TREE CONSERVATION REPORT

OFFICE BUILDING DEVELOPMENT 3026 SOLANDT ROAD CITY OF OTTAWA

Prepared for:

Colonnade Bridgeport 16 Concourse Gate, Suite 200 Ottawa, Ontario K2E 7S8

Prepared by:

Ruhland & Associates Limited 1750 Courtwood Crescent, Suite 200 Ottawa, ON K2C 2B5 (613) 224-4744

> January 15, 2020 Revision

PROJECT INFORMATION

Project Name: Solandt Road Office Development

Owner: Fiera Real Estate Core Fund

Applicant: Colonnade Bridgeport

Attn: Bonnie Martell

Prepared By: Ruhland & Associates Limited,

1750 Courtwood Crescent, Suite 200, Ottawa, ON

K2C 2B5 613-224-4744 Att: Marietta Ruhland

Contractor: Unknown at this time.

Municipal Address: 3026 Solandt Road, Part of Lot 7, Concession 4,

Geographic Township of March, City of Ottawa

Official Plan & Zoning Designations: Site Zoning as per Ottawa Zoning By-law

2008-250

Site Designation IG 6

Purpose for Report: in support for an application for site plan control

Schedule of Proposed Works: 2020-2021.

Other Applications Affecting Subject Lands: none

TREE CONSERVATION REPORT

The subject lands are located on the northeast corner of March Road and Solandt Road located in Ottawa, ON.

The subject lands are approximately 1.58 hectares (3.9 acres) in size. The area affected by the proposed site development is 98% of the site.

It is bounded on all sides by existing commercial / office developments.

The subject lands were visited by Ruhland & Associates Ltd. on January 08, 2020.

Included in this report: 2019 aerial, Map #1 – Current Vegetation, MAP #1D – Existing Vegetation Chart, Map #2 – Proposed Development and Conserved Vegetation, and MAP #2D - Tree Preservation Notes and Details.

Note: locations of trees are from survey information and from field observations and aerial photographs. Status of existing vegetation was taken from field observations, previous site survey to confirm species (2001) and 2018 streetview to confirm status of trees along Solandt Drive.

CRZ (critical root zone) as defined by the City of Ottawa Municipal Trees and Natural Area Protection By-law as: "critical root zone" means the area of land within a radius of ten (10) cm from the trunk of a tree for every one (1) cm of trunk diameter.

GENERAL

The subject lands consists of an existing parking lot and vacant lands (previous buildings were demolished), surrounded by existing developed lands.

SURFACE WATER FEATURES

No significant water features.

STEEP SLOPES

No significant slopes were found on site. The site slopes generally to the west.

WILDLIFE

No evidence of larger mammals was found on the site during any site reviews.

SIGNIFICANT VEGETATION / SPECIES

No significant species or species at risk have been found on site during site visits.

DISTINCTIVE TREES

Seven (7) distinctive trees were found on site, refer to Map #1 – Current Vegetation, MAP #1D – Existing Vegetation Chart.

VEGETATION INVENTORY

EXISTING VEGETATION

The lands consist mainly of grassed areas, unused parking lot and entrance, used parking lot with cultured landscape along the street frontages and within the property.

Refer to Map #2 – Proposed Development and Conserved Vegetation, and MAP #2D - Tree Preservation Notes and Details for species, size condition and action.

MARCH ROAD FRONTAGE (#1-2):

No trees are located within the city road allowance. Trees #1-2 are located adjacent to the street.

Age: Semi-mature.

Size: 30cm DBH each. Codominant stem at 1.2 metre height on Scot's Pine.

Condition: fairly good to good condition.

SOLANDT ROAD FRONTAGE (#7-8, 13-18):

Trees #8 and 13 are located within the city road allowance as show on the existing survey information, and tree # 17 is straddling the property line. The remainder are located adjacent to the street.

Age: Mature.

<u>Size:</u> 5 trees along the property line range form 50cm - 80cm DBH. The remainder range from 15cm - 20cm DBH each.

<u>Condition:</u> fairly good to good condition. Tree #17 is in poor condition with a large portion of the crown dead.

NORTH PROPERTY LINE (#34):

Informal cedar hedge straddles the property line here. Mixed with the cedars are deciduous shrubs and vines.

Age: Semi-mature.

Size: Height ranges from 2 to 4 metres.

