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RE: Scoped EIS for proposed apartment building at 100 Weeping Willow Lane

Overview

During a pre-consultation meeting on May 17, 2021, the Matthew Hayley (Environmental Planner, City of Ottawa) requested a Scoped EIS to address any relevant Species at Risk in association with the proposed apartment building and to confirm whether the site contains regulated Blanding's turtle habitat. There is no single definition as to what prescribes a Scoped EIS, and each one is defined by the apparent needs, such as the request for a Species at Risk assessment. For this we based our initial analysis on the MECP (2019) Species at Risk screening protocol and visited the site on June 1, 2021.

The proposed apartment building will replace an area of mown lawn (red square in adjacent image) that is west of an existing apartment, south of a townhouse development across Weeping Willow Lane, and east of suburban housing across Varley Dr. In this environment, natural heritage features would be mostly restricted to urban associated species such as robins, blue jays, song sparrows, and squirrels. Vegetation in this area is predominately non-native landscaping species. As such, the potential for associated Species at Risk is very low. The relevant natural heritage area to the future apartment would be the riparian woodland to the south, that contains a tributary (white line) of the Kizell drain. As an urban woodland, it has numerous disturbance features such as garbage, indeterminate trails, and proximity to development. It also contains a number of invasive and non-native species such as canary reed grass, Manitoba maple, garlic mustard, buckthorn, and wild parsnip, as well as a number of dead ash trees showing signs of emerald ash borer damage.



For the purposes of this EIS, regulated habitat refers to the Category 1,2, and 3 Blanding's Turtle habitat types outlined in the MNRF General Habitat Description for the Blanding's Turtle (*Emydoidea blandingii*). These are based on distances from known critical life cycle features, such as nest sites. In our opinion, for reasons which are discussed further on in this report, the probability of the apartment being within regulated habitat is extremely low.

A similar opinion was noted by Lisa McShane (MECP) who in a June 23, 2021 email, acknowledge the presence of Blanding's Turtles in the Kizzel Drain Wetland Complex, but then noted it would be unlikely for them to be present at this site due to the urban barriers and the limited habitat.

It is also our opinion that Blanding's Turtles should be discouraged from accessing the portion of this tributary that is west of Herzberg Road as this area could act as a population sink.

Other Species at Risk were considered, and it is our opinion that risks of a negative impact to these species from the proposed apartment building are very low.

As a matter of course for land alteration within proximity to a watercourse, it is recommended that silt barriers be constructed between the creek and the construction site, within the existing mowed lawn area. The silt barrier will need to be maintained throughout the construction period and beyond, until any bare ground has re-vegetated.

Species at Risk

Bobolink/Meadowlark (Threatened): The MNRF administered Natural Heritage Information Center (NHIC) site lists Bobolink and Meadowlark as two Species at Risk that have been reported within the two 1 km squares (18VR2920 and 18VR2919) that the apartment site straddles. These could be historical references from when this area was predominately grassland habitat. All recent sightings posted in both iNat and eBird for these birds are associated with field areas more than 2 km from the apartment site. Neither species are urban associates, and both require larger open field habitat. They would not be nesting on or near the proposed apartment build site.

Butternut (Endangered): Butternuts are also listed in both NHIC 1 km squares (18VR2920 and 18VR2919) that the apartment site straddles. This could also be a historical reference, but there are two wooded areas in these squares (one north of March Road and one south of Leacock Drive) that they might be found in. Both areas are well removed from any potential impact influence of the proposed apartment. There are no Butternuts postings in iNat for the wooded area to the south of the proposed apartment site and none were observed here during the June 1 field visit.

Species at Risk Bats (Endangered): As a mowed lawn, the future building site does not represent roosting, maternity, or hibernacula features for Species at Risk Bats. The existence of dead trees in the adjacent riparian woodland (e.g., ash) has the potential to provide maternity/roost sites. From our extensive bat acoustic monitoring work over the last several years, we have found that bats are common in urban environments, demonstrating their tolerance for human activity. For example, we recorded several bats flying overhead on feeding flights during a crowded and noisy downtown festival in front of Kingston City Hall. As well, we often record higher bat densities in urban environments and this was also noted by Schowalter et al. (1979) for Little Brown Bats (END), where they often use human structures for maternity and roost purposes. In a sense, bats can be considered in the same vein as urban birds that are able to co-exist in the urban environment, but with potential negative encounters being reduced as bats are only active at night.

Four Ontario bat species were added to the Ontario Endangered Species Act because of the impact of White Nose Syndrome and not from habitat loss. Within several years this fungus has been able to decimate population numbers because it attacks bats when they hibernate, and since hibernation sites in Ontario are limited, this fungus has the potential to wipe out whole populations. The huge reduction in population numbers means that there are extensive areas of summer habitat that are no longer being used. Consequently, SAR bats are not limited by a lack of summer habitat, and therefore impact concerns, and especially those bats within the urban environment, should address the potential for direct harm as opposed to habitat loss.

Direct harm would result if trees used for daytime roosting were felled during the roosting/maternity season (i.e., April 15 to Sept. 15). Since there are no plans to intrude into the riparian valley and there will be at least a 30 m setback from the creek, then we do not foresee any risks to riparian trees from the proposed apartment build.

