



## AUDREY MEADOWS – PHASE 2 ZONING BY-LAW AMENDMENT

### 1<sup>ST</sup> SUBMISSION COMMENTS

<u>Agency/Consultant</u>	<u>Comment</u>
County of Wellington	<p>Based on my review of the information submitted, I would request that the following be addressed prior to deeming this application complete:</p> <ul style="list-style-type: none"><li>• The submitted EIS be updated with signatures from the author and resubmitted and</li><li>• The source water protection screening form is to be updated to reflect that an OPA and Zoning By-law amendment application are being considered</li></ul> <p>A pre-consultation meeting was not formally held for this development proposal and although strongly encouraged, they are not required. Planning staff will complete a detail review of the application and prepare subsequent planning reports once the application has been deemed complete. If we have additional comments at the time of this detail review, we will let yourself and the applicant know.</p> <p>Please also be aware that a related OPA has been received, but not yet deemed complete. Once both applications are complete, my intent would be to ensure all public meetings are joint meetings.</p>
Puslinch Fire and Rescue	<p>Puslinch Fire and Rescue Service reviewed the zoning by-law amendment application for lots 17, 18 concession 8 on July 2, 2021. Please be advised that the department has no concerns regarding the application. Please find attached the fire department water supply connection requirements.</p>



Harden Environmental Services Ltd. – Stan Denhoed, Senior Hydrogeologist	WAITING FOR COMMENTS
Township Ecologist Consultant - NRSI	See attached.
GM BluePlan	See letter attached.
GRCA	See letter attached



# Puslinch Fire and Rescue

7404 Wellington Rd 34, Puslinch, ON, N0B 2J0

**Fire Chief Luis Gomes**

## Water Storage Tanks and Hydrants for Fire Protection

### **Water Storage Tanks**

1. Water storage tanks will be sized as per the Ontario Building Code.
2. The top of the tank to be installed below the frost line. Minimum 1.3 M.
3. The bottom of the tank must not be more than 4.6 M below ground level.
4. Access manhole must have lockable heavy metal cover with no holes.
5. Access ladder to be aluminum with rungs to floor of tank.
6. Concrete to be 35 MPA at 30 days with 6% air entrainment.
7. Reinforcement to be per manufacturers specifications.
8. Install a vent pipe with rodent and insect screen.
9. Install automatic float valve system to a water source with back flow preventer.
10. Compliance with the inspection, testing and maintenance provisions of NFPA 25, "Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems", for tanks is deemed to satisfy the maintenance requirements
11. The water supply source for the dry hydrant shall provide, on a year-round basis, the required quantity of water, as determined in NFPA 1142, Chapter 4, and Ontario Fire Marshal's Guidelines on Rural water Supplies for firefighting.
12. The fire department will:
  - inspect during installation of tank or tanks
  - inspect location of hydrant
  - inspect before filling
  - perform a pump test with fire pumper before final approval.

## **Dry Hydrant Design and Location.**

- 1** Puslinch Fire and Rescue Services shall approve all aspects of the dry hydrant design and construction, including the type of materials, pipe size, and system fittings to be used.
- 2** All dry hydrant systems shall be designed and constructed to provide a minimum flow of 1000 gpm (3800 L)
- 3.** Adequate working space shall be provided around the dry hydrant to provide for a safe working environment.
- 4.** Dry hydrant systems shall be designed and constructed so that slope and piping configurations do not impede drafting operations.
- 5.** Suction hose connection(s) shall be compatible with the fire department's hard suction hose size and shall conform to NFPA 1963, *Standard for Fire Hose Connections*. The connection(s) shall include a protective cap. The cap and adapter shall be of materials that minimize rust and galvanic corrosion at draft.
- 6.** Dry hydrant to be installed a minimum of 30 M from any building and will be approximately 1.8 meters from the edge of driveway using 150 mm (6") pipe. The fire department connection fitting will be 67 cm to 90cm above the ground and facing fire truck location. The Fire Department connection must be NH (National Hose) 150mm (6") thread - female connection with a cap to seal the opening.
- 7.** The dry hydrant system and access to the site shall be developed in a manner that allows the fire department pump to connect to the hydrant using not more than 20 ft (6 m) of hard suction hose
- 8.** Dry hydrants shall be located such that they are accessible under all weather conditions. Grass, brush, and other vegetation shall be kept trimmed and neat. Vegetation shall be cleared for a minimum 3 ft (0.9 m) radius from around hydrants
- 9.** Dry hydrants shall be located a minimum of 100 ft (30 m) from any structure
- 10.** No parking or other obstacles shall be allowed within 20 ft (6 m) of the access side of the hydrant.
- 11.** Dry hydrants shall be protected from damage by vehicular and other perils, including freezing and damage from ice and other objects.
- 12.** Dry hydrants shall be inspected at least quarterly and maintained as necessary to keep them in good operating condition. The hydrants shall be flow tested at least annually with an approved pump to ensure the minimum design flow is maintained. Compliance with the inspection, testing and maintenance provisions of NFPA 25, "Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems", for hydrants is deemed to satisfy the maintenance requirements
- 13.** Dry hydrant locations shall be made visible from the main roadway during emergencies by reflective marking and signage approved by Puslinch Fire and Rescue services

