



Muncaster
Environmental
Planning Inc.

February 13, 2018

Mr. Shawn Hickey
President
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16 Concourse Gate, Suite 200
Ottawa, Ontario
K2E 7S8

RE: 20 and 30 Frank Nighbor Place
Environmental Impact Statement

I have completed an Environmental Impact Statement (EIS) for two concurrent Site Plan applications; one for a proposed commercial development at 20 Frank Nighbor Place in Kanata, and a second for a private street over a portion of the site to the south of the parking for the commercial development. The private street will provide a secondary access to 20 Frank Nighbor Place and access to future developments on 30 and 40 Frank Nighbor Place through subsequent Site Plan applications and associated EIS assessments. As shown in Novatech (2018) in late 2017, 30 and 40 Frank Nighbor Place were severed from 20 Frank Nighbor Place.

The approximate three hectare site is to the south of Highway 417, at the west end of Frank Nighbor Place to the east of the Carp River and the Canadian Tire Centre.

Site Context and Proposed Development

The site and adjacent lands are designated *Employment Area* on Schedule A of the Official Plan and are zoned Light Industrial, except the Carp River corridor to the west which is designated *Major Open Space* and zoned Open Space. No wetland habitats or channels with aquatic habitat potential were observed on the site, with the Carp River approximately 70 metres to the west at its closest point. The west portion of the Stony Swamp Wetland Complex is the closest Provincially Significant Wetland, beginning approximately 3.5 kilometres to the east. Stony Swamp is also the closest Area of Natural and Scientific Interest. The floodplain of the Carp River to the west of the site is indicated on the City's geoOttawa floodplain layer. The closest terrestrial component of the Natural Heritage System, as mapped on the Schedule L3 Overlay, is the Hazeldean Woods, approximately 1.9 kilometres to the east of the site. The closest Urban Natural Area is the high-rated Kanata Town Centre Core Park, approximately 1.2 kilometres to the northeast of the site. Unstable slopes along the Carp River are identified as an environmental constraint on Schedule K of the Official Plan.

The Carp River was considered by the Carp River Watershed/Subwatershed Study (CRWSS) to support degraded warm water fish communities in an altered stream side environment in the vicinity of the site (Robinson, 2004). Fish species noted by TSH (2005) in the Carp River in the

general area of the site included banded killifish, fathead minnow, bluntnose minnow, brook stickleback, longnose dace, northern redbelly dace, creek chub, white sucker, common shiner, golden shiner, pumpkinseed, rock bass, central mudminnow, and Johnny darter. The benthic community was reflective of very poor water quality (Robinson, 2004). TSH (2005) concluded that the lack of geomorphic structure in the Carp River limits the potential for a healthy aquatic habitat, with a dominance of fine sediment and organic materials on the streambed. No high or moderate recharge areas, areas of rare vegetation, Areas of Natural and Scientific Interest, or Centres of Ecological Significance were identified by Robinson (2004) in the vicinity of the site. No wetlands, woodlands greater than 50 years of age, or forest interior habitat were identified by Robinson (2004) on or adjacent to the site, with scrub vegetation noted to the east of the Carp River. The recommended Carp River corridor width by TSH (2005) to accommodate the Carp River Restoration Plan was 70 metres in the general area of the site. Revegetating up to 50 percent of the total stream length with native, woody, riparian vegetation was recommended in the CRWSS for the Carp River corridor. Following the recommendations of the Carp River Restoration Plan (TSH, 2005) the Carp River to the west of the site was realigned on City - owned land from an 'eroded channel' in 2016 to provide sinuosity and additional habitat structure such as round stone substrate, gravel-cobble shoals, pools, and floodplain plantings of woody vegetation. Portions of the remaining original channel were cleaned out and the channel narrowed with local fill areas.

A 2885m² automotive, recreation vehicle (RV) and trailer dealership building is proposed for construction in the north portion of the site, with the private road to the south of the surface parking for the building.

For the purposes of this report Nighbor Place and Highway 417 are considered in an east-west orientation.

Methodology

This EIS was prepared in accordance with Section 4.7.8 of the City of Ottawa Official Plan following the EIS Guidelines, found at <http://ottawa.ca/en/development-application-review-process-0/environmental-impact-statement-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 years of experience in completing natural environment assessments.

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

The natural environment features of the site and adjacent lands were reviewed on February 9th, 2018 under hazy skies with clear patches, a light breeze, and an air temperature of - 5° C. Snow cover was extensive throughout the site.

