



**TREE
CONSERVATION
REPORT**
349 Danforth

Tree Conservation Report submitted as Partial
Requirements for a Site Plan Control Application,
October 8, 2020

Prepared by: **Dendron Forestry Services**



Dendron Forestry Services

www.dendronforestry.ca

613.805.WOOD (9663)

info@dendronforestry.ca

Tree Conservation Report

Submitted as part of Site Plan Control Application

Address: 349 Danforth

Date: October 8, 2020

Prepared by: Astrid Nielsen, RPF, ISA Certified Arborist ®

Prepared for: Fernando Matos, Ottawa Carleton Construction Group
fernando@ottawacarletonconstruction

Site Visit: October 7, 2020

Introduction

This Tree Conservation Report has been prepared for Fernando Matos of Ottawa Carleton Construction Group, as partial requirements for the Site Plan Control Application submitted to the City of Ottawa. The objectives of this Tree Conservation Report are:

- To describe all trees over 10 cm on the site, recording their species, size, and current health condition
- To evaluate the impact of the trees by the proposed development and what the recommended action is (retain or protect)
- To provide recommendations on how to mitigate damage to retained trees during construction

Current Vegetation

The following is an inventory of all trees 10 cm or greater on the property and neighbouring property that will be impacted by development.



Tree Inventory

Tree ¹	Species	Diameter at breast height (dbh)	Ownership ²	Condition	Action
1	Showy mountain-ash (<i>Sorbus decora</i>)	14 cm	Private	Good	Proposed removal to accommodate new building
2	American elm (<i>Ulmus americana</i>)	11 cm	Private	Good	Proposed removal to accommodate new building
3	American elm (<i>Ulmus americana</i>)	10 cm	Private	Fair	Proposed removal to accommodate new building
4	American elm (<i>Ulmus americana</i>)	22 cm	Private, possibly jointly owned with 358 Richmond	Good	Proposed removal to accommodate new building

¹ Please refer to the attached grading plan for tree numbers. Note that the Tree Disclosure map includes a tree layer added to the grading plan (in pdf format) provided by the client. This layer includes only information about the trees and the original grading plan is not altered in this process.

²Ownership of the tree in this report is based on the information provided and should not be used as a determination of ownership. For ownership disputes, a survey should be relied on.

Proposed Development and Conserved Vegetation

The proposed development at this site will be a 3-story mixed use building with a footprint that will encompass almost of the extent of the entire lot. The trees that are currently onsite have seeded naturally and are not well placed to accommodate the proposed development and the level of construction activity and excavation that will take place on this site. To accommodate the proposed development, removal of these tree is recommended.

Please note that a **Tree Permit** from the City of Ottawa Planning, Infrastructure and Economic Development Department is required for the removal of any trees onsite.



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The undersigned personally inspected the property and issues associated with this report on Oct. 7, 2020. On Behalf of Dendron Forestry Services,



Astrid Nielsen, MFC, RPF (Registered Professional Forester)

ISA Certified Arborist®, ON-1976

ISA Tree Risk Assessment Qualified

Principal, Dendron Resource Surveys

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Figure 1: Tree 1 - showy mountain ash to be removed



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Figure 2: American elms (trees 2-4) growing along the side of the building - to be removed



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Intended Use of the Report

This Information Report was carried out by Dendron Forestry Services (hereafter Dendron) at the request of the Client. The information, interpretation and analysis contained within this Report is to be used solely for the purposes outlined within this Report. This Report is for the exclusive use of the Client.

Limitations of this Report

This Report is based on the circumstances and observations as they existed at the time of the site inspection of the Client's Property and the trees situated thereon by Dendron and upon information provided by the Client to Dendron. The opinions in this Report are given based on observations made and using generally accepted professional judgment, however, because trees and plants are living organisms and subject to change, damage and disease, the results, observations, recommendations, and analysis as set out in this Report are valid only as at the date any such testing, observations and analysis took place and no guarantee, warranty, representation or opinion is offered or made by Dendron as to the length of the validity of the results, observations, recommendations and analysis contained within this Report. As a result the Client shall not rely upon this Report, save and except for representing the circumstances and observations, analysis and recommendations that were made as at the date of such inspections. It is recommended that the trees discussed in this Report should be re-assessed periodically.