Blanding's Turtle (Threatened): The watercourse that is south of the proposed apartment building is a tributary of the Kizell Drain, which is in turn a tributary of Watts Creek that flows into Shirley's Bay in the Ottawa River. The Kizell Drain is covered in a MVCA Kizell Drain 2016 Summary Report, where it is noted that only a small portion of its drainage basin contains natural lands.

The dominance of urban roads and housing associated with the apartment building is not favorable to Blanding's turtles and as might be intuitively expected, Millar (2010) determined that Blanding's turtles preferentially are found in wetlands and areas of open water and not in urban areas. Similarly, the work by Dillon Consulting Ltd. (2013) and Hamill and Seburn (2010) reports no Blanding's turtles in association with this tributary of the Kizell Drain, nor are they reported in the NHIC squares that the apartment building will straddle (18VR2920 and 18VR2919), nor are they listed in the downstream sections in the adjacent 1 km squares that also includes a tributary of Watts Creek (18VR3019, 18VR3020).

In our opinion it is highly unlikely that Blanding’s Turtles would ever find their way here from the nearest known concentration area, which is the Kizell Drain Wetland Complex. The direct overland route is about 1 km but would be fraught with risks as there are many hazards such as roads, pets, and curious people that the turtles would have to contend. While a 1 km travel distance is possible for these turtles, overland distances are normally done within proximity of a water bodies or wetlands. For example, Beaudry et al (2010) found that the average distance they stray from water during kilometer long travel routes was 127 m, and the MNRF Blanding’s Turtle General Habitat Description (undated), notes distances from water bodies ranging from 99.5 to 242 m during travel. It is simply not probable that a direct overland access to this site from the Kizell Drain Wetland Complex would occur. That leaves the water route as a consideration, whereby they would follow the Kizell Drain downstream for about 3 km to the tributary confluence, and then a further 1.5 km to the apartment site. The question would be, what benefit does the watercourse next to the apartment, or the apartment site itself, have for this turtle that would require it to travel so far?

The MNRF Blanding’s Turtle General Habitat Description (undated) notes three areas of life cycle vulnerability for this turtle that an EIS should consider. These are:

1. Overwintering: Overwintering habitat requires water that is deep enough to not freeze to the bottom in winter. The watercourse to the south of the proposed apartment site is far too shallow and intermittent to support overwintering.

2. Feeding: Feeding areas typically occur in marsh or swamp habitat that can provide the necessary Blanding’s Turtle food items. The shallow mostly clear running water of this tributary could provide some food items, but it lacks the breadth, depth, and instream vegetation that is indicative of a more diverse and productive aquatic system, and a Blanding’s turtle would find it a poor kitchen.



3. Nesting: Unfortunately for this species, they seem to have a propensity for nesting in urban associated features such as graveled roadside verges, disturbed sites, and lawns. Unfortunate because these areas are fraught with risks such as with vehicle collisions and predation by urban associated predators such as raccoons. The mown lawn of the proposed apartment site would provide a suitable nesting substrate, but there would be nest predation risks such as with the raccoons that were observed in the adjacent riparian area, and from lawn maintenance. We deem it highly unlikely that it would be used for nesting. For one, there have been no reports of Blanding’s turtles in this vicinity, but also because of the many travel barriers along the several kilometers of water routes from the known habitat concentration areas. To simplify matters we will start at Herzberg Rd. From here, they

would have to contend with an underground passage of about 100 m, which they would unlikely attempt as they are known to avoid these long dark passages (see Lang 2000), and instead would more likely navigate the long parking lot of the Gilmore Printing Service, with its own inherent risks.

Tunnel avoidance is discussed in MNRF (2016) regarding an appropriate turtle passage Openness Ratio, where it was noted that culvert use by turtles was negatively correlated with longer culvert lengths, and that passages longer than 25 m should instead consider an overpass or a bridge, rather than a culvert. Large culvert structures of 52 meters in length were used under nearby Terry Fox Drive for Blanding's Turtle use, but these included skylights every 13 m to enhance the Openness effect. There are no such skylight openings for the Gilmore underground passage.

From the Gilmore site, turtles would have to contend with an approximately 41m passage under March Rd. or attempt the hazardous journey across this busy road. They would then have to contend with the approximate 41 m passage under Teron Rd. The culvert here is undersized as per MNRF (2016) for this 41 m travel distance. Worse, the turtles would be trapped within the culvert by this barrier on the west side of Teron Rd. That leaves overland road travel as the necessary route.



Along this long perilous journey from the Kizell Drain Wetland Complex, Blanding's turtles would encounter countless sites with desirable nesting features such as other mowed lawns, gravel road edges, and dirt edges of farm fields. Why avoid all these, and instead take a long perilous journey to this isolated site?

Concerns about negative impacts are often based on a probability of risk, and this is also inherent in MNRF (undated) and MNRF (2015). As such, it is our opinion, that there would be an extremely low probability that Blanding's Turtles would be find their way to the apartment building site for nesting purposes, or the adjacent watercourse for feeding purposes.

References

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Respectfully submitted,



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