

RELATED BY-LAWS:  
- TREE PROTECTION BY-LAW (No. 2020-340)

REFER TO THE TREE PROTECTION NOTES, FOUND ON THE PLANS AND/OR REPORT.

PRIOR TO ANY WORK ACTIVITY, THE PLAN AND THE INSTALLED FENCE MUST BE APPROVED BY CITY FORESTRY STAFF.

TREE PROTECTION FENCE SHALL BE ERECTED TO PROTECT AND ENCLOSE THE CRITICAL ROOT ZONE (CRZ = DBH x 10). SEE PLAN FOR LOCATION.

TREE PROTECTION TO REMAIN IN PLACE AND BE MAINTAINED IN GOOD CONDITION UNTIL THE SOIL/SEED IS STARTED. REMOVE FENCE AT THIS TIME.

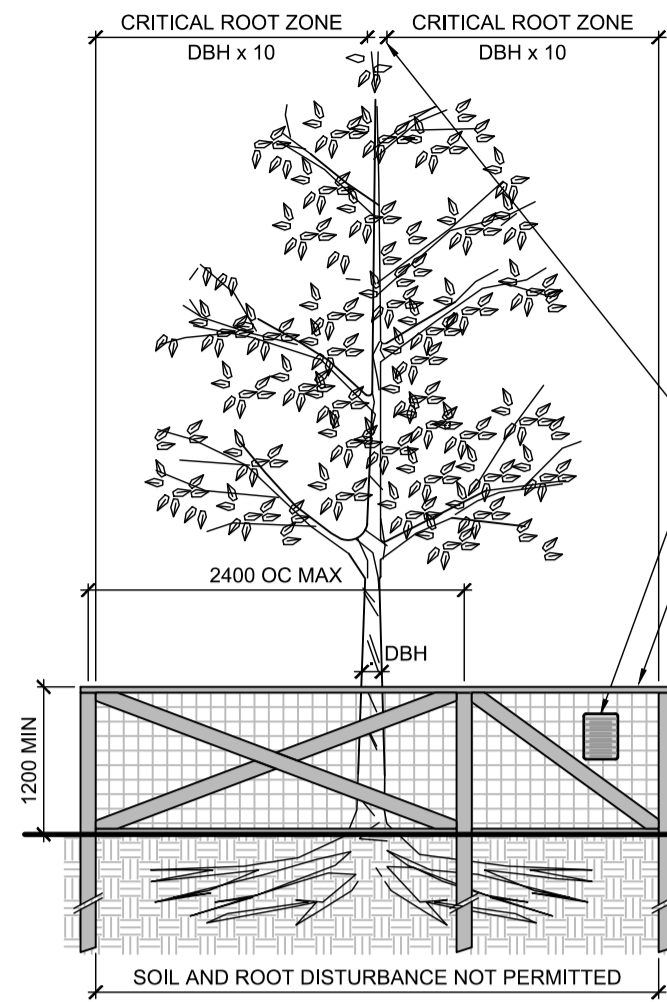
MEASURED FROM OUTSIDE EDGE AT BASE OF TRUNK

TREE PROTECTION SIGNAGE AS PER CITY STANDARD

TREE PROTECTION FENCING MUST BE CONSTRUCTED OF RIGID OR FRAMED MATERIALS, eg.  
- MODULOC - STEEL  
- PLYWOOD HOARDING, OR  
- SNOW FENCE ON 2x4 FRAME.

POSTS SHALL BE MAX. 2.4m APART, AND POSTS SHALL BE SECURED TO PREVENT ALTERATIONS TO THE FENCE LOCATION.

ALL SUPPORTS AND BRACING MUST BE PLACED OUTSIDE OF THE CRZ, AND INSTALLATION MUST MINIMIZE DAMAGE TO EXISTING ROOTS



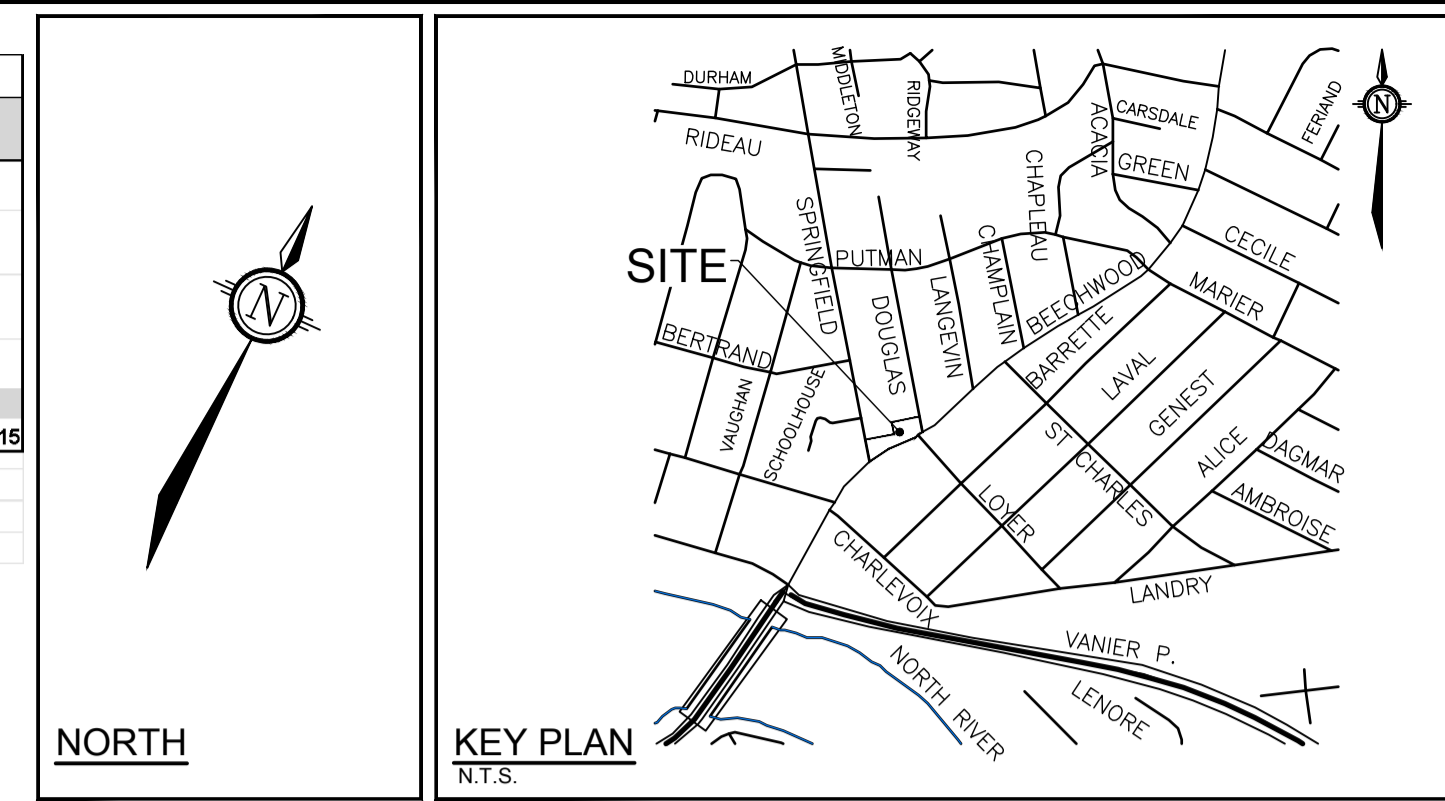
TREE PROTECTION FENCE

D1

EXISTING TREE CANOPY COVER:

