



Muncaster
Environmental
Planning Inc

February 18, 2009

Mr. Robin Doull
1043 North River Rd
Ottawa, Ontario
K1K 3V7

Dear Mr. Doull:

RE: 2050 Dunrobin Road
Preliminary Tree Study and Protection Plan

This letter report represents a preliminary tree study and protection plan, as outlined in Section 4.7.2 of the City of Ottawa's 2003 Official Plan, for a proposed development of nine rural residential lots on the east side of Dunrobin Road between Lillian Way and Constance Lake Road in the south part of Lot 20, Concession IV in the Geographic Township of March, West Carleton Ward, City of Ottawa. The site is approximately 9.1 hectares in size, and is dominated by former pasture lands, with an intermitted deciduous east-west hedgerow and some tree cover around a former residence to the east of Dunrobin Road (Figure 1). An active but little used railway line borders the east side of the site.

Introduction

The objectives of the preliminary tree study and protection plan are:

- to produce a plan showing any forested areas and smaller tree stands containing trees which warrant initial consideration for conservation measures as well as major groupings of other natural vegetation;
- to provide a general description of the tree cover including species composition, age, vigour, soil drainage, topographic characteristics and degree of disturbance;
- to assess the existing health of the tree cover, the existing and potential functions, if any, with respect to ecological features and aesthetics, and the sensitivity of such areas to changes in grades, drainage, sun and wind exposure and water table elevation;
- to provide a professional opinion on the priority for retention of the tree cover; and,

- to review the concept plan to determine if appropriate opportunities for tree retention and planting exist and have been taken into consideration.

Background Information

The site is identified as *General Rural Area* in the 2003 City of Ottawa Official Plan. The site is not part of a natural area as defined in the former Region of Ottawa-Carleton's Natural Environment System Strategy. Constance Creek is the closest natural area, approximately 600m to the east of the site. Constance Creek is also the closest Provincially-significant wetland and Area of Natural and Scientific Interest. No environmental constraints, as identified on Schedule K of the Official Plan, are in proximity to the site.

The topography of the site is generally level, with a gentle slope to the southeast. The soils on the site are primarily well-drained sandy loams, with bedrock reported within one metre of the surface. A tributary of Constance Lake is forms the very southeast border of the site, at the south end of a narrow access lane (Figure 1).

Colour aerial photography (2005) was used to assess the natural environment features in the general vicinity of the site. A field review of the site was conducted on February 17th, 2009. The ground was generally snow covered during the field survey, with areas of exposed lands. Vegetation units were described using the methodology in the *Ecological Land Classification for Southern Ontario*.

The site is generally isolated from an environmental perspective from agricultural lands on the west side of Dunrobin Road and residences to the north, east and south. There is no forest habitat abutting the edges of the site, with a small wooded area (up to 70m in width and depth) to the north of the east edge of the site.

Vegetation Communities

The majority of the site is a cultural meadow with blueweed, common milkweed, goldenrod, common mullein, white sweet clover, evening primrose, wild carrot, purple loosestrife and brome grass well represented. Red raspberry, common buckthorn and hawthorn shrubs are also present.

Areas of cultural thicket are among the meadow habitat (Figure 1). Common buckthorn, hawthorn, red raspberry and common juniper are well represented in the thicket habitat, along with regenerating ash, elm and poplar stems.

An intermittent east-west hedgerow in the central and east portions of the site contains white elm and white ash trees, along with common buckthorn and hawthorn shrubs. Many of the trees are in poor condition with damaged bark and broken branches. Several of the trees are coppice (multi-stemmed) with bent trunks, perhaps from ice storm damaged. The largest trees are white ash up to 46cm diameter at breast height (dbh).

Several mature and intermediated-aged trees are adjacent to a former residence to the east of Dunrobin Road. The largest tree is a 90cm dbh over-mature sugar maple that has many dead and pruned limbs. Smaller maple trees, between 15 and 40cm dbh, are in better condition around the former residence. There are several mature Manitoba maples around a remaining shed. The Manitoba maple trees have many broken limbs, slanted limbs and areas of bark damage. Small red cedars, up to 22cm dbh, are also present.

A 40cm dbh white spruce is south of the laneway to the former residence. Smaller white spruce are also in this area, along with sugar maples up to 28cm dbh. A 48cm dbh red maple is in poor condition with areas of fungus growth and badly damaged bark.

A cluster of basswood trees up to 40cm dbh are further to the south of the laneway. These trees are in poor condition with dead and broken limbs and bent trunks.

Recommendations

The site has no natural heritage features of note. Some of the larger trees on the site appear to be nearing the end of their life cycle and are not recommended for protection. Others are in good condition and should be retained where possible as part of the nine lot rural development. Examples of the tree in better condition recommended for retention are shown on Figure 1 and described below. These trees are adjacent to the proposed road location. If these specific trees cannot be retained, others on the site should be kept. In addition the future homeowners should be encouraged to plant a variety of native trees of local origin to eventually provide greater tree cover than is currently on the site.

The following trees, identified on Figure 1, are represented of larger trees in good condition that should be retained through careful siting of the building envelope, the adjacent road and associated work areas. If these specific trees cannot be retained, others on the site should be kept.

- A. a 40cm dbh white spruce in the southeast corner of Lot 1;
- B. a 35cm dbh sugar maple in the southeast corner of Lot 1;
- C. a 45cm dbh white ash in the south portion of Lot 4; and,
- D. a multi-stem white ash in the central portion of Lot 5.

It is also important to realize the value of retaining regenerating stems for long-term benefits.

The above tree retention can be enhanced through:

- minimizing the extent of woody vegetation removal as much as possible;
- a minimum setback of three metres from the trunk of trees to be retained (five metres for trees in excess of 30cm dbh) to provide protection for the root system. No grading or activities that may cause soil compaction such as heavy machinery traffic, should be permitted within this setback. The setback should be clearly identified with sturdy fencing at least 1.5m in height before construction begins; and,

- plantings of native trees on a lot by lot basis. To provide a natural appearance, trees should be planted in a random, cluster fashion rather than in a grid system. Plantings of native trees, such as sugar maple, red maple, red oak, bur oak, basswood, white spruce and tamarack will add to the natural heritage of the site.

To protect breeding birds, no tree or shrub removal should occur between May 15th and July 10th, unless a survey, completed within five days before the proposed removal, identifies no breeding activity in the woody vegetation to be cut.

Conclusion

There are natural heritage terrestrial features of note on the site. No notable environmental features are located in proximity to the site and the periphery is not forested. The rural lot size will permit retention of scattered trees and regenerating stems through minimizing the work areas and careful siting of the building envelopes as discussed above.

Thank you for the opportunity to conduct this work. Please call if you have any questions on this preliminary tree study and protection plan.

Yours Sincerely,
MUNCASTER ENVIRONMENTAL PLANNING INC.






Bernie Muncaster, M.Sc.
Principal



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Legend

-  Vegetation community
-  Site boundary
-  Examples of trees with potential for retention (see text for details)

Vegetation Communities

-  Cultural meadow
-  Cultural thicket



Approx. Scale 1:3,700

February 17, 2009

FILE: 08-46

Figure 1

Prepared for: **Mr. Robin Doull**

Prepared by:



PRELIMINARY TREE PLAN

2050 DUNROBIN ROAD,
CITY of OTTAWA