## **General Notes:**

### NFPA 25:

#### **4.1 Responsibility of the Owner or Occupant.**

4.1.1\* The owner or occupant shall provide ready accessibility to components of waterbased fire protection systems that require inspection, testing, or maintenance.

4.1.2\* The responsibility for properly maintaining a waterbased fire protection system shall be that of the owner of the property.

**In accordance with the Fire Protection and Prevention Act, Puslinch Fire and Rescue Services requests that all test and inspection documentation be submitted annually to [fireprevention@puslinch.ca](mailto:fireprevention@puslinch.ca), all work must be performed by qualified fire protection technicians.**

Rev 2019.01.21

August 4, 2021

2670

Township of Puslinch  
Planning and Development Department  
Puslinch, ON  
N0B 2J0

Attention: Mr. Jeff Bunn,  
Deputy Clerk

**RE: Audrey Meadows Development, Part Lots 17, 18 and 19, Concession 8  
Township of Puslinch  
Peer Review of Zoning Bylaw Amendment Application**

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As requested, Natural Resource Solutions Inc. (NRSI) has completed a peer review of the Zoning By-Law Amendment (ZBA) Application ("Application") prepared by Stovel and Associates on behalf of Audrey Meadows Ltd. for a proposed development on the above-noted lots, herein referred to as the "subject property", owned by Audrey Meadows Ltd. Our comments are set out below.

**Background**

The subject property is located southwest of Victoria Road South (Concession 8), Maltby Road East and Old Ruby Lane, in the Township of Puslinch. Multiple reports were included in the Application detailing natural heritage features existing on and adjacent to the subject property, as well as potential direct and indirect impacts the proposed ZBA and associated development may have on these features. The Environmental Impact Study (EIS) prepared by Stovel and Associates during 2021 ("2021 EIS") relies on the findings of a 2004 EIS prepared by Stovel and Associates ("2004 EIS") for the existing Audrey Meadows subdivision, south of the subject property described within this review. The Application was prepared in 2021 and submitted to the Township of Puslinch in June 2021.

**Tasks Carried out**

In order to complete this review, NRSI carried out the following steps:

- Review of the following reports:
  - Environmental Impact Study (June 2021). Prepared by Stovel and Associates.
  - 2019-2020 Annual Report, Groundwater Monitoring and Surface Water Monitoring Program (April 2021). Prepared by Hydrogeology Consulting Services.
  - Planning Justification Report (June 2021). Prepared by Stovel and Associates
  - Zoning By-Law Amendment Application (June 2021). Prepared by Stovel and Associates on behalf of Audrey Meadows Ltd.
  - Paris-Galt Moraine Policy Area Letter (June 2021). Prepared by Groundwater Science Corp.
  - Zoning By-Law Amendment to By-Law 023/18 for Audrey Meadows Ltd. (June 2021).

Jack Richard and Erin Bannon of NRSI completed a site visit on July 20<sup>th</sup>, 2021. NRSI staff were accompanied by the landowner, as well as Rob Stovel, of Stovel and Associates. During the site visit, we had the opportunity to investigate the subject property and to examine the natural features present, in addition to the materials reviewed.

## **Relevant Policy Framework**

Our review examined the Application materials and considered the adequacy of the Application and the impacts of the proposed development on natural heritage features identified within the County of Wellington Natural Heritage System, or “Greenlands System”, and the Provincial Policy Statement (“PPS”). Both Greenlands and Core Greenlands, as identified by the County of Wellington Official Plan (OP), existing within the subject property. Additionally, our review evaluated the level to which the Application confirms with the *Endangered Species Act* (ESA), 2007, and the *Township of Puslinch Comprehensive Zoning By-Law, 2018*. This analysis was undertaken to identify whether the Application, particularly the EIS, sufficiently addressed the direct and indirect impacts the proposed Audrey Meadows development may have on the natural heritage features and policies that protect them, as well as avoidance, and mitigation of impacts.

