May 5, 2025

Client Name: Jeff Olajos

Project: 25-7877- 860 Olajos Lane – Lot 21 Con 7

INTRODUCTION

The Township of Leeds and the Thousand Islands requested a Significant Woodland Impact Assessment to evaluate the potential effects of a proposed home development at 860 Olajos Lane (Lot 12, Concession 7). Given the property's designation as Significant Woodland by the Ministry of Natural Resources and Forestry (MNRF), this assessment was required to determine potential impacts on woodland connectivity, ecological functions, and biodiversity.

Through pre-consultation with the Township, it was determined that a desktop Environmental Impact Statement (EIS) would be required to assess the potential impacts of the proposed development on the significant woodland. As part of this process, a desktop assessment using ArcGIS Pro was conducted to estimate the total area that would be affected if all trees within the development footprint were removed. The proposed development consists of a single residential home, driveway, septic system, and deck/patio.

In addition, the Township's Zoning By-law (07-079) includes provisions for the protection of natural heritage features, reinforcing the need for an environmental assessment before development occurs near ecologically significant areas.

SIGNIFICANT WOODLANDS

The MNRF designates Significant Woodlands based on their ecological importance, including their role in maintaining biodiversity, providing critical wildlife habitat, and supporting regional forest connectivity.

In accordance with the Provincial Policy Statement (PPS, 2024), development and site alteration within or adjacent to Significant Woodlands must demonstrate no negative impact on their ecological functions. Based on this assessment, the proposed removal of woodland represents approximately 0.00485% (639.02 m^2) of the total 13,187,651.40 m^2 woodland (Figure 1). This minimal removal is not expected to disrupt ecological connectivity, wildlife movement corridors, or habitat availability, as more than 99.995% of the connected woodland will remain intact. The remaining forested areas will continue to support ecological functions and sustain wildlife populations within the broader landscape.

Although the impact calculation is based on the removal of all trees within the development footprint, it is recommended that tree removal be minimized wherever possible to further reduce localized impacts on wildlife. Retaining existing vegetation, particularly along woodland edges and within buffer zones, can help maintain habitat continuity, reduce disturbances, and enhance long-term ecological resilience.

The Natural Heritage Reference Manual (2010) emphasizes the importance of protecting significant woodlands while recognizing that development can occur when the loss does not compromise the overall ecological integrity of the landscape. In this case:

- The retained woodlands within the larger connected complex, along with the extensive surrounding forested landscape, will ensure the long-term viability of wildlife habitats and connectivity.
- While the affected woodland areas are part of the significant woodland designation, the selective removal of trees is not critical to the broader woodland's ecological function.

The proposed development aligns with the guidelines of the PPS (2024) and the Natural Heritage Reference Manual, ensuring that:

1. Potential impacts are minimized.
2. Remaining significant woodlands continue to provide ecological and functional roles at the regional scale.
3. Sustainable practices, including reforestation with native species and the preservation of buffers, further enhance habitat quality and biodiversity.

MITIGATION MEASURES FOR SPECIES AT RISK (SAR) AND WILDLIFE

To ensure the sustainability of future developments, recommended mitigation measures must be upheld during construction and subsequent land use changes. Key measures include:

Installing exclusion fencing to prevent wildlife, including Species at Risk (SAR), from entering work zones.

- Restricting vegetation clearing to October 1–March 31 to avoid sensitive wildlife periods. If vegetation removal must occur outside of this window, a qualified biologist must conduct a pre-clearance sweep to identify active nests, dens, or other sensitive habitats before any clearing or exclusion fencing installation.
- Maintaining 30-meter buffers around wetlands to prevent encroachment.
- Implementing erosion and sediment controls, stormwater management systems, and replanting disturbed areas with native vegetation.
- Minimizing noise, light, and vibration disturbances, and avoiding nighttime work to reduce stress on wildlife.
- Applying SAR-specific protections, such as installing fencing before May 1 and conducting post-construction monitoring.

- Educating construction crews on wildlife sensitivities and SAR protocols to ensure compliance with environmental regulations.

These measures will help mitigate potential ecological impacts, protect sensitive species, and maintain the integrity of the surrounding habitat while allowing the proposed development to proceed in accordance with environmental best practices.

CONCLUSION

By implementing these mitigation measures and sustainable practices, this assessment ensures compliance with the Provincial Policy Statement (2024) and the Natural Heritage Reference Manual (2010). The proposed development minimizes environmental impact while maintaining the ecological integrity of the significant woodland. These measures support long-term habitat sustainability, ensuring that wildlife corridors, connectivity, and ecological functions remain intact. This balanced approach allows for responsible development while preserving the natural heritage of the property, ensuring its ecological resilience and sustainability for future generations.