EXISTING CANOPY COVERAGE - As surveyed at site in 2023				
	AVERAGE EXISTING SPREAD	CANOPY COVERAGE EXISTING PER TREE	QUANTITY OF TREES	TOTAL EXISTING CANOPY COVERAGE (m <sup>2</sup> )
Existing Large Deciduous trees (tree #6)	10m	79	1	79
Existing Medium Deciduous trees (tree #2, 4, and 5)	6m	28	3	84
Existing Small Deciduous trees (tree #1 and 3)	4.5m	16	2	32
Existing Coniferous trees on site (tree #7)	5m	20	1	20
<b>TOTAL EXISTING CANOPY COVERAGE (m<sup>2</sup>):</b>				<b>215</b>

- Area of a circle =  $(r \times r) \times \pi$
- Canopy coverage per tree calculation:  $(\text{average mature spread}/2) \times (\text{average mature spread}/2) \times \pi$
- Canopy calculations do not include Trees 8, 9 and 10 because they are on the neighbouring property.



LEGEND

- EXISTING TREE TO REMAIN, SYMBOL SIZE REFLECTS CRZ
- EXISTING TREE TO REMOVE, SYMBOL SIZE REFLECTS CRZ
- TREE PROTECTION FENCE

TREE PROTECTION

Implement the following protection measures for retained trees, both on site and on adjacent sites, prior to any work activity, including tree removal. Maintain tree protection fence in place and in good condition for the duration of site works:

- The Landscape Architect or Certified Arborist is to determine the location of the tree protection fencing and detail it on any associated plans for the site (e.g. tree conservation report, tree disclosure report, etc.).
- Under the guidance of a Landscape Architect or Certified Arborist, erect a fence at the critical root zone (CRZ) of trees. Diameter at breast height (DBH) is the trunk diameter measured at 1.3m height on the tree trunk. The CRZ is calculated as DBH x 10. Refer to the Tree Protection Fence detail.
- Refer to the Tree Protection Plan for fence location. City Forestry Staff are to approve both the plan and the installed fence prior to work commencement.
- Do not place any material or equipment within 2m of the CRZ of any tree, including outhouses.
- Do not attach any signs, notices, or posters to any tree.
- Do not disturb, raise, or lower the existing grade within the CRZ without approval.
- Only tunnel or bore when digging within the CRZ of a tree. Hand work only where required within the CRZ; absolutely no machinery permitted.
- Do not damage the root system, trunk, or branches, or any tree.
- Do not extend hard surface or significantly change landscaping.
- Ensure that exhaust fumes from all equipment are directed away from any tree canopy.
- When trees marked for removal overlap with the CRZ of trees marked for preservation: cut roots at the edge of the CRZ and grind down stumps after tree removals, do not pull out stumps. Ensure there is no root pulling or disturbance of the ground within the CRZ.
- Prior to work taking place, notify and consult the Landscape Architect and City Forestry Staff if roots must be cut. Roots 20mm or larger should be cut at right angles with clean, sharp horticultural tools without tearing, crushing, or pulling. Refer to City of Ottawa Specification S.P. F-8011 Tree Protection, Excavation of Root Zone.
- If damaged or objectionable branches are observed, consult the Landscape Architect, before any work is conducted. Do not prune leaders. Do not prune more than 1/4 of crown.
- Set up a water and fertilizing program, if trees are being affected by site works, to the satisfaction of the Landscape Architect.
- The Landscape Architect is to prescribe mitigation measures if the protected fenced area must be reduced to facilitate construction. Measures may include the placement of plywood, wood chips, or steel plating over the roots for protection. City Forestry Staff are to approve said measures prior to fence movement.
- City of Ottawa By-law: Protects municipal trees and municipal natural areas in the City of Ottawa and trees on private property in the urban area of the City of Ottawa (2020-340).

EXISTING TREE INVENTORY:

NOTE: EXISTING TREES (8, 9 AND 10) ARE OUTSIDE THE PROPERTY LINE. TREE LOCATIONS ARE SCHEMATIC ONLY.

No.	Botanical Name	Common Name	DBH (cm)	CRZ (m)	Condition	Owner	Remarks	Recomm.
1	<i>Acer platanoides</i>	Norway Maple	23.0	2.30	F	Client	Conflict	Remove
2	<i>Acer platanoides</i>	Norway Maple	25.0	2.50	F	Client	Conflict	Remove
3	<i>Acer negundo</i>	Manitoba Maple	20.0	2.00	F	Client	Conflict	Remove
4	<i>Acer negundo</i>	Manitoba Maple	25.0	2.50	F	Client	Conflict	Remove
5	<i>Acer negundo</i>	Manitoba Maple	25.0	2.50	F	Client	Conflict	Remove
6	<i>Syringa vulgaris</i>	Common Lilac	21.0	2.10	P	Client	Conflict - 6 stems - 7cm ea. Dead wood evident, low vigor, suffering lack of light, leaning	Remove
7	<i>Picea glauca</i>	White Spruce	20.0	2.00	F	Client	Conflict	Remove
8	<i>Tilia americana</i>	Basswood	20.0	2.00	VP	Neighbour	Presence of insects and disease; swollen areas on trunk; leader gone, decay evident in a number of places	Remove
9	<i>Pinus strobus</i>	White Pine	10.0	1.00	G	Neighbour		PROTECT
10	<i>Picea glauca</i>	White Spruce	20.0	2.00	G	Neighbour	Conflict	Remove

Legend

G	Good	Conflict	Remove due to conflict with construction.
F	Fair	Remove	Remove due to tree health or invasive status.
P	Poor	PROTECT	Protect trees as per contract details and specifications.
VP	Very Poor		

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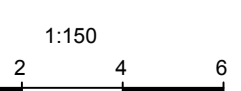
Owner:  
2317916 CNT INC.  
2081 MERIVALE ROAD  
Ottawa, ON K2G 1G9

