


40-YEAR CANOPY CALCULATION METHODOLOGY:

TO ACHIEVE THE 40-YEAR CANOPY PROJECTION, A METHODOLOGY WAS ADAPTED FROM THE NEW CIVIC HOSPITAL CANOPY COVER PLAN:

1. FIRST, PROPOSED TREES WERE PLACED ON THE GROUND PLANE, GIVING EACH TREE CIRCLE WITH A DIAMETER THAT EQUATES TO 2/3 MATURITY BASED ON THE DATA IN THE SOURCE NOTED IN THE CHART.

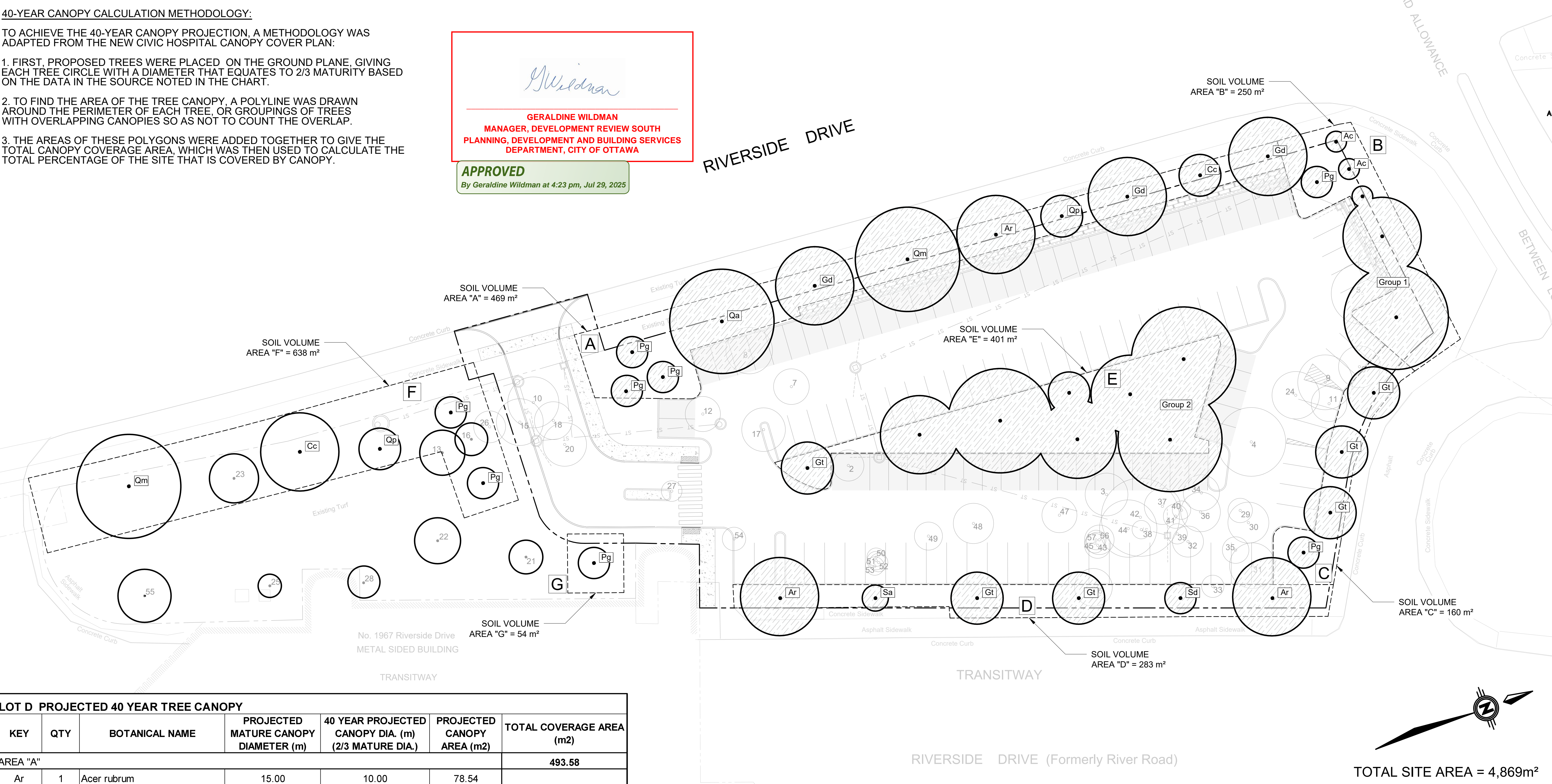
2. TO FIND THE AREA OF THE TREE CANOPY, A POLYLINE WAS DRAWN AROUND THE PERIMETER OF EACH TREE, OR GROUPINGS OF TREES WITH OVERLAPPING CANOPIES SO AS NOT TO COUNT THE OVERLAP.

