Muncaster Environmental Planning Inc.

June 5, 2024

Mr. Stephen Fazli
209-1591 Lycee Place
Ottawa, Ontario
K1G 4A7

Dear Mr. Fazli:

RE: 6208 Nick Adams Road
Environmental Impact Study – Severances

This Environmental Impact Statement (EIS) assesses two proposed rural severances to the southwest of the Village of Greely in the City of Ottawa. The site is bordered by Manotick Station Road to the east and Nick Adams Road to the north (Figure 1). The site is in the northwest part of Lot 11, Concession III in the Geographic Township of Osgoode, City of Ottawa. The site was originally Lot 18, the most westerly lot, in a 17.4 hectare site approved for a rural residential subdivision in the mid-2010s. The site now has a municipal address of 6208 Nick Adams Road and is mostly forested, with meadow habitat along the east edge.

For the purposes of this report Manotick Station Road is assumed to be in a north-south orientation.

Background and Project Description

The site is in an area characterized by individual residences, rural residential subdivisions, agricultural land, and regenerating habitats including forests. There are no Natural Areas, as defined by Brownell and Blaney (1997) in the former Region of Ottawa-Carleton's Natural Environment System Strategy on the site, with portions of the high rated West Osgoode Wetland and Upland Complex Natural Area to the west of the site, west of Manotick Station Road. Young cultural habitat is to the south of the site, with a large trailer park further to the south. Residences are to the north, with agricultural land and rural residential subdivisions further to the north. Thickets, forests, commercial operations and residences are along both sides of Manotick Station Road.

Two severances, each just over 0.8 hectares, are proposed for the 1.65 hectare site (Figure 1). The north severance, also known as 'Lot 1', has approximately 55 metres of frontage along Nick Adams Road, while the south severance, also known as 'Lot 2, has approximately 90 metres of frontage along Manotick Station Road. A new rural residence is proposed for each severance, with each severance served by a private drilled well and septic system.

The lands proposed for severance and adjacent lands are identified as Rural Countryside on Schedule B9 of the City's Official Plan. As shown on Schedule C11-B of the Official Plan, there are no portions of the City's Natural Heritage System directly on the lands proposed for severance, with a Natural Heritage System Core Area associated with the West Osgoode Natural Area to the west of Manotick Station Road. Forest further to the east of Manotick Station Road on either side of Nick Adams Road are part of the City's Natural Heritage System Overlay, also shown on the Schedule C11-B. No environmental constraints are shown for the site on Schedule C15 of the Official Plan, with unstable slopes mapped along Grey's Creek, about 900 metres to the east of the site. The closest Provincially Significant Wetland is a parcel associated with the West Osgoode Swamp approximately 700 metres to the west of the site. Much of the on-site forest is identified as unevaluated wetland on the geoOttawa layer. A watercourse along the south and central west edge of the site is also mapped on geoOttawa (Figure 1).

Methodology

As the study area, identified as the recommended building areas on each severance and the adjacent 120 metres, contains portions of the Natural Heritage System on the adjacent lands, an EIS is required to determine if the proposed severances and associated residences would have a negative impact on the significant natural features. Potential Species at Risk utilization, the presence of wetlands, impacts on watercourses, and significant woodlands will also be assessed. This EIS was prepared following the City's EIS Guidelines, with guidance from the Natural Heritage Reference Manual (OMNR, 2010). The field survey and this report were completed by Bernie Muncaster, who has a Master's of Science in Biology and over thirty-six years of experience in completing natural environment assessments. Michelle Muncaster assisted with the field survey and completing this report.

The EIS will provide the methodology to mitigate as required negative impacts on significant features and functions. Potential Species at Risk in the general area were identified from Ministry of Natural Resources and Forestry databases, the Ontario Breeding Bird Atlas, Ontario Reptile and Amphibian Atlas, and Species at Risk reported for the overall City of Ottawa.

Colour aerial photography (1976 - 2022) was used to assist in assessing the natural environment features in the general vicinity of the site. As part of the overall rural residential subdivision, the natural environment features of the site and adjacent lands were reviewed on May 5th, June 27th and July 5th, 2012. The June 27th survey began at 08:30 with partly cloudy skies, a light to moderate breeze and an air temperature of 22° C. Additional surveys for grassland Species at Risk were completed on June 15th, 23rd and 30th, 2013. An updated survey of the proposed severances and adjacent lands was completed from 08:15 to 09:50 on June 4th, 2024, under sunny skies, light air, and an air temperature of 21° C. The study was completed by systematically travelling through the survey area and completing a description of the lands based on the vegetation component of the Ecological Land Classification for Southern Ontario.

