

TREE COMPENSATION PLANTING CONCEPT

Project Memorandum

Cityview Ridge, 20 and 37 Cityview Drive

REVISED: October 14, 2020



GSP Group has been retained to investigate opportunities for compensation tree planting for the proposed Cityview Ridge plan of subdivision in response to a City of Guelph requirement to compensate for the proposed removal of existing trees. Specifically, we were requested to respond to a comment from the City of Guelph staff to confirm that 1) there was sufficient space within the proposed subdivision to accommodate all the proposed compensation plantings and 2) confirm that there would be no net loss of existing canopy cover. The proposed subdivision is located between Cityview Drive and Watson Parkway immediately north of the CN Rail corridor in Guelph, Ontario. This memorandum outlines existing conditions observed, potential compensation areas, proposed planting, and the methodology used to determine the location of compensation plantings.

The Environmental Impact Study (EIS) for Cityview Ridge (North-South Environmental 2012, updated on 17 July 2017) provided a tree compensation plan that has been accepted by City staff. This memorandum is to be read in conjunction with the *Cityview Ridge EIS*.

The Tree Compensation Planting Concept demonstrates that the required number of compensation trees (783) can be accommodated within the Cityview Ridge subdivision site.

Given the configuration of proposed residential, open space and SWM facility block development, it is recognized that the existing cultural thicket and cultural plantations area at the east end of the subdivision is the only viable location for potential compensation donor sites. We conducted in-field reviews of these potential sites.

The eastern end of the site supports two Cultural Plantations (CUP), Cultural Thicket (CUT), Coniferous Swamp (SWC), Deciduous Swamp (SWD) and Thicket Swamp (SWT) (see Figure 2, of the EIS). The two CUP units consist of Scots Pine and are relatively degraded by dead trees which have created canopy openings. The CUT is largely composed of common buckthorn. A portion of the northeast corner of the Scots Pine plantation is proposed for removal to accommodate an apartment block (Block 125). It is accepted that all of the swamp vegetation communities are to be preserved. As well, Scots Pine, though not a native species, is to be preserved to the greatest extent possible.

The intent of adding new plantings within the plantation and thicket areas is to satisfy the City of Guelph's tree compensation requirements as well as increase the overall ecological health of this natural area.

Within the Scots Pine and Thicket communities, we identified three conditions for possible compensation sites that would not impact community health but rather improve it.

- Openings in the Scots Pine plantation
- Small open old field meadow areas within the CUT unit
- Areas of continuous buckthorn thicket

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Sites worthy of consideration for planting are at minimum 100m² in size. Refer to the Tree Compensation Planting Concept. Extents identified on the plan were calculated using aerial photography and visually checked in the field. They have not been surveyed. Because of this we have modified our measurements by a factor of 80% to account for any possible inaccuracies.

New tree planting quantities are based on an average planting density of 1 tree per 5m². This density mimics existing plantation conditions. A variety of tree species native to Guelph are to be utilized. New trees will have a range of sizes at the time of planting from 100cm height (2-gallon container) to 40mm caliper (15 gallon container). No caliper sized trees are to be specified as these would require larger equipment to install resulting in significant site damage and generally do not establish as well in the long-term. All tree stock is to be nursery grown and containerized (no bare root stock). Trees will be planted in 'pods' and covered in continuous mulched beds.

Potential Compensation Sites are as follows:

SITE	AREA	90% FACTOR	MAXIMUM # TREES
Openings in Scots Pine Plantation	1670 m ²	1503 m ²	300
Open Old Field Meadow Areas	1670 m ²	1503 m ²	300
Buckthorn Thicket	3320 m ²	2988 m ²	580
TOTALS	6660 m²	5994 m²	1180

Total maximum number of new trees: 1180




Total required compensation trees: 783

In addition to the required 783 compensation trees that are to be planted (see EIS), no net loss of canopy will result using the proposed concept planting.


A handwritten signature in black ink, appearing to be "Brian Roth".


Brian Roth, OALA, CSLA
GSP GROUP INC.





POTENTIAL TREE COMPENSATION SITES:	AREA (M ²)	FACTOR (x .90 M ²)	MAXIMUM # OF POSSIBLE COMPENSATION TREES (1 PER 5 M ²)	# OF COMPENSATION TREES REQUIRED
 BUCKTHORN THICKET	3,320	2,988	580	
 OPEN MEADOW	1,670	1,503	300	
 OPENINGS IN SCOTS PINE PLANTATION	1,670	1,503	300	
TOTALS:	6,660	5,994	1,180	783


LEGEND


 REGIONAL FLOODPLAIN


 100YR FLOODPLAIN


 LIMIT OF CULTURAL PLANTATION, MARCH 2009


 10m OFFSET TO CULTURAL PLANTATION


 LIMIT OF HEDGEROW


 LIMIT OF WETLAND AS ESTABLISHED IN FIELD WITH G.R.C.A. JUNE 12, 2006


 30m OFFSET TO WETLAND LIMIT

 SIGNIFICANT WOODLANDS 10m BUFFER

 CLYTHE CREEK 30m BUFFER

 APPROXIMATE STEEP SLOPE

 PROPERTY LINE

 20 METRE WIDTH GAPS

DATE: OCT. 09/20

drawing title:
**TREE
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