Further Services

Neither Dendron nor any assessor employed or retained by Dendron for the purpose of preparing or assisting in the preparation of this Report shall be required to provide any further consultation or services to the Client, save and except as already carried out in the preparation of this Report and including, without limitation, to act as an expert witness or witness in any court in any jurisdiction unless the Client has first made specific arrangements with respect to such further services, including, without limitation, providing the payment of the Report's regular hourly billing fees.

Dendron accepts no responsibility for the implementation of all or any part of the Report, unless specifically request to examine the implementation of such activities recommended herein. In the event that inspection or supervision of all or part of the implementation is request, that request shall be in writing and the details agreed to in writing by both parties.

Assumptions

The Client is hereby notified and does hereby acknowledge and agree that where any of the facts and information set out and referenced in this Report are based on assumptions, facts or information provided to Dendron by the Client and/or third parties and unless otherwise set out within this Report, Dendron will in no way be responsible for the veracity or accuracy of any such information. Further, the Client acknowledges and agrees that Dendron has, for the purposes of preparing their Report, assumed that the Property, which is the subject of this Report is in full compliance with all applicable federal, provincial, municipal and local statutes, regulations, by-laws, guidelines and other related laws. Dendron explicitly denies any legal liability for any and all issues with respect to non-compliance with any of the above-referenced statutes, regulations, bylaws, guidelines and laws as it may pertain to or affect the Property to which this Report applies.

Professional Responsibility

In carrying out this Report, Dendron and any Assessor appointed for and on behalf of Dendron to perform and carry out the Report has exercised a reasonable standard of care, skill and diligence as would be customarily and normally provided in carrying out this Report. While reasonable efforts have been made to ensure that the trees recommended for retention are healthy, no guarantees are offered, or implied, that these trees, or all parts of them will remain standing. It is professionally impossible to predict with absolute certainty the behaviour of any single tree or group of trees, or all their component parts, in all given circumstances. Inevitably, a standing tree will always pose some risk. Most trees have the potential to fall, lean, or otherwise pose a danger to property and persons in the event of adverse weather conditions, and this risk can only be eliminated if the tree is removed.