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Existing Conditions

The soils on the site are primarily permeable gravelly sand and silty sand loams (exp 2012). The overburden material extends beyond a depth of ten metres based on the test pit / borehole and well drilling completed by exp (2012). A thin layer of topsoil is throughout the majority of the site, with areas of fill, including small boulders, noted on the lands proposed for severance. The bedrock is dominated by dolostone and limestone of the Oxford Formation, underlain by dolomite and sandstone of the March Formation and then the Nepean Sandstone (exp 2012). The topography of the site is nearly level, with a gentle slope to the west and south.

The drainage on the east side of Manotick Station Road is a swale choked with broad-leaved cattail (Photo 1). Small pockets of standing water were present on June 3rd but there was no flow or other connectivity. No defined low flow channel, coarse substrate, or other features of aquatic habitat save for the emergent vegetation was observed. The swale on the south side of Nick Adams Road contained no cattails or standing water and was vegetated throughout with upland vegetation such as field horsetail, bladder campion, red clover, common dandelion, and field thistle. No channels with aquatic habitat potential were observed on or adjacent to the site.

Cultural Meadow

Small representations of cultural meadows are along the north and east edges of the site (Photo 2), continuing to the east of the site. An old barn and other structures were previously in this area but removed by the spring of 2013. Common brome grass, orchard grass, Canada thistle, field sow-thistle, common milkweed, tall goldenrod, Canada goldenrod, tufted vetch, white clover, red clover, goat's-beard, common dandelion, wild carrot, field mustard, tall buttercup, bladder campion, coltsfoot, common mugwort, wild grape, lesser stitchwort, Canada anemone, and common burdock are typical ground flora, with red elderberry, alternate-leaved dogwood, and red raspberry shurbs near the edges of the meadow habitat.

Upland Poplar – Ash Deciduous Forest

A fresh-moist upland deciduous forest covers the majority of the site and is dominated by trembling aspen and large-toothed aspen, with white ash, green ash, white cedar, and white elm also well represented in portions of the forest (Photo 2). Crack willow and amur maple were also noted. The majority of trees in the forest are in the 15cm – 25cm dbh. A few aspens are up to 42cm dbh and the largest white cedar and crack willow were up to the 35cm dbh. Many of the poplar trees have insect and bark damage. Most of the ash greater than 15cm dbh appear dead and emerald ash borer evidence was extensive. The extent of windthrow and dead ash stems in the forest was noticeably greater than in 2012 (Photos 4 and 5).

The understory is thick throughout much of the forest (Photos 3, 4, and 6). The non-native and invasive glossy buckthorn and tartarian honeysuckle are common in much of the understorey, with the density of buckthorn greater in the south portion of the north severance and on the south severance. Alternate-leaved dogwood, grey dogwood, common buckthorn, prickly gooseberry, black current, red elderberry, and highbush cranberry are also in the understory. Regenerating ash and poplar stems are common in areas, along with less elm and amur maple regeneration. The ground flora is dominated by thicket creeper and wild grape in areas and also includes tall

buttercup, sensitive fern, white bedstraw, white snakeroot, tall goldenrod, Philadelphia fleabane, white trillium, virgin's bower, and field horsetail. There is a greater wetland affinity along the central -west portion of the site, where sensitive fern is dominant in areas and tall meadow-rue, awl-fruited sedge, and reed canary grass are also present.

Wildlife observed during the June 4th survey included song sparrow, American crow, black-capped chickadee, American goldfinch, American robin, red-winged blackbird, northern cardinal, yellow warbler, common yellowthroat, chestnut-sided warbler, northern flicker, northern leopard frog, grey tree frog, and white-tailed deer tracks. No fissured bedrock, stone fences, or other stone piles were observed on or adjacent to the severances. A few of the dead ash had smaller woodpecker cavities but these cavities appeared too exposed and too small to be suitable cavities for other wildlife. No whitewash, owl pellets, or stick nests indicating potential raptor utilization were observed on the site. No forest interior habitat is present due to the adjacent residences, meadow habitat, and the Manotick Station Road corridor. Regional roads, agricultural lands, commercial operations, residences including trailer parks, and rural residential estate developments impact potential linkages in the vicinity of the site.

