## TREE CONSERVATION REPORT

# LAKELAND MEADOWS SUBDIVISION PHASE 2 1626 OLD PRESCOTT ROAD

## CITY OF OTTAWA

Prepared for: HOLZMAN CONSULTANTS INC.

Prepared by: Douglas Associates Landscape Architects Limited 1750 Courtwood Crescent, Suite 112 Ottawa, ON K2C 2B5 (613)224-4744

February 22, 2013

## **PROJECT INFORMATION**

PROJECT NAME:	Lakeland Meadows Subdivision Phase 2
OWNER:	Lakeland Meadows Ltd.
APPLICANT:	Holzman Consultants Inc.
PREPARED BY:	Douglas Associates Landscape Architects Limited, 1750 Courtwood Crescent, Suite 112 Ottawa, ON K2C 2B5 613-224-4744 Attn: Marietta Ruhland
CONTRACTOR:	unknown at this time

MUNICIPAL ADDRESS: 1626 Old Prescott Road

OFFICIAL PLAN & ZONING DESIGNATIONS: Village – DR1 zone

PURPOSE FOR REPORT: in support for an application for subdivision

SCHEDULE OF PROPOSED WORKS: T.B.D.

OTHER APPLICATIONS AFFECTING SUBJECT LANDS: none at this time

## TREE CONSERVATION REPORT

The subject lands are located west of Old Prescott Road near Donwell Drive and east of Lakeshore Drive.

The subject lands are 43.36 hectares (107.14 acres) in size. The area affected by the proposed site development is approximately 39.81 hectares (98.37 acres) in size. The affected area is 91 - 92% if the developer retains the vegetation outlined in this report.

It is bounded on the northeast by the future Quinn Farm development, and Shadow Ridge Subdivision to the south. The site is bound on the west and east by Lakeshore Drive and Old Prescott Road respectively.

Included in this report is Map #1 – Current Vegetation, Map #2 – Proposed Development and Conserved Vegetation, and Sketch D-1 – Existing Vegetation Preservation Details.

## GENERAL

The subject lands consists of primarily fallow agricultural land with hedgerows. A section of the subject lands to the northeast are a mix of ponds and hillocks with woodlot cover. There are several seasonally wet areas in both fallow and woodlot covered land.

There are no significant slopes in the subject lands. Drainage occurs from the northwest and from the southeast to the centre of the subject lands, which then flows southeast.

Distinctive trees can be found within the southwest hedgerow and within 10m of the northeast boundary.

## **VEGETATION INVENTORY**

#### EXISTING VEGETATION

East of Lakeshore Drive, the land consists mainly of fallow fields with hedgerows running northwest and southeast within the fallow fields (along drainage swales). Small groupings of mature deciduous trees exist along the south-most hedgerow and along the north hedgerow.

West of Old Prescott Road, the land consists mainly of recently fallow fields with hedgerows, mature and semi-mature woodland with swampy areas along the north of the subject lands.

HEDGEROWS:

Predominately Ash, Poplar, Manitoba Maple, Elm, Maple, Cedar, some Apple, Basswood, Oak, and Birch. Shrub understory of dogwood, viburnum, honeysuckle.

Age: Predominately semi-mature to mature with some saplings.

The south-most hedgerow consists mostly of semi-mature and mature trees including Ash, Basswood, Black Cherry and Sugar Maple, while the north hedgerow consists primarily of White Birch and White Cedar. There are also several good specimens of Oak along the northern hedgerow.

Size: range from 10-75cm DBH.

Condition: the majority of the trees are in good condition and health.

SEMI MATURE ASH / MAPLE GROVE:

A stand of ash and maple with an understory of deciduous shrubs and saplings of Red and Sugar Maple.

Age: mature.

Size: range from 40-90cm DBH.

Condition: The trees are in good condition.

MATURE DECIDUOUS TREES:

Single mature trees occur mainly along Hedgerows.

Age: mature.

Size: range from 60-100cm DBH.