3. THE AREAS OF THESE POLYGONS WERE ADDED TOGETHER TO GIVE THE TOTAL CANOPY COVERAGE AREA, WHICH WAS THEN USED TO CALCULATE THE TOTAL PERCENTAGE OF THE SITE THAT IS COVERED BY CANOPY.



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MANAGER, DEVELOPMENT REVIEW SOUTH
PLANNING, DEVELOPMENT AND BUILDING SERVICES
DEPARTMENT, CITY OF OTTAWA

APPROVED
By Geraldine Wildman at 4:23 pm, Jul 29, 2025



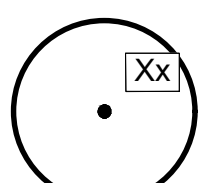
LOT D PROJECTED 40 YEAR TREE CANOPY						
KEY	QTY	BOTANICAL NAME	PROJECTED MATURE CANOPY DIAMETER (m)	40 YEAR PROJECTED CANOPY DIA. (m) (2/3 MATURE DIA.)	PROJECTED CANOPY AREA (m2)	TOTAL COVERAGE AREA (m2)
AREA "A"						493.58
Ar	1	Acer rubrum	15.00	10.00	78.54	
Cc	1	Celtis occidentalis	8.00	5.33	22.34	
Gd	3	Gymnocladus dioica	15.00	10.00	78.54	
Qa	1	Quercus alba	20.00	13.33	139.63	
Qm	1	Quercus macrocarpa	20.00	13.33	139.63	
Qp	1	Quercus palustris	8.00	5.33	22.34	
Pg	3	Picea glauca	6.00	4.00	12.57	
AREA "B"						702.84
Ac	6	Amelanchier canadensis	15.00	10.00	471.24	
Pg	3	Picea glauca	6.00	4.00	12.57	
Group 1	3 Trees Total				219.03	
AREA "C"						117.29
Gt	3	Gleditsia triacanthos	10	6.67	104.72	
Pg	1	Picea glauca	6.00	4.00	12.57	
AREA "D"						204.55
Ar	1	Acer rubrum	15.00	10.00	78.54	
Gt	3	Gleditsia triacanthos	10	6.67	104.72	
Sa	1	Sorbus americana	5	3.33	8.73	
Sd	1	Sorbus decora	6	4.00	12.57	
AREA "E"						638.87
Gt	1	Gleditsia triacanthos	10	6.67	34.91	
Group 2	7 Trees Total				603.96	
https://www.ville.quebec.qc.ca/publications/docs_ville/repertoire_ess_arboricoles.pdf		TOTAL SITE AREA				
		TOTAL CANOPY COVERAGE				2157.12
		% OF SITE CANOPY COVERAGE				44%