Photo 1 – Thick mat of cattails in the swale on the east side of Manotick Station Road adjacent to the southwest corner of the site. View looking north towards Nick Adams Road

Photo 2 – Cultural meadow and north portion of upland deciduous forest, including north part of building area for the north severance. View looking south from Nick Adams Road

Photo 3 – Typical condition of the upland deciduous forest in the south portion of the recommended building area for the north severance. View looking southeast

Photo 4 – The understory of the upland deciduous forest is extremely thick in many areas and windthrow is common. This is in the north part of the south severance. View looking southeast

Photo 5 – Recommended building area for the south severance, with a larger number of dead ash trees. View looking north from the central portion of the building area

Photo 6 – Entrance to the recommended building area for the south severance. View looking east from east of Manotick Station Road

Significant Woodlands

Forests in the rural portion of Ottawa are assessed for significance by the criteria identified in Table 7.2 of OMNR (2010). The site is in the Castor River rural planning area, with 27 percent forest cover. In terms of the woodland size criteria, with this extent of forest cover in the planning area a contiguous forest would need to be at least 20 hectares to meet the size criteria for significance. The on-site forest is contiguous with a small forested area to the south and to the east of the south portion of the site, but there are no contiguous forests to the west or north. The overall contiguous forest is approximately 3.5 hectares and thus would not be considered significant woodlands based on the woodland size criterion identified in OMNR (2010). Due to the adjacent residences, meadow habitat, and the Manotick Station Road corridor, no forest interior habitat is present on the site or elsewhere within the contiguous forest. No other features were observed in the on-site forests that would meet the criteria for significant woodlands, including a lack of larger tree structure, no apparent economic or social functions, no sensitive watercourses or water bodies, and no rare vegetation communities.

The on-site forest is disturbed by non-native vegetation, tree condition and windthrow but would provide some ecological functions including local wildlife habitat and an area of tree cover and associated climate, air quality, and wildlife benefits.

Legend

- Proposed Severances
- B — Recommended Building Area (max. development footprint within building area is 0.2 ha)
- Vegetation Communities
- Mapped Channel

Vegetation Communities

1. Cultural meadow
2. Upland poplar - ash deciduous forest

Approx. Scale 1: 1,800

0 20 40 60 METRES

Figure 1 **FILE: 24 - 04** June 3, 2024	**NATURAL ENVIRONMENT CONDITIONS** **6208 Nick Adams Road** **Osgoode, City of Ottawa**	Prepared for: Stephen Fazli Prepared by: Muncaster Environmental Planning Inc.

Species at Risk

No Species at Risk, including butternut or black ash, were observed during the June 4th, 2024 field survey. The only Species at Risk observed in the 2012 surveys was a pair of bobolinks in the meadow to the west of the current site during the June 27th, 2012 survey. No bobolinks were observed during targeted breeding surveys in the late spring and early summer of 2013 or in 2024. The remaining meadow habitat contains too much woody vegetation and is too small for nesting by the grassland Species at Risk bobolink and eastern meadowlark.

The MNRF's Make a Map: Natural Heritage Areas website was reviewed on June 3rd, 2024. This site allows for a search of Threatened and Endangered species covered by the 2008 *Endangered Species Act*, as well as other species of interest. A search was conducted on the 1 km square including the lands proposed for severance and adjacent retained lands (18VR50 – 27). No Species at Risk were recorded for this square, with two species of special of concern, wood thrush and eastern wood pewee.

Avian Species at Risk reported in the Ontario Breeding Bird Atlas for the 10 km square 18VR50 that includes the site and general area are eastern whip-poor-will, chimney swift, eastern meadowlark, and bobolink. Chimney swift nests predominantly in larger open chimneys without a metal liner, and sometimes in tree hollows. This habitat is not present on-site. Eastern whip-poor-will requires large wooded areas with open patches, and/or open woodlands or alvar. The understorey of the forest is too thick with buckthorn and other shrubs to be utilized by eastern whip-poor-will. Bobolink and eastern meadowlark are discussed above. No forest interior habitat, which is utilized by wood thrush and eastern wood pewee for nesting, is present.