<u>Condition:</u> the majority of the cedars are in fair to good condition and habit, but are overgrown and have not been pruned for form.

EAST PROPERTY LINE (N/A):

No vegetation on subject lands. Adjacent vegetation consists of a crab apple and 4 spruce adjacent to the building.

Age: Semi-mature.

Size: average range from 20-25cm DBH.

Condition: good condition and habit.

INTERNAL AREA (#1-6A, 9-12, 19-33):

Trees here consists of leftover cultural landscape from the demolished buildings and adjacent parking. The majority are in good condition with exceptions of overgrown mugho pine, damaged crab apple and sugar maple, refer to chart.

Age: Mature and semi-mature.

Size: range for 15cm - 50cm DBH, average within 20-30 DBH.

Condition: tree conditions range from poor to good. Trees in poor condition include the 50cm DBH Sugar Maple - #4 (rot at trunk base and dead central leader), 40cm DBH Crab Apple - #6a (major branch dead cracked and removed) and Mugho Pine - #3. Trees in fair condition include the remainder of the Mugho Pine (all are overgrown with bad habit) and some of the crab apples which are crowded out. Trees in fairly good condition include about half of the Crab Apples, and Scot's Pine. The remainder of the trees are in good condition.

DISTINCTIVE TREES

Distinctive trees (as described in the City of Ottawa tree bylaw 2009-200: 'means any tree with a DBH of 50 centimetres or greater').

Seven (7) distinctive trees were found on site, 5 along Solandt and two within the property and are within or immediately adjacent to the building excavation extents.

VEGETATION CONSERVATION

VEGETATED AREAS TO BE RETAINED

Tree # 7 (80cm DBH Bur Oak) and tree # 13 (50cm DBH Sugar Maple) are planned for retention, if feasible.

VEGETATED **A**REAS TO BE **R**EMOVED

The remainder of the existing vegetation located on the subject lands are to be removed including the two Bur Oak within the Solandt road allowance and one poor condition Bur Oak straddling the property line. The remainder of the trees are located within the proposed development area. The trees within the city right of way are located within the proposed access road, or within excavation limits for the parking lot or access road.

Refer to 2019 aerial showing existing vegetation (tree in central portion along March Road has since been removed), Map #1 – Current Vegetation, MAP #1D – Existing Vegetation Chart, Map #2 – Proposed Development and Conserved Vegetation, and MAP #2D - Tree Preservation Notes and Details.

All removals to be done in accordance with the City of Ottawa tree bylaw 2009-200 and this Tree Conservation Report.

POTENTIAL IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACTS

It is noted that excavation for the development of the building, parking lot, roadways and/or sidewalks will be within the Critical Root Zone (CRZ) of these trees, therefore the health and long term sustainability of the trees will be affected. Feasibility of retaining Trees # 7 and 13 to be reviewed by a qualified arborist prior to construction start up.

Before construction start up, the following is to be confirmed:

- Limit of excavation relating to the CRZ of the tree
- Overall health of tree and long term sustainability
- Pruning requirements for health of tree and safety of users
- Any additional mitigation measures required beyond those listed in this TCR.

Based on the above, feasibility of preserving these trees will be made in consultation with the City of Ottawa Forestry Department. If it is determined that one or both of these trees cannot be preserved, they will be replaced with 2, 80-90mm caliper deciduous trees per tree removed. Replacement trees will be of a large deciduous species conducive to the developed environment such as Bur Oak, Red Oak, Red Maple, Hackberry, American Linden street varieties, Elm varieties resistant to Dutch Elm Disease.

As the site previously contained buildings and parking lots, revisions of impervious surfaces (e.g. parking and proposed buildings) would not significantly impact the amount of water infiltrating into the site's ground.

PROTECTION MEASURES

Preliminary root cutting at the edge of proposed excavation areas prior to any on site excavation would protect the integrity of the existing root system of trees in proximity of the proposed development, refer to Map #2 and MAP #2D - Tree Preservation Notes and Details.

In accordance with the Municipal Trees and Natural Areas Protection By-law No. 2006-279, a protection fence is to be erected at vegetation that is to be preserved and set up along the property lines on the north and east sides of the site, as indicated on Map #2. The protection fence shall be erected as per T MAP #2D - Tree Preservation Notes and Details. The protection fence shall be maintained throughout all phases of the development. No work is to be done within the tree protection fence.