Existing Conditions

The site has been heavily disturbed over an extended time, with no tree cover of note since at least 1976. Except for the west edge, the site has been in cultivation since 2011, with corn stalks dominating the current site conditions (Photo 1). The Carp River corridor is the only significant natural heritage feature in the area. At its closest point the Carp River itself is approximately 70 metres west of the southwest portion of the site. The west edge of the site corresponds to the east edge of Mississippi Valley Conservation's regulatory limit east of the Carp River. The floodplain of the Carp River is to the west of the site, with the closest portion of the floodplain about 30 metres to the west of the southeast corner of the site (Figure 1).

The soils in the general area are mapped as poorly drained clay and sandy loams (Schut and Wilson, 1987), which is consistent with the observations of TSH (2005). An east-west access road off Frank Nighbor Place splits the south part of the site from the central and north portions (Figure 1). This road was used for the Carp River restoration work and provides access to a City easement which includes a sanitary pipe, a stormwater pipe, and a watermain.

In addition to the cultivated fields, areas of cultural meadow and cultural thicket are along the west portion of the site and the north edge (Figure 1, Photo 3). Wild carrot, chicory, orchard grass, reed canary grass, wild parsnip, evening primrose, common milkweed, common teasel, common burdock, aster, goldenrod, purple loosestrife, wild cucumber, elecampane, and field sow-thistle were representative of the ground flora in the cultural habitats.

A 70cm diameter at breast height (dbh) white ash was in the meadow habitat in the northwest corner of the site (Photo 2). Evidence of emerald ash borer was on the trunk of the ash tree. Other woody vegetation in the cultural meadow habitat included red raspberry and tartarian honeysuckle shrubs, along with regenerating ash, white spruce, and elm stems. Red raspberry and staghorn sumac were dominant in the cultural thicket habitat, with chokecherry, glossy buckthorn, blackberry, and red-osier dogwood also well represented.

Four planted lindens, between 25cm and 28cm dbh are between two and four metres to the south of the site (Photo 6). Planted conifers along the east edge of the site, west of the Home Depot, included white spruce and Austrian pine between 25cm and 30cm dbh (Photo 7). Two 25m dbh planted hackberry were to the south of the conifers. These trees appear to be between 0.5 and one metre east of the property line. The adjacent planted trees appeared to be in generally good condition.

Woody vegetation was limited in the Carp River corridor to the west of the central and north portions of the site. A cluster of regenerating white spruce up to 22cm dbh was to the west of the west site edge, north of the access road (Photo 5). More trees are further to the west of the south portion of the site, including white ash and white elm up to 38cm dbh and smaller Manitoba maple (Photo 4). Recent beaver cuttings were common in this area.

Wildlife observations were limited by the winter survey but included American crow and ring-billed gull. No evidence of raptor nesting or wildlife cavity trees were observed on or adjacent to the study area.



Photo 1 – Site, with view looking north from the south-central edge of the site



Photo 2 – Mature white ash in the northwest corner of the site.



*Photo 3 - Cultural thicket in the west-central edge of the site.
View looking north*



*Photo 4 – Woody vegetation to the west of the south portion of the site.
View looking northwest*



Photo 5 – Regenerating white spruce to the west of the west-central edge of the site.



*Photo 6 – Planted lindens to the south of the site.
View looking east, with the south edge of the site on the left*



Photo 7 – Planted conifers along the east edge of the site. View looking north

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 identified in the background review or field survey that would trigger a Significant Wildlife Habitat designation with respect to the ELC communities present were observed on or adjacent to the site. For example, in the cultural and other habitats no tree cavities were noted that may support maternity colonies for bats or other potential wildlife denning, and no stick nests were observed. Stone fences for potential use by snakes and other wildlife were not seen. No forests, including forest interior habitat or old growth forest, are present. No evidence of colonial nesting bird breeding habitat or other examples of seasonal concentration areas were observed. Wetland habitat is not present outside of the Carp River corridor and no rare vegetation communities or rare or specialized habitat, including seeps or springs, were noted.

No significant linkage function is anticipated in the vicinity of the site due to the lack of natural areas, the Highway 417 corridor and adjacent commercial and industrial urban developments.

Significant Woodlands

No forests are on or adjacent to the site and thus there is no potential for significant woodlands.