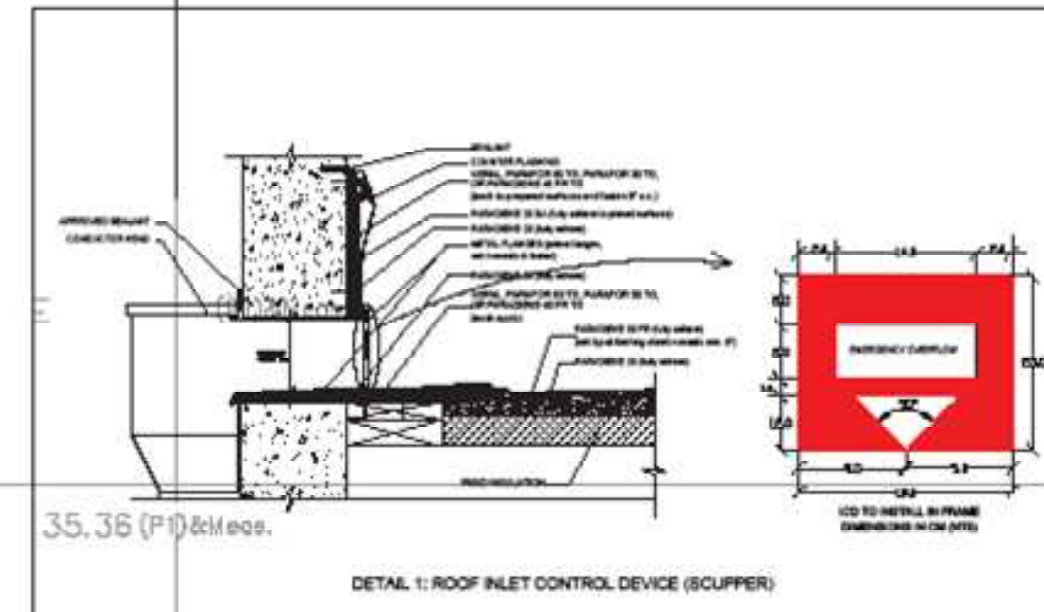
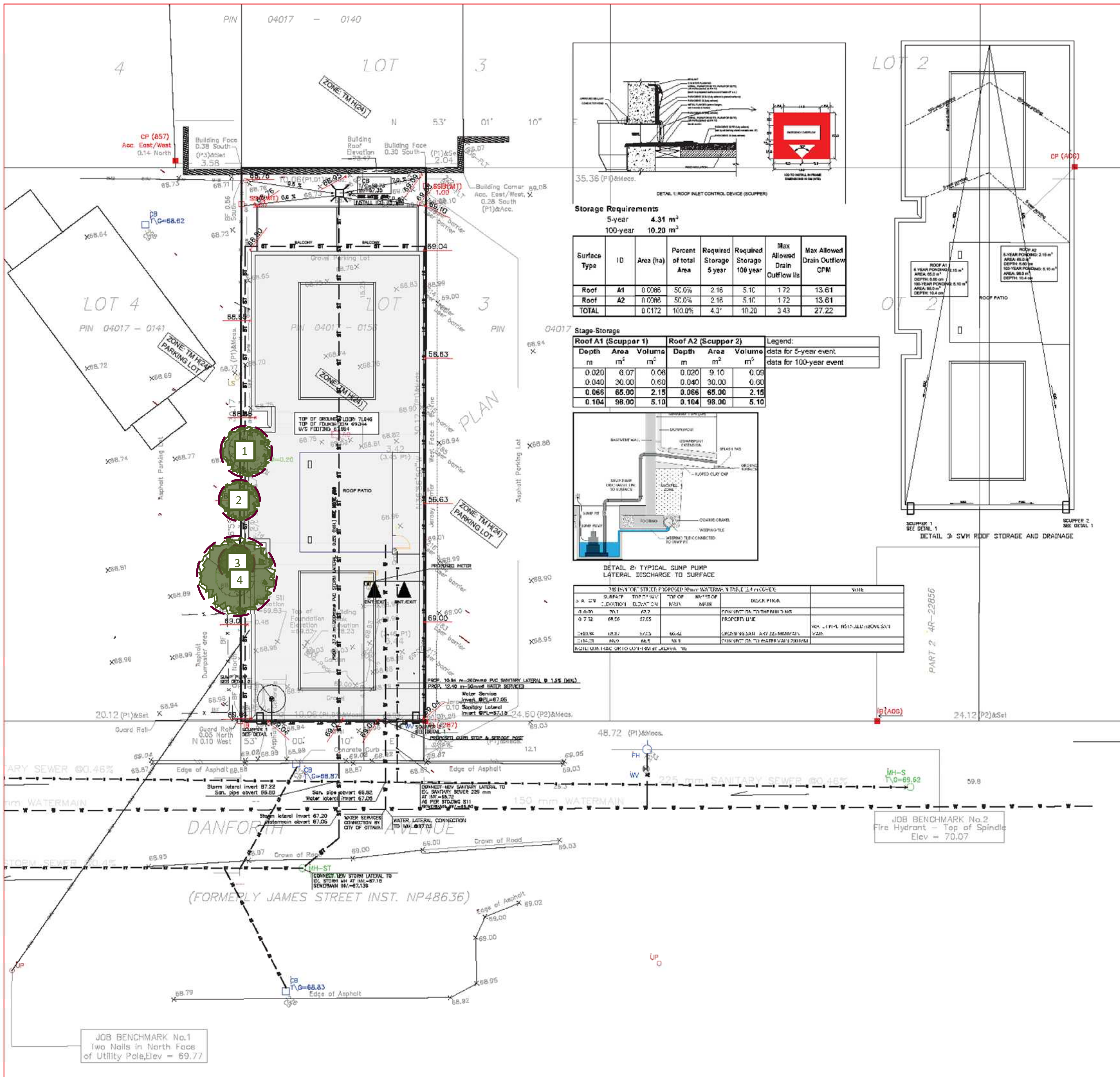
Without limiting the foregoing, no liability is assumed by Dendron for:

