

September 15, 2023

488-23

Via Digital Upload

Attn: Honourable Paul Calandra
Minister of Municipal Affairs and Housing

c/o

Mr. Dellarue Howard
Community Planning and Development
Exter Road Complex 2nd Floor
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London, ON N6E 1L3

**RE: Request to Facilitate the Proposed Redesignation of the Subject Lands
198602 2nd Line N.E., Melancthon, ON
ERO No. 019-7419**

UrbanSolutions Planning & Land Development Consultants Inc. (UrbanSolutions) is the authorized planning consultant acting on behalf of AJGL Group Inc., the owner of the subject lands municipally known as 198602 2nd Line N.E., Melancthon, in the County of Dufferin.

On June 21, 2023, the Ministry of Municipal Affairs and Housing (MMAH) initiated an invitation for public consultation on Official Plan Amendment No. 2 (OPA 2) to the Dufferin County Official Plan. This amendment represents the first phase of the County's ongoing Municipal Comprehensive Review (MCR) and contains policy updates which establish intensification targets and allocate land for residential, commercial, and employment uses to the County's lower-tier municipalities; in keeping with the findings of a Land Needs Assessment prepared by WSP. On August 18, 2023, UrbanSolutions made a submission to the Ministry via ERO 019-7119 (Comment ID: 92804) recommending specific schedule changes to the DCOP to better align with the goals and objectives of the Province.

On August 16, 2023, the Province initiated a subsequent invitation for public consultation on the proposed Official Plan Amendment No. 3 (OPA 3) to the DCOP, which constitutes the second phase of the County's Municipal Comprehensive Review. OPA 3 was adopted by County Council on July 13, 2023 via By-law No. 2023-43 and contains corresponding policy and land use schedule updates which implement the aforementioned Land Needs Assessment. The subject lands, as described below, are well-suited for future growth as will be discussed throughout the remainder of this Letter. In keeping with our office's previous submission to the Ministry via ERO 019-7119, this Letter will conclude with specific changes recommended to OPA 3 to better align with the goals and objectives of the Province.

Site & Surrounding Context

The subject lands have a total area of approximately 29.1 hectares (71.9 acres) and are predominantly comprised of vacant agricultural land. The lands are bounded by the property municipally known as

199022 2nd Line N.E. to the north opposite County Road 9 (for which a subsequent submission is being made under separate cover), agricultural lands to the east and south, and the property municipally known as 158567 Highway 10 to the west (for which a submission is also being made under separate cover).

It should be noted that a large portion of the subject lands comprises a parcel currently owned by the proponent (as indicated by the red-shaded area in Figure 1), while a small rectangular lot located at the northwestern corner is not currently owned by the proponent (as indicated by the yellow shaded area in Figure 1). In taking a comprehensive approach to the planning matters associated with this submission, both portions collectively comprise the “subject lands”, as described herein.



Figure 1 – Subject Lands and Surrounding Context Map

The subject lands are located approximately 1 kilometre east of both the Dundalk Primary Settlement Area boundary and Grey County boundary (Figure 2); separated by lands which are also owned by the proponent (158567 Highway 10) and the subject of a subsequent submission under ERO 019-7119.

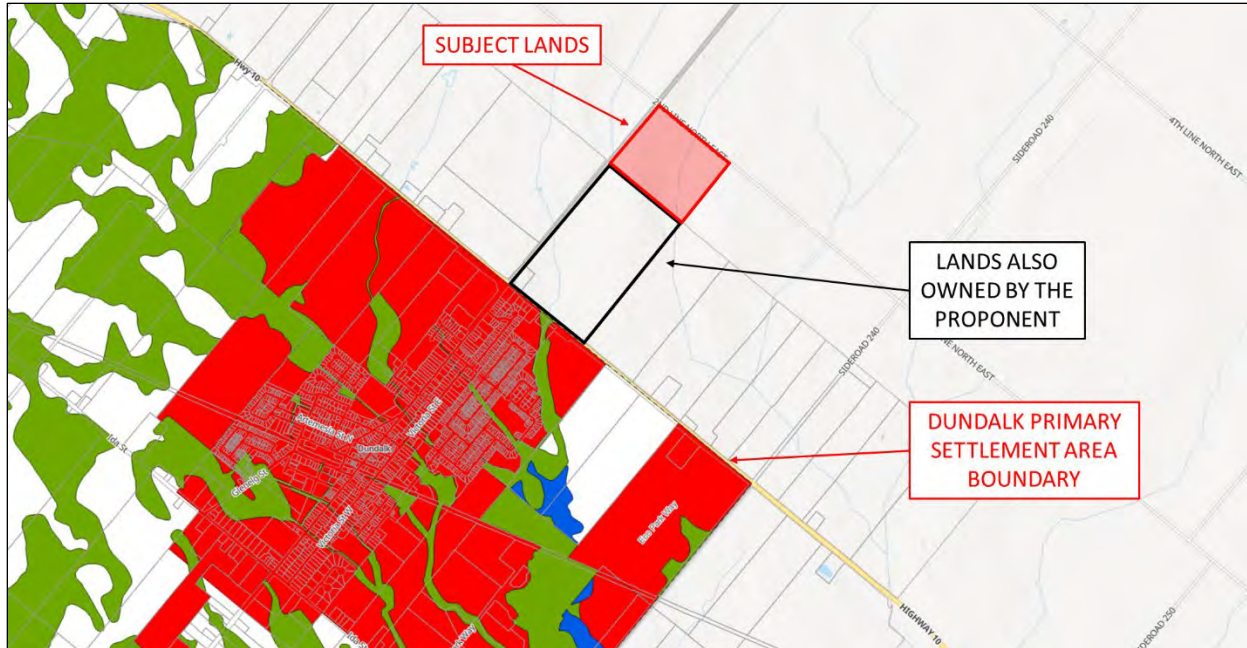


Figure 2 – Subject Lands in Proximity to Grey County and Dundalk Primary Settlement Area Boundary

The lands to the west of the subject site (opposite Highway 10 and within the Dundalk Primary Settlement Area boundary) are comprised of various commercial and service uses including a gas station, Tim Hortons, LCBO, and an auto-repair shop. Further west is a residential neighbourhood predominantly comprised of single detached dwellings.