SOIL VOLUME CALCULATIONS -Tree Quantity and Size -Soil Volume Area and Depth	TREE QUANTITY	CITY OF OTTAWA TARGET SOIL VOLUME (m³)	DESIGN SOIL VOLUME (m³)	SOIL ADEQUACY PERCENTAGE
Area A - 6 Large Trees, 2 Medium Trees, 3 Conifers Plant Bed (469m² x 1.00m depth)	11	294	469	159%
Area B - 2 Large Trees, 3 Small Trees, 1 Conifers Plant Bed (250m² x 1.00m depth)	6	153	250	163%
Area C - 3 Medium Trees, 1 Conifer Plant Bed (160m² x 1.00m depth)	4	93	160	172%
Area D - 2 Large Trees,1 Medium Tree, 2 Small Trees Plant Bed (283m² x 1.00m depth)	11	140	283	202%
Area E - 6 Large Trees,1 Medium Tree, 1 Small Tree Plant Bed (401m² x 1.00m depth)	8	235	401	170%
Area F - 2 Large Trees, 4 Medium Trees, 2 Conifers Plant Bed (638m² x 1.00m depth)	8	216	638	295%
Area G - 1 Conifer Plant Bed (54m² x 1.00m depth)	1	18	54	300%

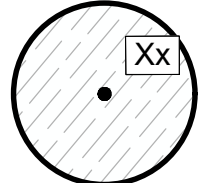
SOIL VOLUME NOTES:

CITY OF OTTAWA TARGET SOIL VOLUMES BASED ON MINIMUM 30m³ FOR LARGE AND MEDIUM TREES, 25m³ FOR SMALL TREES, AND 18m³ FOR CONIFERS.

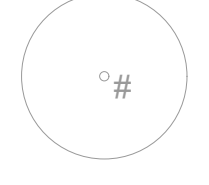
LEGEND:



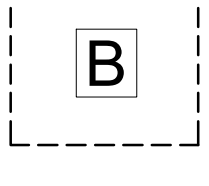
SITE AREA BOUNDARY




APPROXIMATE TREE CANOPY AT 40-YEAR GROWTH



APPROXIMATE TREE CANOPY IN SITE AREA AT 40-YEAR GROWTH



EXISTING TREE (REFER TO TCR)



SOIL VOLUME AREA AND IDENTIFIER

KEY PLAN



NOT TO SCALE

Surveyor



ANNIS, O'SULLIVAN, VOLLEBEK LTD.
14 CONCOURSE GATE, SUITE 500
NEPEAN, ONTARIO, K2E 7S8

TOPOGRAPHIC INFORMATION & BENCHMARK

SURVEY COMPLETED BY ANNIS, O'SULLIVAN, VOLLEBEK LTD. ON MARCH 21, 2024. ELEVATIONS SHOWN ARE GEODETIC AND ARE REFERRED TO THE CGVD28 GEODETIC DATUM, DERIVED FROM CONTROL MONUMENT NO. 019680274 HAVING AN ELEVATION OF 66.322m.

BOUNDARY INFORMATION WAS COMPILED FROM PLANS 4R-19213, 4R-35573 AND 4R-36051


JOB BENCHMARK


CUT CROSS ON SIDEWALK NEAR OVERPASS
ELEVATION = 68.53m

Client



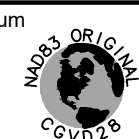
RIVERSIDE CAMPUS
1967 RIVERSIDE DRIVE,
OTTAWA, ONTARIO, K1H 7W9





landscape architecture



4	ISSUED FOR REVIEW	KC	2025/03/18			
3	ISSUED FOR REVIEW	KC	2025/01/23			
2	ISSUED FOR REVIEW	KC	2024/10/31			
1	ISSUED FOR REVIEW	KC	2024/10/25			
No.	Revision	By	Date (yy/mm/dd)			
Scale						
SCALE: 1:250						
Project Title						
THE OTTAWA HOSPITAL RIVERSIDE CAMPUS 1967 RIVERSIDE DR., OTTAWA						
PARKING LOT D						
Drawing Title						
PARKING LOT D 40 YEAR CANOPY PROJECTION + SOIL VOLUME						
Designed by:	KC	Datum				
Drawn by:	CS					
Approved by:	--					
Project No.	479008	Drawing No.	L-4			