Muncaster Environmental Planning Inc.

April 8, 2024

West Capital Developments
75 First Street, Suite 14
Orangeville, Ontario
L9W 2E7

Attention: Andrew Wildeboer

Dear Mr. Wildeboer:

RE: Carp Airport Lands – Phase 1B-2
Species at Risk Assessment

This Species at Risk Assessment addresses the Phase 1B-2 component of the Carp Airport development. The Phase 1B-2 lands (Figure 1) are to the east of the Phase 2A lands east of Diamondview Road, and east of the Phase 1B-1 lands east of Carp Creek. The Phase 1B-2 lands begin approximately 850 metres south of March Road, in Part of Lot 14, Concession 4 of Huntley Geographic Township. For the purposes of this report, March Road is considered to be in an east-west extension. This report has been updated to address City of Ottawa comments dated February 15th, 2023.

Single detached residences will be built on the Phase 1B-2 lands, which consists of a portion of registered Plan of Subdivision 4M-1593. The Phase 1B-2 lands will be accessed via an extension of Albert Boyd Private from Phase 2A and internal roads extending from the east terminus of Albert Boyd Private. The Carp Creek corridor is to the west of the Subject Lands. The corridor was registered as Blocks 166 to 168 on Plan 4M-1593 as part of a previous phase and transferred to City of Ottawa and not subject to this Species at Risk Assessment. There will be no disturbances within the Creek corridor.

The Phase 1B-2 lands have been cleared of trees and grubbed. The road extension over Carp Creek is constructed, along with many of the road beds for the Phase 1B-1 lands. Regenerating ground flora, including some woody vegetation is present between the road beds.

Methodology

This Species at Risk Assessment was completed following the applicable components of 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-three years of experience completing natural environment assessments. Potential Species at Risk in the general area were identified from

Ministry of Natural Resources and Forestry and Department of Fisheries and Oceans databases, the Ontario Breeding Bird Atlas, the Ontario Reptile and Amphibian Atlas, and Species at Risk reported for the overall City of Ottawa.

A field survey of the Phase 1B-2 and adjacent lands, including the Carp Creek corridor, was completed on June 27th, 2022 from 12:30 to 13:55 under a light to moderate breeze. sunny skies, and an air temperature of 21° C. Five spring 2020 targeted turtle surveys were completed along and adjacent to the Carp Creek corridor as part of the Phase 2A assessment (Muncaster, 2020). Additional field surveys of the entire Carp Airport lands, including the Phase 1B-2 lands, were completed in 2003 and 2004, including breeding bird surveys on June 10th and July 4th, 2004 (Muncaster, 2007).

Environmental Features

The Carp Airport Natural Area, identified as Area 413 in the former Region of Ottawa-Carleton's Natural Environment System Strategy (White, 1997) including many of the former and existing forests in the vicinity of the site. This Natural Area was considered to have a low significance in the Region's study, although the area had a moderate rating for representation of common vegetation communities, landscape attributes and diversity of vegetation communities. The summary for the Natural Area indicated that there was a high level of disturbance in the fair to poor quality mixed forests. This same general area was designated Category 2 for Terrestrial Management Priorities in the Carp River Watershed Subwatershed Study (CRWSS). White (1997) identified a relatively low number of plants with high coefficients of conservatism, along with a high impact of the invasive non-native glossy buckthorn. No special concentration of seasonal wildlife was reported, although the natural area summary does indicate that the area is occupied and utilized by a variety of representative wildlife species and communities.

The Phase 1B-2 lands are not part of the current Natural Heritage Features Overlay or other components of the Natural Heritage System, as shown on Schedule C11-A of the new City of Ottawa Official Plan.

Carp Creek flows from south to north within Blocks 166 to 168 of registered Plan 4M-1593 between Phase 2A to the west and Phase 1B-1 to the east.

Existing Conditions

The topography of the site is generally level, with gentle slopes in proximity to Carp Creek. Small lower lying areas are present adjacent to the road beds and within ruts and other areas of disturbance. No channels were observed on the Phase 1B-2 lands leading to Carp Creek. Mapped watercourses are present in the north portion of the Phase 1B-2 lands on the geoOttawa layer but these were not observed in the field. No wetland communities were observed on the Phase 1B-2 lands and no unevaluated wetlands are mapped outside of the Carp Creek corridor on the geoOttawa layer.