The developer is to provide necessary protection against any construction site runoff into the treed areas.

No storage, vehicular traffic or other construction activities to take place within the treed areas.

SPECIFIC PROTECTION MEASURES

All protection measures shall follow Municipal Trees and Natural Areas Protection By-law No. 2006 – 279

PLANTING RECOMMENDATIONS

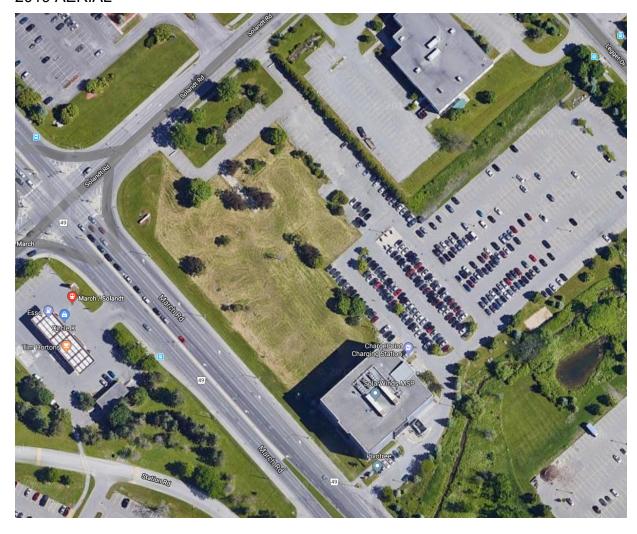
Planting a mix of indigenous (or cultivars there of) deciduous street trees along March Road and Solandt Road. Where road conditions are not amenable to indigenous, non-invasive, non-indigenous species will be selected.

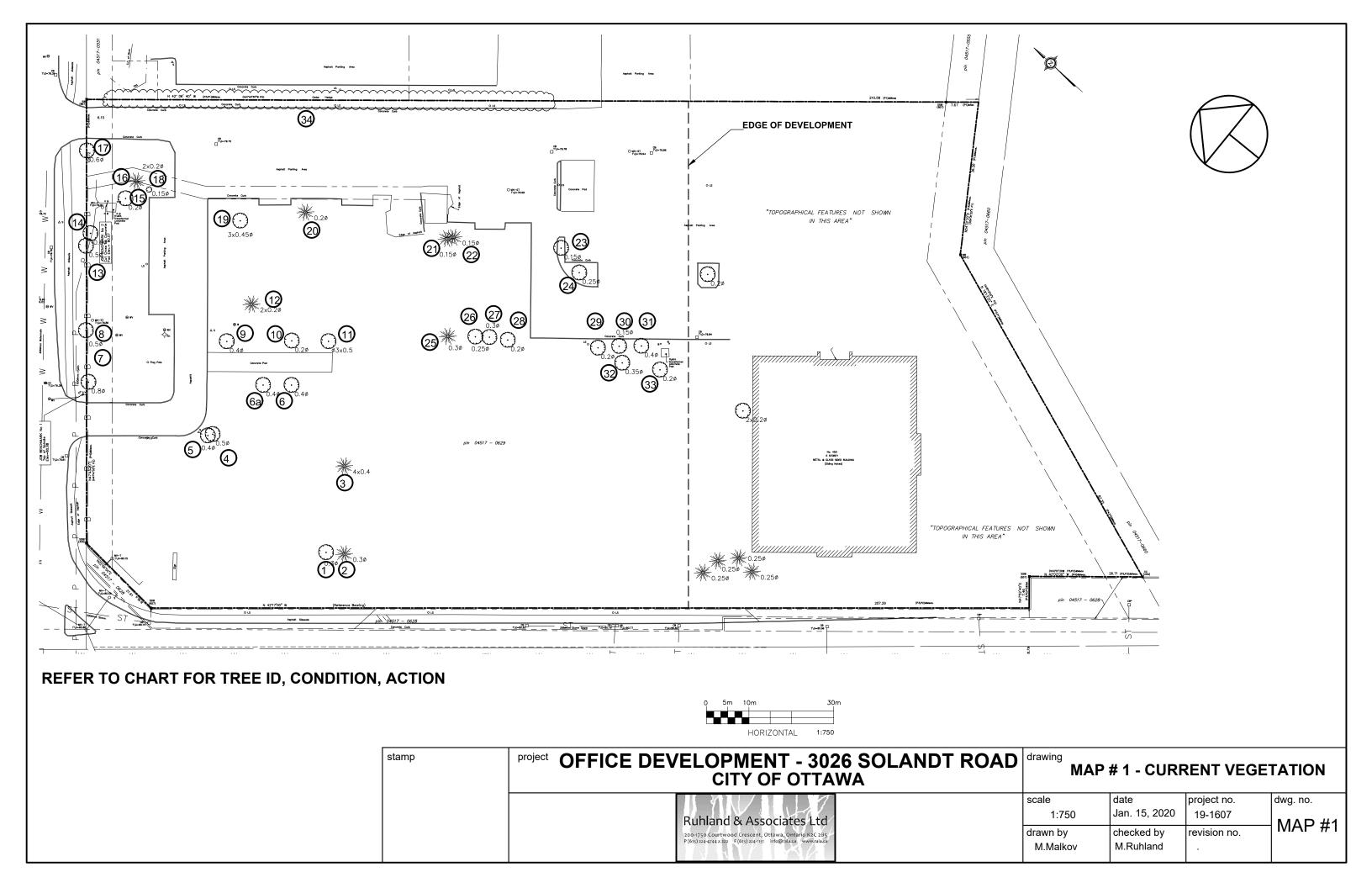
If any of the trees slated to remain require removal due to proximity of construction, they should be replaced at a replacement ratio of 2:1. Replace with 80-90mm diameter indigenous deciduous trees conducive to the developed environment such as Bur Oak, Red Oak, Red Maple, Hackberry, American Linden street varieties, Elm varieties resistant to Dutch Elm Disease.