Tracey Geneau

Tracey Geneau, BSc., Fish & Wildlife Technician, O.W.E.S., Butternut Assessor
Sr. Environmental Technologist

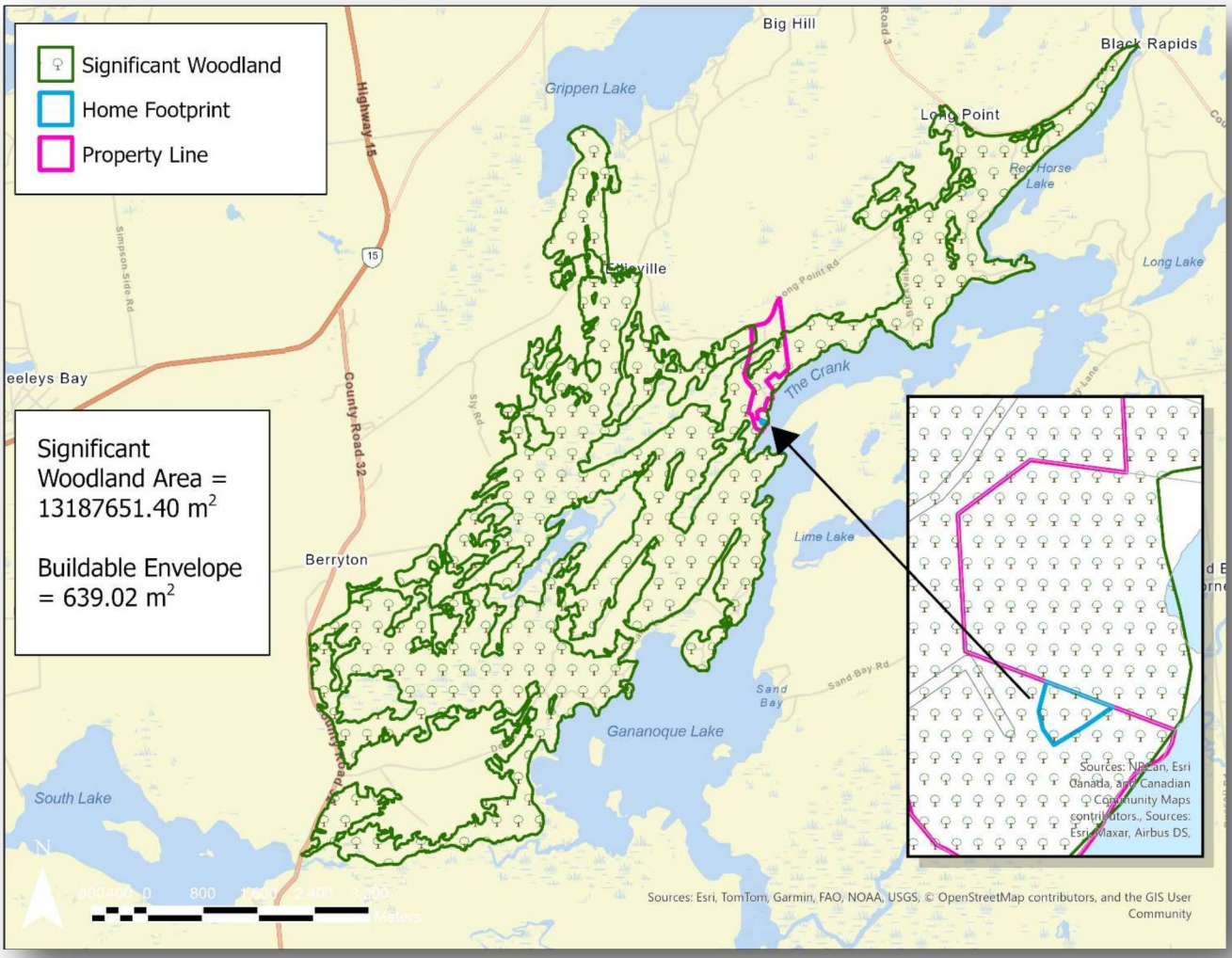

Figure 1: Buildable Development Envelope in Relation to the Significant Woodland Area