Cultural Meadow

As indicated above, the Phase 1B-2 lands have been cleared of trees and grubbed. Ground flora has regenerated outside of the installed road bases (Photo 3) and the vegetation community would be considered a cultural meadow (Photos 1 and 2). Species were reflective of the disturbed conditions and included common ragweed, wild parsnip, ox-eye daisy, lamb's quarter, wild carrot, common mullien, June meadow grass, reed canary grass, yellow wood sorrel, wild cucumber, sweet-scented bedstraw, common milkweed, bull thistle, Canada thistle, Canada goldenrod, tall goldenrod, curled dock, tall buttercup, white avens, yellow avens, St. John's wort, tufted vetch, purple loosestrife, sensitive fern, blue vervain, joe-pye-weed, rough cinquefoil, white clover, alsike clover, lower hop clover, wild grape, thicket creeper, path rush, spotted touch-me-not, common strawberry, common dandelion, and Philadelphia fleabane. Slender willow, red raspberry, and glossy buckthorn shrubs are scattered in the open meadow habitat, with regenerating poplar, ash, and Manitoba maple stems less than 10cm diameter at breast height (dbh) also present.

Wildlife observed during the late June survey included ring-billed gull, song sparrow, black-capped chickadee, European starling, yellow warbler, American goldfinch, American crow, blue jay, American robin, red squirrel, and white-tailed deer tracks. No trees with potential wildlife cavities were observed on or adjacent to the Phase 1B-2 lands.