Species at Risk

No Species at Risk were observed during the field survey, although it was completed outside of the growing season. The Ministry of Natural Resources and Forestry (MNRF)'s Make a Map: Natural Heritage Areas website was reviewed on January 24th, 2018 (www.giscopeapp.lrc.gov.on.ca/web/MNR/NHLUPS/NaturalHeritage/Viewer/Viewer.html). 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 squares including the site and adjacent lands (18VR21-76 and -86). No Species at Risk were identified for these squares, with one species of special concern, snapping turtle. Snapping turtle has been recorded along the Carp River corridor by TSH (2005), but would not be expected on the site itself.

Five Species at Risk, eastern whip-poor-will, barn swallow, bank swallow, eastern meadowlark, and bobolink, are identified for the overall 10 km square (18VR21) including the site in the Ontario Breeding Bird Atlas. Suitable habitat for these Threatened species was not observed on the site. Eastern whip-poor-will requires large wooded areas with open patches and/or open woodlands or alvar habitats. Eastern meadowlark and bobolink utilize larger grassland areas. The cultivated fields are not suitable nesting habitat for these grassland Species at Risk. No structures for potential use by barn swallows or sand habitats used by bank swallow were observed on or adjacent to the site.

An Information Request for potential Species at Risk in the general area was submitted to the Kemptville District MNRF on January 22nd, 2018. In addition to the species discussed above, MNRF responses for sites in the general area have also identified chimney swift, Blanding's

turtle, little brown bat, eastern small-footed myotis, tri-colored bat, and butternut as potential Species at Risk in the general area. Butternut is found in a variety of habitats in eastern Ontario. No butternuts were observed on or within 50 metres of the proposed development areas. No structures are on the site and thus no chimneys are present which could be used for nesting by chimney swift. No cavity trees or structures for potential bat use were noted. Wetland habitat is not present on the site and turtle utilization would be confined to the Carp River corridor. Blanding's turtle is known from the Carp River north of Richardson Side Road, about two kilometres to the north of the site.

The potential Species at Risk reported for the City of Ottawa were also reviewed, with an emphasis on the endangered and threatened species historically reported in the overall City, including butternut, American ginseng, eastern prairie fringed-orchid, wood turtle, spiny softshell, Blanding's turtle, musk turtle, bobolink, eastern meadowlark, barn swallow, bank swallow, Henslow's sparrow, loggerhead shrike, eastern whip-poor-will, bald eagle, cerulean warbler, golden eagle, least bittern, little brown bat, eastern small-footed myotis, northern long-eared bat, olive hickorynut, eastern cougar, lake sturgeon, and American eel. The habitat requirements of these species along with those listed as special concern were reviewed.

Based on the site and adjacent habitat, the potential Species at Risk most likely to occur in the study area is butternut, which is found in a variety of habitats in eastern Ontario and is known from various sites in the Kanata and Stittsville areas. No butternuts were observed on or within 50 metres of proposed development areas.

Kilgour (2014) mapped the Blanding's turtle habitat for the Carp River south of Richardson Side Road including this site and adjacent lands. No Category 1 or 2 Blanding's turtle habitat was mapped south of the Highway 417 corridor. The primary purpose with respect to Blanding's turtle habitat of the Category 3 lands is to provide movement corridors between wetlands. As shown by a blue line on Figure 1 at the end of this EIS, Category 3 Blanding's turtle habitat extends onto the northwest corner of the site. However, Kilgour (2014) concluded that as this Category 3 habitat leads only to developed areas they cannot support overland travel corridors from the Carp River riparian edge to other wetlands as no other wetlands are present within or beyond the Category 3 lands. There is no indication that Blanding's turtle would utilize the site to migrate to other suitable habitats from the Carp River. Thus, the primary purpose of Category 3 Blanding's turtle habitat is not applicable to the Category 3 lands on and adjacent to the site.

Impact Analysis and Recommendations

The Carp River and associated fish habitat is a natural heritage feature, as identified in the Provincial Policy Statement and OMNR (2010), found in the vicinity of the site. At its closest point the Carp River is approximately 70 metres west of the site, with the site outside of the floodplain and regulatory limit associated with the river. The stormwater for the site will be designed so any treated post-development runoff is not impaired from a water quality perspective and inputs to the Carp River are similar to existing pre-development inputs. This will be accomplished with a dual drainage system (i.e. minor and major system flows), maximizing the use of rooftop and surface storage available on site, providing on-site water quality control

equivalent to a 'Normal' Level of Protection (i.e., minimum 70% total suspended sediments removal) prior to releasing flows from the site towards the Carp River, and providing guidelines to ensure that site preparation and construction are in accordance with the current Best Management Practices for Erosion and Sediment Control.