- a) any legal description provided with respect to the Property;
- b) issues of title and or ownership respect to the Property;
- c) the accuracy of the Property line locations or boundaries with respect to the Property; and
- d) the accuracy of any other information provided to Dendron by the Client or third parties;
- e) 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
- f) the unauthorized distribution of the Report.

Further, under no circumstance may any claims be initiated or commenced by the Client against Dendron 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.

General

Any plans and/or illustrations in this Report are included only to help the Client visualize the issues in this Report and shall not be relied upon for any other purpose. This report is best viewed in colour. Any copies printed in black and white may make some details difficult to properly understand. Dendron accepts no liability for misunderstandings due to a black and white copy of the report.



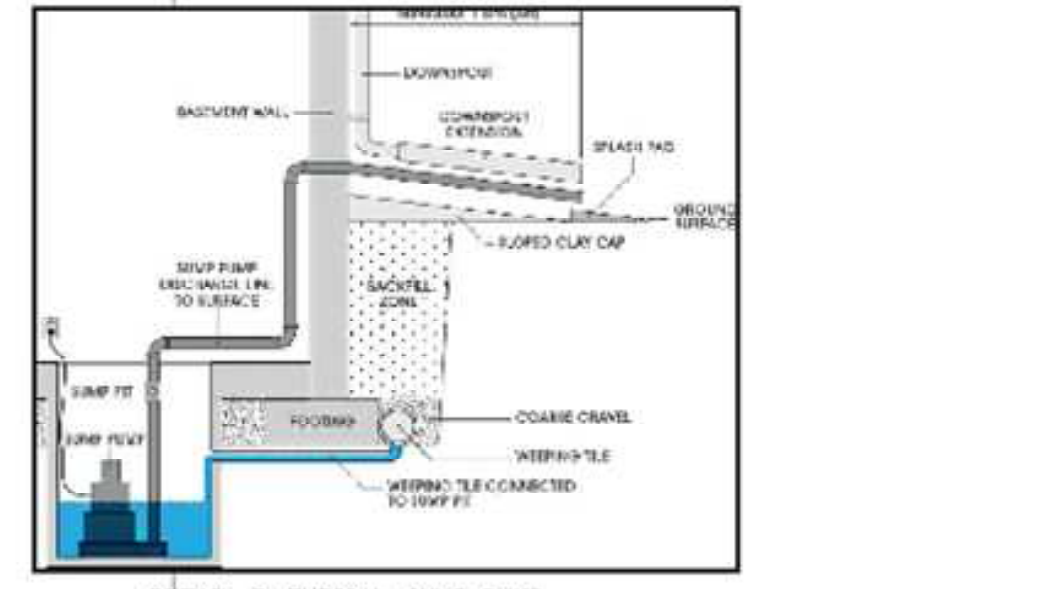
Storage Requirements

5-year 4.31 m³
100-year 10.20 m³

Surface Type	ID	Area (ha)	Percent of total Area	Required Storage 5-year	Required Storage 100-year	Max Allowed Drain Outflow l/s	Max Allowed Drain Outflow CPM
Roof	A1	0.0086	50.0%	2.16	5.10	1.72	13.61
Roof	A2	0.0086	50.0%	2.16	5.10	1.72	13.61
TOTAL		0.0172	100.0%	4.3	10.20	3.43	27.22