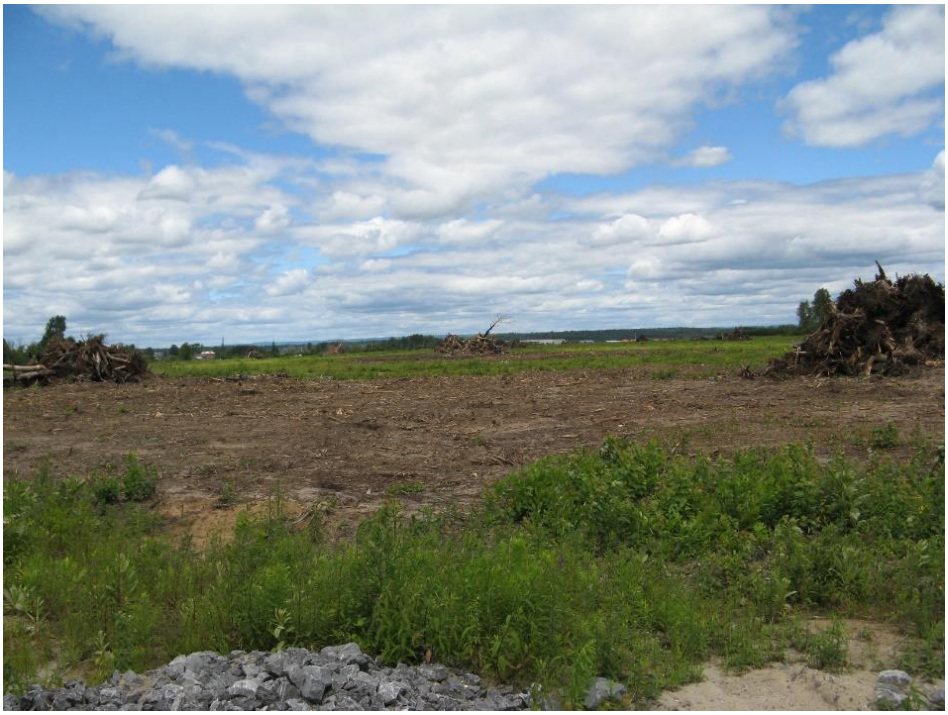

Photo 1 - Phase 1B-2 lands looking north from south end

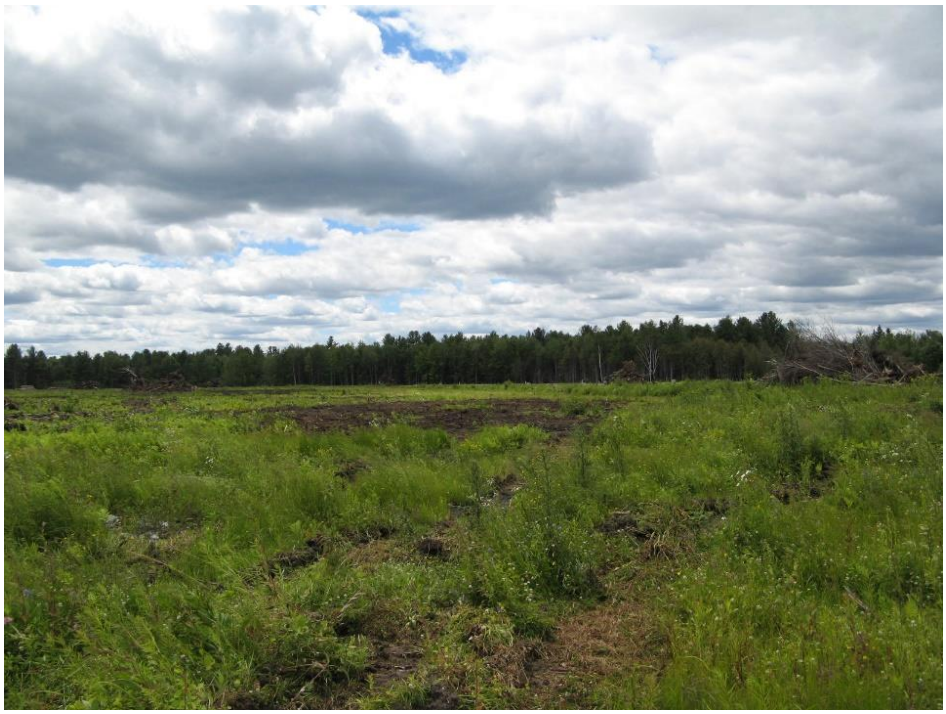

Photo 2 - Phase 1B-2 lands looking south from north end, with trees within the Carp Creek corridor, being Blocks 166 to 168 on registered Plan 4M-1593 in the background

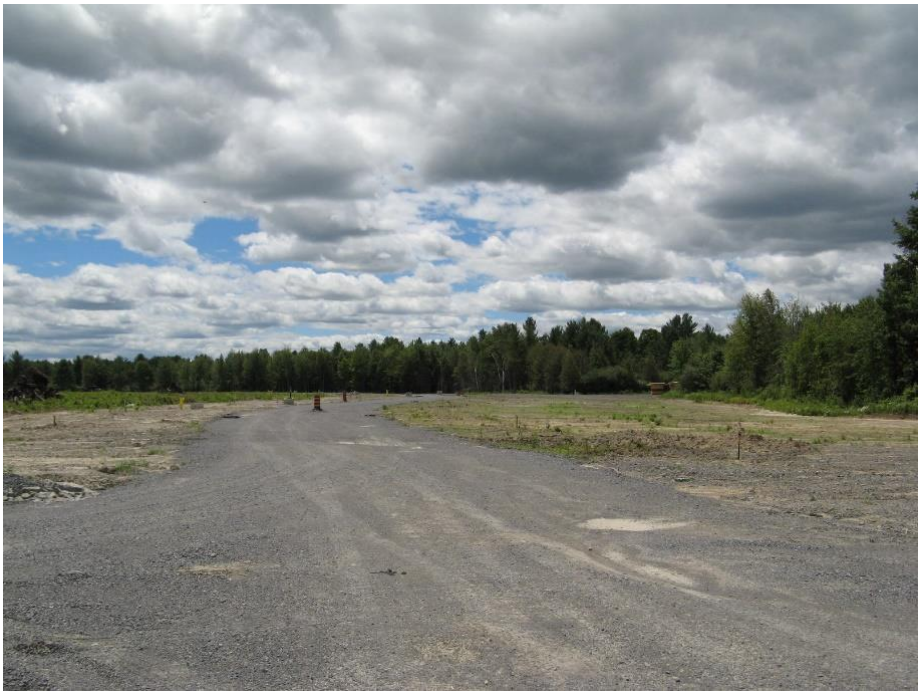

Photo 3 – Road base installed in Phase 1B-1 abutting the west portion of the Phase 1B-2 lands. View looking south from northwest end, with trees within the Carp Creek corridor, being Blocks 166 to 168 on registered Plan 4M 1593 to the right and in the background