**NOT FOR CONSTRUCTION**

No.	REVISION	DATE	BY
2.	RE-ISSUED FOR SPC	JUN 26/24	RGJ
1.	ISSUED FOR SPC	JUN 13/23	RGJ

SCALE

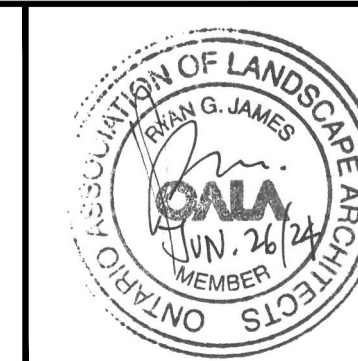
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DESIGN

MEL
CHECKED
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RGJ
APPROVED
RGJ

FOR REVIEW ONLY



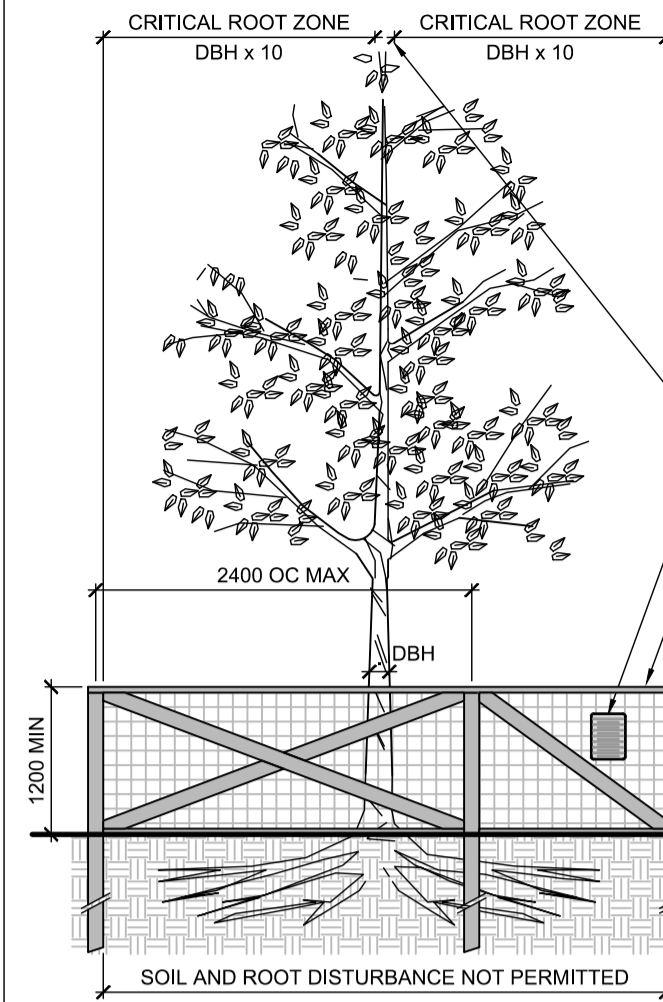
**NOVATECH**  
Engineers, Planners & Landscape Architects  
Suite 200, 240 Michael Cowpland Drive  
Ottawa, Ontario, Canada K2M 1P6  
Telephone (613) 254-9643  
Facsimile (613) 254-5867  
Website www.novatech-eng.com

LOCATION  
CITY OF OTTAWA  
47 BEECHWOOD AVENUE

DRAWING NAME  
**TREE CONSERVATION PLAN 1  
EXISTING CONDITION & TREE COVER**

PROJECT No.  
122186-00  
REV #  
REV # 2  
DRAWING No.  
122186-TCR1

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- TREE PROTECTION BY-LAW (No. 2020-340)



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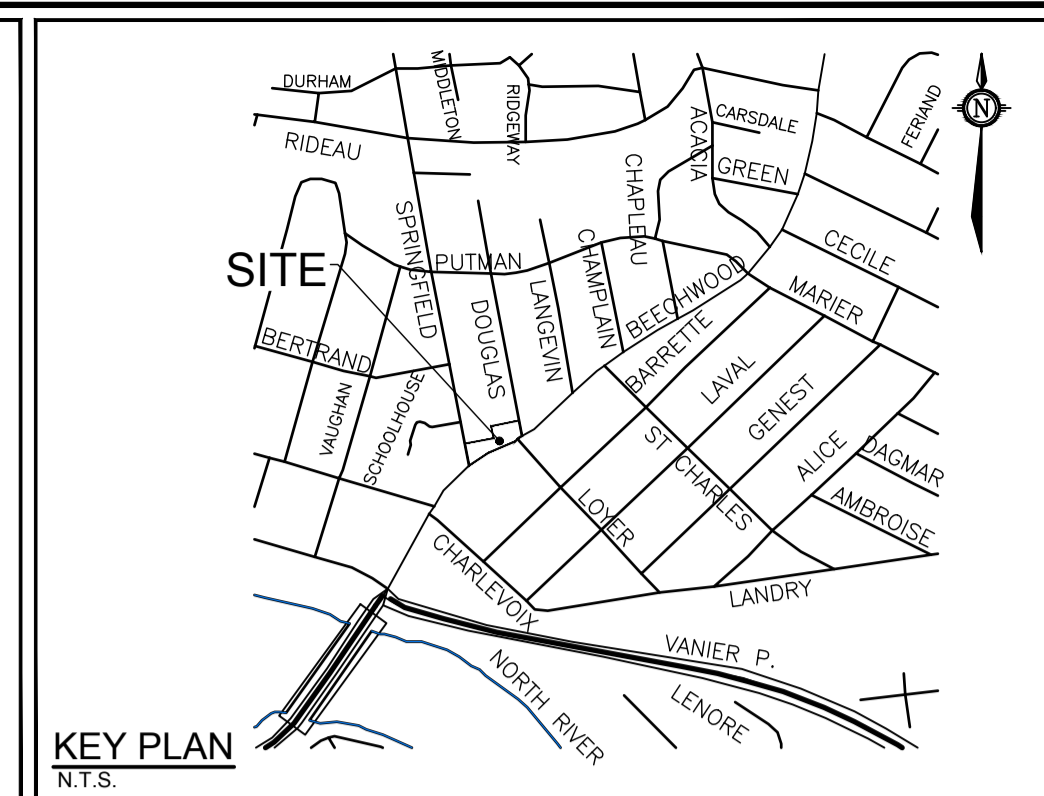
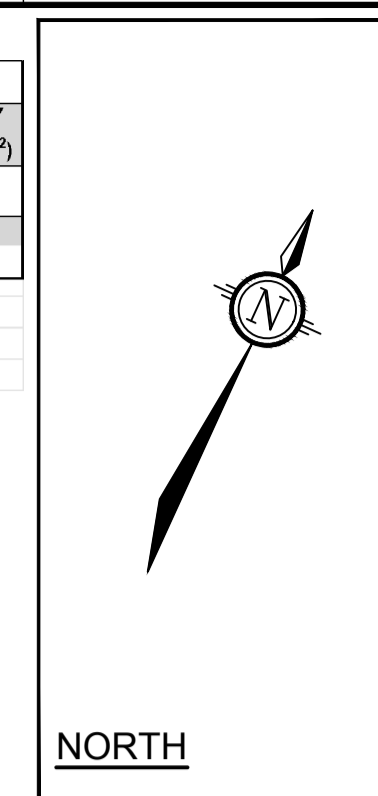
TREE PROTECTION FENCE

