CAIV 1749 Tree Conservation Report Orleans Village Phase 4

September 3, 2024

Submitted to: Bronwyn Anderson

KILGOUR & ASSOCIATES LTD. www.kilgourassociates.com



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1.0 INTRODUCTION

This updated Tree Conservation Report (TCR) was prepared by Kilgour & Associates Ltd. (KAL) on behalf of Caivan (Orleans Village 2) Ltd. (Caivan) in support of the Phase 4 development (the "Site") of their Orleans Village community. A TCR for this location was previously completed by KAL (2022) on March 28, 2022, to support site regrading in preparation for the currently proposed community development. Most of the trees on the Site were subsequently cleared by Cavian as part of the regrading work. This current TCR provides theupdated community plan and reviews the final remaining trees on the Site.

A TCR is required for all Plans of Subdivision, Site Plan Control Applications, Common Elements Condominium Applications, and Vacant Land Condominium Applications where there is a tree of 10 cm in diameter at breast height (DBH) or greater on a site and/or if there is a tree on an adjacent site that has a critical root zone (CRZ) extending into the proposed work area. A "tree" is defined as any species of woody perennial plant, including its root system, which has reached or can reach a minimum height of at least 450 cm at physiological maturity. The CRZ is calculated as DBH x 10 cm.

The removal of trees on the Site cannot occur until written approval of the TCR has been granted through a tree permit as per the City of Ottawa's Tree Protection By-law. The approval of the TCR will come in the form of a letter (the tree permit) from the General Manager¹ with conditions specific to the Site, tree retention, and associated tree protection and tree removal. The approved TCR is a requirement for the approval of the development applications listed above. A copy of the report must be available on the Site during tree removal, grading, construction, or any other site alteration activities, and for the duration of construction on the Site.

2.0 PROPERTY INFORMATION

The area of proposed site alteration is on a portion of lands owned by Caivan located off Lamarche Avenue (the "Site; Figure 1). The Site covers approximately 4.6 ha and is zoned as a Development Reserve Zone (DR).

The Site is surrounded by:

- Lamarche Avenue to the west; and
- Innes Road to the north; and
- A residential development to the south; and
- An industrial site to the west.

¹ General Manager of the Public Works & Environmental Services Department or the General Manager of the Planning, Infrastructure and Economic Development Department of the City of Ottawa, or their designate.



Kilgour & Associates Ltd.





2.1 Property Owner/Applicant and Arborist Contact Information

Table 1 Contact information for the property owner/applicant and arborist

Organization	Role	Contact Person	Phone	Email Address
			Number	
Caivan Communities 2934 Baseline Road, Suite 302 Ottawa, ON, K2H 1B2	Proponent	Bronwyn Anderson, Vice President, Land	416-457-8942	Browyn.Anderson@Caivan.com
Kilgour & Associates Ltd. 2285-C St. Laurent Blvd., Unit 16, Ottawa, ON, K1G 4Z6	Arborist	Anthony Francis, PhD Director of Land Development	613-367-5556	AFrancis@KilgourAssociates.com

2.1.1 Qualifications of Arborist

Anthony Francis (Ph.D.) is a Senior Ecologist with 20 years of consulting experience to both government agencies and private industry. He has worked on a diversity of projects relating to species at risk (SAR), invasive species, terrestrial and aquatic habitat, environmental effects monitoring and mitigation, and fate/effects of contaminants. Within each of these subject areas, Dr. Francis has completed projects addressing specific site concerns and broader policy initiatives. Dr. Francis' academic background is in spatial ecology with a focus on tree species diversity. As a Senior Ecologist at KAL, he regularly completes TCRs, Environmental Impact Statements, and Integrated Environmental Reviews for land development projects throughout Ottawa and eastern Ontario. He is also a certified Butternut Health Assessor (BHA #104).

2.2 Additional Applications

Not applicable.

3.0 EXISTING CONDITIONS

3.1 Tree Inventory

An inventory of trees on the Site was initially performed on March 26, 2022, following guidelines set forth by the City of Ottawa (2020). The Site was reviewed again on September 2, 2024, by Anthony Francis, noting that most of the previously identified trees had been removed.

The only remaining trees on the Site are six (6) Manitoba Maples (*Acer negundo*) located in **Hedgerow H1** (see Figure 1). All six trees were multi-stemmed and generally in good condition with DBH measuring from 25 to 45 cm. Numerous saplings (all <10 cm DBH) of the same species were located along the base of the hedgerow.

Additional Manitoba Maples are present on the adjacent property to the north but are sufficiently offset from the property line such that their critical root zones (CRZ) do not extend on the Site (i.e. DBH <30cm and located >3m from the property line.)



3.2 Ecological Significance of Trees on Site

No federally or provincially significant tree species (i.e., those listed under the *Species at Risk Act* (SARA), the *Endangered Species Act* (ESA), or those tracked on the Natural Heritage Information Centre (MNRF, 2021) are present on or adjacent to the Site. None of the trees occurring near the Site are considered regionally rare or uncommon species by Brunton (2005).

Given their urban context, the trees on the Site likely play a role in the regulation of relative humidity, sequestration of carbon and removal of pollutants, wind-shielding, shading and reduction of urban heat island effects, and filtration of dust, noise, and light pollution. They also provide some habitat structure in the surrounding urban landscape. However, the trees on the Site likely only provide habitat for common bird and small mammal species in the Ottawa area and not species of significance (i.e., species that are at risk, rare, or provincially or federally significant).