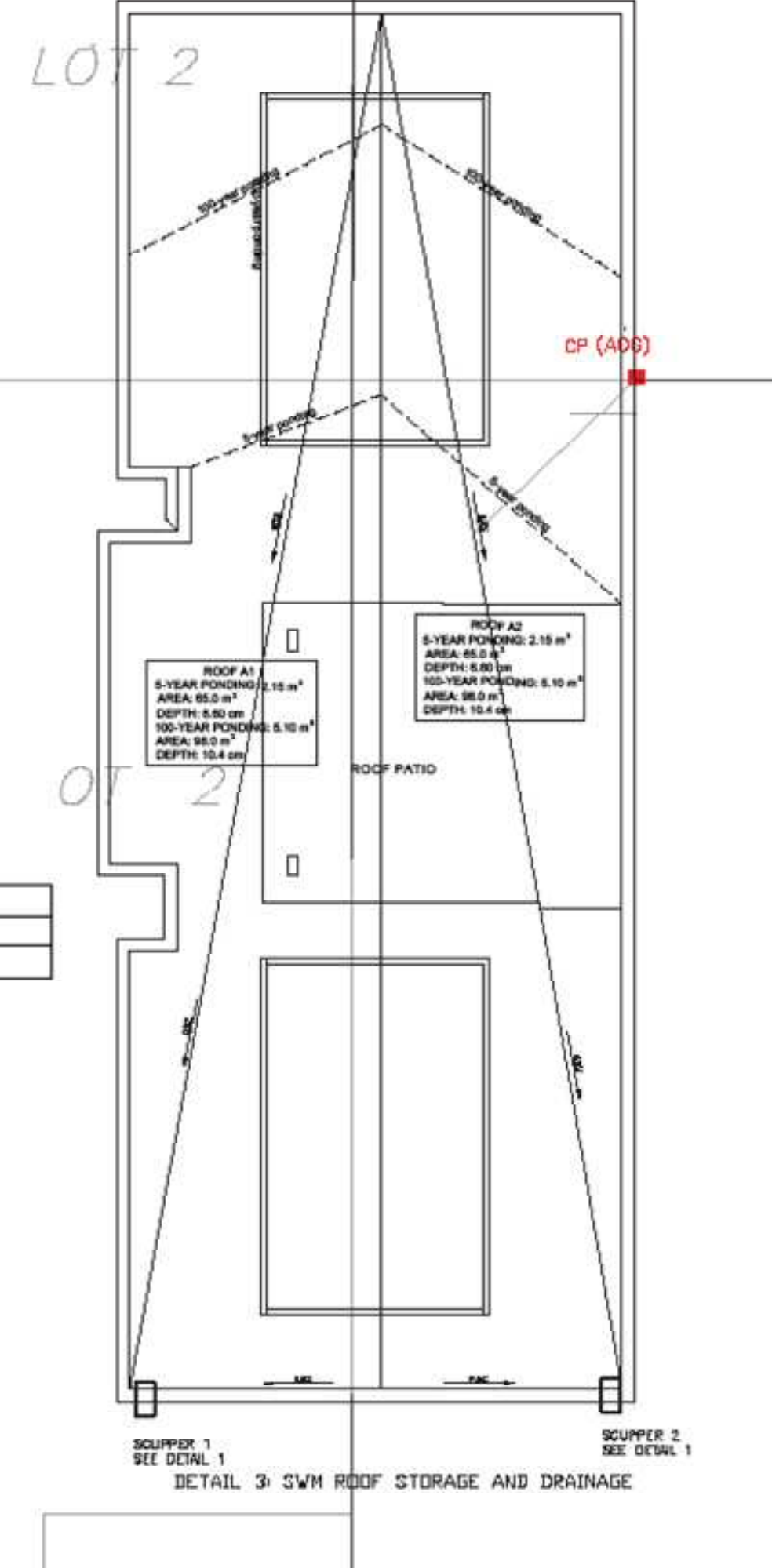
Stage-Storage

Roof A1 (Scupper 1)			Roof A2 (Scupper 2)			Legend:	
Depth	Area	Volume	Depth	Area	Volume	data for 5-year event	
m	m ²	m ³	m	m ²	m ³	data for 100-year event	
0.020	6.07	0.06	0.020	9.10	0.09		
0.040	30.00	0.60	0.040	30.00	0.60		
0.066	65.00	2.15	0.066	65.00	2.15		
0.104	98.00	5.10	0.104	98.00	5.10		