Existing Planning Policy Framework

Province of Ontario

To address current housing supply concerns, the Province of Ontario has established the Housing Supply Action Plan and the *More Homes Built Faster Act*; which has been given Royal Assent. This Plan is part of a long-term strategy to help build more homes and make life more affordable for families across Ontario.

Dufferin County Official Plan

The subject lands are currently designated ‘Countryside Area’ and ‘Provincially Significant Wetlands (S. 5.3.1)’ on Schedule B – Community Structure of the Dufferin County Official Plan (DCOP). It should be noted that the portions of the site currently designated ‘Countryside Area’ on Schedule B are also designated ‘Agricultural Area (S. 4.2) on Schedule C – Agricultural Area and Rural Lands of the Dufferin County Official Plan.

Township of Melancthon Official Plan

The subject lands are currently designated ‘Agricultural’, ‘Environmental Protection’, and ‘Environmental Conservation’ on Schedule A-1 – Land Use & Roads Plan of the Township of Melancthon Official Plan.

Township of Melancthon Zoning By-law No. 12-1979

The subject lands are currently zoned “A1” General Agricultural and “OS2” Open Space Conservation in the Township of Melancthon Zoning By-law No. 12-1979.

Background Studies

Natural Heritage Constraints Analysis

The Natural Heritage Constraints Analysis prepared by GeoProcess Research Associates enclosed within Appendix A identifies several natural features as potentially occurring within the Study Area limits. The Analysis concludes that an Environmental Impact Study (which will be secured through the future Draft Plan of Subdivision and Zoning By-law Amendment application processes) will be required to finalize the limits of such identified natural features and confirm the ultimate development limits of the subject lands.

Site Servicing Investigation Letter

A Site Servicing Investigation Letter prepared by SCS Consulting Group Ltd. is enclosed within Appendix B. The Letter concludes that the subject site can either be serviced from Dundalk’s existing municipal water and wastewater system located southwest of the site (subject to confirmation of capacity and allocation by the Township of Southgate, Grey County), or by having a new municipal system constructed on the subject lands to service future development on-site and within the immediate area. In both scenarios, the Letter confirms that a future Hydraulic Analysis will be necessary to confirm the appropriate infrastructure sizing and configuration required to provide adequate supply and pressure to service future development.

Planning Merit

As previously noted, OPA 3 was approved by Council on July 13, 2023 via By-law No. 2023-43. This amendment constitutes Phase II of the County’s ongoing Municipal Comprehensive Review and is intended to update the policies and land use schedules of the Official Plan to conform with the County’s population and employment growth projections contained in Schedule 3 of the Growth Plan – which is forecasted to reach a total of 95,000 residents and 39,000 jobs by 2051.

On July 13, 2022, WSP completed a Land Needs Analysis (LNA) in support of the Dufferin County Municipal Comprehensive Review to allocate the forecasted population and employment growth to each of the County’s eight (8) lower-tier municipalities, and ultimately determine whether (and to what extent) settlement area expansions are necessary. Using growth estimates generated by Metro Economics, as well as the findings of a high-level review of building permit data, the Analysis projects that the County will require an additional 10,339 dwelling units to accommodate forecasted population growth to 2051 (26,700 people). Of this total, the Analysis allocates 94% (9,757 units) to existing settlement areas and the remaining 6% (582 units) to rural areas outside of settlement areas (Table 1):

	Total Dwelling Demand 2021 to 2051	% of Dwelling Units Outside Settlement Areas	Dwelling Units Outside Settlement Areas	Dwelling Units Inside Settlement Areas
Amaranth	1,140	19%	216	924
East Garafraxa	354	26%	92	263
Grand Valley	2,445	0%	0	2,445

Melancthon	227	43%	99	129
Mono	180	55%	98	82
Mulmur	298	26%	79	219
Orangeville	3,620	0%	0	3,620
Shelburne	2,075	0%	0	2,075
County Total	10,339	6%	582	9,757

Table 1 – Exhibit 4 from Dufferin County’s Land Needs Assessment Report (July 13, 2022)

Based on the allocations outlined in Table 1, as well as the fact that the Growth Plan mandates a 40% County-wide intensification target within Delineated Built-up Areas, the Analysis concluded that the current density levels prescribed by the DCOP are insufficient to accommodate the allocated growth within the existing land supply. Accordingly, the Analysis recommends that each municipality update its minimum intensification targets in accordance with Table 2 below:

	Current DCOP Minimum Intensification Target	Proposed OPA 2 Minimum Intensification Target
Grand Valley	12%	40%
Orangeville	50%	60%
Shelburne	38%	48%

Table 2 – Current vs. Proposed Intensification Targets within Grand Valley, Orangeville, and Shelburne

The proposed minimum intensification targets outlined in Table 2 were then applied to the total forecasted unit demand (2021-2051) within Grand Valley, Orangeville, and Shelburne which produced a value of 4,146 units. Based on an estimate of remaining unit capacity within each municipality (as outlined in Appendix A of the Analysis), a capacity shortage of 2,187 units was identified across the County’s existing Delineated Built-up Area. Accordingly, the Analysis recommended that Grand Valley, Orangeville, and Shelburne increase their intensification targets beyond what is outlined in Table 2 to achieve forecasted growth. Similarly, the Analysis identified a 1,467 unit capacity shortage across the County’s Designated Greenfield Areas (lands within settlement areas and outside the delineated built boundary) based on forecasted growth, and recommended settlement area boundary expansions for Grand Valley and Shelburne accordingly.

While it is recognized that the above-noted strategy and recommendations are intended to accommodate the full extent of the County’s forecasted growth, it should be noted that such will be contingent on having each municipality achieve ambitious density targets. For reference, OPA 2 establishes an intensification target of 40% for Grand Valley’s delineated built-up area whereas the current DCOP prescribes a target of only 12% for the municipality (Table 2). Should the County be unable to accommodate 40% of growth within its Delineated built-up Areas, a greater proportion will need to be directed toward Designated Greenfield and Rural Areas.