Prepared by

Marietta Ruhland, OALA Senior Landscape Architect Ruhland & Associates Limited January 15, 2020

2019 AERIAL





OFFICE DEVELOPMENT - 3026 SOLANDT ROAD SIZE DISTINCTIVE PLANT ID# **ACTION** COMMON NAME **BOTANICAL NAME** COMMENTS RATIONALE DBH* / ht. (cm) TREE** 30 REMOVE CRAB APPLE MALUS VARIETY GOOD CONDITION WITHIN BUILDING EXCAVATION FAIRLY GOOD CONDITION 30 REMOVE SCOT'S PINE PINUS SYLVESTRIS WITHIN BUILDING EXCAVATION 2 4x40 REMOVE MUGHO PINE PINUS MUGO POOR CONDITION WITHIN BUILDING EXCAVATION 3 50 REMOVE SUGAR MAPLE ACER SACCHARUM POOR CONDITION WITHIN BUILDING EXCAVATION 4 40 SUGAR MAPLE ACER SACCHARUM 5 REMOVE GOOD CONDITION WITHIN BUILDING EXCAVATION 6 40 REMOVE CRAB APPLE MALUS VARIETY FAIR CONDITION WITHIN BUILDING EXCAVATION 6a 40 REMOVE CRAB APPLE MALUS VARIETY POOR CONDITION WITHIN BUILDING EXCAVATION 80 **RETAIN ^^** BUR OAK QUERCUS MACROCARPA GOOD CONDITION RETAIN IF FEASIBLE QUERCUS MACROCARPA 8 ^ 50 REMOVE BUR OAK FAIRLY GOOD CONDITION WITHIN ENTRANCE ROAD CRAB APPLE WITHIN ENTRANCE ROAD 9 40 REMOVE MALUS VARIETY FAIRLY GOOD CONDITION 10 20 REMOVE CRAB APPLE MALUS VARIETY FAIRLY GOOD CONDITION WITHIN ENTRANCE ROAD 11 3x50 CRAB APPLE MALUS VARIETY WITHIN ENTRANCE ROAD REMOVE FAIRLY GOOD CONDITION 12 2x20 MUGHO PINE PINUS MUGO WITHIN PARKING LOT REMOVE FAIR CONDITION 13 ^ 50 SUGAR MAPLE ACER SACCHARUM RETAIN IF FEASIBLE **RETAIN ^^** GOOD CONDITION 14 QUERCUS MACROCARPA CRZ WITHIN PARKING LOT EXCAVATION 60 REMOVE **BUR OAK** GOOD CONDITION 15 20 REMOVE TREE LILAC SYRINGA RETICULATA AIRLY GOOD CONDITION WITHIN PARKING LOT 16 2x20 REMOVE SCOT'S PINE PINUS SYLVESTRIS GOOD CONDITION WITHIN PARKING LOT 17 ^ 60 REMOVE **BUR OAK** QUERCUS MACROCARPA POOR - CROWN PARTIALLY DEAD | CRZ WITHIN EXCAVATION 18 15 REMOVE MUGHO PINE PINUS MUGO FAIR CONDITION WITHIN PARKING LOT 19 3x45 REMOVE TREE LILAC SYRINGA RETICULATA GOOD CONDITION WITHIN PARKING LOT 20 20 REMOVE SCOT'S PINE PINUS SYLVESTRIS AIRLY GOOD CONDITION WITHIN PARKING LOT 21 15 REMOVE MUGHO PINE PINUS MUGO FAIR CONDITION WITHIN PARKING LOT 22 15 REMOVE MUGHO PINE PINUS MUGO FAIR CONDITION WITHIN PARKING LOT 23 TILIA AMERICANA CULTURAL AIRLY GOOD CONDITION 15 REMOVE AMERICAN LINDEN WITHIN PARKING LOT 24 25 REMOVE AMERICAN LINDEN TILIA AMERICANA CULTURAL GOOD CONDITION WITHIN PARKING LOT 25 30 REMOVE PINE SCOT'S PINUS SYLVESTRIS FAIRLY GOOD CONDITION WITHIN PARKING LOT 26 25 REMOVE CRAB APPLE MALUS VARIETY GOOD CONDITION WITHIN PARKING LOT 27 30 REMOVE CRAB APPLE MALUS VARIETY WITHIN PARKING LOT GOOD CONDITION 28 20 REMOVE TREE LILAC SYRINGA RETICULATA GOOD CONDITION WITHIN PARKING LOT 29 20 REMOVE CRAB APPLE MALUS VARIETY GOOD CONDITION WITHIN PARKING LOT 30 15 REMOVE CRAB APPLE MALUS VARIETY FAIR CONDITION WITHIN PARKING LOT