Species at Risk

On June 20th, 2022, the Ministry of the Natural Resources and Forestry's Make a Map: Natural Heritage Areas website was reviewed. 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 Phase 1B-2 lands and adjacent areas (18VR11 – 98). Blanding's turtle, a threatened Species at Risk, was noted for this square and is known from the wetlands to the west of the Highway 417 corridor. Blanding's turtle and snapping turtle, a species of special concern, were identified in the Ontario Reptile and Amphibian Atlas for the overall 10km square 18VR11 that includes the site and general area. Due to the narrow and incised nature of Carp Creek and lack of marsh or swamp wetland habitat with standing water adjacent to the channel, suitable turtle habitat would not appear to be present along the Carp Creek corridor. No turtles were observed during the current June 2022 survey, five spring 2020 targeted turtle surveys, a September, 2018 survey of the Phase 2A lands including the Carp Creek corridor, or during field reviews completed on June 10th and July 4th, 2004.

No aquatic Species at Risk were identified for the general area on Map 14 of the Department of Fisheries and Oceans Aquatic Species at Risk Maps. Species at Risk identified for the 10 km square (18VR11) including the overall site and general area in the Ontario Breeding Bird Atlas include barn swallow, bank swallow, eastern meadowlark, and bobolink. No structures were present on or adjacent to the Phase 1B-2 lands that may be utilized by chimney swift or barn swallow. Eastern meadowlark and bobolink utilize larger grassland areas such as hay fields. The meadow habitats dominating the Phase 1B-2 lands do not represent potential nesting habitat for these grassland Species at Risk. Although some meadow vegetation has regenerated in the location of the former forest, the topsoil has generally been removed and the density of grasses is far too low and regenerating woody vegetation too great to represent suitable habitat. In addition, the disturbed meadow habitat in now bisected by many roads and other servicing corridors. No sand piles that may be utilized by bank swallow were observed.

Other potential Species at Risk that have been found in the general area include butternut and eastern whip-poor-will. No butternut trees were observed on or within 50 metres of the Phase 1B-2 lands. Eastern whip-poor-will utilize rock or sand barrens with scattered trees, savannahs, old burns, or other disturbed sites in a state of early to mid-forest succession, or open conifer plantations. No suitable habitat is on the Phase 1B-2 lands. Several bat species are listed as Species at Risk. In the summer, cavities in trees greater than 25cm dbh in deciduous and mixed forests may be used by bats for maternal colonies. No suitable cavity trees were observed on or adjacent to the Phase 1B-2 lands.

The field surveys conducted by White (1997) on approximately twenty-five percent of the Carp Airport Natural Area identified, as listed at that time, no regionally or provincially significant flora or fauna.

The potential Species at Risk historically reported for the overall City of Ottawa and their habitat requirements were also reviewed, including butternut, American ginseng, eastern prairie fringed-orchid, wood turtle, spiny softshell, Blanding's turtle, Henslow's sparrow, loggerhead shrike, eastern meadowlark, bank swallow, bobolink, eastern whip-poor-will, bald eagle, golden eagle, least bittern, little brown bat, eastern small-footed myotis, northern long-eared bat, olive hickorynut, eastern cougar, lake sturgeon, cerulean warbler, and American eel. Except for butternut, no specific habitat characteristics related to these potential Species at Risk were observed on the Phase 1B-2 lands. No butternut was observed on or adjacent to the site.

Significant Wildlife Habitat

The potential for significant wildlife habitat is assessed using the guidance in OMNR (2010) and MNRF (2015). Potential components which may lead to a designation of significant wildlife habitat include seasonal concentration areas of animals, rare vegetation communities or specialized habitat for wildlife, habitat for species of conservation concern, and animal movement corridors.