The potential Species at Risk in the City of Ottawa were also reviewed, with an emphasis on the endangered and threatened species historically reported in the overall City, including butternut, black ash, American ginseng, eastern prairie fringed-orchid, wood turtle, spiny softshell, Blanding's turtle, musk turtle, Henslow's sparrow, loggerhead shrike, bobolink, chimney swift, eastern meadowlark, bank swallow, eastern whip-poor-will, bald eagle, golden eagle, least bittern, little brown myotis, northern long-eared bat, olive hickorynut, eastern cougar, common gray fox, lake sturgeon, cerulean warbler and American eel. The habitat requirements of these species along with those listed as special concern were reviewed. The preferred habitats are not present except for butternut and potentially black ash. No turtle habitat is present and no cavity trees for potential use by bats were observed within the recommended building areas for the proposed severances. No butternut or black ash was observed on or within 50 metres of the recommended building areas.

Significant Wildlife Habitat

The potential for significant wildlife habitat was assessed using the guidance in OMNR (2010) and MNRF (2015). No flora, fauna, or ecological conditions were observed in the field surveys in the vicinity of the recommended building areas that would trigger a Significant Wildlife Habitat designation with respect to the ELC communities present. For example, no wetlands are present on the proposed severances, indicating waterfowl stopover and staging areas, and amphibian or turtle habitat are not present. Evidence of colonial nesting bird breeding habitat or

other examples of seasonal concentration areas were also not observed on the lands proposed for severance. No rare or specialized habitat including rare vegetation, seeps or springs were noted. The young deciduous forests do not appear to support raptor wintering areas, and forest interior habitat or old growth forest are not present. Cavity trees greater than 25cm dbh that may support maternity colonies for bats are not present in proximity to the recommended building areas. No shrub/early successional breeding birds were observed on the site. No stone fences, stone piles, or areas of broken and fissured rock were observed.

The linkage functions associated with the site would be reduced by the adjacent rural residential subdivisions and the regional roads, agricultural lands, commercial operations, and other residences including trailer parks. However, some linkage function is likely present given the natural area to the west. It is not anticipated that two new residences adjacent to the Manotick Station Road corridor will notably impact any existing linkage function of the general area.

Impact Analysis and Recommendations

Although large portions of the lands proposed for severance are forested, the forest is small, and is disturbed by windthrow, poor tree condition, and non-native species. No specimen trees were observed in the forest. No natural heritage features, as identified in the Provincial Policy Statement and OMNR (2010), were observed on or adjacent to the lands proposed for severance. No indirect impacts are anticipated on the West Osgoode Wetland and Upland Complex Natural Area to the west of Manotick Station Road as residences are along much of Manotick Station Road and the closest portion of the Natural Area is of lower sensitivity such as thickets and young forests rather than older forests or significant wetlands.

The 0.2 hectare recommended building areas for the two severances are shown on Figure 1. The recommended building area for the south severance was selected in a more open area of the forest canopy due to many dead ash trees and other disturbances (Photo 5). The recommended building area for the north severance is as close to Nick Adams Road as feasible to minimize tree removal and maximum use of the meadow habitat along the east edge. The building envelopes on the proposed severances are not to exceed 0.2 hectares, with the red rectangles scaled to approximately 0.2 hectares on Figure 1.

Potential impacts during construction of the rural residences include impacts on wildlife from vegetation removal, increased erosion and release of sediments and other potential contaminants from truck traffic and construction activity, harm to wildlife remaining in the work area during construction, and impacts associated with an increase in noise, dust and light. The following mitigation measures are recommended to address these potential impacts during construction and operation of the rural residences:

1. The amount of tree removal for the building envelopes and associated access on the proposed severances is to be minimized as much as possible;
2. Sturdy protective fencing, at least 1.3 metres in height, is recommended around the perimeter of the work areas to ensure the adjacent vegetation to be retained is not impacted by the construction and to isolate the work area from sensitive wildlife. The

protective fencing is to be installed at the outer limits of the critical root zone (ten times trunk diameter) of the retained trees;