ACER PLATANOIDES

ACER PLATANOIDES

WHITE CEDAR HEDGE

MALUS VARIETY

GOOD CONDITION

GOOD CONDITION

GOOD CONDITION

FAIR - OVERGROWN

NOTE:

Feasibility of retaining Trees # 7 and #13 to be reviewed by a qualified arborist prior to construction start up. It is noted that excavation for the development of the building, parking lot, roadways and/or sidewalks will be within the CRZ of these trees, therefore the health and long term sustainability of the trees will be affected.

^ In City ROW ^^SEE NOTE

31

32

33

34

DBH * Diameter at Breast Height

√ **Distinctive Tree (By-Law 2009-200)

40

35

20

2.0-4.0m ht.

REMOVE

REMOVE

REMOVE

REMAIN

NORWAY MAPLE

NORWAY MAPLE

THUJA OCCIDENTALIS

CRAB APPLE

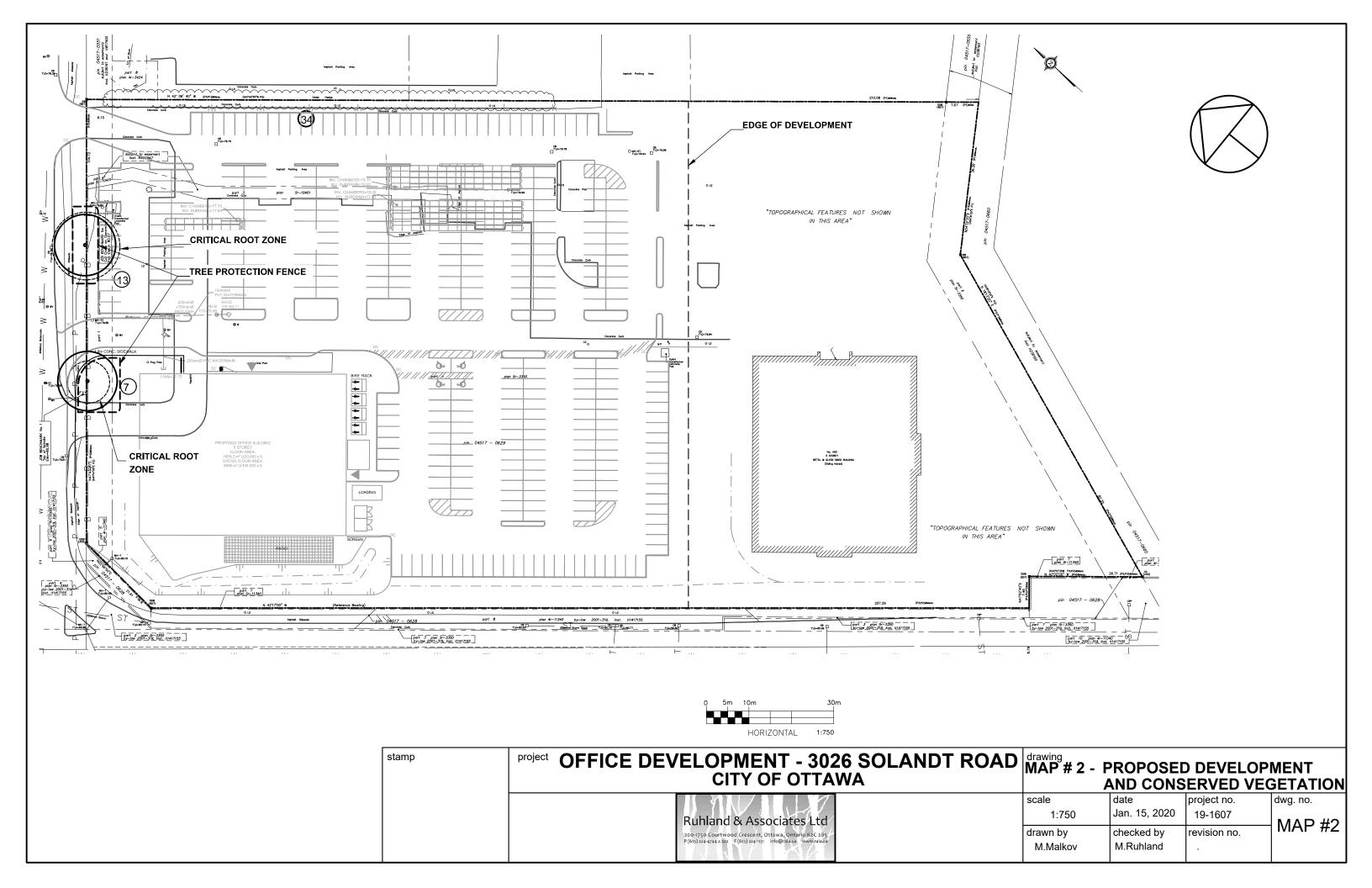