## **Review Comments**

### **Characterization of Vegetation Communities**

The lands that comprise the subject property are predominantly agricultural, although natural features occur throughout a substantial proportion of the northern and western areas of the subject property, as noted in the 2021 EIS and confirmed during NRSI’s site visit. A large deciduous woodland overlaps with the proposed development area. This woodland also extends further to the north and west of the proposed development. The woodland is bounded by coniferous plantation to the south and west of the proposed development area. Each of these woodland areas are designated in the County’s OP as Greenland (woodland) and Core Greenland (wetland) (County of Wellington 2021). The large deciduous woodland contains Provincially Significant Wetlands (PSWs), and is designated as a Core Greenland feature within the County’s Greenlands System. These wetlands form part of the Mill Creek Puslinch Wetland Complex.

South of the PSWs, two smaller unevaluated wetlands occur. These wetlands are each regulated by the Grand River Conservation Authority (GRCA) and are also considered Core Greenlands, as stated within the 2021 EIS. The proposed development area consists primarily of agricultural land. After reviewing the natural areas during our site visit, NRSI agrees with the general vegetation descriptions for the woodland and wetlands areas of the subject property provided in Section 2.4 of the 2021 EIS.

### **Habitat of Endangered or Threatened Species (Core Greenlands)**

Section 5.4.2. of the Wellington County OP mandates that development and site alteration may not impact Species at Risk (SAR), considered endangered or threatened. Specifically, the OP states:

*“Development and site alteration will not be allowed in significant habitat of endangered or threatened species except in accordance with provincial and federal requirements. Development or site alteration adjacent to significant habitat of endangered or threatened species shall require a satisfactory*

*Environmental Impact Assessment that demonstrates there will be no negative impact on the significant habitat of endangered or threatened species or its ecological function.”*

In order to determine whether or not endangered or threatened species occur within the subject property, as well as demonstrate any proposed development will result in “no negative impacts”, it is necessary to conduct fulsome wildlife and habitat surveys. The locations and timing of the field investigations detailed within this 2021 EIS, as well as the overall survey effort completed, are insufficient in our opinion to document the potential presence of some types of SAR species or their habitat within the subject property. Appendix B of the 2021 EIS provides a list of wildlife observed within the subject property, however the report does not provide sufficient information regarding the specific timing and location of the relevant surveys conducted. Currently, it is unclear whether a sufficient number of point count stations for the amphibian call surveys and breeding bird surveys were established in order to adequately assess amphibian and bird habitat.

In order to appropriately assess the potential presence of SAR birds or amphibians within the wooded and wetland habitats of the subject property and immediately adjacent to the subject property, amphibian call surveys and breeding bird survey stations should be established within each habitat type. The standard Marsh Monitoring Protocol requires completing 3 evening amphibian call surveys, and normally recommends the first survey occurs in April, contingent on weather, to document species that typically breed early in the season. Currently, the 2021 EIS does not specify the dates these surveys were completed. Similarly, the timing and location of the breeding bird surveys is unclear. While the 2021 EIS identifies bird species observed on the subject property, no description of the survey method, timing, or location including route or GPS tracks is provided. As such, it is unclear whether any breeding bird surveys were conducted in the woodland areas found on the subject property.

As described by Stovel and Associates during the July 20<sup>th</sup>, 2021 site visit, wildlife species and habitats on and adjacent to the subject property were evaluated by Stovel and Associates within the 2021 EIS using the findings from the survey effort completed to prepare the 2004 EIS, rather than through the collection of current field data. As 17 years have passed since the submission of the 2004 EIS, the results should not be considered current. While breeding bird surveys and amphibian call surveys were reported to have been completed in 2021, a fulsome series of wildlife and habitat surveys were not described to have been completed to inform the 2021 EIS, specifically.

The potential for SAR and Significant Wildlife Habitat (SWH) has not been fully explored within the 2021 EIS. A review of available background information identifies that Jefferson Salamander (*Ambystoma jeffersonianum*) a species considered endangered in Ontario, have been observed within 10km of the subject property (NHIC 2021). During the July 20<sup>th</sup>, 2021 field visit, NRSI staff observed a small woodland pond, or vernal pool, in the large deciduous forest community northwest of the proposed development. Given that this pond had open water during July, it could be considered candidate SWH and may provide amphibian breeding habitat based on guidance provided by the Significant Wildlife Habitat Technical Guide (2000). The 2021 EIS reported no woodlands supporting amphibian breeding ponds. Additionally, rock piles and rock crevices were observed during NRSI’s field visit, which may provide reptile hibernacula and bat hibernacula, respectively. The 2021 EIS did not consider either of these SWH types.



