



URBAN FORESTRY & FOREST MANAGEMENT CONSULTING

P.O. Box 13593, STN. KANATA, OTTAWA, ON K2K 1X6
TELEPHONE: (613) 838-5717
WEBSITE: WWW.IFSASSOCIATES.CA

November 28, 2023

Kevin Fagan
Project Manager
JBPA Developments Inc.
107 Pretoria Avenue, Ottawa, ON K1S 1W8

RE: RAISED PLANTER WITH TREES AT 18 HAWTHORNE AVENUE

Dear Kevin,

This brief memo outlines my review of a raised planter holding four trees at the rear of the building proposed for 18 Hawthorne Avenue. The importance of the trees relate to privacy screening between adjacent private backyards and the new building.

The raised planter is designed to hold 80m³ of soil, or 20m³ per tree. The City of Ottawa's standards in terms of recommended soil volumes are 18m³ for large trees within shared rooting spaces and 15m³ per tree when medium sized trees are used. Originally the trees slated for the planter were honey-locusts (*Gleditsia triacanthos*) – a species typically understood to be large-growing (30m in height and 90cm in diameter at maturity according to Trees In Canada, Farrar, 2017). In my opinion the aggressive rooting habit of the species makes it unsuitable for a raised planter (roots are known to cause pre-mature aging of the structure through damage to membranes). Instead of locusts (a species not native to Eastern Ontario), I would instead recommend hackberry (*Celtis occidentalis*). Hackberry are generally medium-sized (15m height and 50cm diameter at maturity – Trees In Canada) and are native to the area.

The planter design incorporates all the elements critical to successful tree establishment and longevity – shared soil volume beyond that required for the recommended species, rigid insulation on the sides and bottom to guard against frost, a thick layer of organic mulch on the surface, a drip irrigation system and drainage holes (see landscape plan prepared by Kallala Design page 2).