3.3 Other Natural Environment Elements

3.3.1 Surface Water Features

No trees on site are associated with surface water features.

3.3.2 Steep Slopes

No steep slopes occur on or near the Site.

3.3.3 Valued Woodlots

The Site does not contain any woodlots designated as Urban Natural Features or Natural Environment Areas, areas evaluated in the *City of Ottawa Urban Natural Areas Environmental Evaluation Study* (UNAEES; Muncaster Environmental Planning Inc. and Brunton Consulting Services, 2005), or other areas that meet the criteria used in the UNAEES

3.3.4 Significant Woodlands

The Site does not contain any significant woodlands per *Significant Woodlands: Guidelines for Identification, Evaluation, and Impact Assessment* (City of Ottawa, 2018).

3.3.5 Greenspace Linkages

The Site does not contain any greenspace linkages.

3.3.6 Distinctive Trees

Of the six remaining Manitoba Maples, four are >30 cm DBH and could considered as "Distinctive Trees", though all site trees had previously been planned for removal.



3.3.7 Hazardous Trees

A formal risk assessment for hazardous trees (e.g., Tree Risk Assessment) was not completed for the Site, though the six remaining trees appear to be in good condition.

3.3.8 Unique Ecological Features

The Site does not contain any riparian woodlots, rare communities, or other unique ecological features not already addressed in this document.

4.0 PROPOSED DEVELOPMENT

The proposed residential community will consist of 476 stacked townhouse-type units with a 0.45 ha central community park (Figure 2). Most tree coverage on the Site was previously removed in 2022 to accommodate preparatory site grading works. Site development will require the removal of the six remaining Manitoba Maples. Trees on adjacent properties will not be impacted by site development.

Construction and final site clearing are planned to commence in the fall of 2024. All site works are expected to be completed by mid-2026.







5.0 MITIGATION MEASURES

5.1 Site Preparation and Construction

The following mitigation measures should be applied during Site preparation and construction:

- Trees adjacent to the Site will not be removed or damaged.
- To minimize impacts to trees adjacent to the Site:
 - Erect a fence beyond the CRZ of the retained trees. The fence should be highly visible (orange construction fence) and paired with erosion and sediment control fencing.
 - Pruning of branches is recommended in areas of potential conflict with construction equipment but must be completed by a certified arborist.
 - Do not place any material or equipment within the areas protected by the construction fencing.
 - Do not attach any signs, notices, or posters to any trees.
 - Do not raise or lower the existing grade within areas protected by the construction fencing without approval.
 - o Tunnel or bore when digging within the CRZ of a tree.
 - o Do not damage the root system, trunk, or branches of any remaining trees.
 - Ensure that exhaust fumes from all equipment are not directed towards any tree's canopy.

5.2 Tree Planting Recommendations

Per the City of Ottawa Tree Protection By-Law (No. 2020-340), compensatory tree planting should be determined through the development review process. For the purposes of this report, it is recommended that trees be based on the number of unit footprints, i.e., one tree per stacked unit pair. This equates to planting 238 new trees throughout the community. Given the small lot sizes, it is recognized that planting locations will not necessarily follow a one per-lot distribution and that smaller sized trees will likely be required when planning on lots. The landscape plan for the community may focus on the inclusion of trees around the site perimeter, within amenity and parking areas, and within the central park as required. This level of planting can be anticipated to generate a net gain in canopy cover at maturity for the Site, relative to pre-clearing canopy levels.

All trees indicated within the landscape plan to be produced must species indigenous to the Ottawa area.



6.0 CLOSURE

This report was prepared for exclusive use by Caivan Communities. The report may only be distributed by those entities. Questions relating to the data and interpretation can be addressed to the undersigned.

Respectfully submitted,

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7.0 LITERATURE CITED

- Brunton, D.F. 2005. Vascular Plants of the City of Ottawa. Appendix A in Muncaster Environmental Planning and Brunton Consulting Services. Urban Natural Areas Environmental Evaluation Study, Final Report to City of Ottawa.
- City of Ottawa. 2016. Greenspace Master Plan. Available online at: https://ottawa.ca/en/planning-development-and-construction/official-plan-and-master-plans/greenspace-master-plan
- City of Ottawa. 2018. Significant Woodlands: Guidelines for Identification, Evaluation, and Impact Assessment. Available online at: http://ottwatch.ca/meetings/file/572913
- City of Ottawa. 2020. Tree Protection (By-law No. 2020-340). Available online at: https://ottawa.ca/en/living-ottawa/laws-licences-and-permits/laws/law-z/tree-protection-law-no-2020-340
- Kilgour & Associates Ltd. (KAL). 2022. Tree Conservation Report Orleans Village Phase 4. Date: March 28, 2022
- Ministry of Natural Resources and Forestry. 2021. Natural Heritage Information Centre: Make Natural Heritage Map. Available online at: https://www.ontario.ca/page/make-natural-heritage-areamap
- Muncaster Environmental Planning Inc. and Brunton Consulting Services. 2005. City of Ottawa Urban Natural Areas Environmental Evaluation Study Final Report. A report prepared for the Environmental Management Division, Planning & Growth Management Department, City of Ottawa. Available online at: https://app06.ottawa.ca/calendar/ottawa/citycouncil/pdc/2005/05-24/Final%20Report_UNAEES.htm