## Recommendations

Based on our review of the 2021 EIS and the Application, it is our opinion that the following steps are required to complete the 2021 EIS for the ZBA and associated proposed development, in order to adequately address aspects related to the natural environment:

- Conduct fulsome vegetation and wildlife surveys, as well as describe the timing, location, and methods applied for the 2021 natural environment surveys, specifically for surveys which do not conform with the referenced standards or those typically conducted under the submission of an EIS;
- Complete fulsome screening and assessments for the variety of SWH types that may occur within and adjacent to the subject property including, but not limited to, woodlands containing amphibian breeding ponds, reptile hibernacula, and bat maternity roosting/hibernacula habitat;
- Complete fulsome screening for SAR that may exist within the subject property or adjacent lands; and
- Demonstrate and confirm that the proposed development will have no negative impact to any significant habitat of endangered or threatened species, or its ecological function.

## **Woodlands (Greenlands)**

Section 5.5.4. of the County of Wellington OP identifies the following with respect to the Greenlands System and Significant Woodlands, which are relevant to this ZBA:

*“In the Rural System, woodlands over 4 hectares and plantations over 10 hectares are considered to be significant by the County, and are included in the Greenlands system... In the Urban System, woodlands over 1 hectare are considered significant by the County, and are included in the Greenlands system.*

*Detailed studies such as environmental impact assessments may be used to identify, delineate and evaluate the significance of woodlands based on other criteria such as: proximity to watercourses, wetlands, or other woodlands; linkage functions; age of the stand or individual trees; presence of endangered or threatened species; or overall species composition.”*

The 2021 EIS correctly identifies Significant Woodlands within the subject property. Currently, the 2021 EIS states that no removal of Significant Woodlands will occur in order to facilitate the proposed Audrey Meadows development associated with the ZBA. Despite this, the limits of proposed development shown within the 2021 EIS overlap with the Significant Woodland boundary, with many lots extending into the existing woodland. The 2021 EIS explains that while some limited backlotting will occur, appropriate restrictions will be established within conditions of draft plan approval in order to ensure the woodland area is not damaged or removed during the construction of the proposed development. The 2021 EIS has proposed a 5m setback from the woodland dripline along the rear of lots #8-19, those directly adjacent to the existing woodland, in which no development or disturbance is permitted, as a means to minimize impacts to the woodland. Neither the woodland dripline or 5m setback has been shown in mapping provided within the Application. Typically, Significant Woodlands are provided a 10m setback, or buffer, to afford this feature sufficient protection from disturbance. In addition to a reduced setback, 2021 EIS identifies that the proposed development will result in partial ownership of the existing woodland to each of the development lots. Should the

proposed development provide partial ownership of the adjacent Significant Woodland for each lot, consideration will need to be given to how this may impact stewardship, and whether this may adversely impact this feature or its ecological function.

### Recommendations

- Confirm that the proposed development will not impact the Significant Woodland feature, or its ecological function. A tree inventory and Tree Protection Plan may be required to ensure trees adjacent to the proposed development, and potential impacts to those trees are adequately assessed;
- Illustrate the proposed setback limit in relation to the proposed development lots and Significant Woodland dripline. These features should be delineated with a high level of accuracy, using GPS technology; and
- Specify the restrictions that will be implemented to ensure that development lots included within portions of the Significant Woodland dripline do not negatively impact this feature or its ecological function. Consideration should be given to installing fencing for lots #8-19 along the woodland dripline, to better protect this feature, in addition to the implementation of a rear yard use condition.

### **Wetlands (Core Greenlands)**

With regards to wetlands, Section 5.4.1. of the County of Wellington OP states:

*“All wetlands in the County of Wellington are included in the Core Greenlands. Development and site alteration will not be permitted in wetlands which are considered provincially significant. Provincially significant wetlands are shown in Appendix 3 of this Plan. All other wetlands will be protected in large measure and development that would seriously impair their future ecological functions will not be permitted. The appropriate Conservation Authority should be contacted when development is proposed in or adjacent to a wetland.”*

The 2021 EIS correctly identifies multiple wetlands within the subject property, including PSWs forming part of the Mill Creek Puslinch Wetland Complex, as well as smaller wetlands regulated by the GRCA. As identified within the 2021 EIS and County of Wellington's OP, all wetlands within and adjacent to the subject property are considered Core Greenlands. The 2021 EIS states that the proposed development will not result in any removal of wetland areas. Each of the wetlands within the subject property have been delineated by Stovel and Associates, however during the July 20<sup>th</sup>, 2021 field visit Rob Stovel reports having had technical GPS issues and expressed the potential for inaccuracies in the recorded wetland boundaries. Stovel stated that this would be revisited during fall 2021 but also stated that the GRCA did not participate in the identification of the wetland boundaries. While the 2021 EIS referenced background information material and mapping provided by the GRCA, the Application does not appear to conform with Section 5.4.1 of the County of Wellington OP, which requires that the relevant Conservation Authority be consulted when a development is proposed within or adjacent to a wetland. A significant portion of the proposed development area falls within GRCA-regulated wetland buffer areas and the GRCA should be consulted on wetland boundaries and appropriate activities within the regulated areas.

Section 4.31 of the Township of Puslinch Comprehensive Zoning By-Law requires that:

*“No buildings or structures, including a private sewage treatment system and associated tile weeping bed, shall be constructed closer than 30 metres from the limit of a Natural Environment (NE) Zone.*

*Notwithstanding the required setback in subsection (A) above or any other provision in this By-law to the contrary:*

- ii. Where a vacant lot existed on the day of passing of this By-law, a building permit may be issued for permitted buildings or structures, excluding new agricultural buildings and structures, provided that:*
  - i. there is no other suitable location on the lot outside of the 30 metre minimum setback, and*
  - ii. a setback of at least three (3) metres from the NE Zone boundary is maintained.”*

*Notwithstanding the above, the setback from the Natural Environment (NE) Zone may be reduced to a distance that is supported by the Conservation Authority having jurisdiction pursuant to its authority provided under the Conservation Authorities Act, R.S.O. 1990. Where the Conservation Authority provides written approval for a reduced setback from the NE Zone an amendment to this By-law shall not be required. “*

Core Greenlands are defined as Natural Environment Zones (NE Zones) under the Township of Puslinch Comprehensive Zoning By-Law and are entitled a minimum 30m setback, notwithstanding the exceptions noted above. The 2021 EIS and Application propose a 15m setback for lots #5, 6, and 7, which are directly adjacent to a wetland area, identified as a Core Greenland feature. The proposed development lots will extend within the natural feature dripline and within close proximity to the wetland boundary. While the proposed development may limit the building envelope of each lot by a 15m setback, consideration should be given towards how the reduced setback and partial ownership of the adjacent natural feature may impact stewardship, and whether this may adversely impact this feature or its ecological function.

### Recommendations

- Consult with the GRCA to confirm delineation of wetland boundaries as identified in 2021 EIS, as well as suitability of proposed development in relation to GRCA-regulated areas, including wetland buffers;
- Confirm that appropriate erosion and sediment controls, referenced within the 2021 EIS, will be implemented to ensure that the adjacent wetlands, and other natural features, are not impacted during the construction of the proposed development;
- Illustrate the proposed setback limit in relation to the proposed development lots and Core Greenlands/Wetland boundary. These features should be delineated with a high level of accuracy, using GPS technology; and
- Specify the restrictions that will be implemented to ensure that development lots within 30m of Core Greenlands/Wetlands do not negatively impact this feature or its ecological function. Consideration should be given to installing fencing along the woodland dripline for lots #5, 6, and 7, to better protect this feature.

## Aquatic Resources

The 2021 EIS describes the aquatic features that are found adjacent to the proposed development. Currently, there is no mention of when the field surveys were conducted within the subject property and adjacent lands. Spring 2021 was drier than is typical and it is not currently clear whether or not this has been considered in relation to the assessment of aquatic features on and adjacent to the subject property. Table 1 of the 2021 EIS states that the identified aquatic habitat is considered coldwater. GRCA Regulation mapping confirms this. Despite this, this feature is not described or mentioned within the Aquatic Resources section of the 2021 EIS. A discussion on aquatic species, including sensitive species that may be impacted by the proposed development, is also not provided.

Currently, the Fisheries Habitat section of the 2021 EIS states that *“there is no fish habitat on or within 120 m of the subject property.”* However, in the Potential Indirect Impacts section, it is stated that the closest residential lot is approximately 85 m away from the intermittent tributary of Mill Creek. Clarification should be given as to which statement is accurate and the EIS should be updated accordingly.

Without assessing the Functional Servicing Report and Stormwater Management Plan, referenced by the 2021 EIS, it cannot be determined if the Stormwater Management Plan is sufficient to mitigate the impacts to the proposed development (i.e. thermal impacts, and total suspended solids). The Stormwater Management Policy (9.9.9.3) for the Wellington County Official Plan states:

*c) The objectives of a stormwater management plan are to avoid, minimize and/or mitigate stormwater volume, contaminant loads and impacts to receiving water courses in order to:*

- i. Maintain groundwater quality and flow and stream baseflow;*
- ii. Protect water quality;*
- iii. Minimize the disruption of pre-existing (natural) drainage patterns wherever possible;*
- iv. Prevent increases in stream channel erosion; v. Prevent any increase in flood risk; and*
- v. Protect aquatic species and their habitat.*

With regards to the private sewage treatment on each lot, the section on aquatic habitat states *“in the long run, this could prove to be a significant net improvement to the ecological functions associated with the site.”* No data has been provided within the 2021 EIS to support this statement.

Groundwater Science Corp. (GSC) Paris and Galt Moraine Policy Area letter states that the maintenance or enhancement of groundwater recharge through Low Impact Development measures will be addressed during the Draft Plan stage. GSC also stated that by maintaining the site recharge, the baseflow to the adjacent watercourses would be maintained. This letter states that local surface water drainage patterns to be maintained through detailed design process and associated stormwater management design. GSC anticipates proposed development will meet the requirements of the Paris and Galt Moraine Policy Area.

### Recommendations

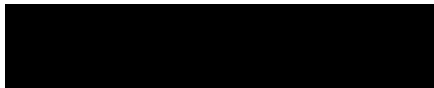
- Provide a more fulsome description of Aquatic Resources with regards to the thermal regime and fish species present;
- Confirm the distance the proximity of the subject property to fish habitat features, including but not limited to, intermittent streams;
- Specify the mitigation measures that will be in place for the Stormwater Management facility and confirm if these measures will be sufficient for the thermal regime and fish species present; and
- Confirm that the SWM Plan follows the policies within the Wellington County OP.

### **Conclusion**

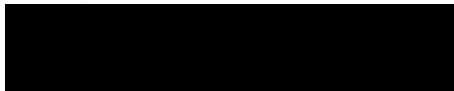
Based on our review of the 2021 EIS and additional documents supporting the Application, it is NRSI's position that the recommendations described above are required to complete the 2021 EIS for the proposed ZBA and adequately address the policies defined in Section 5 of the County of Wellington's OP.

Please do not hesitate to contact me if you require further clarification on these matters.

Sincerely,  
Natural Resource Solutions Inc.



David E. Stephenson, M.SC.  
Certified Arborist and Senior Biologist



Erin Bannon  
Terrestrial & Wetland Biologist / Certified Arborist



Jack Richard  
Registered Professional Forester



July 23, 2021  
Our File: 121006-025

Township of Puslinch  
7404 Wellington Road 34  
Guelph, ON N0B 2J0

Attention: Ms. Lynne Banks

Re: Application for Zoning By-law Amendment  
Part Lots 17 and 18, Concession 8, Township of Puslinch

Dear Ms. Banks:

An application for a Zoning By-law Amendment has been received by the Township for the subject lands on Part Lots 17 and 18, Concession 8, to rezone the lands as Rural Settlement residential Zone, to allow for the development of a future 29-lot residential subdivision, to be connected to the existing Audrey Meadows subdivision to the south. A request from the Township was received by GM BluePlan Engineering on June 28, 2021 to review the Zoning By-Law Amendment Application and supporting documents. This letter has been prepared to document our review of the application.

In support of the Township's review, the following documents and drawings were received and reviewed:

- Functional Servicing and Stormwater Management Report, prepared by Triton Engineering Services Limited, dated June 2021.
- Traffic Impact Brief, prepared by Triton Engineering Services Limited, dated June 2021.
- Groundwater and Surface Water Monitoring Program, prepared by Hydrogeology Consulting Services, dated April 9, 2021.
- Report on Site Characteristics and Proposed Development Objectives as they relate to the Wellington County Official Plan – Section 4.9.7 Paris and Galt Moraine Policy Area, prepared by Groundwater Science Corp., dated June 20, 2021.
- Zoning Bylaw Amendment Application Form, completed by Rob Stovel, dated June 21, 2021.
- Permission to Access Form, dated June 22, 2021.
- Draft Zoning Bylaw Amendment.

The following documents were received and will be reviewed in detail by others:

- Planning Justification Report, prepared by Stovel and Associates Inc., dated June 2021.
- Environmental Impact Study, prepared by Stovel and Associates Inc., dated June 2021.
- Drinking Water Source Protection Screening Form, completed by George R. Good, dated April 20, 2021.

Based on our review, we have no concerns with the zoning bylaw amendment from an engineering perspective.

At the time of detailed design and Draft Plan Approval, GMBP will require the following plans for review:

- **Legal Survey of the Property**, undertaken by a licenced Ontario Land Surveyor.
- **General Arrangement Plan**, showing proposed layout of subdivision, including number and size of residential lots, road allowance, stormwater management block(s) and greenspace to remain.
- **Site Grading and Servicing Plans**, developed to illustrate the site topography and drainage under existing and proposed conditions. The plan(s) should also show potable water and wastewater servicing infrastructure. Detailed drawings of proposed stormwater management facilities should be provided.