As there is no forest interior habitat on the Phase 1B-2 lands, eastern wood pewee and wood thrush, both Species of Special Concern, are not anticipated to be on the site and were not heard during the June survey. The on-site habitat is too disturbed with minimal early successional habitat to be used by Species of Conservation Concern indicators (MNRF, 2015) such as brown thrasher, clay-coloured sparrow, field sparrow, eastern towhee, upland sandpiper, or grasshopper sparrow. No evidence of animal movement corridors, such as those for deer or amphibians, were noted.

Other field observations would not trigger a significant wildlife habitat designation with respect to the ELC communities present. For example, the cultural habitats do not support waterfowl stopover or staging areas, colonial nesting bird breeding habitat or other examples of seasonal concentration areas. No rare vegetation communities or rare or specialized habitats as described in MNRF (2015) were observed. No wetlands with the potential to support amphibians were observed on the Phase 1B-2 lands. With respect to the Carp Creek corridor to the west, Muncaster (2020) concluded that due to the narrow and incised nature of Carp Creek and lack of marsh or swamp wetland habitat with standing water adjacent to the channel, suitable turtle habitat would not appear to be present along the Carp Creek corridor. No turtles were observed during five spring 2020 targeted surveys, a September, 2018 survey, or during field reviews completed on June 10th and July 4th, 2004. No seeps or springs, potential bat hibernacula or maternity colonies, or suitable turtle nesting or wintering areas were noted. Stone piles and areas of broken and fissured rock for potential use by snakes, including potential reptile hibernaculum, were not observed nor was evidence of winter raptor utilization. No potential wildlife habitat cavity trees were observed on the Phase 1B-2 lands.

Large natural areas are to the south of the site and further to the west, west of the Highway 417 corridor. Linkage functions on this site are anticipated to be minimal as there are no natural areas to the north, with the highway and Carp Road corridors, the Carp Airport, residential communities and aggregate operations impacting connecting functions in the area.

Summary and Mitigation Measures

No Species at Risk or natural heritage features, as identified in the Provincial Policy Statement and OMNR (2020) were observed on the Phase 1B-2 lands. The Phase 1B-2 lands have been highly disturbed with tree removal and grubbing.

Significant natural heritage features adjacent to the Phase 1B-2 lands include fish habitat within Carp Creek to the west and significant woodlands due to the contiguous size greater than fifty hectares and associated forest interior habitat to the south. Forest interior habitat to the south of the Phase 1B-2 lands, may also provide habitat for significant wildlife habitat if species of special concern such as eastern wood pewee and wood thrush are nesting in the forests to the south. Potential impacts on these significant adjacent features could include contributions of deleterious substances impacting the water quality of Carp Creek and impacts on the tree cover of the significant woodlands through direct removal of the trees, damages to the branches and trunks of trees, or impacts on the associated critical root structures. The following mitigation measures are designed to protect these adjacent features and the natural environment in general including the site and adjacent lands:

1) Protective sturdy silt fencing installed prior to construction is recommended along the periphery of the work areas. Where adjacent off-site trees are present in the north portion of the Phase 1B-2 lands, the fencing is to be installed at a distance of ten times the trunk diameter of the outer trees. This will protect the critical root zones of adjacent trees. In addition to protecting adjacent trees to be retained in the Carp Creek corridor as part of recommended work for the previous registered subdivision, the temporary fencing is important to assist in keeping sensitive wildlife out of the work areas, limiting site disturbances to the work areas, protecting the quality of any surface runoff leaving the site, and ensuring no impacts on the significant woodlands to the south. Once the site has been stabilized following construction it is important that the silt fencing is removed;

2) There are no planting sensitivities for the site. Plantings of native trees and shrubs are recommended to add to the natural attributes of the site. A mix of coniferous and deciduous species such as sugar maple, red maple, tamarack, white spruce, white pine, red oak, basswood, native dogwoods, and nannyberry is recommended. It is important that native stock from a local seed source be used whenever possible to maximize the potential for successful plantings;

3) The extent of exposed soils shall be kept to a minimum at all times. Re-vegetation of exposed, non-developed areas shall be achieved as soon as possible;