project OFFICE DEVELOPMENT - 3026 SOLANDT ROAD drawing MAP # 1 - EXISTING VEGETATION stamp **CHART CITY OF OTTAWA** date project no. scale dwg. no. Jan. 15, 2020 19-1607 NTS Ruhland & Associates Ltd MAP checked by revision no. drawn by 200-1750 Courtwood Crescent, Ottawa, Ontario K2C 2B5 P (613) 224-4744 x 222 F (613) 224-1131 info@rala.ca www.rala.ca #1D M.Malkov M.Ruhland

WITHIN PARKING LOT

WITHIN PARKING LOT

WITHIN PARKING LOT

PRUNE FOR VINES / INVASIVES



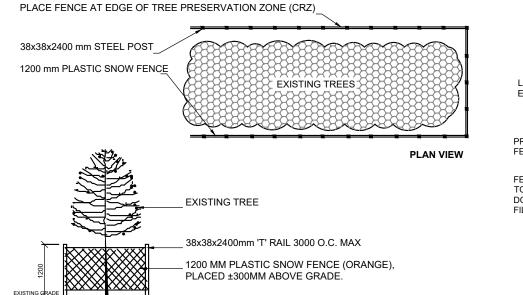
TREE CONSERVATION NOTES:

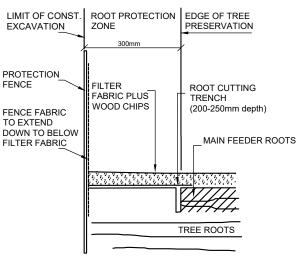
Feasibility of retaining Trees # 7 and #13 to be reviewed by a qualified arborist prior to construction start up. It is noted that excavation for the development of the building, parking lot, roadways and/or sidewalks will be within the CRZ of these trees, therefore the health and long term sustainability of the trees will be affected.