Condition: The trees are in good condition.

MATURE CONIFEROUS TREES:

Maturing single Pine trees occur in fallow fields. Several mature Spruce trees occur along north hedgerow. Tamarack trees are found in groupings throughout the Woodlot Cover area.

Age: mature.

Size: range from 60-100cm DBH.

Condition: Coniferous trees are in good condition, however porcupines have eaten some of the Tamarack.

Semi Mature Deciduous Trees:

Predominately Green Ash, Poplar, Manitoba Maple, and some Elm. Understory of sumac and saplings.

Age: semi-mature.

Size: range from 10-50cm DBH.

Condition: the trees are mainly in good condition and health.

MIXED WOODLOT COVER:

Consists of White Cedar, Ash, Poplar, Maple, Tamarack, Birch and some Oak. Age: Semi-mature to mature, with several seasonally wet areas.

FALLOW FIELD / MEADOW:

Predominately grasses, raspberry, viburnum, burs, young saplings of Manitoba Maple, Poplar, Sumac.

Age: mature meadow with some pioneering species starting to root.

### **SIGNIFICANT VEGETATION / SPECIES**

No species at risk have been found during site reviews. Significant vegetation is found only in the southwestern hedgerow, and along the northeastern wooded areas and northern hedgerow.

## NATURAL ELEMENTS

#### VEGETATION

There are no woodlots designated as Natural Environmental Areas or Urban Natural Features on the site or in the vicinity, or evaluated in the UNAEES.

The existing hedgerow to the northeast plus the southwestern hedgerow, and along the northeastern wooded areas form a significant vegetative cover and habitat for the support and migration of wildlife.

#### SURFACE WATER FEATURES

There is a field drain to the south of the subject lands which runs south perpendicular to the property line, it is on land held by others. A small drainage ditch runs across the middle of the site runs southeast connecting to this field drain. Refer to Golder Associates Ltd. Fish Community and Habitat Assessment.

A small pond is located in the northeast wooded area. Not included in Golder Associates Ltd. Fish Community and Habitat Assessment.

#### STEEP SLOPES

No steep slopes found on site.

#### **GREENSPACE MASTERPLAN**

There appears to be no greenspace linkages on the subject lands as shown on the Greenspace Master Plan. However, the Masterplan does suggest a Contributing Open Space and Leisure Lands on the subject lands with connections to the Primary Natural Lands linkage to the north (approx. 0.5 km).

Note: There are Primary Natural Lands to the east (approx. 0.35 km) and south (approx. 0.25 km) of the subject lands.

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No evidence of larger mammals was found on the site during any site reviews. Evidence of small animals such as grouse, porcupine, mice, frogs and groundhogs were observed. The subject lands are conducive to a range of wildlife such as small mammals, deer, including small predators and a good variety of birds and especially amphibians.

#### **O**THER

There are a significant amount of boulders (old farm walls). These should be salvaged during clearing and grubbing operations and can be used as features in the proposed subdivision.

## **VEGETATION CONSERVATION**

#### AREAS CHOSEN FOR RETENTION

The existing Hedgerows along the north and south boundaries, the Mature Coniferous Tree hedgerow, and woodlots with Mature Trees are to be retained. (See Map #2)

Preservation of Hedgerows on Blocks 96-91, 76, 75, 183-171, 205-202, 25-23, 5, and 4 in the south and Blocks 131-139, 46-41 in the north will be retained.

Preservation of vegetation on Blocks 221, 222, 220 and 219 to be analysed in detail during Site Plan Control process.

The retention of the vegetation areas chosen for retention will greatly help to screen the proposed development from adjoining lands and keep the integrity of the existing vegetative corridors.

#### VEGETATED AREAS TO BE REMOVED

Vegetation to be removed due to development impacts: lots are to be raised in elevation, sizes of the lots do not permit preservation of any vegetation within the developed area.