D1

PROPOSED & RETAINED TREE CANOPY COVER:

PROPOSED & RETAINED CANOPY COVERAGE AT MATURITY				
SIZE OF PROPOSED TREE	AVERAGE MATURE SPREAD	CANOPY COVERAGE PER TREE AT	QUANTITY OF TREES	TOTAL PROPOSED CANOPY COVERAGE AT MATURITY (m <sup>2</sup> )
Deciduous - Small (less than 6m H)	4.5m	16	4	64
<b>TOTAL PROPOSED CANOPY COVERAGE (m<sup>2</sup>):</b>				<b>64</b>

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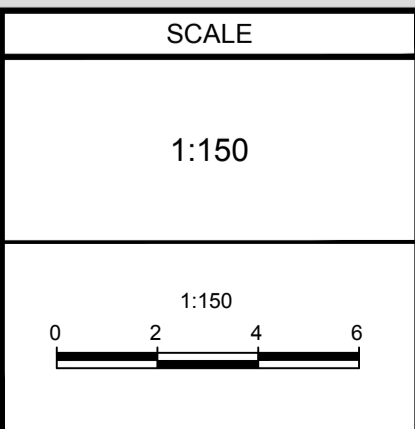


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Owner:  
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2081 MERIVALE ROAD  
Ottawa, ON K2G 1G9

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2.	RE-ISSUED FOR SPC	JUN 26/24	RGJ
1.	ISSUED FOR SPC	JUN 13/23	RGJ



DESIGN	MEL
CHECKED	RGJ
DRAWN	MEL
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APPROVED	RGJ

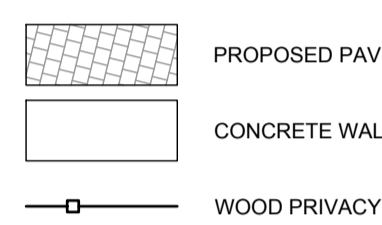
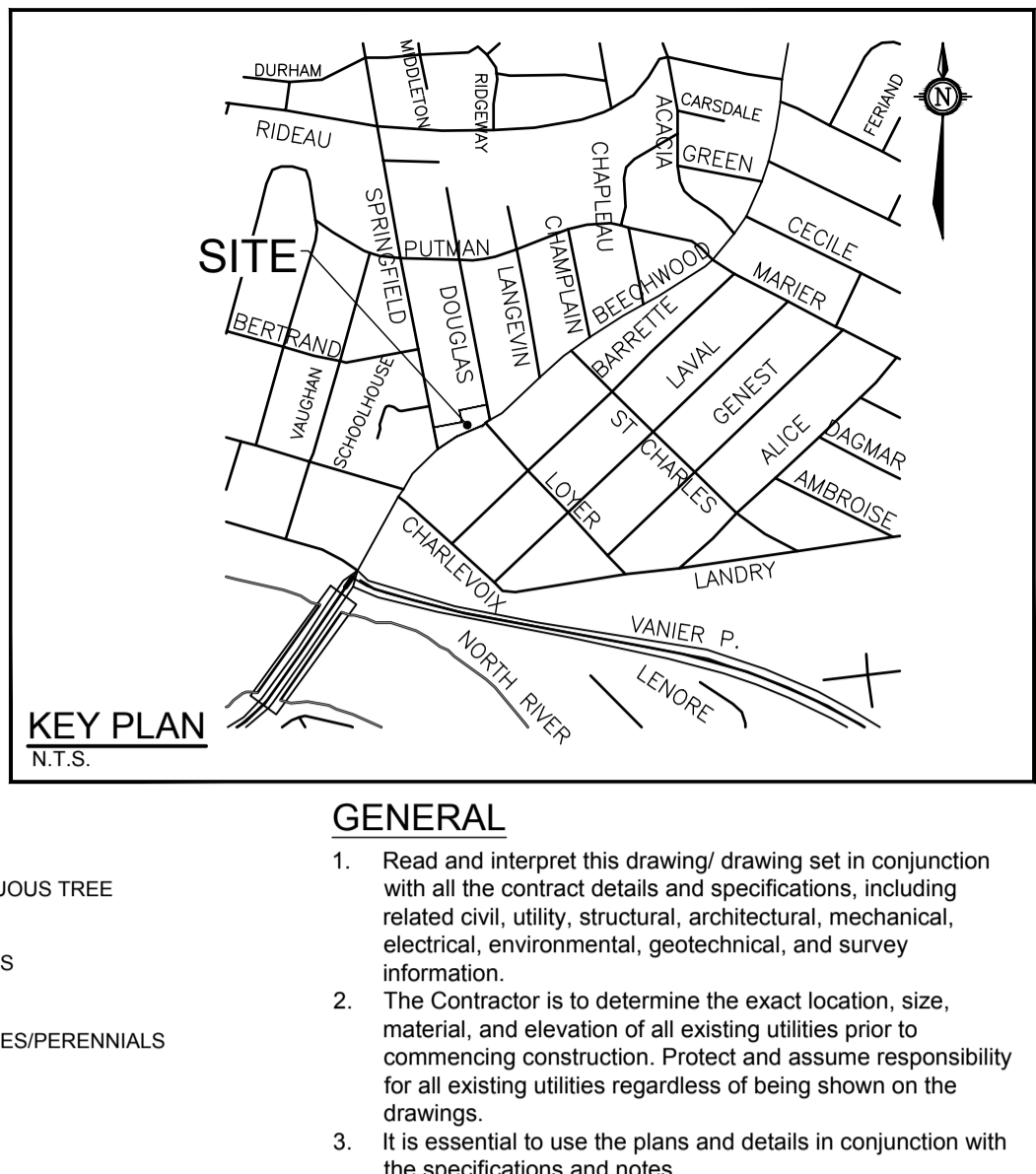
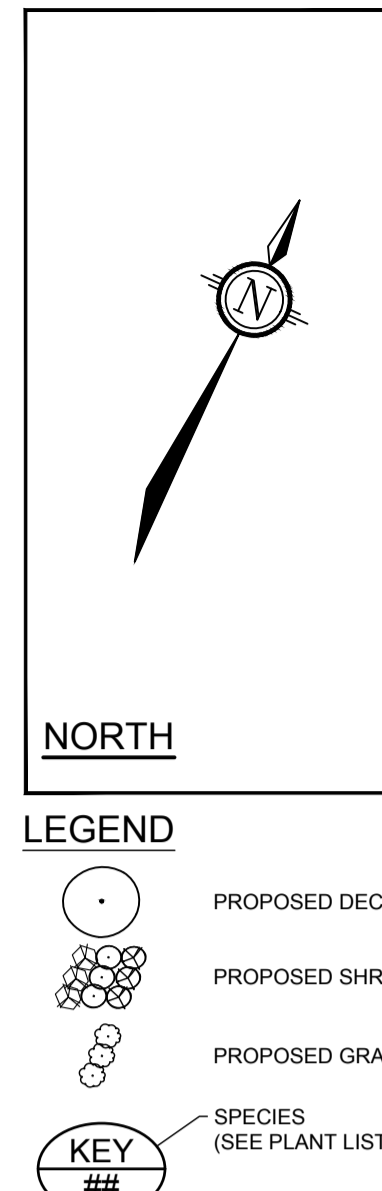
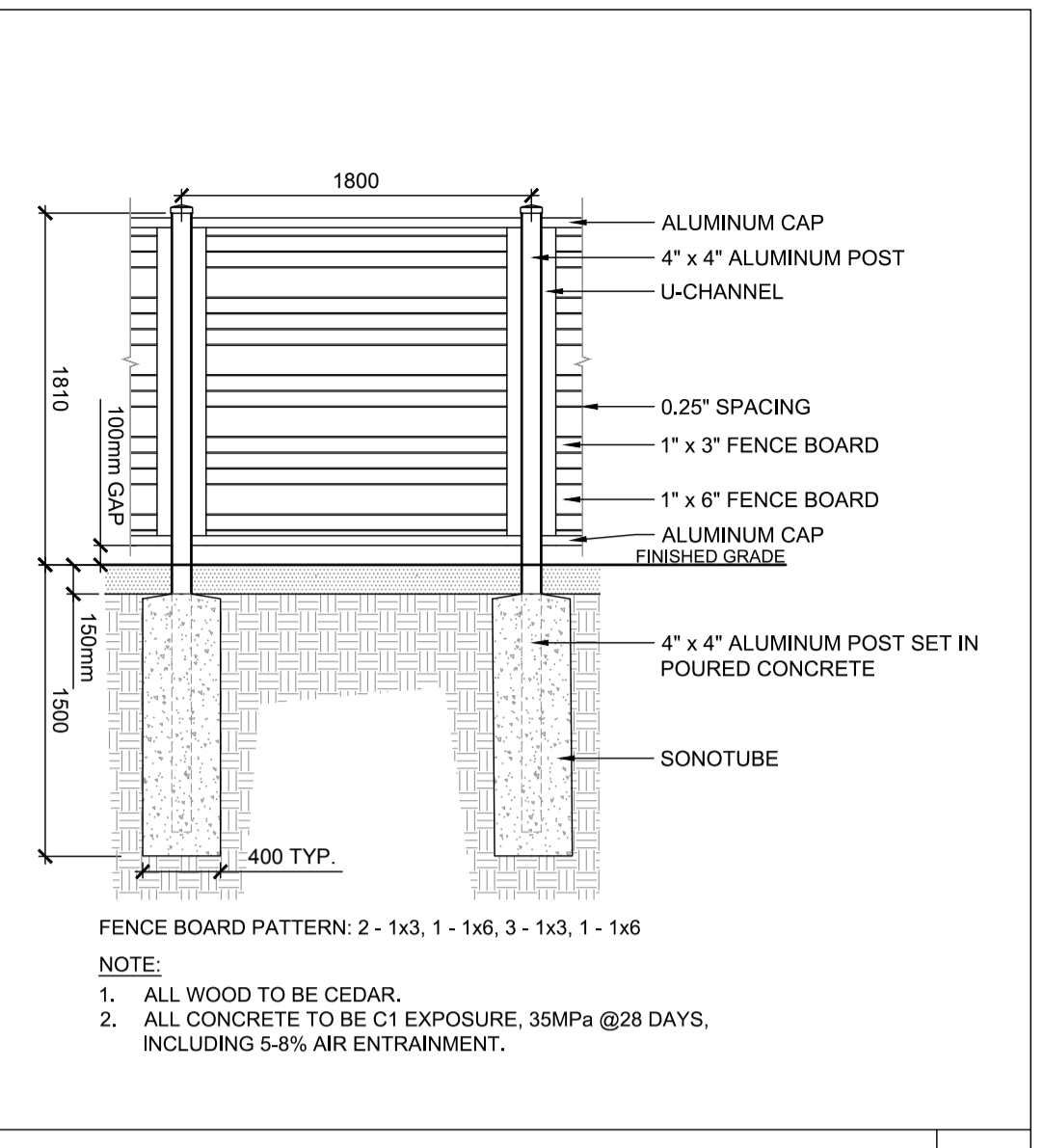
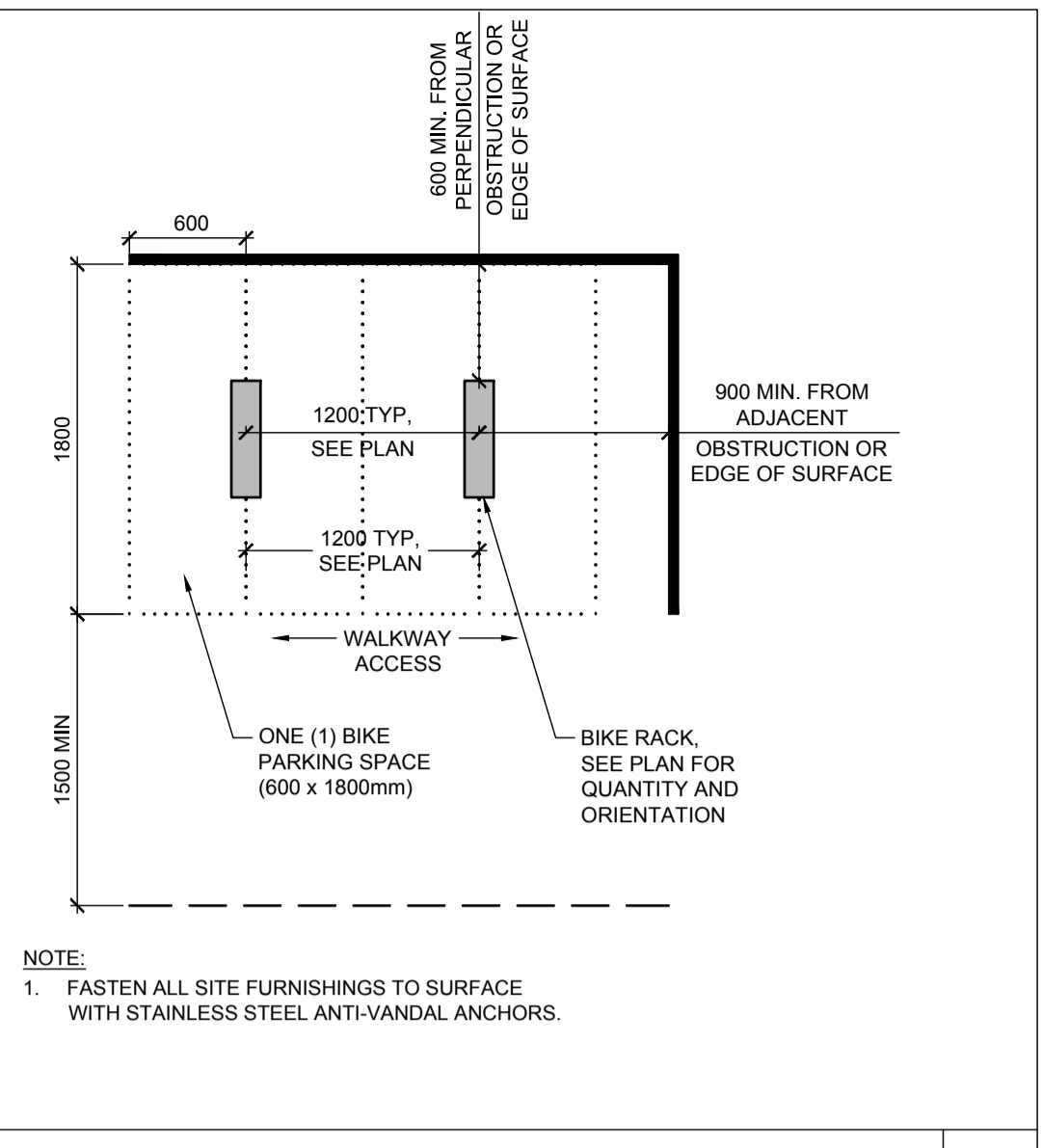
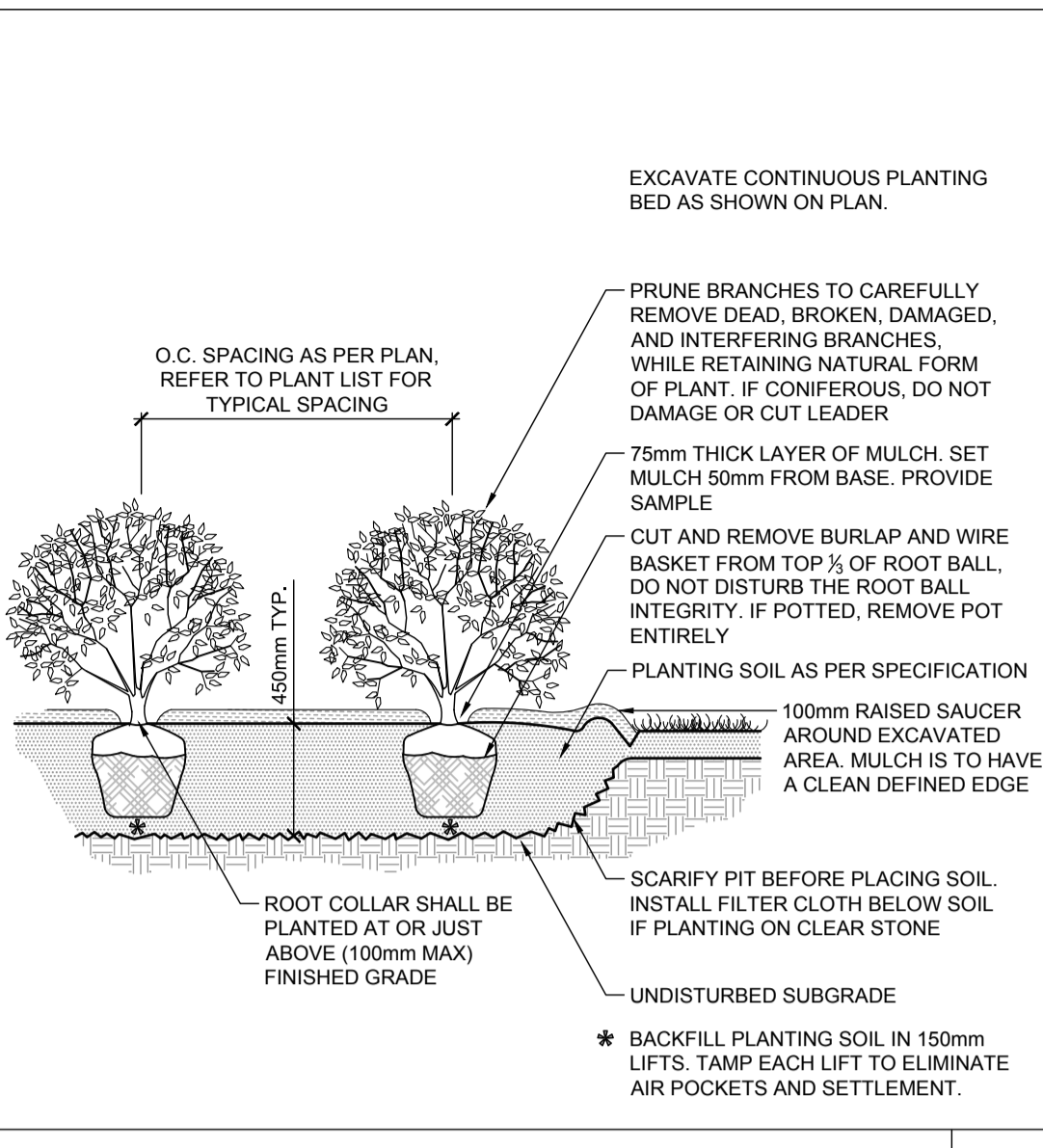
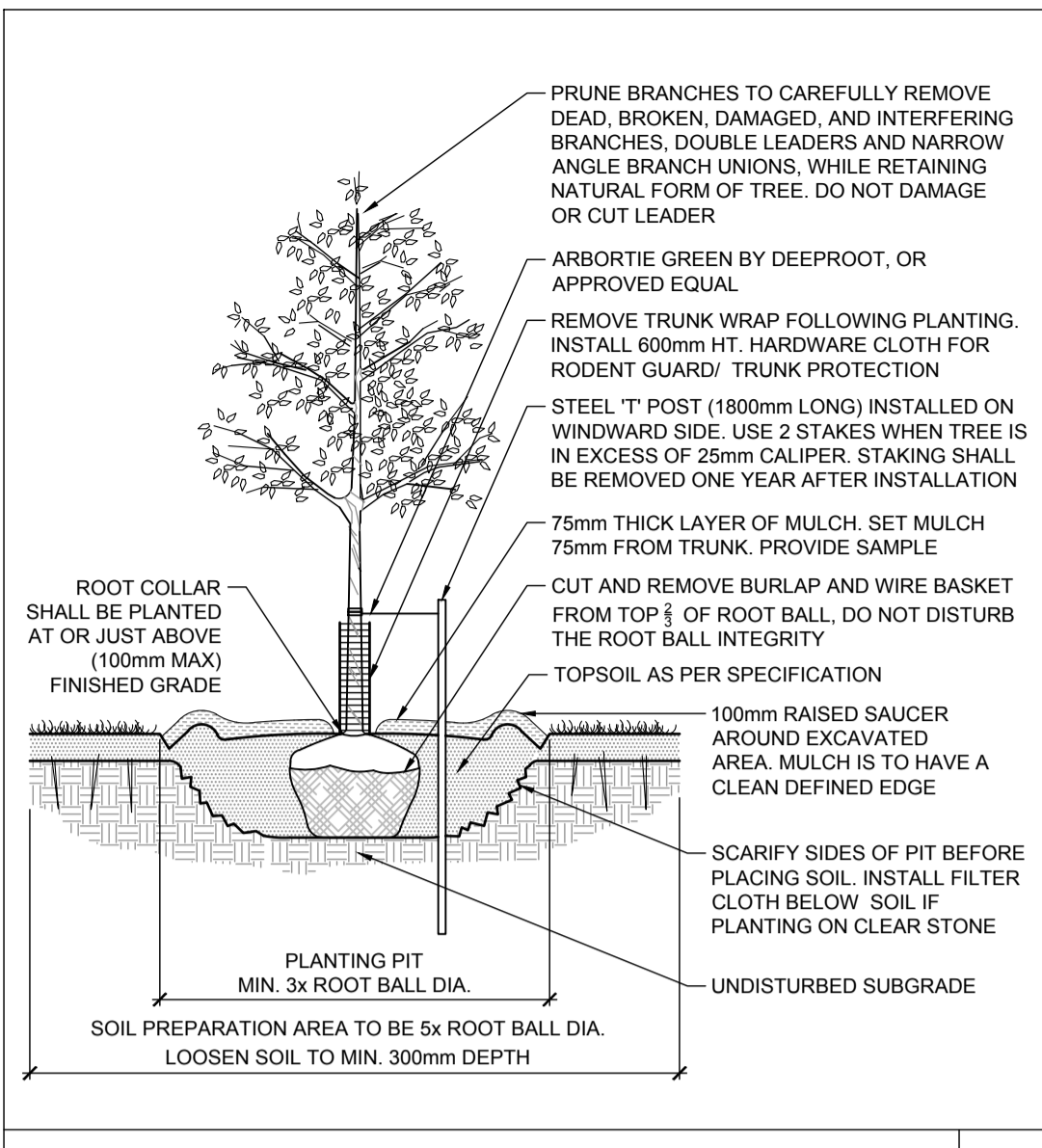


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LOCATION	
CITY OF OTTAWA 47 BEECHWOOD AVENUE	
DRAWING NAME	
TREE CONSERVATION PLAN 2 PROPOSED DEVELOPMENT & TREE COVER	
PROJECT No.	122186-00
REV	REV # 2
DRAWING No.	122186-TCR2

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PC2023-0238



**GENERAL**

1. Read and interpret this drawing/ drawing set in conjunction with all the contract details and specifications, including related civil, utility, structural, architectural, mechanical, electrical, environmental, geotechnical, and survey information.
2. The Contractor is to determine the exact location, size, material, and elevation of all existing utilities prior to commencing construction. Protect and assume responsibility for all existing utilities regardless of being shown on the drawings.
3. It is essential to use the plans and details in conjunction with the specifications and notes.
4. Do not scale drawings. Work to dimensions only.
5. Protect all existing and retained vegetation for the duration of construction according to the contract details and specifications.
6. Reinstate all areas and items damaged or disturbed, beyond the Limit of Work, because of construction activities, including but not limited to construction staging areas, haul roads, stockpile areas, etc. to the satisfaction of the Consultant. Unless otherwise noted, Contractor is to reinstate all areas to pre-construction condition or better to the satisfaction of the Contract Administrator.

**PRODUCT INFORMATION**

Install products as per manufacturer specifications. Shop drawings required.

**PAVERS**  
Edge of pavers to receive edge restraint.  
• TBD by [Manufacturer]  
Location:  
Size:  
Pattern:  
Colour:

**FENCE**  
• Horizontal Wood Privacy Fence  
Panel Height: 2m  
Post Cap: TBD  
Colour: TBD

**SITE FURNITURE**  
Fasten all site furnishing to surface with stainless steel anti-vandal anchors.  
• Trio Bike Rack by Forms + Surfaces  
Powdercoat Colour: Dark Grey Metallic Texture

**PLANTING**

1. Plant material to be No. 1 Grade and is to comply with Canadian Standards for Nursery Stock (latest edition) published by the Canadian Nursery Landscape Association.
2. Use structurally sound plant material with strong fibrous root system free of disease, defects, and injuries. Use trees with straight trunks, well and characteristically branched for species. Obtain approval from consultant of plant material at source prior to digging. All trees and shrubs to be container grown, potted, WB or BB, as indicated on Plant List. Bare root plants are only acceptable for certain species and as approved by the Landscape Architect.
3. Plant material substitutions are not permitted without the written approval from the Consultant, with 48 hours notice, prior to shipping plant material.
4. Plant locations are schematic / approximate only. Contractor is to stake out locations on site for approval by the Landscape Architect prior to installation. Contractor will assume full responsibility if the Landscape Architect is not notified.
5. The illustrated number of plants shown in the Planting Plan supersedes the estimated number in the Plant List. Contractor to report any discrepancies to the Landscape Architect prior to installation. Contractor will assume full responsibility if the Landscape Architect is not notified.
6. Ensure trees are thoroughly watered following planting. Monitor material and ensure adequate moisture until acceptance.
7. In heavy clay or poorly drained soils, set root ball with root collar 75-100mm higher than finished grade.
8. Approved topsoil depths are as follows:  
a. Plant Beds - 450mm continuous depth. Applies to shrubs, perennials, vines, and groundcovers.
9. Apply the following mineral fertilizer unless soil tests show other requirements:  
a. Plant Beds - (8-32-16), i.e. 8% Nitrogen, 32% Phosphorus, 16% Potash per manufacturer specifications.

**Trio Bike Rack**  
SKTRO

Quantity:

Weight: 25.00 lbs.

Dimension: 12" L X 2.75" D X 33.5" H

Body Material: Cast Aluminum

Body Finish: Powdercoat, Dark Grey Metallic Texture

Mounting: Surface Mounted With Embedded Anchors

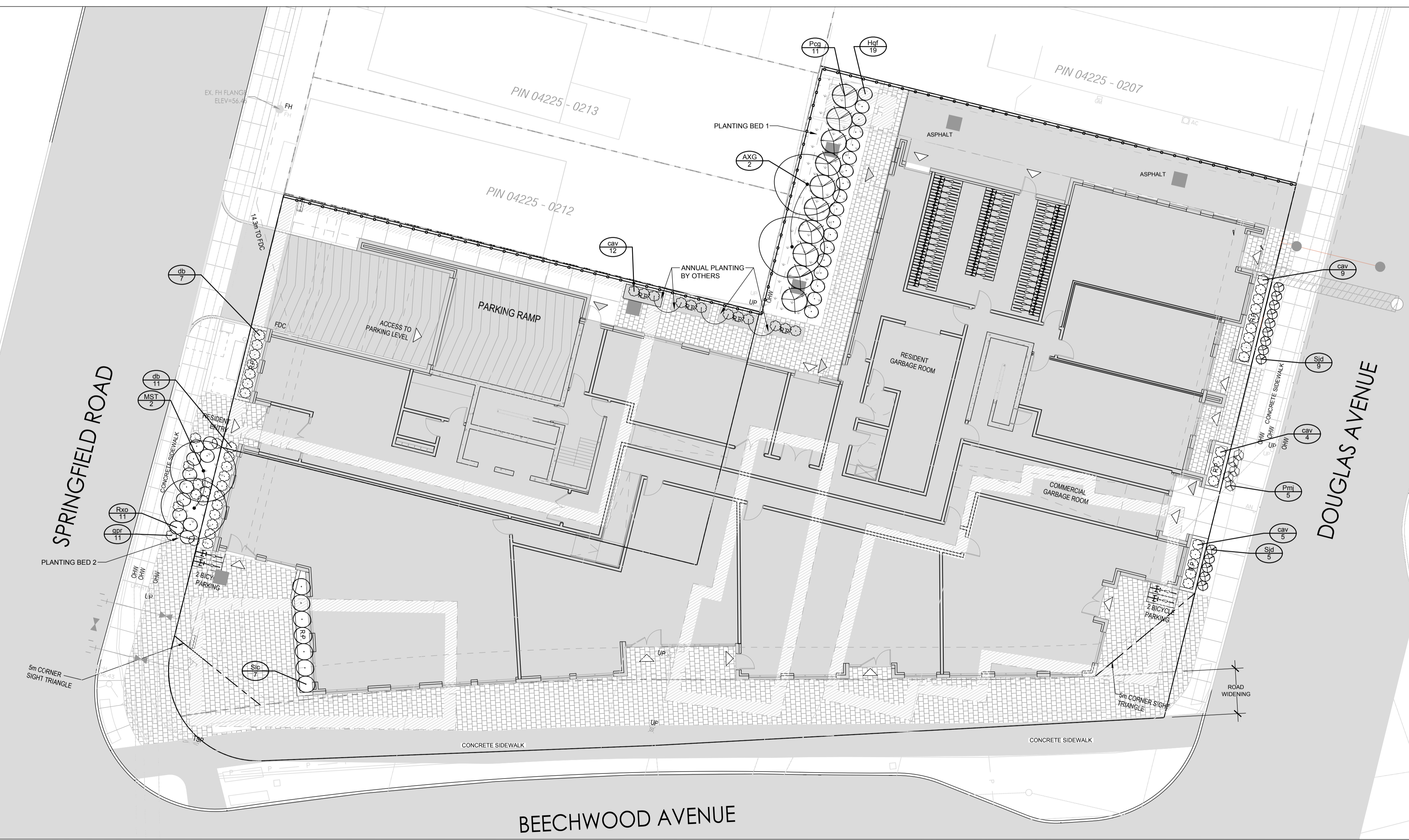
**SOIL CALCULATIONS:**

Planting Bed No.	Available Soil Area (sq m)	Available Soil Depth (m)	Available Soil Volume (cu m)	No. of Proposed Trees				Total No. of trees	Min. required Soil Volume total (cu m)
				Small 20m <sup>1</sup> or 12m <sup>2</sup>	Medium 25m <sup>1</sup> or 15m <sup>2</sup>	Large 30m <sup>1</sup> or 18m <sup>2</sup>	Evergreen 25m <sup>1</sup> or 15m <sup>2</sup>		
Planting Bed 1	61.47	0.40	24.59	2	0	0	0	2	24m <sup>3</sup>
Planting Bed 2	21.70	1.2m	26.04	2	0	0	0	2	24m <sup>3</sup>

Note 1: For proposed Planting Bed 1 - the average soil depth shall be 0.4m over the underground parking garage to provide adequate soil volume to support 2 small trees.

**PLANT LIST**

KEY	QTY	BOTANICAL NAME	COMMON NAME	OWNERSHIP	COMMENT	SIZE	COND	SPACING
<b>Deciduous Trees</b>								
AVG	2	Amelanchier x grandiflora	Apple Serviceberry (multi-stem)	Private	Native Culture	175cm 15gal	PT	As Shown
MST	2	Malus 'Sugar Tyme'	Sugar Tyme Crabapple	City	Non Native	50mm Cal	WB	As Shown
<b>Coniferous Shrubs</b>								
Pmj	5	Pinus mugo 'Lakobsen'	Lakobsen Mugo Pine			40cm Spr	BB	As Shown
<b>Deciduous Shrubs</b>								
Hgf	19	Hydrangea pan. 'Tiny Quick Fire' (SMANRPSB)	Tiny Quick Fire Hydrangea			40cm Ht	PT	As Shown
Pcg	11	Physocarpus opulifolius 'Centre Glow'	Centre Glow Ninebark			60cm Ht	PT	As Shown
Rvo	11	Rosa x 'Italian Ice'	Ice Easy Italian Ice Rose			50cm Ht	PT	As Shown
Sjd	14	Spiraea japonica 'Double Play Candy Corn'	Double Play Candy Corn Spiraea			50cm Ht	PT	As Shown
Sic	7	Stephanandra incisa 'Crispa'	Cutleaf Stephanandra			40cm Ht	PT	As Shown
<b>Perennials</b>								
gpr	11	Ceranium 'Rozanne'	Rozanne Cranesbill			1g	PT	As Shown
<b>Ornamental Grasses</b>								
cav	30	Calamagrostis acutiflora 'Avalanche'	Avalanche Feather Reed Grass			1g	PT	As Shown
db	18	Bromelia pennisetoides 'Bronzeschleier'	Bronze Veil Tufted Hair Grass			1g	PT	As Shown

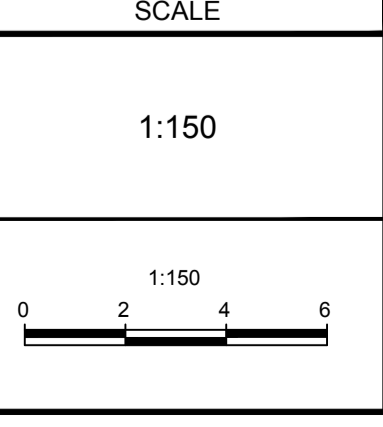


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LOCATION	CITY OF OTTAWA 47 BEECHWOOD AVENUE
<b>DRAWING NAME</b>	LANDSCAPE PLAN
<b>PROJECT No.</b>	122186-00
<b>REV</b>	REV # 2
<b>DRAWING No.</b>	122186-L1

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