In light of the current housing crisis and provincial directives outlined in the *More Homes Built Faster Act*, it is important to plan for additional residential land due to the inherent challenges associated with achieving a 40% County-wide intensification target (given historic development patterns within the County). As such, Appendices C through L of this Letter include recommended map changes to Draft Schedules B, C, E1, and E of the New Dufferin County Official Plan (via OPA 3) which removes the subject lands’ existing ‘Countryside Area (S.4.0)’ and ‘Prime Agricultural (S.4.2)’ designations and places them into

a new Community Settlement Area. Subsequent map changes are also recommended to Schedules A, D, F, G, H and Appendix 3 of the County's current Official Plan, which are required to fully realize the recommended redesignation.

In keeping with the Provincial Housing Supply Action Plan, ERO No. 019-7419 presents an opportunity to further revise Dufferin County's Official Plan by adding the subject lands to a new Community Settlement Area in order to realize their full development potential. Further, the proponents have indicated the potential for the subject lands to be developed with affordable modular housing units which can be brought on stream quicker than traditional dwelling types; thus, achieving the objectives of the Province's *More Homes Built Faster Act*.

In considering the expansion or creation of a new settlement area through a municipal comprehensive review process, Section 1.1.3.8 of the Provincial Policy Statement states that the following must be demonstrated:

- a) sufficient opportunities to accommodate growth and to satisfy market demand are not available through intensification, redevelopment and designated growth areas to accommodate the projected needs over the identified planning horizon;
- b) the infrastructure and public service facilities which are planned or available are suitable for the development over the long term, are financially viable over their life cycle, and protect public health and safety and the natural environment;
- c) in prime agricultural areas:
 1. the lands do not comprise specialty crop areas;
 2. alternative locations have been evaluated, and
 - i. there are no reasonable alternatives which avoid prime agricultural areas; and
 - ii. there are no reasonable alternatives on lower priority agricultural lands in prime agricultural areas;
- d) the new or expanding settlement area is in compliance with the minimum distance separation formulae; and
- e) impacts from new or expanding settlement areas on agricultural operations which are adjacent to or close to the settlement area are mitigated to the extent feasible.

The above-noted policies relating to existing prime agricultural areas are satisfied in that the subject lands (when considered in conjunction with the property municipally known as 158567 Highway 10 directly to the west) represent a natural extension of the Dundalk Primary Settlement Area boundary, as outlined previously in Figure 2. Additionally, the future Draft Plan of Subdivision and Zoning By-law Amendment applications will provide the necessary tools to mitigate any impacts of the proposed urban uses with any nearby agricultural operations. This includes ensuring compliance with the minimum distance separation formulae established by the Province. Further, the enclosed Site Servicing Investigation Letter prepared by SCS Consulting Group Ltd. concludes that the subject site can be serviced from the existing municipal water and wastewater system located to the southwest (subject to confirmation of capacity and allocation by the Township of Southgate, Grey County) or by having a new water treatment plant constructed on the subject lands; thus, satisfying the above policies relating to infrastructure.

As previously noted, the Land Needs Assessment completed by WSP as a part of Dufferin County's Municipal Comprehensive Review identified specific intensification targets (and subsequent settlement area boundary expansions) that would be required to accommodate population and employment growth

targets established by the Growth Plan. We believe that achieving these intensification targets will prove difficult given historic development trends within the County and that it is therefore important to plan for additional residential land. The recommended redesignation of the subject lands in the County's New Official Plan via OPA 3 will support the Province's goal of building 1.5 million homes over the next 10 years.

Recommended Changes to Dufferin County's New and Current Official Plan

Based on the above, UrbanSolutions recommends the following map changes to Dufferin County's New Official Plan via OPA 3:

1. To amend Draft Schedule B of OPA 3, being 'Draft Schedule B – Community Structure and Land Use' by redesignating the subject lands from 'Countryside Area (S.4.0)' to 'Community Settlement Area' as shown on Appendix C.
2. To amend Draft Schedule C of OPA 3, being 'Draft Schedule C – Prime Agricultural Areas and Rural Lands' by redesignating the subject lands from 'Prime Agricultural Area (S.4.2)' to 'Community Settlement Area' as shown on Appendix D.
3. To amend Draft Schedule E of OPA 3, being 'Draft Schedule E – Natural Heritage Features' by adding the subject lands to the 'Community Settlement Area' designation as shown on Appendix E.
4. To amend Draft Schedule E1 of OPA 3, being 'Draft Schedule E1 – Natural Heritage System' by adding the subject lands to the 'Community Settlement Area' designation as shown on Appendix F.

Additionally, the following subsequent map changes to Dufferin County's current Official Plan would also be required to implement the above-noted map changes to the County's New Official Plan via OPA 3:

1. To amend Schedule A of the Dufferin County Official Plan, being 'Schedule A – Provincial Plan Areas' by adding the subject lands to the 'Community Settlement Area' designation as shown on Appendix G.
2. To amend Schedule D of the Dufferin County Official Plan, being 'Schedule D – Mineral Aggregate Resource Areas' by adding the subject lands to the 'Community Settlement Area' designation as shown on Appendix H.
3. To amend Schedule F of the Dufferin County Official Plan, being 'Schedule F – Human-Made Hazards' by adding the subject lands to the 'Community Settlement Area' designation as shown on Appendix I.
4. To amend Schedule G of the Dufferin County Official Plan, being 'Schedule G – Transportation' by adding the subject lands to the 'Community Settlement Area' designation as shown on Appendix J.

5. To amend Schedule H of the Dufferin County Official Plan, being 'Schedule H – Active Transportation' by adding the subject lands to the 'Community Settlement Area' designation as shown on Appendix K.
6. To amend Appendix 3 of the Dufferin County Official Plan, being 'Appendix 3 – Potential Forest Hazard Classification for Wildland Fire' by adding the subject lands to the 'Community Settlement Area' designation as shown on Appendix L.