### POTENTIAL IMPACTS AND MITIGATION MEASURES

#### POTENTIAL IMPACTS

Addition of impervious surfaces to the site would impact the amount of water infiltration, possibly affecting changes to the water table.

Possible wind-row effect along northeast hedgerow.

#### PROTECTION MEASURES

Preliminary root cutting at the edge of proposed excavation areas prior to any on site excavation, which would protect the integrity of the existing root system of trees in proximity of the proposed development.

The erection of a protection fence along vegetation that is to be preserved (any construction that would occur within six metres of the dripline of any deciduous tree or within a distance of two thirds the height of any coniferous trees. The protection fence is to be 1.5 metres in height and is to be erected a minimum of 2 metres outside the dripline or outside the 1/2 height distance of any coniferous trees that are to be preserved. The protection fence to consist of orange snow fence with t-posts every 2 metres and a top rail, and is to be maintained throughout all phases of the development.

The developer is to provide necessary protection against any construction site runoff into the treed areas.

No storage, vehicular traffic or other construction activities to take place within the treed areas, including the buffer strip.

#### PLANTING RECOMMENDATIONS

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- Where hedgerow are to be preserved, only minimal grade changes can occur and no inground development such as swimming pools within the dripline of these trees.
- Hedgerows are to be cleared of damaged branches and trees that pose a safety hazard only or threaten other, more significant vegetative species. The remainder to be preserved where feasible. Dead trees not posing a safety problem in terms of closeness to housing and trails should be kept. These are an important component to wildlife habitat.
- Understory vegetation should be preserved in all cases to insure the future regeneration of the hedgerows.
- All development to be confined to outside the dripline of any deciduous tree and to a distance equal to 1/2 the height of any coniferous trees to be preserved.
- No invasive species to be planted on the lots. These include but are not limited to: all Acer platanoides cultivars (all Norway Maples such as Crimson King, Emerald Queen, Deborah, Harlequin, etc.), Buckthorn, Loosestrife, invasive ornamental grasses & grounds covers. Only native, indigenous species to be planted within and near the treed areas. The RVCA / MVCA can be contacted to obtain a complete list of invasive species.

#### MITIGATION MEASURES BY HOME BUILDER / HOME OWNER

- The erection of a protection fence along vegetation that is to be preserved (at any type of construction that would occur within six metres of the dripline of any deciduous tree or within a distance of two thirds the height of any coniferous trees). A protection fence of 1.5 metres in height is to be erected a minimum of 2 metres outside the dripline or outside the 1/2 height distance of any coniferous trees that are to be preserved. The protection fence is to consist of an orange snow fence with T-posts every 2 metres.
- 1. The home builder is to provide necessary protection against any construction site runoff into the hedgerows or other trees areas.
- 2. No storage, vehicular traffic or other construction activities to take place within the treed areas and hedgerows.