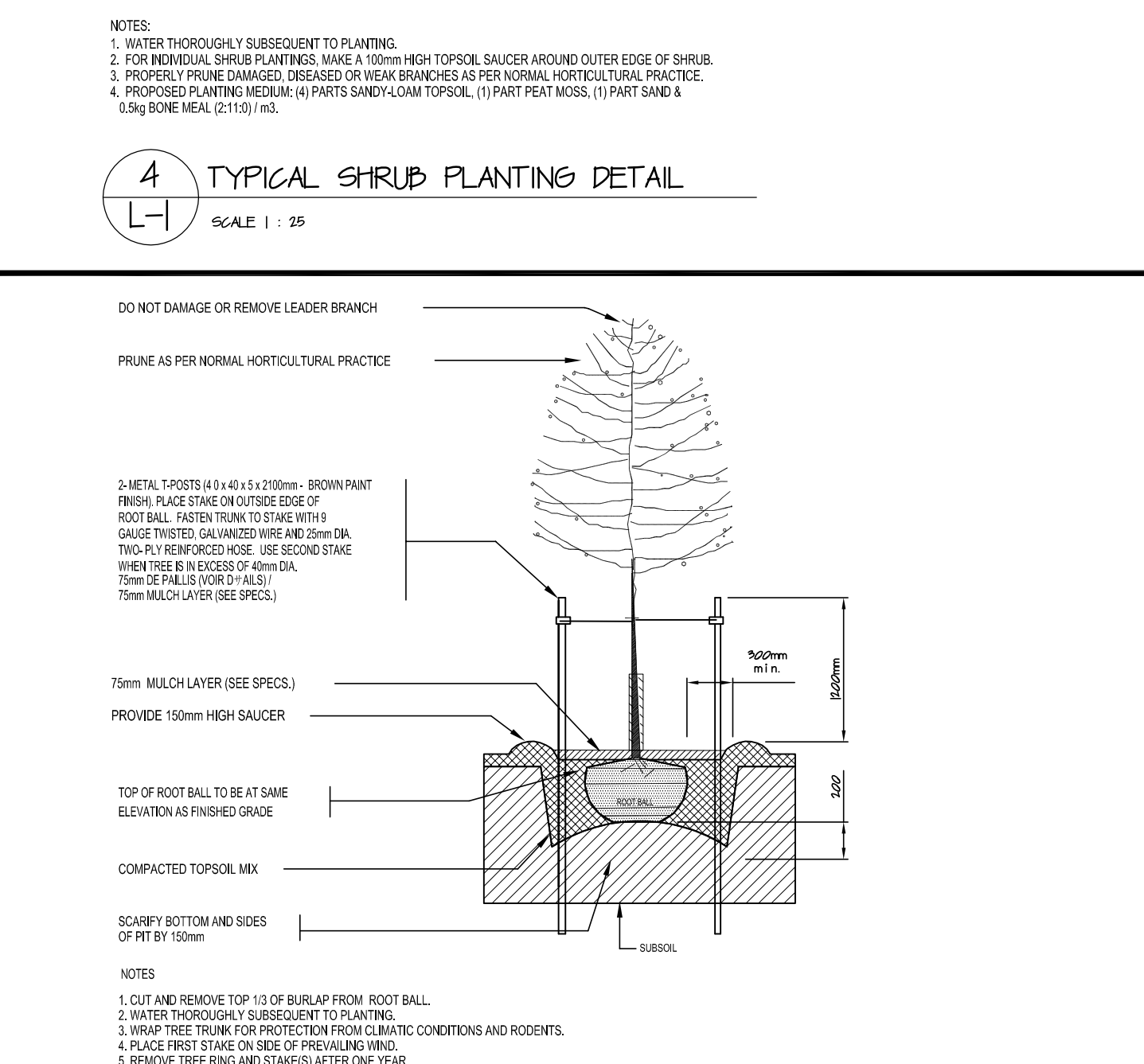
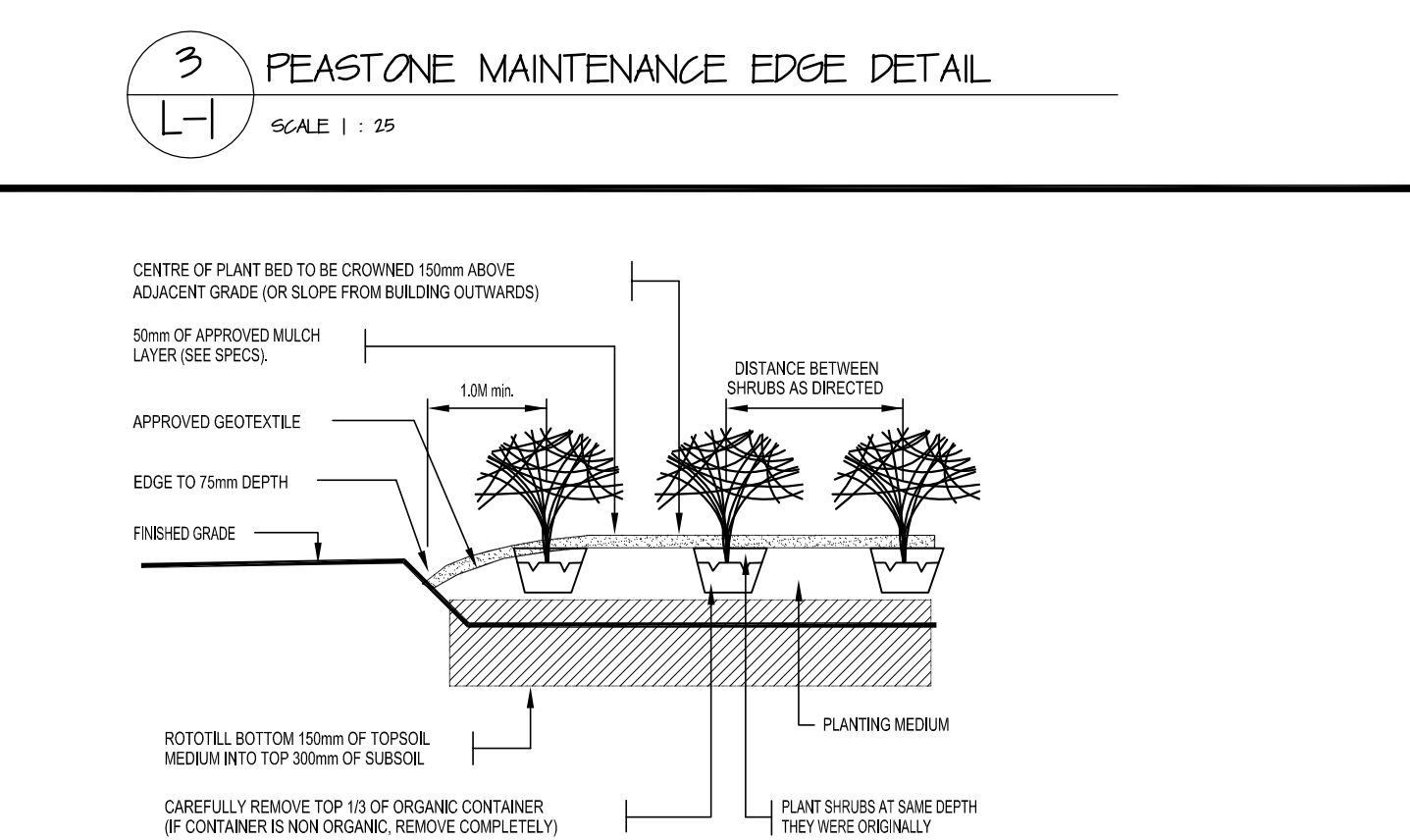
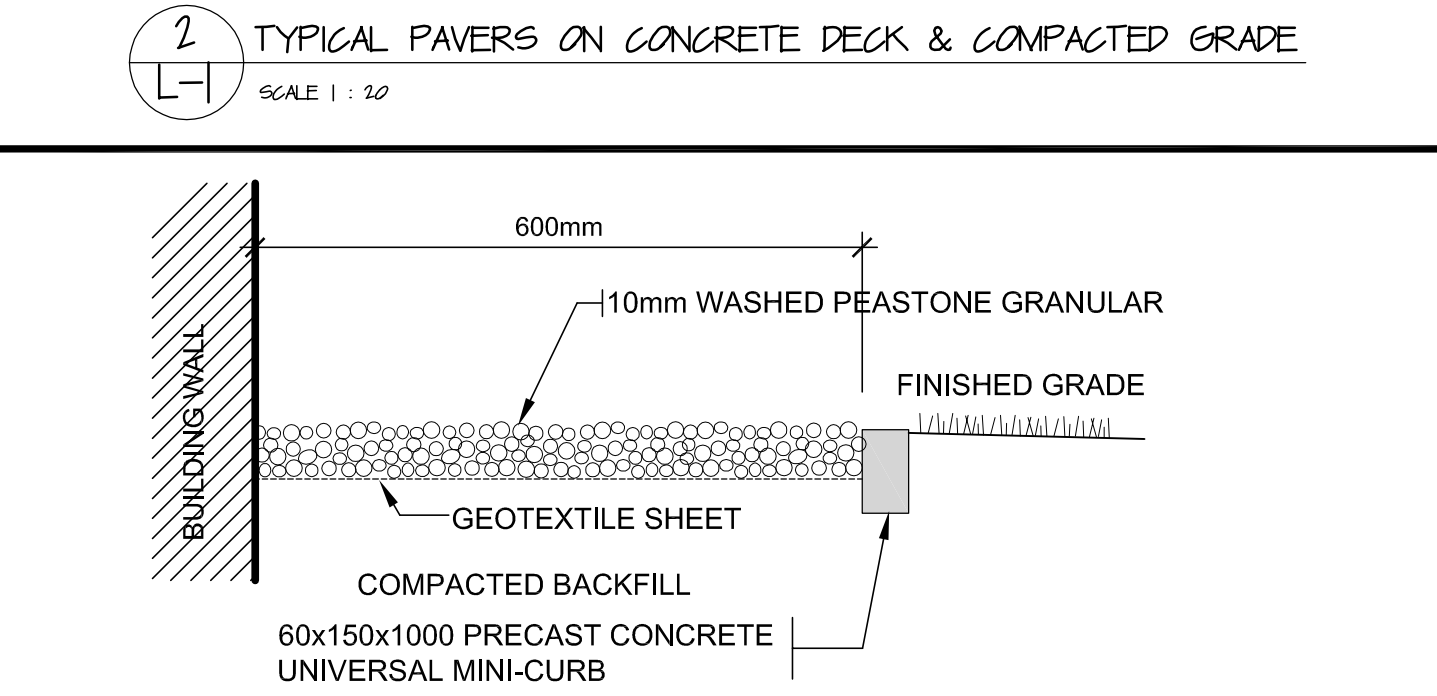