THE FOLLOWING TABLE PROPOSED WATER MAIN TABLE 2.4 m COVEY

DATE	SLURRY TOP OF WATER MAIN	TOP OF INVERT OF DUCT PIPING	NOTE
DATE	ELEVATION	DATE	
07/22	69.26	07/22	FOR SUMP PUMP TO THE MAIN
07/22	69.26	07/22	PROPERTY LINE
07/22	69.26	07/22	FOR SUMP PUMP TO THE MAIN
07/22	69.26	07/22	PROPERTY LINE



- NOTES:**
- EXISTING SERVICES AND UTILITIES SHOWN ON THIS DRAWING WERE TAKEN FROM THE BEST AVAILABLE RECORDS. CONTRACTOR IS REQUESTED TO CHECK IN THE FIELD FOR LOCATION AND ELEVATION OF PIPES AND CHECK WITH AUTHORITIES AND UTILITIES TO HIS SATISFACTION BEFORE DIGGING.
 - CONTRACTOR IS ADVISED TO COLLECT INFORMATION ON SOIL CONDITIONS AS DEEMED NECESSARY.
 - PROPOSED SITING DETAILS FOR THIS PROPOSED BUILDING WERE TAKEN FROM THE SITE PLAN PREPARED BY 'unPaired architecture'.
 - EXISTING HORIZONTAL AND VERTICAL SURVEY DATA SHOWN ON THIS PLAN INCLUDING SITE BENCHMARK, ROAD ELEVATIONS AND THE TOPOGRAPHICAL INFORMATION OF THE LOT SHOWN WERE PROVIDED BY 'JANNIS, O'SULLIVAN, VOLLECK & CO. LTD.' (June 24, 2020) LAND ARCH-NOVA DESIGN INC. IS NOT RESPONSIBLE FOR THE SURVEY PROVIDED.
 - ALL SERVICES INFORMATION WERE PROVIDED BY THE CITY OF OTTAWA AND ARCH-NOVA IS NOT RESPONSIBLE FOR THE ACCURACY OF PLANS AND INFORMATION. CONTRACTOR IS ADVISED TO CHECK ACCURACY ON THE SITE AND CONFORM WITH THE CITY STAFF BEFORE ANY WORK ON THE SITE.
 - ALL GRADING SHALL BE DONE TO THE SATISFACTION OF THE CITY OF OTTAWA.
 - ALL GRABES SHOWN ARE METRIC. EXISTING AND PROPOSED GRABES SHOWN ON THIS DRAWING ARE BASED ON A GEODETIC BENCHMARK PROVIDED BY 'unPaired architecture' AS SHOWN ON THEIR SITE PLAN.
 - USE SADDLE CONNECTIONS WITH CORP STOPS FOR THE 50 MM WATER SERVICES.
 - CONSTRUCT ALL SANITARY PIPES IN ACCORDANCE WITH CITY OF OTTAWA'S LATEST REVISED STANDARDS OTHERWISE AS PER DMS3 AND DMS3 SPECIFICATIONS.
 - ALL WORKS CONSTRUCTED BY THE CONTRACTOR SHALL MEET CITY OF OTTAWA'S CURRENT ENGINEERS' STANDARDS AND PER CITY'S REQUIREMENTS.
 - THE CONTRACTOR SHALL CONSTRUCT AND ENSURE THAT THE 50 MM WATER SERVICES IN THIS LOT SHALL HAVE A MINIMUM OF 2.4m OF GROUND COVER. OTHERWISE THERMAL INSULATION IS REQUIRED AS PER CITY SPECIFICATIONS W 21, V 22 AND V 23. THE WATER SERVICE INSTALLATION SHALL BE STEEL PIPE AND CONSTRUCTED IN ACCORDANCE WITH STD DWG V26.
 - IF WATER SERVICE IS LESS THAN 0.3 m FROM SEWER, MANHOLE OR CATCH BASIN, CONTRACTOR IS REQUESTED TO INSULATE BETWEEN THEM WITH 50mm RIGID INSULATION AS PER CITY DETAIL V-20.
 - ALL WATERMAIN SERVICE AND FITTINGS SHALL CONFORM TO APPROVED ANVA AND/OR CSA STANDARDS.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS TO COMPLETE THE WORKS.
 - WATER SERVICES CONNECTION ON DANFORTH STREET SHALL BE DONE BY THE CITY. EXCAVATION, BACKFILLING AND REINSTATEMENTS BY CONTRACTOR.
 - THE OWNER AND/OR HIS CONTRACTOR SHALL CONTACT ALL THE UTILITY COMPANIES REGARDING RELOCATION REQUIREMENTS FOR ANY EXISTING OVERHEAD UTILITY POLE.
 - WATER SERVICE AND WATERMAIN TRENCH DETAILS AS PER CITY W-17 DETAIL.