This space is intentionally left blank

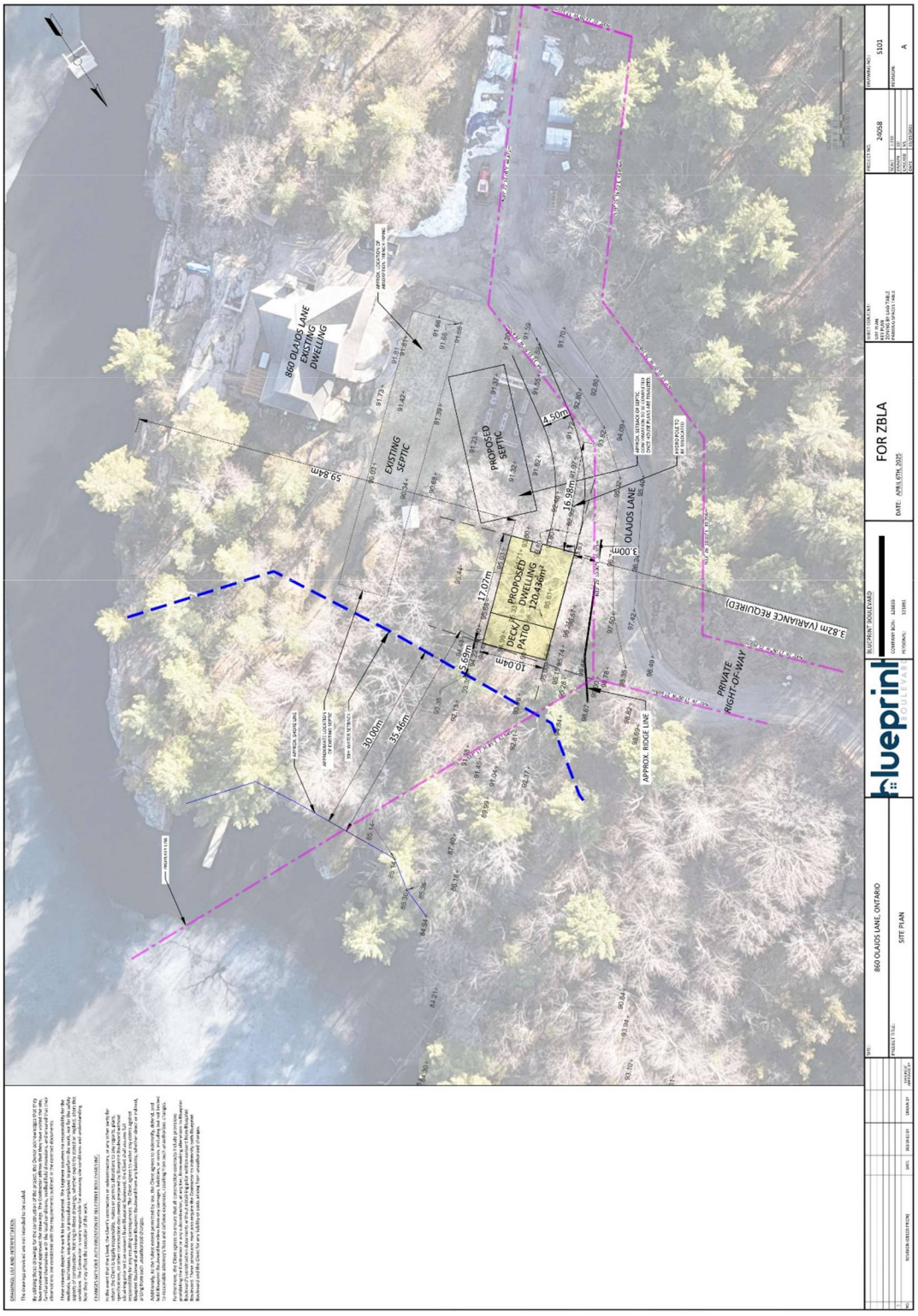

Figure 2: Site Plan Drawing

REFERENCES

Ontario Ministry of Municipal Affairs and Housing. Provincial Policy Statement, 2024 (PPS). Government of Ontario, 2024.

Ontario Ministry of Natural Resources. Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005, Second Edition. Queen's Printer for Ontario, 2010.

Ontario Ministry of the Environment, Conservation and Parks (MECP). Butternut Assessment Guidelines (Updated 2021).

Ontario Ministry of Natural Resources and Forestry (MNRF). Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E, 2015.

Ontario Ministry of Natural Resources and Forestry (MNRF). Significant Wildlife Habitat Technical Guide, 2000.

Township of Leeds and the Thousand Islands. Official Plan, 2018.

Township of Leeds and the Thousand Islands Zoning By-law 07-079, 2023