The only tree on the site is a mature white ash affected by the emerald ash borer. It is recommended that this tree be removed. The critical root zone of the trees to the west of the site will not extend onto the site. The critical root zone of the trees to the south and east of the site may extend up to one and 2.5 metres, respectively onto the site. To protect these trees, no excavations, filling, grading or other site disturbances are to occur where the critical root zones of the adjacent trees encroached onto the site, unless a certified arborist determines no potential impact to the adjacent trees.

The following additional mitigation measures are recommended:

1. Planting of native trees and shrubs is recommended for the landscaping of the site. Due to the clay soils, tree and shrub species that have a high water demand are generally not recommended. These species include willows, poplars and elm. Site plantings should include native species where possible including a mix of coniferous and deciduous species such as sugar maple, red maple, basswood, bur oak, red oak, and white spruce trees, along with nannyberry, other native Viburnums, elderberry and dogwood shrubs. It is important that native trees from a local seed stock be used whenever possible;
2. Woody vegetation removal is to occur before April 15th or after August 15th for the protection of breeding birds, unless a survey conducted within five days of the vegetation removal identifies no bird nesting activity;
3. Silt fencing is to be properly installed around the perimeters of the work areas before site disturbances occur. This fencing will filter any surface runoff and assist in isolating the site from wildlife. It is important that the fencing is properly dug in and maintained, including replacement of broken panels as required. The fencing will also delineate the work area, keep equipment in proper areas, and protect adjacent trees and other vegetation. The fencing should be kept in place and maintained until all site servicing and construction has been completed. Once the site is stabilized the fencing is to be removed;
4. As recommended in City of Ottawa (2015) prior to beginning work each day, the work area is to be checked for wildlife by conducting a thorough visual inspection of the work space and immediate surroundings. 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 or snakes observed in the vicinity of the work areas or that may otherwise be in danger are to be safely relocated to the Carp River corridor. 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;
5. 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;

6. The contractor will have a spill kit on-hand at all times in case of spills or other accidents; and,
7. 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.

In addition, many helpful wildlife-oriented mitigation measures are detailed in the City's Protocol for Wildlife Protection during Construction (City of Ottawa, 2015). The contractor is 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. Appendix 1 of City of Ottawa (2015) describes these species. Appendix 1 should be modified for this project to include the contact information of the project biologist, as applicable. Any Species at Risk sightings are to be immediately reported to the Ministry of the Natural Resources and Forestry and work that may impact the species suspended immediately.

Conclusion

A 2,885m² automotive, recreation vehicle (RV) and trailer dealership building is proposed for the north portion of the site, with a private road to the south of the surface parking for the building. The site is dominated by cultivated fields, planted in corn in 2017. The Carp River corridor was the only natural heritage feature, as identified in the Provincial Policy Statement, observed in the vicinity of the site. The Carp River is a minimum of 70 metres to the west of the west edge of the site and will not be impacted by the proposed development provided the recommended mitigation measures are properly implemented. No Species at Risk are anticipated to utilize the site.

References

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Ontario Ministry of Natural Resources. 2010. Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005. Second 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.

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Prepared for the City of Ottawa. Project No. 00056. 224 pp & append.

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(excluding the Ottawa Urban Fringe). Report No. 58 of the Ontario Institute of Pedology.

TSH. 2005. Carp River, Poole Creek and Feedmill Creek Restoration. Class Environmental
Assessment. Final Report, December 2005. 85 pp & append.

Please call if you have any questions on this EIS.

Yours Sincerely,
MUNCASTER ENVIRONMENTAL PLANNING INC.



Bernie Muncaster, M.Sc.
Principal

20 Frank Nighbor



Vegetation Communities

- ① Cultivated field
- ② Cultural meadow
- ③ Cultural thicket

Legend

- Site
- - - Vegetation Communities
- Carp River Floodplain
- Category 3 Blanding's Turtle Habitat (Kilgour, 2014)



Approx. Scale 1:2,100



Figure 1

February 9, 2018

FILE: 17-20

NATURAL ENVIRONMENT FEATURES

20 Frank Nighbor Place
Kanata, City of Ottawa

Prepared for: **SiteCast Construction**

Prepared by:



Muncaster
Environmental
Planning Inc.