Before construction start up, the following is to be confirmed:

- Limit of excavation relating to the CRZ of the tree
- Overall health of tree and long term sustainability
- Pruning requirements for health of tree and safety of users
- Any additional mitigation measures required beyond those listed in the TCR.

Based on the above, feasibility of preserving these two trees will be made in consultation with the City of Ottawa Forestry Department. If it is determined that one or both of these trees cannot be preserved, they will be replaced with 2, 80-90mm caliper deciduous trees per tree removed. Replacement trees will be of a large deciduous species conducive to the developed environment such as Bur Oak, Red Oak, Red Maple, Hackberry, American Linden street varieties, Elm varieties resistant to Dutch Elm Disease.





ROOT CUTTING PRIOR TO EXCAVATION

NOTES:

ELEVATION

- 1. PROVIDE PROTECTION FOR TREES SHOWN AS REQUIRING PROTECTION ON CONTRACT DRAWINGS USING METHOD SHOWN, WHERE OPERATIONS THREATEN OTHER NEARBY TREES, APPLY SAME MEASURES.
- PROTECT ROOTS OF ALL TREES AS SHOWN ABOVE. NO EXCAVATION, FILLING, STORAGE OF MATERIALS, DISPOSAL OF CHEMICALS, VEHICLE TRAFFIC, OR OTHER ACTIVITY WHICH COULD CAUSE DISTURBANCE OF SOIL ROOT AREA, INCLUDING SOIL COMPACTION SHALL TAKE PLACE WITHIN THE PROTECTED AREA.

THE CITY OF OTTAWA TREES BY- LAW REQUIRES THAT CONTRACTORS WORKING NEAR TREES MUST:

- ERECT A FENCE AT THE CRITICAL ROOT ZONE (CRZ) OF TREES;
- NOT PLACE ANY MATERIAL OR EQUIPMENT WITHIN THE CRZ OF THE TREE;
- NOT ATTACH ANY SIGNS, NOTICES OR POSTERS TO ANY TREE
- NOT RAISE OR LOWER THE EXISTING GRADE WITHIN THE CRZ WITHOUT APPROVAL;
 TUNNEL OR BORE WHEN DIGGING WITHIN THE CRZ OF A TREE:
- NOT DAMAGE THE ROOT SYSTEM. TRUNK OR BRANCHES OF ANY TREE;
- ENSURE THAT EXHAUST FUMES FROM ALL EQUIPMENT ARE NOT DIRECTED TOWARDS ANY TREE'S CANOPY.

CRITICAL ROOT ZONE (CRZ) OF A TREE:

D (DIAMETER OF TRUNK IN CENTIMETERS) X 10CM = CRITICAL ROOT ZONE. THE CRITICAL ROOT ZONE IS ESTABLISHED AS BEING 10 CENTIMETRES FROM THE TRUNK OF A TREE FOR EVERY CENTIMETRE OF TRUNK DIAMETER. THE TRUNK DIAMETER IS MEASURED AT A HEIGHT OF 1.2 METRES FOR TREES OF 15 CENTIMETRES DIAMETER AND GREATER AND AT A HEIGHT OF 0.3 METRES FOR TREES OF LESS THAN 15 CENTIMETRES DIAMETER. THE CONTRACTOR MUST OBTAIN ALL PERMITS AND APPROVALS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CALL A CITY TREE INSPECTOR WHEN WORK IS REQUIRED NEAR A CITY TREE.

TREE PROTECTION AND ROOT CUTTING DETAIL

| st | stamp | project OFFICE DEVELOPMENT - 3026 SOLANDT ROAD CITY OF OTTAWA | | MAP # 2 - TREE PRESERVATION NOTES & DETAILS | | | |
|----|-------|---|--|---|-------------------------|--------------|-----|
| | | Ruhland & Associates Ltd 200-1750 Courtwood Crescent, Ottawa, Ontario K2C 2B5 P(613) 224-4744 x 222 F(613) 224-1131 info@rala.ca www.rala.ca | | date Jan. 15, 2020 | project no. 19-1607 | dwg. no. | |
| | | | | , , l | checked by M.Ruhland | revision no. | #2D |