Thank you for the opportunity to provide these comments. Please feel free to contact the undersigned to discuss the matter further.

Kind Regards,
UrbanSolutions



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Principal



Matthew LeBlanc, M.PL, BA (Hons)
Planner

cc: AJGL Group Inc. (via email)

Appendix A – Natural Heritage Constraints Analysis

Prepared by GeoProcess Research Associates

Natural Heritage Constraints Analysis

MELANCTHON, ON

Prepared for

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August 18, 2023
Project No. P2023-769

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1. Introduction



This report provides the results of a natural heritage constraints analysis completed by GeoProcess Research Associates Inc. (GeoProcess) for four properties located at 158567 Highway 10, 198602 2nd Line N.E., 199022 2nd Line N.E, and 476234 3rd Line in Melancthon (Dufferin County) Ontario (herein referred to as the Study Area). Based on a review of background data and a desktop analysis, a natural heritage constraints analysis was conducted based on applicable natural heritage policies and regulations and on the existing ecological conditions as best understood through aerial imagery and background review information.

The properties are located in two separate watersheds, each with its own Conservation Authority, with three properties regulated by the Grand River Conservation Authority (addresses 158567 Highway 10, 198602 2nd Line N.E., and 199022 2nd Line N.E) and one regulated by the Nottawasaga Valley Conservation Authority (476234 3rd Line). Regulation mapping from the two conservation authorities (CA) was used to help define the overall natural heritage system (NHS) presented for each of the properties.

This assessment is based only on a desktop review of available background information sources. A site visit was not part of the scope of this assessment, and as such, the results of this assessment are considered to be high level and can only be used as a preliminary assessment of the natural heritage features found within the Study Area and the constraints assigned to them. Due to the lack of direct field data, a conservative approach has been taken when determining which features should be included in the natural heritage system (NHS) and applicable setbacks.

2. Policy Context

The following sections provide a review of the policies and regulations that are relevant to the Study Area.

2.1. Provincial Policy Statement

The Provincial Policy Statement (PPS), 2020 is administered under Section 3 of the *Planning Act*. It became effective May 1, 2020 and replaces the 2014 PPS. The PPS applies to planning decisions made on or after that date. It provides policy direction for land use and development within the Province of Ontario and provides for appropriate development while protecting resources of provincial interest, public health and safety, and the quality of the natural and built environment. The policies of the PPS may be complemented by provincial and municipal plans and policies.

The PPS defines eight natural heritage features and provides planning polices for each, listed below. The function of Natural Heritage Features and Areas is further clarified by the definition of a Natural Heritage System, which is “a system made up of natural heritage features and areas, and linkages intended to provide connectivity (at the regional or site level) and support natural processes which are necessary to maintain biological and geological diversity, natural functions, viable populations of indigenous species, and ecosystems.”

1. Significant wetlands;
2. Coastal wetlands;
3. Fish habitat;
4. Significant woodlands;
5. Significant valleylands;

6. Habitat of endangered species and threatened species;
7. Significant Wildlife Habitat; and,
8. Significant Areas of Natural and Scientific Interest (ANSIs).

Section 2.0 and 3.0 of the PPS deal with development and site alteration, and where these activities shall not be permitted. Section 2.0 policies surround the conservation of biodiversity, and protection of the health of the Great Lakes, natural heritage, water, agricultural, mineral and cultural heritage and archaeological resources for their economic, environmental and social benefits. Section 3.0 directs development away from areas of natural or human-made hazards to mitigate risks to public health or safety, and property damage from natural hazards, including the risks that may be associated with the impacts of a changing climate.

Policies in Section 2.1 are particularly relevant as they surround development and site alteration in and adjacent to *natural heritage features*. These policies and select others are outlined below, in Table 1.

Table 1. Applicable Policies of the Provincial Policy Statement

Policy Number	Policy
(2.1 - Natural Heritage) 2.1.2	The diversity and connectivity of natural features in an area and the long-term <i>ecological function</i> and biodiversity of <i>natural heritage systems</i> , should be maintained, restored or where possible, improved, recognizing linkages between and among <i>natural heritage features and areas, surface water features and ground water features</i> .
2.1.3	<i>Natural heritage systems</i> shall be identified in Ecoregions 6E & 7E, recognizing that <i>natural heritage systems</i> will vary in size and form in <i>settlement areas, rural areas, and prime agricultural areas</i> .
2.1.4	<i>Development</i> and site alteration shall not be permitted in: a) <i>significant wetlands</i> in Ecoregions 5E, 6E and 7E; and, b) <i>significant coastal wetlands</i> .
2.1.5	<i>Development</i> and site alteration shall not be permitted in: a) <i>significant wetlands</i> in the Canadian Shield north of Ecoregions 5E, 6E and 7E; b) <i>significant woodlands</i> in Ecoregions 6E and 7E (excluding islands in Lake Huron and St. Marys River); c) <i>significant valleylands</i> in Ecoregions 6E and 7E (excluding islands in Lake Huron and St. Marys River); d) <i>significant wildlife habitat</i> ; e) <i>significant areas of natural and scientific interest</i> ; and f) <i>coastal wetlands</i> in Ecoregions 5E, 6E and 7E that are not subject to policy 2.1.4(b) unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.
2.1.6	<i>Development</i> and site alteration shall not be permitted in <i>fish habitat</i> except in accordance with <i>provincial and federal requirements</i> .
2.1.7	<i>Development</i> and site alteration shall not be permitted in <i>habitat of endangered species and threatened species</i> , except in accordance with <i>provincial and federal requirements</i> .
2.1.8	<i>Development</i> and site alteration shall not be permitted on <i>adjacent lands</i> to the <i>natural heritage features and areas</i> identified in policies 2.1.4, 2.1.5 and 2.1.6 unless the <i>ecological function</i> of the <i>adjacent lands</i> has been evaluated and it has been demonstrated that there will be no <i>negative impacts</i> on the natural features or on their <i>ecological functions</i> .