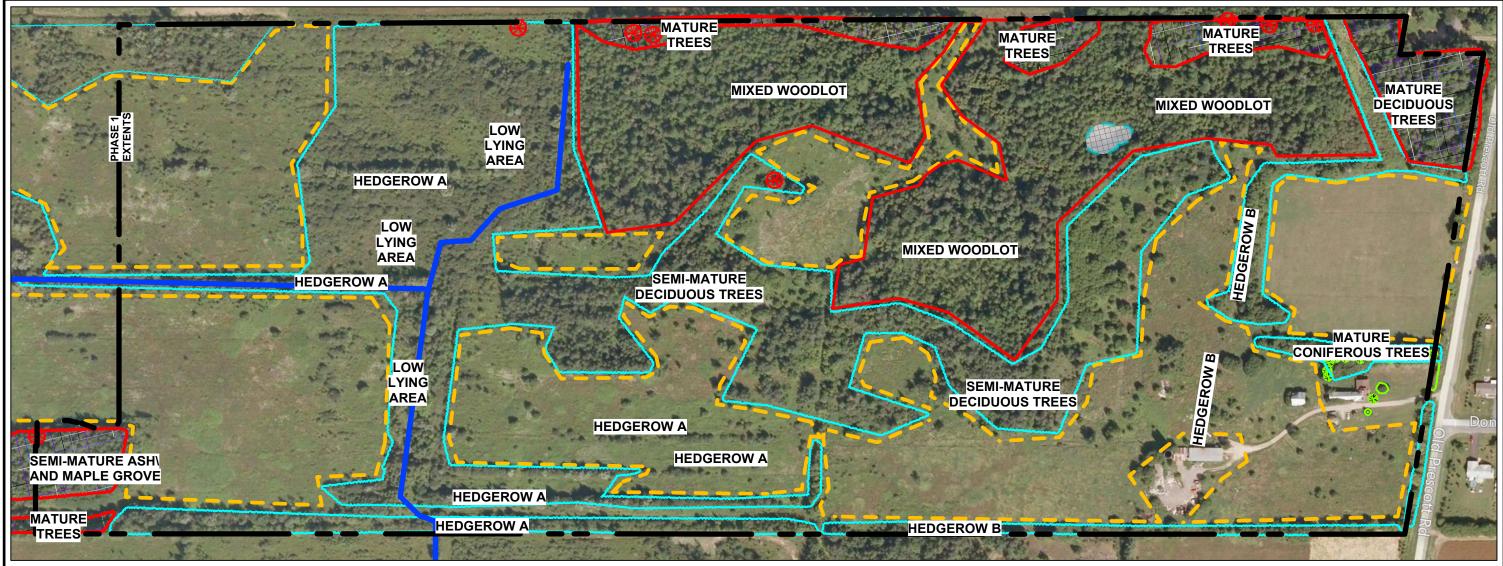
Prepared by



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Marietta Ruhland, OALA Douglas Associates Landscape Architects Limited

February 22, 2013



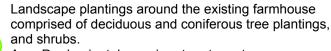
#### **VEGETATION INVENTORY**

#### WOODLOT COVER



Stands of mixed deciduous and coniferous trees, seasonal wet areas. Understory of ferns and saplings. Age: Predominately semi-mature to mature. Size: averaging 35cm diameter. Condition: the trees are in good condition and health.

#### PLANTED LANDSCAPE



Age: Predominately semi-mature to mature. Size: averaging 35cm diameter. Pine trees along the driveway are approaching 45cm DBH. Condition: the trees are in good condition and health.

#### MEADOW:

Predominately grasses, raspberry, burs, young

- saplings of poplar, willow and ash.
- Age: mature meadow with some invasive and pioneering plant species.

#### **REGENERATION:**

HEDGEROW A: Predominately Polar, Birch, and Willow, with an undergrowth of saplings, viburnum, and shrub willow. HEDGEROW B: Predominately Manitoba Maple, Sumac and Ash, with an undergrowth of saplings and shrubs. SEMI-MATURE DECIDUOUS TREES: Pedominately Manitoba Maple, Polar and Willow, with an undergrowth of saplings, viburnum and willow shrubs. Age: young to semi-mature regeneration. Size: up to 35cm diameter. Condition: Fair condition and health.

#### **NATURAL ELEMENTS**

SURFACE WATER FEATURES:

A small pond and several seasonally wet areas are located in the woodlot area in the northeast.

There are seasonal wet areas in the meadows along the middle and north of the site.

See Fish Community and Habitat Assessment 05-1120-894 by Golder Associates Ltd.

#### SLOPES:

The site is generally flat with a gentle slope to the south.

#### GREENSPACE LINKAGES:

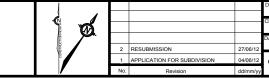
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There appears to be no Greenspace Linkages or Pathways on the subject lands as shown on the Greenspace Master Plan. However, the Masterplan does suggest a Contributing Open Space and Leisure Lands on the subject lands with connections to the Primary Natural Lands linkage to the north (approx. 0.5 km). Note: There are Primary Natural Lands to the east (approx. 0.35 km) and south (approx. 0.25 km) of the subject lands.