- **Sediment and Erosion Control Plan**, detailing measures to limit the effect of the proposed construction on the surrounding area and infrastructure.
- **Landscaping Plan and Tree Preservation/Enhancement Plan**, adhering to requirements determined by the Township Ecologist and in keeping with the Environmental Impact Study.
- **Plan and Profile Drawings for all Roads and Services.**
- **Composite Utility Plan (CUP)**, indicating the location of all underground and aboveground services, utilities driveways, street lighting, traffic and street signs, community mailbox(es) and landscaping to be installed within the municipal right of way. Sign-off of the CUP by each utility company represented by the plan is to be provided with the submission.
- **Street Lighting and Photometric Plans**, prepared by a professional engineer and including street lighting layout and design, electrical drawings showing the location of poles, load centres and luminaires, standard drawings and specifications for materials and installation, and a photometric distribution diagram indicating the average maintained illumination levels and uniformity rating in comparison to IESNA minimum requirements.

In addition, an updated Functional Servicing and Stormwater Management Report, based on the detailed design, a Geotechnical Report, updated Hydrogeological Report, and updated Traffic Impact Brief, will be required and reviewed at the time of Draft Plan Approval.

#### **Deficiencies/Outstanding Matters**

Item No.	Matter / Requirement	Drawing / Document Reference	Date Issue Identified	Comment

#### **Additional Commentary**

Item No.	Additional Commentary
1.	The Township Environmental Engineer/Hydrogeologist should confirm that 0.3 hectares is an adequate lot size for the proposed septic systems with tertiary treatment.
2.	The site is partially located within GRCA regulated area, and therefore the GRCA should comment on the proposed setbacks to woodland dripline and wetland.

#### **Completed/Approved**

Item No.	Matter / Requirement	Drawing / Document Reference	Date Issue Identified	Date Issue Cleared	Comment



If you have any questions or require additional information, please do not hesitate to contact us.

Yours truly,

GM BLUEPLAN ENGINEERING  
Per:



Andrea Reed, P. Eng.  
Project Engineer





**PLAN REVIEW REPORT: Township of Puslinch  
Lynne Banks, Development & Legislative Coordinator**

**DATE:** August 3, 2021

**YOUR FILE:**

**RE:** **Application to Amend a Zoning By-Law**  
Part Lot 17 & 18, Concession 8, Township of Puslinch  
Audrey Meadows Ltd.

**GRCA COMMENT:\***

Grand River Conservation Authority (GRCA) staff have now had the opportunity to review the information circulated with the above noted application. Based on our review of the materials provided, we are not in a position to support this application at this time. The GRCA recommends that wetland areas be delineated and zoned Natural Environment. Please see our detailed comments below.

**BACKGROUND:**

**1. Resource Issues:**

Information currently available to this office indicates the subject lands contains a watercourse, wetland, the Provincially Significant Mill Creek Puslinch Wetland Complex, and the regulatory allowances to these features.

**2. Legislative/Policy Requirements and Implications:**

It is our understanding that the applicant is proposing to change the zoning from Agricultural (A-1) and Natural Environment to Rural Settlement, Open Space, and Natural Environment and have reviewed the following document in support of the zoning application:

- Groundwater Science Corp. 2021. Audrey Meadows Subdivision. Wellington County Official Plan. Section 4.9.7 Paris and Galt Moraine Policy. Technical Memo. Dated June 20, 2021.
- Hydrology Consulting Services. 2021. 2019-2020 Annual Report, Groundwater and Surface Water Monitoring Program. Audrey Meadows Subdivision. Dated April 9, 2021.
- Stovel & Associates Ltd. 2021. Environmental Impact Study, Proposed Rural Settlement Development. Prepared for Audrey Meadows Ltd.
- Triton Engineering Services Ltd. 2021. Functional Servicing and Stormwater Management Report. Audrey Meadows Subdivision. Dated June 2021.

Based on our review of the reports noted above, we provide the following comments:

**Natural Heritage**

1. The Audrey Meadows Environmental Impact Study (EIS), prepared by Stovel and Associates Inc. (2021), recommends a 15 metre wetland buffer however does not justify this reduced setback. Additional information, including a reference to the Mill Creek

Subwatershed Study and other relevant buffer guidelines, will be required to justify a reduced buffer width in principle. The GRCA recommends that the delineated wetlands be captured in the Natural Environment Zoning to prevent future development impacts. Buffers and appropriate setbacks should be identified and addressed through the EIS.

2. We request that the wetland limits be delineated by a qualified person, surveyed using a high resolution GPS (or total station surveyed), and the two (2) unevaluated wetland units be assessed using the most recent edition of the Ontario Wetland Evaluation System (OMNRF 2014).

### **Stormwater Management**

3. The Functional Servicing and Stormwater Management Report did not clearly demonstrate that groundwater recharge and discharge functions will be maintained on and adjacent to the subject site. Please provide a monthly water balance for pre-development and post-development catchments.
4. Section 2.1.2 (Hydrology and Hydrogeology) of the EIS states that “the water table in the ponds at the southeast of the site are close to the stabilized groundwater level.” The wetlands appear to be located within the southwest portion of the site, however the stormwater management block is proposed to be located toward the southeast portion of the site. We would request that the applicant demonstrate post-development infiltration deficit mitigation measures, including proposed infiltration facility location and seasonally high groundwater elevations for the SWM facilities and infiltration facilities.
5. According to the Functional Servicing and Stormwater Management Report, the quantity control objective is to match pre- and post-development peak runoff rates. The peak modelling summary indicates that post-development peak runoff rates toward the wetland (and woodland) area will be below pre-development rates. This suggests there could be an overall reduction in surface flow volumes toward the wetland. A similar assessment of infiltration rates was not provided, despite the proposed reliance on infiltration measures to maintain groundwater recharge and discharge functions on the Galt –Paris Moraine. A more comprehensive assessment of surface runoff and infiltration rates and volumes on this site is required to clearly demonstrate that the proposed development will not result in an adverse impact on the hydrological functions (i.e. recharge, discharge, and storage) of the wetlands on and adjacent to the subject lands.

Due to the presence of the above-noted features, portions of the subject lands are regulated by the GRCA under the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (Ontario Regulation 150/06). Any future development or site alteration within the regulated areas will require prior written approval from GRCA in the form of a permit pursuant to Ontario Regulation 150/06.

### **3. Additional Information/Suggestions provided in an advisory capacity:**

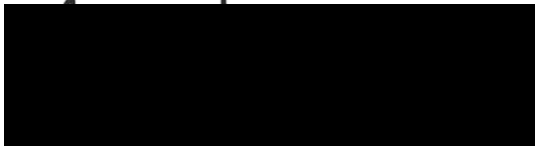
It is the opinion of GRCA staff that the EIS did not adequately address the Natural Heritage features as it relates to threatened or endangered species and woodland features and recommend that the Township of Puslinch consider peer review of the of the report.



This application is considered a 'Major' Zone Change application, with an applicable fee of \$2,335 as per the 2021 fee schedule. With a copy of this correspondence, the applicant will be invoiced in the amount of \$2,335.00.

Should you have any questions or require further information, please me, at 519-621-2763 ext. 2230 or by email at [jsimons@grandriver.ca](mailto:jsimons@grandriver.ca).

Yours truly,



Jenn Simons  
Resource Planner  
Grand River Conservation Authority

c.c. Audrey Meadows Ltd. (via email only)  
Robert Stovel c/o Stovel and Associates Inc. (via email only)

Enclosed (1)

***\* These comments are respectfully submitted to the Committee and reflect the resource concerns within the scope and mandate of the Grand River Conservation Authority.***





# Grand River Conservation Authority

Date: Jul 06, 2021

Author: js

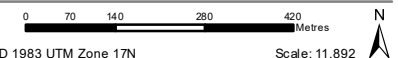
## Part Lot 17 & 18, Concession 8, Puslinch

### Legend

- Regulation Limit (GRCA)
- Regulated Watercourse (GRCA)
- Regulated Waterbody (GRCA)
- Wetland (GRCA)
- Floodplain (GRCA)
  - Engineered
  - Estimated
  - Approximate
  - Special Policy Area
- Slope Valley (GRCA)
  - Steep
  - Oversteep
  - Steep
- Slope Erosion (GRCA)
  - Oversteep
  - Toe
- Lake Erie Flood (GRCA)
- Lake Erie Shoreline Reach (GRCA)
- Lake Erie Dynamic Beach (GRCA)
- Lake Erie Erosion (GRCA)
- Parcel - Assessment (MPAC/MNRF)

This legend is static and may not fully reflect the layers shown on the map. The text of Ontario Regulation 150/06 supercedes the mapping as represented by these layers.

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The source for each data layer is shown in parentheses in the map legend. For a complete listing of sources and citations go to: <https://maps.grandriver.ca/Sources-and-Citations.pdf>



Map Centre (UTM NAD83 z17): 568,986.74 4,816,153.70

This map is not to be used for navigation | 2015 Ortho (ON)