 - PROPOSED SANITARY SERVICES LATERAL SHALL BE PVC-SDR35 OR EQUIVALENT AND CONNECTION TO THE EXISTING SEWER SHALL BE AS PER CITY OF OTTAWA DWG. 511. SEWER TRENCH DETAILS AS PER STD DWG 56 & 57. SADDLE CONNECTIONS MAX 300 MM, MANUFACTURED 'T' CONNECTIONS OR FOR LARGE DIAMETERS SEWER MANHOLES.
 - SANITARY AND STORM SEWER SERVICES BENDS AND RIGERS USED MUST BE CONSTRUCTED TO THE CITY'S SATISFACTION.
 - DETAILS OF THE EXISTING SEWERS AND WATERMAIN SHOWN ON DANFORTH STREET PLANS OBTAINED FROM THE CITY MAY NOT BE CURRENT. THE CONTRACTOR SHALL REFER TO THE CITY'S SEWER AND WATERMAIN DRAWINGS FOR DETAILS. CONTRACTOR IS ADVISED TO EXCAVATE AND INVESTIGATE THE SEWER ELEVATIONS IN FRONT OF THIS PROPERTY FIRST TO ENSURE THAT 1.5% (MIN) PIPE SLOPE OF THE SANITARY LATERAL CAN BE ACHIEVED USING THE PROPOSED UNDERSIDE OF CONCRETE FOOTINGS ELEVATIONS. IF 1.5% (MIN) SLOPE IS NOT POSSIBLE FROM THE HOUSE TO THE SEWER THEN THE CONTRACTOR SHOULD SURFOND THE OWNER'S PROJECT MANAGER AND THE CITY ACCORDINGLY FOR FURTHER DIRECTION.
 - FOR DEVELOPMENT OF THIS LOT, THE CONTRACTOR MUST CONSTRUCT THE UNDERGROUND SANITARY AND WATER SERVICES FROM SEWER AND WATERMAIN TO THE PROPERTY FIRSTLY, PRIOR TO HOUSE CONCRETE FOUNDATION POURING.
 - IF THE DEPTH FROM UNDERSIDE OF HOUSE CONCRETE FOOTING TO PROPOSED FINISHED GROUND ELEVATION IS LESS THAN 1.0 m IT IS RECOMMENDED THAT INSULATION (50 mm TICS) MINIMUM BE INSTALLED AT THE BUILDING'S FOOTING AND FOUNDATION OF THE HOUSE TO PROVIDE SUFFICIENT PROTECT COVER FOR THE FOUNDATION STRUCTURES. THE FOOTINGS WILL NEED TO BE REVIEWED FOR INSULATION BY THE OWNER'S SOILS ENGINEER. EXACT INSULATION REQUIREMENTS SHALL BE AS PER ARCHITECT'S INSULATION DETAILS AS SHOWN ON THEIR ARCHITECTURAL DRAWINGS AND CONFIRMED BY THE OWNER'S SITE SOILS ENGINEER.
 - WATER SERVICE LINES AS PER STD DWG V26.
 - BLANK WATER SERVICES AT CITY WATERMAIN BY CITY FORCES.
 - EXISTING SEWERS TO BE CAPPED AT THE PROPERTY LINE TO THE SATISFACTION OF CITY'S SEWER OPERATIONS.
 - BACKWATER VALVES WILL BE USED ON SERVICES PER SC4.1, SC4.1A AND SC4.2.
 - ASPHALT AND GRAVEL SURFACES TO BE CLEARED AND REPLACED WITH SOFT LANDSCAPING AS SHOWN ON ARCHITECTURAL AND LANDSCAPING PLANS.
 - ALL SERVICE LATERALS UNDER THE BUILDING FOOTINGS TO BE SLEEVED IF THE PIPE IS LESS THAN 0.3 m BELOW THE FOOTING.
 - PROPOSED SANITARY AND STORMWATER SERVICES LATERALS SHALL BE PVC-SDR35 OR EQUIVALENT AND CONNECTIONS TO THE EXISTING CITY SYSTEM SHALL BE AS PER CITY OF OTTAWA DWG. 511. SEWER TRENCH DETAILS AS PER STD DWG 56 & 57.
 - ALL PROPOSED STORM PIPES WITH INVERT LESS THAN 2.0 m BELOW THE SURFACE ARE TO BE INSULATED FOR FROST PROTECTION.
 - ROOF DRAIN TO BE SELECTED BY CONTRACTOR AND PRESENTED TO ENGINEER FOR ACCEPTANCE. ROOF DRAIN SHOULD PROVIDE REQUIRED OUTFLOW FROM THE ROOF STORAGE.
 - BACKYARD CATCH BASIN (STD 530) TO BE EQUIPPED WITH 75 MM DRIFICE TO PREVENT LARGER BEERIS TO ENTER INTO THE LATERAL.