4) During construction, sediment and erosion control measures will be implemented as required, including filtering of pumped groundwater, properly installed and kept silt fencing, and seepage barriers deployed in temporary drainage ditches, until the site is stabilized. These control measures must be properly maintained to maximize their function during construction. For example, the silt fencing must be properly keyed in to filter runoff and isolate the work areas from wildlife and be maintained as required, including repair of broken panels and removal of accumulated sediment;

5) Many helpful wildlife oriented mitigation measures are detailed in the City's Protocol for Wildlife Protection during Construction (City of Ottawa, 2015). Contractors are to review in detail and understand the City's Protocol for Wildlife Protection during Construction prior to commencement of construction. Listed below are specific mitigation measures associated with the Protocol for Wildlife Protection during Construction (City of Ottawa, 2015);

6) The contractor is to be aware of potential Species at Risk in the vicinity of the site such as butternut. Appendix 1 of City of Ottawa (2015) describes these species. The contact biologist for this project is Bernie Muncaster (613-748-3753). Any Species at Risk sightings are to be immediately reported to the project manager and the MECP and activities are to be stopped until further direction is received from the Ministry;

7) As recommended in City of Ottawa (2015), prior to beginning work each day thorough visual inspections of the work space and immediate surroundings are to be completed for wildlife. See Section 2.5 of the City's Protocol for Wildlife Protection during Construction (City of Ottawa, 2015) for additional recommendations on construction site management. Any turtles and snakes that are not endangered or threatened Species at Risk in the work area are to be relocated to the south. Direction on handling Species at Risk covered by the Endangered Species Act is required from the MECP. Animals should be moved only far enough to ensure their immediate safety. See Appendix 1 and the links in Section 4 of City of Ottawa (2015) for suggestions on how to effectively relocate turtles and snakes;

8) Although not anticipated, to protect breeding birds no additional tree or shrub removal should occur between April 15th and August 15th unless a breeding bird survey conducted by a qualified biologist within five days of the woody vegetation removal identifies no active nests in the trees or shrubs. No stick nests or other evidence of raptor utilization was observed on or adjacent to the site;

9) Where required by the City, permanent fencing will be installed around portions of the four lots backing onto the Carp creek Corridor and will tie into the permanent fencing to be installed along the west edge of the 1B-1 lands. All gates are prohibited in the permanent fencing along the Carp Creek Corridor to restrict intrusions and disturbances on the natural feature. This fencing will be effective in keeping backyard creep and other disturbances outside of the Carp Creek corridor;

10) 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; and,

11) Waste will be managed in accordance with provincial regulations. The contractor will have a spill kit on-hand at all times in case of spills or other accidents.

Conclusion

No Species at Risk were observed or are anticipated for the Phase 1B-2 lands other than butternut, which was not seen on or adjacent to the site. No significant natural heritage features are on the site. The above mitigation measures are to be properly implemented during construction to protect any unexpected Species at Risk utilization of the site and to protect the fish habitat of Carp Creek to the west of the site and significant woodlands, and associated potential significant wildlife habitat, to the south of the site.

References

City of Ottawa. 2015. Protocol for Wildlife Protection during Construction. August, 2015. 14 pp & Append.

Muncaster Environmental Planning Inc. 2007. Integrated Environmental Review, Carp Airport Residential Subdivision and Aerospace Business Park. Revised March, 2007. 21 pp.

Muncaster Environmental Planning Inc. 2020. Carp Airport Lands – Phase 2A. Species at Risk Assessment and Tree Conservation Report – Revised. October 5th, 2020. 17 pp. & append

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.

White, D.J. 1997. Summary: Natural Area Reports for Natural Areas West of the Rideau River (400 Series). Prepared for the Regional Municipality of Ottawa-Carleton, Planning and Development Approvals Department. Report #28-08c. 120 pp.

Please call if you have any questions regarding this updated report.

Yours Sincerely,
MUNCASTER ENVIRONMENTAL PLANNING INC.

Bernie Muncaster, M.Sc.
Principal

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FIGURE 1 – PHASE 1B-2 LANDS OUTLINED in RED