Policy Number	Policy
(2.2 - Water) 2.2.2	<i>Development and site alteration shall be restricted in or near sensitive surface water features and sensitive ground water features such that these features and their related hydrologic functions will be protected, improved or restored. Mitigative measures and/or alternative development approaches may be required in order to protect, improve or restore sensitive surface water features, sensitive ground water features, and their hydrologic functions.</i>
(3.1 - Natural Hazards) 3.1.1	Development shall generally be directed, in accordance with guidance developed by the Province (as amended from time to time), to areas outside of: a) <i>hazardous lands adjacent to the shorelines of the Great Lakes - St. Lawrence River System and large inland lakes which are impacted by flooding hazards, erosion hazards and/or dynamic beach hazards;</i> b) <i>hazardous lands adjacent to river, stream and small inland lake systems which are impacted by flooding hazards and/or erosion hazards;</i> and c) <i>hazardous sites.</i>
3.1.3	Planning authorities shall prepare for the impacts of a changing climate that may increase the risk associated with natural hazards

2.2. Endangered Species Act (2007)

The Endangered Species Act (ESA) (2007) provides protection to species designated as Threatened or Endangered on the Species at Risk in Ontario list (MECP 2019). The habitat of some species at risk is also protected under the ESA. Protected habitat is habitat identified as essential for life processes including breeding, rearing, feeding, hibernation and migration.

The ESA (Subsection 9(1)) states that:

"No person shall,

(a) kill, harm, harass, capture or take a living member of a species that is listed on the Species at Risk in Ontario List as an extirpated, endangered or threatened species;

(b) possess, transport, collect, buy, sell, lease, trade or offer to buy, sell, lease or trade,

(i) a living or dead member of a species that is listed on the Species at Risk in Ontario List as an extirpated, endangered or threatened species,

(ii) any part of a living or dead member of a species referred to in subclause (i),

(iii) anything derived from a living or dead member of a species referred to in subclause (i); or

(c) sell, lease, trade or offer to sell, lease or trade anything that the person represents to be a thing described in subclause (b) (i), (ii) or (iii)."

Clause 10 (1)(a) of the ESA also states that:

"No person shall damage or destroy the habitat of a species that is listed on the Species at Risk in Ontario list as an endangered or threatened species."

An authorization or permit between the proponent and the MECP is required to authorize activities that would otherwise be prohibited by subsection 9(1) and 10(1) of the ESA.

There are three applicable regulations under the ESA, 2007; O. Reg. 230/08 - the Species at Risk in Ontario (SARO) List, O. Reg. 242/08 (General), and O. Reg 830/21 (Exemptions – Barn Swallow, Bobolink, Eastern Meadowlark and Butternut). These regulations serve to identify which species and habitats receive protection and provide direction on the current implementation of the ESA.

2.3. Town of Melancthon Official Plan

The Town of Melancthon Official Plan (OP) was prepared and adopted by the Council of the Corporation of the Township of Melancthon under By-law No. 38-2014 in accordance with Section 17 of the Planning Act, R. S. O. 1990, c. P. 13, as amended to March, 2014, on the 14th day of August 2014.

As per Schedule A-1, the Study Area contains Environmental Protection and Environmental Conservation overlays and Niagara Escarpment Development Control Areas. In addition, per Schedules D & E – Natural Heritage, the Study Area contains Provincially Significant Wetlands (PSW), Locally Significant Wetlands (LSW)/Unevaluated Wetlands, Significant Woodlands, and Watercourses. See Table 2 below for a detailed breakdown of which Official Plan natural heritage features and Protection and Conservation overlays are found on the individual properties within the Study Area.

Table 2. NH Features and Environmental and Conservation designations as per the Town of Melancthon Official Plan found on each of the four properties.

Location	Wetlands	Significant Woodlands	Watercourses	Environmental Protection Designation	Environmental Conservation Designation
158567 Highway 10	A PSW and LSW are located in the eastern corner of the property.	A Significant Woodland is located on the within the PSW/LSW on the eastern portion of this parcel.	Two watercourses traverse the property. One in the eastern corner, within the PSW, and one in the western corner of the property.	The eastern corner of this parcel is designated as Environmental Protection.	Designations of Environmental Conservation exist along the eastern portion of the parcel, and within the watercourse located on the western corner of the parcel.
198602 2 nd Line N.E.	A continuation of the above-noted PSW and LSW is located on the southern corner of the property.	A continuation of the above-noted Significant Woodland is located on the southern corner of this parcel.	One watercourse exists on this property: a continuation of the above-noted watercourse which transects the PSW located on the southeastern portion of the property.	The southern corner of this parcel is designated as Environmental Protection.	Environmental Conservation designations are noted within the watercourse and the LSW.

Location	Wetlands	Significant Woodlands	Watercourses	Environmental Protection Designation	Environmental Conservation Designation
199022 2 nd Line N.E.	No wetlands are noted within this parcel; however, two PSW/LSWs are located adjacent to the north and northwest of the property.	No woodlands are noted within this parcel. However, one Significant Woodland is located adjacent to the west of the parcel.	Two watercourses bisect this property: one on the eastern portion of the property and one on the western portion of the property.	No Environmental Protection Areas are noted within this parcel; however, two are located adjacent to the north and northwest of the property.	Environmental Conservation designations are noted within the watercourse.
476234 3 rd Line	A LSW is noted within the northern portion of this parcel.	One Significant Woodland is located on the northwestern corner of this parcel.	One watercourse traverses the southwestern corner of this parcel.	No Environmental Protection Areas are noted within this parcel.	Environmental Conservation designations are noted within the watercourse and along the northwestern corner of this parcel.

Section 5.1 of the OP notes that Environmental Protection Areas include PSWs; Section 5.5 defines Environmental Conservation Areas as *important natural heritage features and areas and well as lands and sites that are potentially hazardous*. Natural heritage features and areas is further defined within the OP as:

- *Locally significant and unevaluated wetlands*
- *Significant woodlands*
- *Significant wildlife habitat*
- *Significant areas of natural or scientific interest*
- *Habitat of endangered species and threatened species*
- *Fish habitat*

Section 5.5 (c) explains that hazardous lands and sites are *those adjacent to rivers and streams which may be impacted by flooding hazards or erosion hazards*.

As per Section 5.4, uses permitted within the Environmental Protection designation include:

- *Legally existing uses*
- *Low impact and passive recreation uses such as walking trails that do not involve the use of motorized vehicles*
- *Forest, wildlife, and fisheries management and archaeological works and activities but not commercial forestry*



- *Essential public watershed management and flood or erosion control works*
- *Essential transportation and utility facilities as authorized under an environmental assessment process.*

Further to Section 5.4.,

- *Development and site alteration shall not be permitted in areas designated Environmental Protection except in connection with the permitted uses listed in subsection 5.4.1.*
- *New development related to the permitted uses shall generally be sited and designed to be in harmony with the area's landscape character and shall be sensitive to the natural environment.*
- *An Environmental Impact Study shall be required for any development or site alteration in any area designated Environmental Protection.*
- *Development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.*

In addition, per Section 5.5.1, the following are permitted uses within the Environmental Conservation designation:

- *Legally existing uses*
- *Low impact and passive recreation uses such as walking trails that do not involve the use of motorized vehicles*
- *Forest, wildlife, and fisheries management and archaeological works and activities but not commercial forestry*
- *Essential public watershed management and flood or erosion control works*
- *Essential transportation and utility facilities as authorized under an environmental assessment process*
- *Existing public and private parks, fairgrounds sport fields and campgrounds*
- *Agricultural uses*
- *Uses permitted in the underlying land use designation, provided that it has been demonstrated that there will be no negative impacts on the natural heritage features and areas or their ecological functions and that in floodplains or other hazardous lands the use is in compliance with Sections 3.5 and 5.5.3.*

Lastly, it should be noted that, as per Schedule A-1 of the OP, the south and southwestern portions of the parcel located at 158567 Highway 10 is subject to Section 3.10 (f) of the OP. As such, the following policies apply to this portion of the parcel:

- Unless there is agreement on the part of the Town of Shelburne concerning a specific development proposal, all non-farm development will be prohibited within approximately 1 kilometre of the boundary of that municipality in the area shown on Schedule A-5.*
- Unless there is agreement on the part of the Township of Southgate concerning a specific development proposal, in the area as shown on Schedule A-1 all non-farm development will be prohibited within approximately 0.5 kilometres of the community of Dundalk as delineated in the planning documents of the Township of Southgate.*
- Notwithstanding the above policies, within the areas referenced in clauses i and ii above a detached dwelling may be erected on an existing lot in accordance with the applicable land use designations and policies of this Plan.*

- iv. *The purpose of the above policies is to maintain a clear separation between rural and urban uses, to prevent inappropriate development near municipal boundaries, and to prevent sprawl adjacent to these urban areas while providing for and encouraging intermunicipal cooperation in the planning and development of such areas.*

2.4. Dufferin County Official Plan

The Official Plan for the County of Dufferin (County OP) provides over-arching policy direction on matters of County significance. The County Official Plan directs County growth management and land use decisions by providing upper-tier land use planning guidance for the County’s eight local municipalities. Detailed land use planning and local decision making is managed and administered locally through the local municipal official plans which will conform to the policies of this Plan.

As per Schedules E – Natural Heritage Features, the Study Area contains PSWs, woodlands, and watercourses. See Table 3 below for a detailed breakdown of which of these features are located within the Study Area:

Table 3. NH Features as identified within the Dufferin County Official Plan found on each of the four Study Area properties.

Location	PSW	Woodlands	Watercourses
158567 Highway 10	A PSW is located in the eastern corner of the property.	Two woodlands are located on the property: one in the northern corner and one in the eastern corner, extending from the PSW.	Two watercourses traverse the property. One in the eastern corner, transecting the PSW and woodland, and one in the western corner.
198602 2 nd Line N.E.	A continuation of the above-noted PSW is located on the southern corner of the property.	Two woodlands exist on this property: one which is a continuation of the woodland located within the PSW, and one that appears to be a hedgerow, located on the southern edge of the property limits.	One watercourse exists on this property: a continuation of the watercourse which transects the PSW located on the southeastern portion of the property.
199022 2 nd Line N.E.	No PSWs are noted within this parcel; however, two PSWs are located adjacent to the north and northwest of the property.	No woodlands are noted within this parcel; however, a woodland is located on the property adjacent to the southwestern corner.	Two watercourses bisect this property: one on the eastern portion of the property and one on the western portion of the property.
476234 3 rd Line	Not applicable. This property is not noted within the County’s OP.		



As per Policy 5.3.9 of the County's OP, no development or site alteration will be permitted within 120 m of Significant Woodland or PSWs unless the ecological function of the lands within the 120 m buffer have been evaluated, and it has been demonstrated through an EIS that there will be no negative impact on the natural features or their ecological functions.

It should be noted that the County's OP does not contain criteria to determine whether woodlands shown on Schedule E are significant, and as such their determination will be based on criteria provided in the Natural Heritage Reference Manual (NHRM). Per the NHRM, a woodland is deemed significant based on its ecological importance in terms of species composition, age, history, location and size.

2.5. Nottawasaga Valley Conservation Authority

The Nottawasaga Valley Conservation Authority (NVCA) is responsible for O. Reg 172/06 – Development, Interference with Wetlands and Alterations to Shorelines and Watercourses, a regulation under the Conservation Authorities Act, 1990. This regulation prohibits development within the Regulation Limits set by the NVCA and applies to shorelines, rivers, stream valleys, hazardous lands, wetlands or areas adjacent to a wetland. A NVCA regulated watercourse is located along the southwest corner of the property located at 476234 3rd Line. As such, the proposed development will be subject to a permit review.

2.6. Grand River Conservation Authority

The Grand River Conservation Authority (GRCA) is responsible for O. Reg 150/06 – Development, Interference with Wetlands and Alterations to Shorelines and Watercourses, a regulation under the Conservation Authorities Act, 1990. This regulation prohibits development within the Regulation Limits set by the GRCA and applies to shorelines, rivers, stream valleys, hazardous lands, wetlands or areas adjacent to a wetland. GRCA regulated watercourses are noted within the boundaries of the properties located at 158567 Highway 10, 198602 2nd Line N.E., 199022 2nd Line N.E. As such, the proposed development will be subject to a permit review.

3. Natural Heritage System

The following sections provides a summary of the potential natural heritage features identified through background desktop reviews found within the Study Area.

3.1. Watercourses

All watercourses observed on the four properties appear to be small and functioning as agricultural drains. Based on aerial interpretation, riparian vegetation appears to be lacking and the channels generally have a straightened planform (shape when looking down from above). Due to the lack of field assessments, conservative assumptions include:

- Watercourses are permanently flowing.
- Watercourses support fish habitat.
- Watercourses have regulatory floodplains.
- Watercourses will need to be retained as open features in a future development scenario, however, they can be realigned for all portions located outside of existing natural features such as woodlands and wetlands.
- Fisheries setbacks of 15 m from the edge of bank will likely be applied.

- All watercourses are regulated by either the GRCA or NVCA and a permit will need to be secured for any work proposed within the regulated limits of the watercourse.
- If channel works are proposed within the high-water mark, a review of the proposed works by the Department of Fisheries and Oceans will be required.

3.2. Wetlands

As this assessment is desktop based, confirmation of the significance of each wetland can not be confirmed, rather their level of significance reflects what is shown in the OP schedules and CA mapping. As such, a 30 m setback has been applied to all wetlands. The 30 m setback could potentially be reduced for non-PSW wetlands if it can be supported through an EIS.

3.3. Woodlands

All woodland designations are based on OP classifications. Woodlands that have not been assigned a designation of significance within the OP schedules are identified as 'other woodlands' in this assessment. It is assumed that all woodlands will need to be retained within future development scenarios. The removal of a woodland would need to be supported within an EIS. All significant woodlands have been assigned a 15 m setback and all other woodlands a 10 m setback. Final setbacks are to be determined through an EIS.

4. Species at Risk Screening

Existing information regarding Species at Risk (SAR) within the study area is summarized from data collected through a desktop review. A desktop background review was conducted using the Natural Heritage Information Center database, Fisheries and Ocean Canada Aquatic Species at Risk Maps and the surrounding areas SAR lists. The Natural Heritage Information Center (NHIC), operated by the Ontario Ministry of Natural Resources and Forestry (MNRF), collects, reviews, manages and distributes information on Ontario's biodiversity. Data distributed by the NHIC is used in conservation and natural resource management decision making and is of valued assistance for the purpose of this report. Data on species, plant communities, wildlife concentration areas and natural areas is made accessible to the public and professionals using generalized 1-kilometer grid units to protect sensitive information. The mapping interface provides current and historical occurrences of SAR within the vicinity of the proposed works location. The database also identifies environmental designations which provide insight into habitat potential including wetland, areas of natural and scientific interests and woodlands. Results from the Fisheries and Ocean Aquatic Species at Risk Maps and SAR lists from surrounding areas were combined with this information to assess the suitability of habitat within the vicinity of the proposed works.

The findings of the SAR screening are presented in Table 3, providing an assessment of the required habitat of potential SAR, the presence or absence of that habitat and the likelihood of the species being present.

4.1. Screening Results

Details of the desktop SAR screening include an amalgamation of historical occurrence records within the vicinity of the proposed works as per current NHIC database records, Fisheries and Oceans Canada Aquatic Species at Risk Maps, the Ontario Breeding Bird Atlas, and the screening of a list of SAR present in Ontario. A review of the applicable SAR screening resources (noted above) indicated records of Species at Risk included below, in Table 4.

Subnational ranks (SRanks) of conservation statuses for Ontario are provided and each species is also classified under one of the three following Ontario species at risk (SARO) statuses:

- Endangered (END) lives in the wild in Ontario but is facing imminent extinction or extirpation.
- Threatened (THR) lives in the wild in Ontario, is not endangered, but is likely to become endangered if steps are not taken to address factors threatening it.
- Special Concern (SC) lives in the wild in Ontario, is not endangered or threatened, but may become threatened or endangered due to a combination of biological characteristics and identified threats.

Table 4. Potential Species at Risk within Study Area

Common Name	Scientific Name	S-RANK	Habitat Requirements	Potential Habitat in the Study Area	Rationale
Endangered					
Prothonotary warbler	<i>Protonotaria citrea</i>	S1B	Flooded woodlands or swamps. Silver maple, ash, yellow birch with holes used for nesting.	Potential	As per a desktop background review, the Study Area contains a forested wetland. Further studies (i.e., site reconnaissance and breeding bird survey) are advised to confirm the presence/absence of this species.
Red-headed woodpecker	<i>Melanerpes erythrocephalus</i>	S3	Open woodland and woodland edges, and is often found in parks, golf courses and cemeteries.	Potential	As per a desktop background review, the Study Area contains a wooded features and edges. Further studies (i.e., site reconnaissance and breeding bird survey) are advised to confirm the presence/absence of this species.
Yellow-breasted chat	<i>Icteria virens</i>	S1B	Lives in thickets and scrubs, especially locations where clearings have become overgrown.	Potential	A site reconnaissance was not part of this high-level constraints analysis. As such, thickets may be present within the Study Area. Further studies (i.e., site reconnaissance and breeding bird survey) are advised to confirm the presence/absence of this species.
King rail	<i>Rallus elegans</i>	S1B	Densely vegetated freshwater marshes	Unlikely	Based on a desktop background review, habitat is



Common Name	Scientific Name	S-RANK	Habitat Requirements	Potential Habitat in the Study Area	Rationale
			with open shallow water that merges with shrubby areas. Prefer larger, coastal wetlands.		likely not within the Study Area.
Acadian flycatcher	<i>Empidonax vireescens</i>	S1B	Mature, shady forests with ravines, or in forested swamps with lots of maple and beech trees.	Potential	As per a desktop background review, the Study Area contains watercourses which flow through woodlands. Further studies (i.e., site reconnaissance and breeding bird survey) are advised to confirm the presence/absence of this species.
Northern bobwhite	<i>Colinus virginianus</i>	S1?	Grassland, prairie or hay fields with woody cover in form of thickets, tangles of vines, shrubs; fence rows or woodland edges; abandoned farm fields; well-drained sandy or loamy soil; pond edges.	Potential	As per a desktop background review, the Study Area contains agricultural lands. In addition, thickets may also be present within the Study Area. Further studies (i.e., site reconnaissance and breeding bird survey) are advised to confirm the presence/absence of this species.
Threatened					
Least bittern	<i>Ixobrychus exilis</i>	S4B	Wetland habitats, cattail marshes with a mix of open pools and channels.	Unlikely	Based on a desktop background review, habitat is likely not within the Study Area.
Bobolink	<i>Dolichonyx oryzivorus</i>	S4B	The preferred breeding habitat for Bobolink consists of hayfields, pastures, and meadows which are dominated by a mixture of grasses and broad-leaved forbs (e.g., red clover, dandelion, timothy). It	Potential	As per a desktop background review, the Study Area contains agricultural lands. Further studies (i.e., site reconnaissance and breeding bird survey) are advised to confirm the presence/absence of this species.



Common Name	Scientific Name	S-RANK	Habitat Requirements	Potential Habitat in the Study Area	Rationale
			also occurs in wet prairie, graminoid peatlands, abandoned fields, no-till cropland, small-grain fields, and reed beds.		
Eastern meadowlark	<i>Sturnella magna</i>	S4B, S3N	This species primarily resides south of the Boreal Forest within mid-height meadows and open areas including agricultural crops (hay and alfalfa), pastures, orchards, fallow fields and other similar ecosites.	Potential	The Study Area likely contains mixed grasses which has the potential to support this species at risk.
Chimney swift	<i>Chaetura pelagica</i>	S3B	Urban settlements where they nest and roost in chimneys or other manmade structures.	Unlikely	Lack of required structures within the Study Area
Bank swallow	<i>Riparia riparia</i>	S4B	It nests in a wide variety of naturally and anthropogenic vertical banks, which often erode and change over time including aggregate pits and the shores of lakes and rivers.	Unlikely	Based on a desktop background review, habitat is likely not within the Study Area.
Short-eared owl	<i>Asio flammeus</i>	S4?B, S2S3	Open areas such as grasslands, marshes and tundra where it nests on the ground and hunts for small mammals, especially voles.	Unlikely	Based on a desktop background review, habitat is likely not within the Study Area.
Special Concern					



Common Name	Scientific Name	S-RANK	Habitat Requirements	Potential Habitat in the Study Area	Rationale
Midland painted turtle	<i>Chrysemys picta marginata</i>	S4	Midland painted turtles prefer waterbodies that have soft bottoms, abundant basking sites, and aquatic vegetation such as ponds, marshes, lakes, and slow-moving creeks.	Unlikely	Based on a desktop background review, habitat is likely not within the Study Area.
Snapping turtle	<i>Chelydra serpentina</i>	S4	Most of their lives are spent in shallow waters. However during the breeding season, females travel overland in search of gravel or sandy sites to lay their eggs.	Unlikely	Based on a desktop background review, habitat is likely not within the Study Area.
Monarch	<i>Danaus plexippus</i>	S2N, S4B	Monarch caterpillars feed exclusively on milkweed plants; therefore, their preferred breeding habitat is meadows and open areas. Adult butterflies can be found in more diverse habitats where they feed on nectar from a variety of wildflowers.	Potential	A site reconnaissance was not part of this high-level constraints analysis. As such, milkweed may be present within the Study Area. Further studies (i.e., site reconnaissance) are advised to confirm the presence/absence of this species.
Bald eagle	<i>Haliaeetus leucocephalus</i>	S4	Variety of habitats and forest types, but almost always near a major lake or river.	Unlikely	Based on a desktop background review, habitat is likely not within the Study Area.
Common nighthawk	<i>Chordeiles minor</i>	S4B	Open areas with little to no ground vegetations, such as logged or burned-over areas, forest clearings, rock barrens, peat bogs,	Unlikely	Based on a desktop background review, habitat is likely not within the Study Area.



Common Name	Scientific Name	S-RANK	Habitat Requirements	Potential Habitat in the Study Area	Rationale
			lakeshores and mine tailings.		
Eastern wood-pewee	<i>Contopus virens</i>	S4B	Mid-canopy layer of forest clearings and edges of deciduous and mixed forests.	Potential	Use woodland habitat for nesting.
Barn swallow	<i>Hirundo rustica</i>	S4B	This species uses almost exclusively human-made structures to mount their cup-shaped nests on.	Potential	Use barns and other open structures for nesting.
Wood thrush	<i>Hylocichla mustelina</i>	S4B	Mature deciduous and mixed forests.	Potential	As per a desktop background review, the Study Area contains forested areas. Further studies (i.e., ecological land classification and breeding bird survey) are advised to confirm the presence/absence of this species.
Black tern	<i>Chlidonias niger</i>	S3B, S4M	Black Terns build floating nests in loose colonies in shallow marshes, especially in cattails.	Unlikely	Based on a desktop background review, habitat is likely not within the Study Area.
Peregrine falcon	<i>Falco peregrinus</i>	S4	Nests on tall, steep cliff ledges close to large bodies of water. They also have adapted to urban settlements, nesting in tall buildings.	Unlikely	Based on a desktop background review, habitat is likely not within the Study Area.

4.2. Species Assessment

The SAR screening has identified a number of SAR that could potentially be found within the Study Area. The habitat for these species falls within three general types:

- