29,19cm (REMOVE)
SUGAR MAPLE
92cm (RETAIN)
NOTES:
• CIRCLES REPRESENT TREE PRESERVATION ZONE
• HOARDING SHALL BE INSTALLED IMMEDIATELY FOLLOWING TREE REMOVAL
• HOARDING MUST BE MADE WITH 4x8 PLYWOOD ORIENTATED VERTICALLY AS SHOWN IN DIAGRAM
• HOARDING MUST REMAIN IN PLACE DURING ENTIRE CONSTRUCTION. ANY ALTERATIONS MUST BE APPROVED BY MICHAEL RICHARDSON
• CONSTRUCTION MUST COMPLY WITH POINT 4 WITHIN PLAN DETAILS
7. Tree Protection Plan Details
PROJECT NAME:
TREE INVENTORY AND HOARDING LAYOUT
274 KING ST E
COBOURG, ON
PREPARED FOR:
MGM DREAM HOME LIMITED
PREPARED BY:
MICHAEL RICHARDSON
RICHARDSON TREE CARE
BRIGHTON, ON
K0K 1H0

Methodology

- Diameter Breast Height: Tree diameter was measured by diameter of the trunk at 1.4 meters above existing grade.
- Tree Condition: A generalized assessment system was employed to describe the overall condition of tree health categories for each inventoried tree. A three (3) level scale from “Good”, “Fair”, and “Poor”, was used to quantify the range of tree conditions.
    - “Good” condition refers to the tree health category being greater than eighty (80) percent of a perfect specimen.
    - “Fair” condition refers to a category condition that is less than eighty (80) percent but more than twenty (20) percent.
    - “Poor” refers to a tree health category that is less than twenty (20) percent.
- Tree #: Refers to the tree number on the tree assessment plan.
- Common Name: The common name for each tree inventoried.
- Botanical Name: The botanical name for each tree inventoried.
- Diameter: Refers to diameter (in centimeters) measured at 1.4m (diameter at breast height (DBH)) above finished grade.
- Root Zone (R.Z.): This is a tree health category to assess the growing conditions within the root zone of the tree (If visible). It is measured on a scale of Good, Fair, Poor.
- Trunk Integrity (T.I.): This is a tree health category to assess the trunk condition of the tree for any defects or weaknesses or other notable issues. It is measured on a scale of Good, Fair, Poor.
- Canopy Structure (C.S.): This is a tree health category to assess the overall shape and condition of the tree canopy, including scaffold and other branch conditions. This is also measured on a scale of Good, Fair, Poor.
- Canopy Vigour (C.V.): This is a tree health category to assess the canopy health of the tree, including the amount of deadwood, dieback and live growth in the canopy as compared to a 100% healthy tree. The size, colour and amount of foliage are also considered in this category. It is measured on a scale of Good, Fair, Poor.
- Tree Protection Zone (TPZ): Tree Protection Zone (TPZ) as recommended by the City of Toronto. This distance is based on the diameter of the tree at breast height and the tree protection zone is measured from the trunk outwards.

Tree Retention Recommendations

- Preserve: The TPZ of the tree will be fully protected (based on the TPZ requirements) during demolition and construction activities and will remain unaltered throughout the duration of demolition and construction.
- Remove: Any tree that is over 15cm in diameter but is not dead, that requires removal. This includes trees significantly impacted by proposed construction which would sustain an unacceptable level of injury that would be unavoidable and likely cause long-term health and structural defects.

Reasons for removal

1. Sugar Maple 54 cm dbh – Tree is in good condition but the location of the proposed building and the soil cutback would destabilize the tree.
2. Sugar Maple 50 cm dbh – Tree has extensive dead in crown, and is in decline. The location of the proposed building and the soil cutback would destabilize the tree.
3. Sugar Maple 52 cm dbh – Most of the tree's canopy has died and dead branch have broken and are hanging in tree. The location of the proposed building and the soil cutback would destabilize the tree
4. White Elm 22-29-19 cm dbh – This tree needs to be removed to allow the parking to be built and for an entrance pathway to the rear yard.
5. White Elm 24 cm dbh - This tree needs to be removed to allow the parking to be built.
6. Plum 15 cm dbh - This tree needs to be removed to allow the parking to be built.

Modified Construction for Tree retention

The 92 cm dbh maple in the neighbouring yard has a TPZ that extends to most of parking space 4 and 5, and the approach to both.

Modified parking pad using no excavation techniques, and permeable (to air and water) must be used for parking space 4 and 5 and the approach to both.

The builder will be required to identify the chosen methodology or the consulting arborist will be tasked with developing a parking pad that meets the following requirements:

- No excavation required
- Load bearing
- No compaction of underlying soil
- Permeable to water and air
- Built of materials that will not alter pH

Specifications for Tree Protection Hoarding/Fencing

- It is necessary to protect all trees designated for preservation during both demolition and construction activities. This tree protection can be accomplished by installing tree protection hoarding (TPH). The Tree Preservation Zone (TPZ) is based upon City of Toronto standards.
- Tree Protection Hoarding shall be comprised of ½ inch plywood mounted on 2 x 4" wood frame.

Trunk Diameter (DBH) Measured @ 1.4m Above Grade	Required TPZ (radius)
10-30cm	1.8m
31-40cm	2.4m
41-50cm	3.0m
51-60cm	3.6m
61-70cm	4.2m
71-80cm	4.8m
81-90cm	5.4m
91-100cm	6.0m
> 100cm	6cm protection for each 1cm of diameter

Preservation Methodology

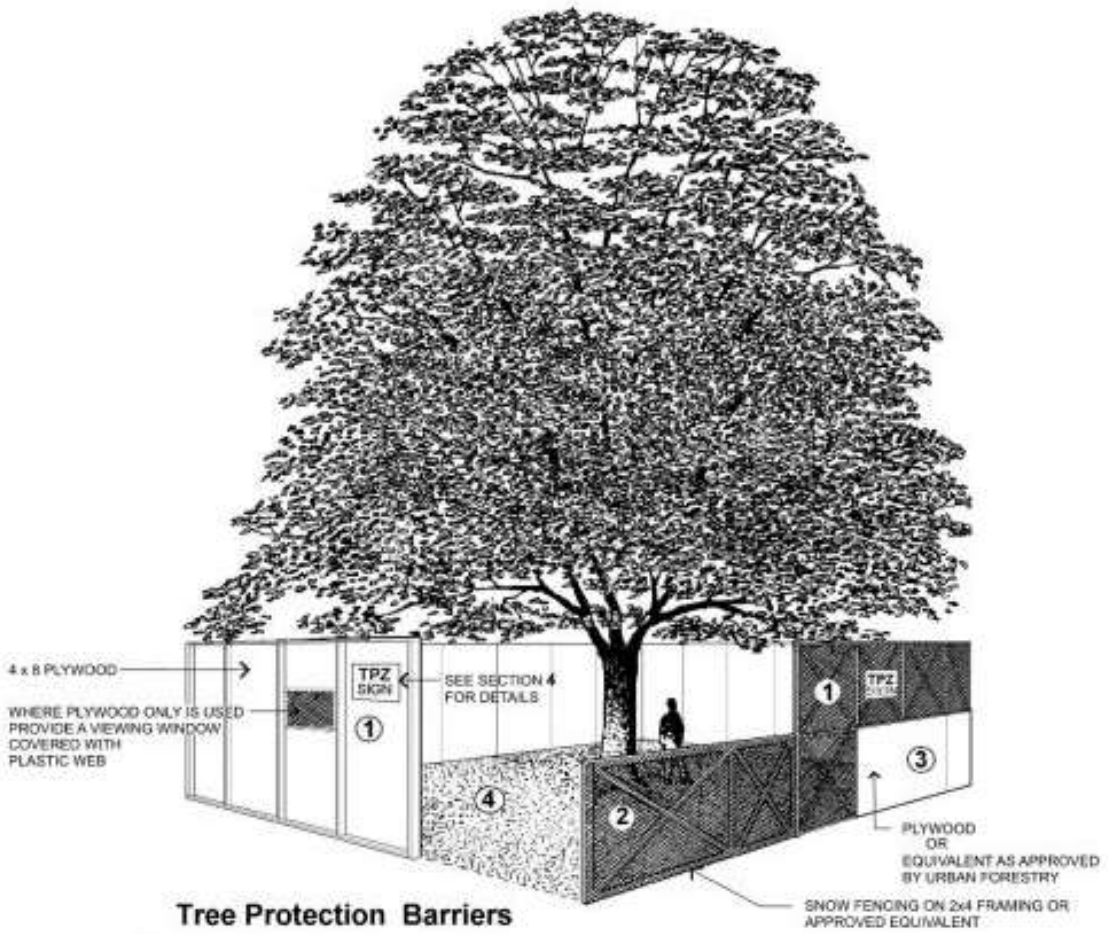
- Trees to be retained shall be protected by hoarding as laid out in the tree inventory and protection schematic.

Pre-construction Phase

The following tree preservation measures should occur prior to construction:

- Trees that are proposed for removal (and after receiving the appropriate removal permits) shall be removed prior to demolition and construction activities.
- Tree Protection Hoarding/Fencing shall be installed and be in place prior to demolition and construction activities.
- All contractors shall be informed of the tree preservation measures and guidelines and any questions or inquiries should be addressed before demolition and construction begins.

- Hoarding shall be installed that is 8 ft tall and built as in the following schematic from the City of Toronto. The hoarding shall be securely fastened such that it cannot be easily moved during construction.
- Tree Protection Signs - A Tree Protection sign shall be displayed on the tree protection fencing/hoarding to inform/remind the contractors and public of the tree protection measures in place.



Tree Protection Barriers

1. **Tree protection barriers must be constructed with a solid wood frame clad with plywood or approved equivalent. Height of hoarding may be less than 8 ft. to accomodate any branches that may be lower.**
2. **Tree protection barriers for trees situated on the City road allowance where visibility must be maintained can be 1.2m (4ft.) high and consist of orange plastic web snow fencing on a wood frame made of 2 x 4s.**
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. **No construction activity, grade changes, surface treatment or excavations of any kind is permitted within the Tree Protection Zone.**

Note:
Sediment control fencing shall be installed in locations indicated in an Urban Forestry approved Tree Protection Plan. The sediment control fencing must be installed to Ontario Provicial Standards (OPSD-219.130) heavy duty silt fence barrier and to the satisfaction of Urban Forestry. See Detail TP- 2

TORONTO Parks, Forestry and Recreation

Urban Forestry February 2016 **Detail TP-1**

Post Construction Preservation Methodology

- Trees shall be fertilized at half strength fish-based fertilizer immediately after hoarding is removed;
- Fertilizer shall include commercially available mycorrhizal inoculant.

Replanting Plan

Replanting of trees on the property shall be provided by the landscape designer on the project.

The landscape plan may require additional tree preservation methodology in the rear yard.

Appendix A – Certificate of Performance

I, Mr. Michael Richardson, do certify:

- That I have personally inspected the plant material referred to in this report and have stated my finding(s) accurately. The extent of the evaluation is stated in the attached report;
- That no one provided significant professional assistance to me, except as indicated in the report. Where observations and data have been collected by others this is stated;
- I have no current interest in the vegetation or the properties that are the subject of this report
- That the analysis, opinions, and conclusions stated herein are my own and are based on current scientific methods and facts;
- That the analysis, opinions, and conclusions were developed and this report has been prepared according to commonly adopted arboricultural standards;
- That my compensation is not contingent upon the reporting of a predetermined conclusion that favours the cause of the client or any other party nor upon results of the assessment, the attainment of stipulated results or the occurrence of any subsequent events;
- I hereby certify that I am an Ontario 444A Arborist having complete the apprenticeship through the Ontario MTCU;
- I have been involved in the field of arboriculture in a full time/part time capacity for a period of more than 25 years;

Signed

Date May 5, 2021

Michael Richardson, B.Sc.F.,
ISA BCMA ON-0377B
Ontario MTCU Qualified Arborist
Butternut Health Assessor # 472