#### WILDLIFE

No evidence of larger mammals was found on the site during any site reviews. Evidence of small mammals such as grouse, porcupine, and groundhogs were observed. The subject lands are conducive to a range of wildlife such as small mammals, deer, including small predators and a good variety of birds and especially amphibians.

## **MAP #1 - CURRENT VEGETATION**





#### GENERAL

The subject lands consists of primarily fallow agricultural land with hedgerows. A section of the subject lands to the northeast are a mix of ponds and hillocks with woodlot cover. There are several seasonally wet areas throughout.

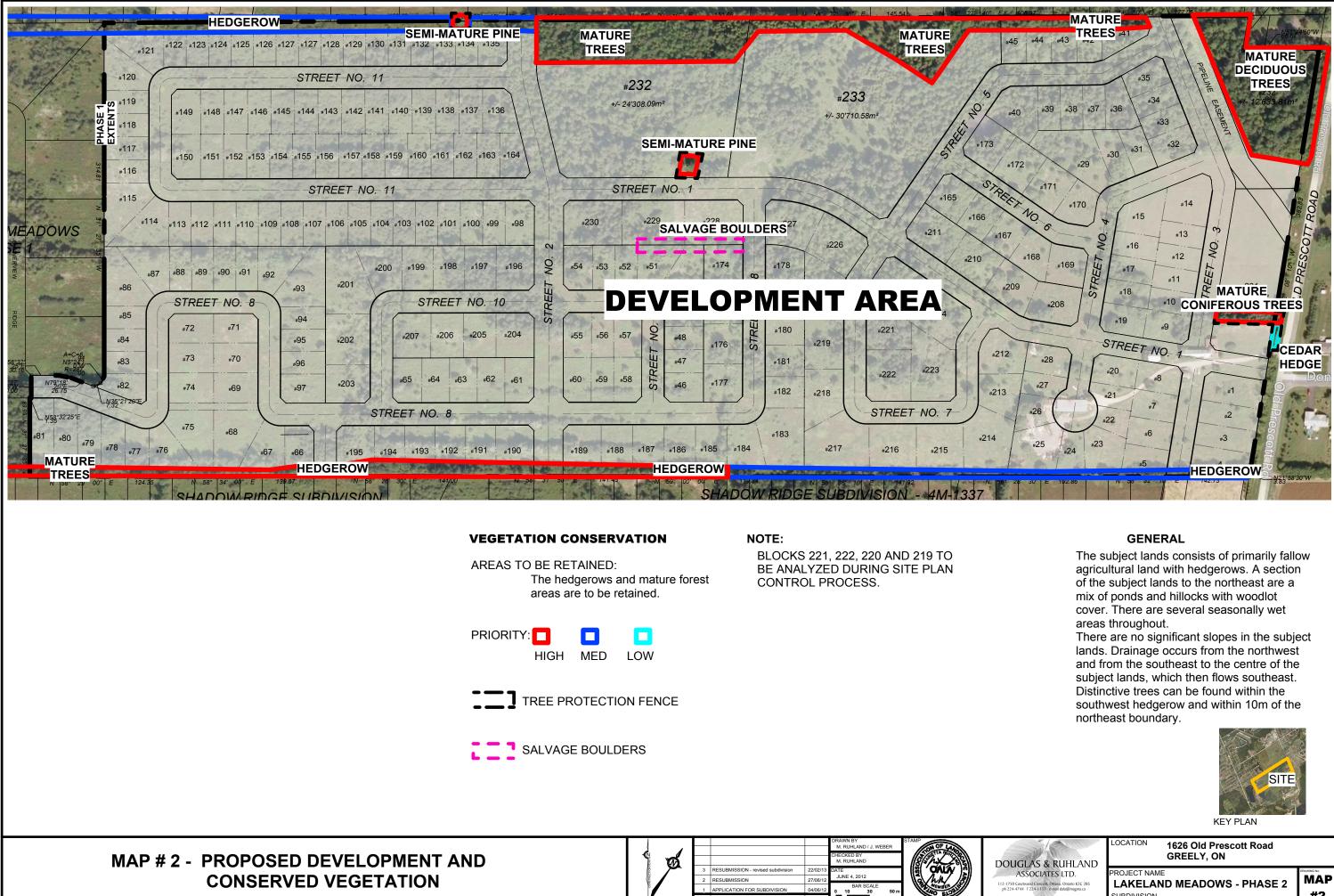
There are no significant slopes in the subject lands. Drainage occurs from the northwest and from the southeast to the centre of the subject lands, which then flows southeast. Distinctive trees can be found within the southwest hedgerow and within 10m of the northeast boundary.