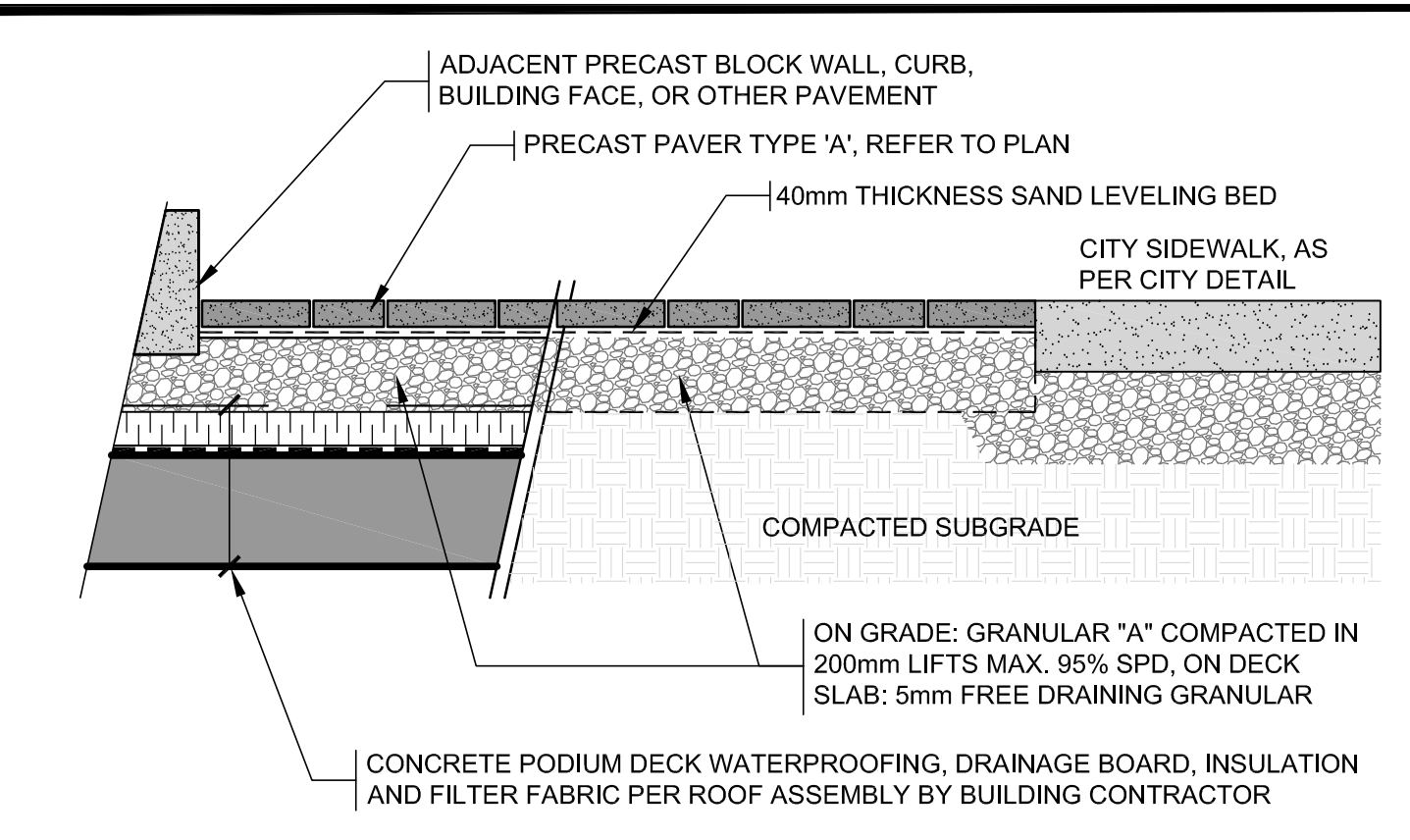
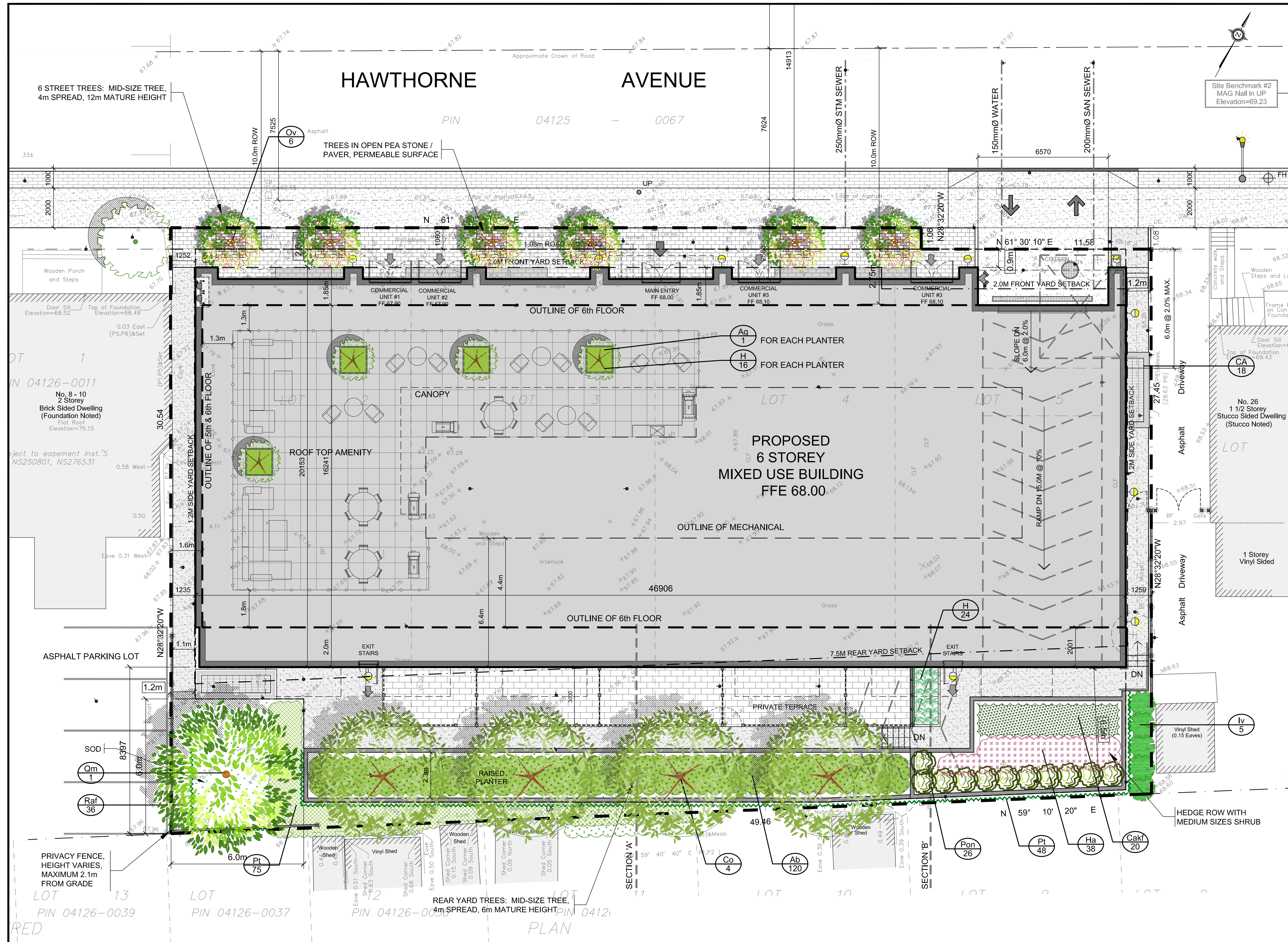
Please do not hesitate to contact me with any questions concerning this report. This report is subject to the attached Limitations of Tree Assessments and Liability to which the reader's attention is directed.