LEGEND

- 56.63 PROPOSED ELEVATION
- 57.87 EXISTING ELEVATION
- U/S FOOTING PROPOSED UNDERSIDE OF CONCRETE FOOTING ELEVATION
- PROPOSED 50mmØ WATER SERVICES COPPER TYPE 'K'
- PROPOSED 150mmØ PVC SANITARY LATERAL SERVICES @ 1% (MIN.) SLOPE
- PROPOSED 200mmØ PVC STORM SEWER
- EXISTING UNDERGROUND POWER LINE/CONDUIT
- EXISTING CATCH BASIN
- EXISTING STORM MANHOLE
- EXISTING SANITARY MANHOLE
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- EXISTING UTILITY POLE
- PROPOSED CURB STOP & SERVICE POST
- PROPOSED METER & REMOTE METER
- ROOF DRAIN
- PROPERTY LINE

349 DANFORTH AVE.: KEY MAP

Drawn by: Z.A.U.
Checked by: Z.A.U.Approved by: Z.A.U.Rev 1 Date Description
Rev 2 Date Description
Rev 3 Date Description

Servicing & Grading Plan

Location: 349 DANFORTH AVENUE, OTTAWA, ON
Owner: NAME ADDRESS
Project No: CW-03-20
Date: September 2020
Drawing No: W-01
Scale: 1:100

45 Banner Road NEPEAN ON K2H 8X5
613-702-3403 contact@archnova.ca
VA Design Inc.

ENG. STAMP ONLY ON FINAL PLAN

Recommended Tree Protection Fencing Area

Critical Root Zone

Note that the tree layer has been added to the original Servicing and Grading plan supplied by the client in pdf format. This layer refers to the trees only, and the original Servicing and Grading plan has not been altered in the process.



Tree Conservation Report – 349 Danforth
Tree layer prepared by Dendron Forestry Services
Version 1.0, Oct. 7, 2020
For more information, please contact info@dendronforestry.ca