KEY PLAN

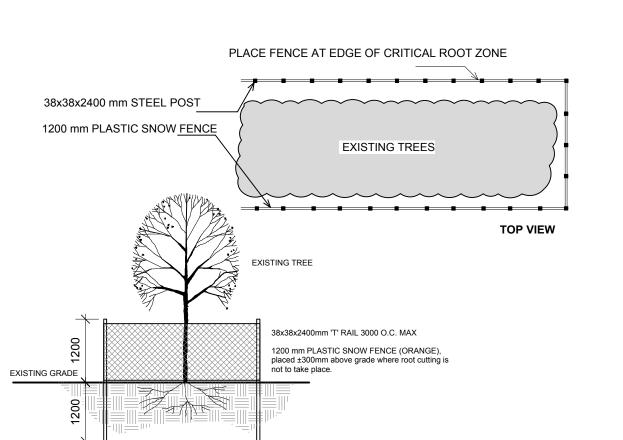
OCATION 1626 Old Prescott Road GREELY, ON **DOUGLAS & RUHLAND** ROJECT NAME ASSOCIATES LTD. LAKELAND MEADOWS - PHASE 2 

MAP #1



#2

SUBDIVISION







Provide protection for trees shown as requiring protection on contract drawings using method shown. where operations threaten other nearby trees , apply same measures.

Protect roots of all trees as shown above. no excavation, filling, storage of materials, disposal of chemicals , vehicle traffic, or other activity which could cause disturbance of soil root area, including soil compaction shall take place within the protected area.

The City of Ottawa Trees By- law requires that contractors working near trees must:

- erect a fence at the critical root zone (CRZ) of trees;
- not place any material or equipment within the CRZ of the tree;
- not attach any signs, notices or posters to any tree; -
- not raise or lower the existing grade within the CRZ without approval;
- tunnel or bore when digging within the CRZ of a tree;
- not damage the root system, trunk or branches of any tree;
- ensure that exhaust fumes from all equipment are NOT directed towards any tree's canopy. -

Critical Root Zone (CRZ) of a tree: D (diameter of trunk in centimeters\_) x 10cm = Critical Root Zone. The critical root zone is established as being 10 centimetres from the trunk of a tree for every centimetre of trunk diameter. The trunk diameter is measured at a height of 1.2 metres for trees of 15 centimetres diameter and greater and at a height of 0.3 metres for trees of less than 15 centimetres diameter. The contractor must obtain all permits and approvals prior to the start of construction.

The contractor must call a City Tree Inspector when work is required near a City tree.

SECTION

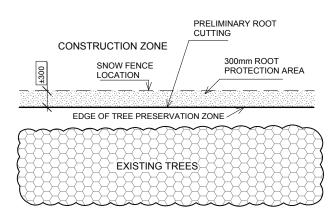
EXCAVATION

PROTECTION FENCE

FENCE FABRIC TO EXTEND DOWN TO

BELOW FILTER FABRIC

## **ROOT PRUNING DETAIL**



#### PLAN NOTE: LIMIT OF EXCAVATION AND LOCATION OF PROTECTION FENCE TO BE DETERMINED ON SITE.

M. RUHLAND

JUNE 4. 2012

BAR SCAL