3. Woody vegetation removal is to occur before April 15th or after August 15th for the protection of breeding birds, unless a survey conducted by a qualified biologist within five days of the vegetation removal identifies no bird nesting activity. As nesting surveys are usually difficult to achieve in the upper canopy of forests and in forests with thick understories, tree removal is strongly recommended for outside of the nesting period;
4. The work areas should be searched for snakes and other sensitive wildlife at the beginning of each work day. Any turtles, snakes, or other sensitive wildlife observed in the vicinity of the work areas or that may otherwise be in danger are to be safely relocated to the south of the work areas. Animals should be moved only far enough to ensure their immediate safety and any handling of Species at Risk during construction for safe relocation purposes should be done by individuals who are properly trained to do so. See Appendix 1 and the links in Section 4 of City of Ottawa (2022) for suggestions on how to effectively relocate turtles and snakes and Section 2.5 for recommendations on construction site management;
5. There are no specific sensitivities for plantings on the site. Any landscaping is to use only locally appropriate native species. This recommendation is not meant to apply to vegetable gardens or non-invasive ornamental shrubs in close proximity to the new residences. Homeowners are encouraged to plant native trees including a mix of coniferous and deciduous species such as sugar maple, red maple, tamarack, white spruce, red oak, and basswood;
6. All construction activity will occur during daylight hours;
7. Outdoor lighting is to be kept to a minimum and not directed away from the new residences;
8. Pets are to be controlled at all times;
9. To discourage wildlife from entering the work area during construction, the site should be kept clear of food wastes and other garbage, and proper drainage provided to avoid accumulation of standing water, which could attract amphibians, birds, and other wildlife to the work areas;
10. Areas of bare soil in locations that are not directly part of the building footprint are to be re-vegetated as soon as possible,
11. Municipal by-laws and provincial regulations for noise will be followed and utilities will be located as required in the vicinity of the site prior to construction. Waste will be managed in accordance with provincial regulations;
12. The contractor will have a spill kit on-hand at all times in case of spills or other accidents;
13. The extent of exposed soils is to be kept to a minimum at all times. Re-vegetation of exposed, non-developed areas is to be achieved as soon as possible; and,
14. Roof runoff should be directed to rain barrels or permeable surfaces.

In addition, many helpful wildlife-oriented mitigation measures are detailed in the City's *Protocol for Wildlife Protection during Construction* (City of Ottawa, 2022). Contractors are to review in detail and understand the City's *Protocol for Wildlife Protection during Construction* prior to commencement of construction. The contractor is to be aware of the potential Species at Risk in the vicinity of the site including butternut and black ash. Appendix 1 of City of Ottawa

(2022) describes these species. Bernie Muncaster (613-748-3753) is the project biologist for this development. Any Species at Risk sightings are to be immediately reported to the Ministry of the Environment, Conservation and Parks and work that may impact the species suspended immediately.

Conclusion

One rural residence is planned in each of the two severances. No natural environment constraints, including Species at Risk utilization, were observed on the recommended building areas. The recommended building areas are in forests but the forests are highly disturbed with trees in poor condition or dead, windthrow, and non-native vegetation.

Construction and operation of the residences in these areas is not anticipated to impact the features and functions of the local natural environment features including the components of the Natural Heritage System to the west of Manotick Station Road provided the important mitigation measures in this report are properly implemented.

This EIS concludes that it is the professional opinion of the author that the construction and operation of two residences and associated infrastructure on the lands proposed for severance in the recommended building areas will not have a negative impact, as defined in the Provincial Policy Statement, on the significant natural heritage features and functions of the area, including the Natural Heritage System Core Area to the west, provided the above recommended mitigation measures are properly implemented.

References

Brownell, V.R. and C.S. Blaney. 1997. Summary: Natural Area Reports for Natural Areas East of the Rideau River. Prepared for the Regional Municipality of Ottawa-Carleton, Planning and Development Approvals Department. 324 pp.
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Ontario Ministry of Natural Resources. 2010. Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005. 2nd Edition. March 2010. 233 pp.

Ontario Ministry of Natural Resources and Forestry. 2015. Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E. January, 2015. 38 pp.

Please call if you have any questions on this Environmental Impact Study.

Yours Sincerely,
MUNCASTER ENVIRONMENTAL PLANNING INC.

Bernie Muncaster, M.Sc.
Principal

\6208 Nick Adams Road EIS