

Tree Canopy Cover Plan : Calculation Methodology

Conceptual Plan: In order to develop this conceptual tree canopy cover plan for the Phase 3 and 4 Hospital and CUP Projects, the team has utilized the City of Oakville precedent as recommended for conceptual study by the City of Ottawa and the NCC, which stipulates mature tree canopy diameters of 3m, 10m and 14m for small, medium and large trees respectively. For purposes of calculation, and to be consistent with the upcoming detailed tree canopy cover plans, the trees on this conceptual plan have been drawn at 2/3 maturity, rendering tree canopy diameters of 2m for small trees, 6.67m for medium trees, and 9.34m for large tree diameters as shown and calculated below.

Detailed Plan: As the tree planting design advances from the conceptual to detailed stage, individual tree species will be located on the tree canopy cover plan at 2/3 of the mature sizes as listed in the following sources as requested by the NCC: 1) the Repertoire des essences arboricoles de la Ville de Quebec* and 2) Michael Dirr's Manual of Woody Landscape Plants**.

Note: Conceptual calculations are not approved for non-conceptual designs.



To apply the method described above, our workflow consisted of the following:

1. Placed proposed trees on the ground plane giving each tree circle a diameter that equates to 2/3 maturity for each category: small, medium and large. We used the existing tree canopy for existing trees to remain, without applying a future growth factor.
2. To find the area of the tree canopy, we drew a polyline around the perimeter of each tree, or groupings of trees with overlapping canopies so we don't count the overlap.
3. To find the tree canopy coverage we added the following three areas: individual proposed tree canopies, tree groupings with overlapping canopies, and existing tree canopies to remain. We divided this sum by the area of the site defined by the TOH lease boundaries for the Phase 3 and 4 Hospital and CUP Project.

* Source: https://www.ville.quebec.qc.ca/publications/docs_ville/repertoire_ess_arboricoles.pdf
 ** Source: Dirr, Mahael A., Manual of Woody Landscape Plants. Revised, 1998.

Hospital Canopy Cover Area Take-Offs	Square Metres	Percent of Total Site Area
Total Site Area	140,045	
Tree Canopy Cover Target in 40 Years	38,866	28%