Yours,



Andrew K. Boyd, B.Sc.F, R.P.F. (#1828)
Certified Arborist #ON-0496A and TRAQualified





GENERAL NOTES

- ALL GENERAL SITE INFORMATION AND CONDITIONS COMPLIED FROM EXISTING PLANS AND CONSULTANT'S FIELD NOTES. REPORT ALL DISCREPANCIES PRIOR TO ANY WORK. NO RESPONSIBILITY IS BORNE BY THE CONSULTANT FOR UNDERLYING SUBSURFACE CONDITIONS.
- THE CONTRACTOR IS TO NOTIFY ALL UTILITY COMPANIES PRIOR TO EXCAVATION TO ASCERTAIN LOCATION OF UNDERGROUND SERVICES. VERIFY ALL ELEVATIONS WITH INFORMATION SHOWN.
- ALL DIMENSIONS AND GRADES ARE TO BE VERIFIED ON SITE PRIOR TO ANY CONSTRUCTION BY THE LANDSCAPE ARCHITECT.
- CONTRACTOR IS TO MAINTAIN POSITIVE SURFACE RUNOFF THROUGHOUT THE ENTIRE CONSTRUCTION PERIOD.
- REINSTATE ALL DAMAGE CAUSED CONTRACTOR TO STRUCTURES, CURBS, PAVEMENT, PLANTING, ROAD SHOULDERS AND OTHER SITE AMENITIES.
- CONTRACTOR TO STAKE PLANTING LOCATION AND OTHER SITE AMENITIES UNDER SUPERVISION OF LANDSCAPE ARCHITECT PRIOR TO ANY WORK.
- NO MODIFICATIONS TO PLANS AND DETAILS, AND NO MATERIALS SUBSTITUTIONS IS PERMITTED WITHOUT THE WRITTEN AUTHORIZATION OF THE LANDSCAPE ARCHITECT.
- USE OF THIS PLAN WITHOUT THE LANDSCAPE ARCHITECT'S SEAL AND SIGNATURE IS NOT ALLOWED AND RELEASE THE LANDSCAPE ARCHITECT OF ANY RESPONSIBILITY.

NO.	DATE	REVISION
7	2023 11 11	ISSUED FOR SPC AGREEMENT
6	2023 11 20	REVISED AS PER SPC COMMENTS
5	2023 10 06	REVISED AS PER SPC COMMENTS
4	2023 07 18	ISSUED FOR ROUND 3 COMMENTS
3	2023 04 12	ISSUED FOR SPC APPLICATION
2	2023 03 17	ISSUED FOR ZA 1st ROUND REVIEW
1	2022 09 15	ISSUED FOR ZONING AMENDMENT

CLIENT: **REAL ESTATE JBHoldingsInc**

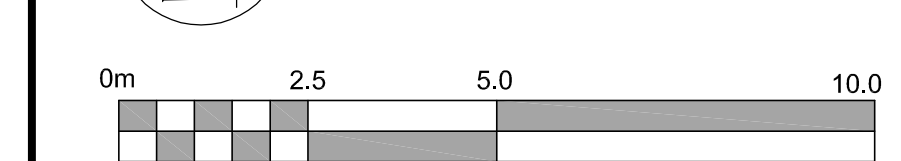
ARCHITECT: **KALLALA design**

PROJECT: **18 HAWTHORNE AVENUE (12 to 24 HAWTHORNE AVENUE)**

OTTAWA ONTARIO

TITLE: **LANDSCAPE PLAN**

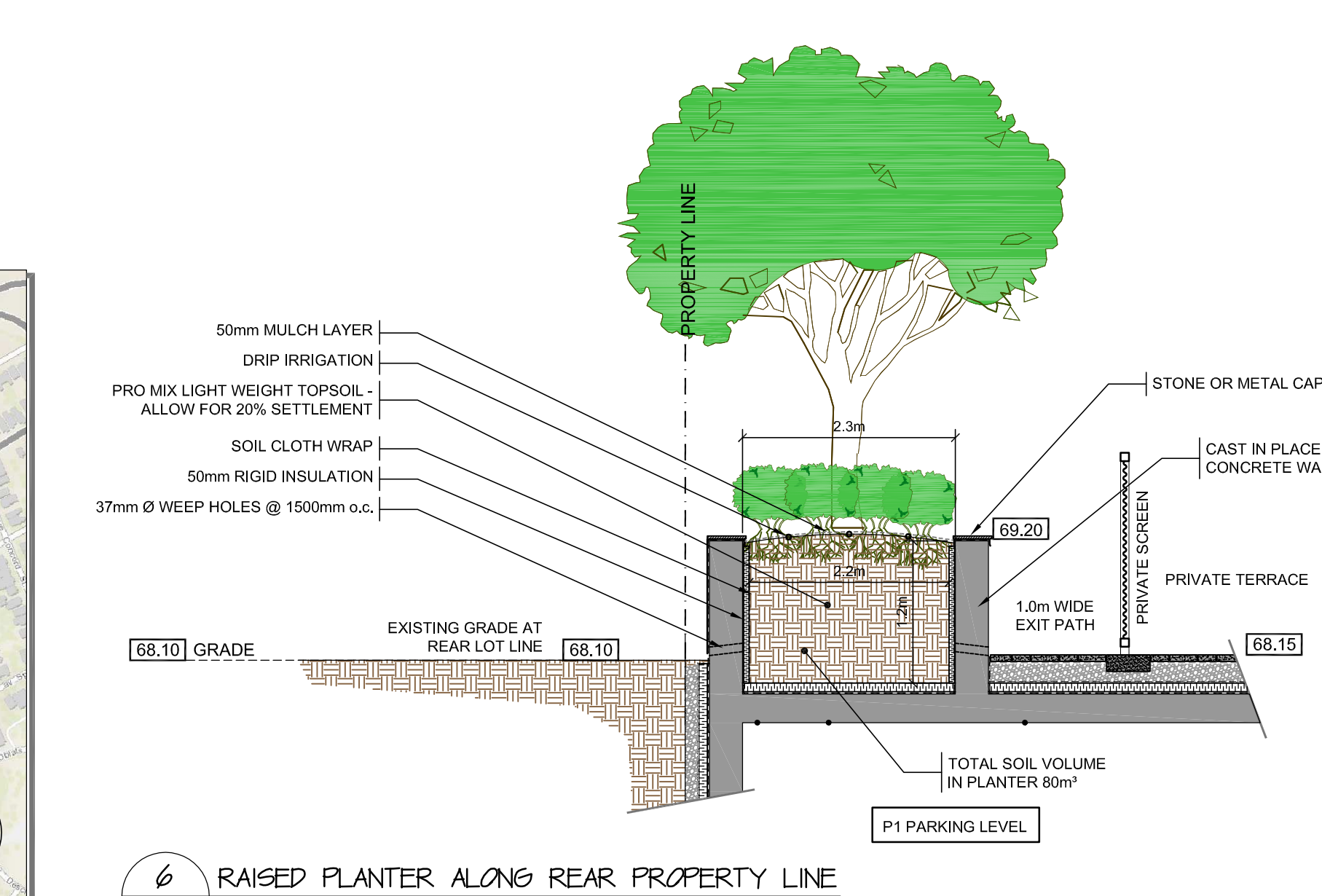
LANDSCAPE PLAN
SCALE 1 : 100



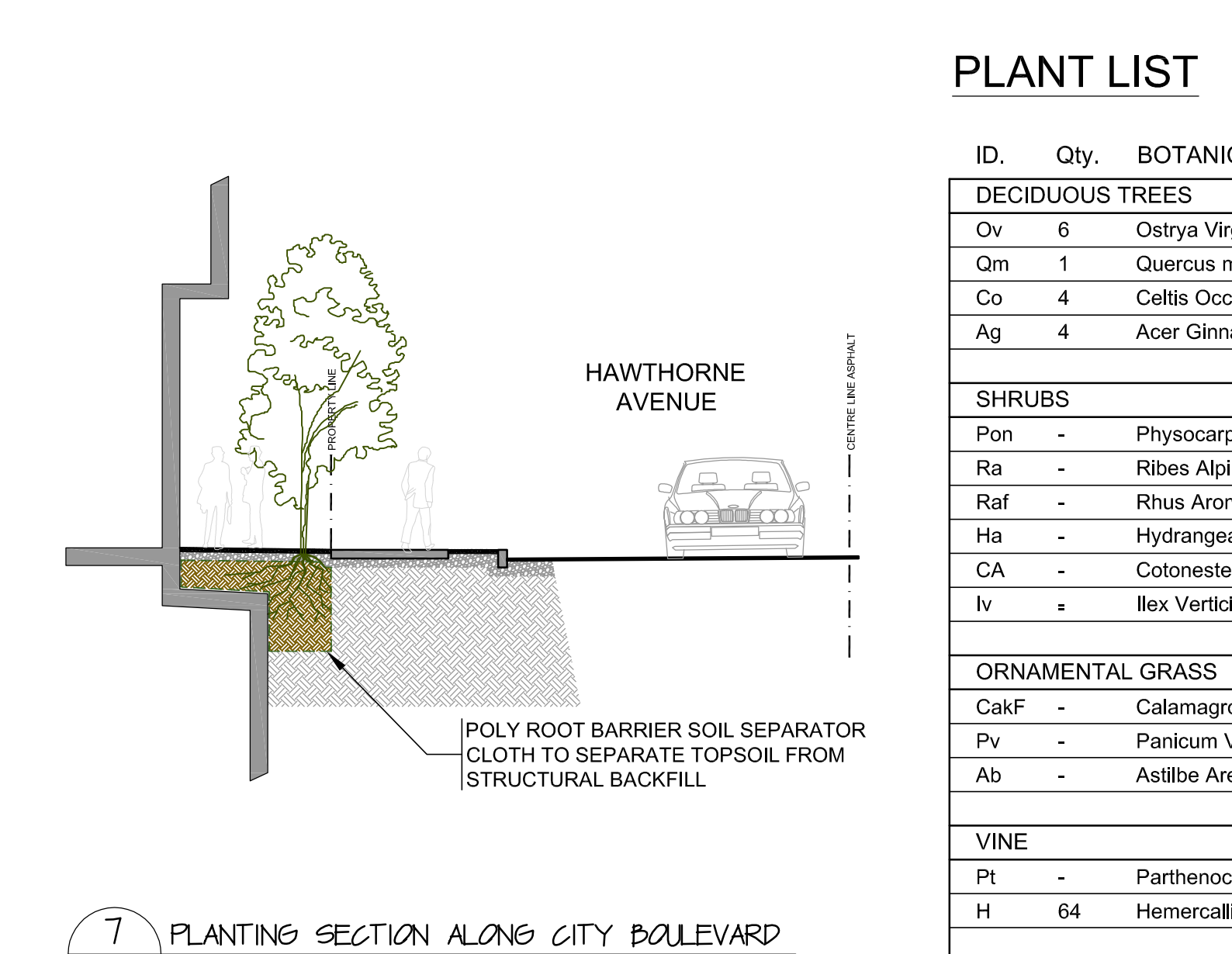
SCALE 1 : 100



KEY MAP



6 RAISED PLANTER ALONG REAR PROPERTY LINE
SCALE 1 : 50



7 PLANTING SECTION ALONG CITY BOULEVARD
SCALE 1 : 100

PLANT LIST

ID.	Qty.	BOTANICAL NAME	COMMON NAME	SPACING	SCHED.	SIZE	REMARKS
DECIDUOUS TREES							
Ov	6	Ostrya Virginiana	IronWood	See Plan	60mm cat.	WB, straight trunk, uniformly well branched	
Qm	1	Quercus macrocarpa	Bur Oak	See Plan	100mm cat.	WB, straight trunk, uniformly well branched	
Co	4	Celtis occidentalis	Northern Hackberry	See Plan	60mm cat.	WB, straight trunk, uniformly well branched	
Ag	4	Acer Ginnala	Flame Maple	See Plan	200 cm ht.	Pots, straight trunk, uniformly well branched	
SHRUBS							
Pon	-	Physocarpus Opulifolius	Pon Purple Ninebark	1.0m o/c		3 Gal Pots	
Ra	-	Ribes Alpinum	Alpine Currant	1.0m o/c		3 Gal Pots	
Raf	-	Rhus Aromatica	Fragrant Sumac	1.0m o/c		3 Gal Pots	
Ha	-	Hydrangea Arborescens	Annabelle Hydrangea	1.0m o/c		3 Gal Pots	
CA	-	Cotoneaster Acutifolius	Peking Cotoneaster	1.0m o/c		3 Gal Pots	
Iv	-	Ilex Verticillata	Winterberry Holly	1.0m o/c		3 Gal Pots	
ORNAMENTAL GRASS							
CaK	-	Calamagrostis Acutiflora	Karl Foerster Feather Reed Grass	0.6m o/c		2 Gal Pots	
Pv	-	Panicum Virgatum	Prairie Fire Switch Grass	0.6m o/c		2 Gal Pots	
Ab	-	Astilbe Arendtii	Bridal Yell Astilbe	0.6m o/c		2 Gal Pots	
VINE							
Pt	-	Parthenocissus Tricupedata	Boston Ivy	0.6m o/c		1 Gal Pots	
H	64	Hemerallis	Stella D'oro Lily	0.3m o/c		2 Gal Pots	

IRRIGATION: PROVIDE FULL COVERAGE DRIP IRRIGATION TO ALL PLANT BEDS, TREE PITS AND PLANTERS

LIMITATIONS OF TREE ASSESSMENTS & LIABILITY

GENERAL

It is the policy of *IFS Associates Inc.* to attach the following clause regarding limitations. We do this to ensure that our clients are clearly aware of what is technically and professionally realistic in assessing trees for retention.

This report was carried out by *IFS Associates Inc.* at the request of the client. The information, interpretation and analysis expressed in this report are for the sole benefit and exclusive use of the client. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the client to whom it is addressed. Unless otherwise required by law, neither all or any part of the contents of this report, nor copy thereof, shall be conveyed by anyone, including the client, to the public through public relations, news or other media, without the prior expressly written consent of the author, and especially as to value conclusions, identity of the author, or any reference to any professional society or institute or to any initialed designation conferred upon the author as stated in his qualifications.

This report and any values expressed herein represent the opinion of the author; his fee is in no way contingent upon the reporting of a specified value, a stipulated result, nor upon any finding to be reported. Details obtained from photographs, sketches, *etc.*, are intended as visual aids and are not to scale. They should not be construed as engineering reports or surveys. Although every effort has been made to ensure that this assessment is reasonably accurate, the tree(s) should be reassessed at least annually. The assessment presented in this report is valid at the time of the inspection only. The loss or alteration of any part of this report invalidates the entire report.

LIMITATIONS

The information contained in this report covers only the tree(s) in question and no others. It reflects the condition of the assessed tree(s) at the time of inspection and was limited to a visual examination of the accessible portions only. *IFS Associates Inc.* has prepared this report in a manner consistent with that level of care and skill ordinarily exercised by members of the forestry and arboricultural professions, subject to the time limits and physical constraints applicable to this report. The assessment of the tree(s) presented in this report has been made using accepted arboricultural techniques. These include a visual examination of the above-ground portions of each tree for structural defects, scars, cracks, cavities, external indications of decay such as fungal fruiting bodies, evidence of insect infestations, discoloured foliage, the condition of any visible root structures, the degree and direction of lean (if any), the general condition of the tree(s) and the surrounding site, and the proximity of people and property. Except where specifically noted in the report, the tree(s) examined were not dissected, cored, probed or climbed to gain further evidence of their structural condition. Also, unless otherwise noted, no detailed root collar examinations involving excavation were undertaken.

While reasonable efforts have been made to ensure that the tree(s) proposed for retention are healthy, no warranty or guarantee, expressed or implied, are offered that these trees, or any parts of them, will remain standing. This includes other trees on or off the property not examined as part of this assignment. It is both professionally and practically impossible to predict with absolute certainty the behaviour of any single tree or groups of trees or their component parts in all circumstances, especially when within construction zones. Inevitably, a standing tree will always pose some risk. Most trees have the potential for failure in the event of root loss due to excavation and other construction-related impacts. This risk can only be eliminated through full tree removal.



Notwithstanding the recommendations and conclusions made in this report, it must be realized that trees are living organisms, and their health and vigour constantly change over time. They are not immune to changes in site conditions, or seasonal variations in the weather. It is a condition of this report that *IFS Associates Inc.* be notified of any changes in tree condition and be provided an opportunity to review or revise the recommendations within this report. Recognition of changes to a tree's condition requires expertise and extensive experience. It is recommended that *IFS Associates Inc.* be employed to re-inspect the tree(s) with sufficient frequency to detect if conditions have changed significantly.

ASSUMPTIONS

Statements made to *IFS Associates Inc.* in regards to the condition, history and location of the tree(s) are assumed to be correct. Unless indicated otherwise, all trees under investigation in this report are assumed to be on the client's property. A recent survey prepared by a Licensed Ontario Land Surveyor showing all relevant trees, both on and adjacent to the subject property, will be provided prior to the start of field work. The final version of the grading plan for the project will be provided prior to completion of the report. Any further changes to this plan invalidate the report on which it is based. *IFS Associates Inc.* must be provided the opportunity to revise the report in relation to any significant changes to the grading plan. The procurement of said survey and grading plan, and the costs associated with them both, are the responsibility of the client, not *IFS Associates Inc.*

LIABILITY

Without limiting the foregoing, no liability is assumed by *IFS Associates Inc.* for: 1) any legal description provided with respect to the property; 2) issues of title and/or ownership with respect to the property; 3) the accuracy of the property line locations or boundaries with respect to the property; 4) the accuracy of any other information provided by the client or third parties; 5) any consequential loss, injury or damages suffered by the client or any third parties, including but not limited to replacement costs, loss of use, earnings and business interruption; and, 6) the unauthorized distribution of the report.

INDEMNIFICATION

An applicant for a permit or other approval based on this report shall agree to indemnify and save harmless *IFS Associates Inc.* from any and all claims, demands, causes of action, losses, costs or damages that affected private landowners and/or the City of Ottawa may suffer, incur or be liable for resulting from the issuance of a permit or approval based on this report or from the performance or non-performance of the applicant, whether with or without negligence on the part of the applicant, or the applicant's employees, directors, contractors and agents.

Further, under no circumstances may any claims be initiated or commenced by the applicant against *IFS Associates Inc.* or any of its directors, officers, employees, contractors, agents or assessors, in contract or in tort, more than 12 months after the date of this report.

ONGOING SERVICES

IFS Associates Inc. accepts no responsibility for the implementation of any or all parts of the report, unless specifically requested to supervise the implementation or examine the results of activities recommended herein. In the event that examination or supervision is requested, that request shall be made in writing and the details, including fees, agreed to in advance.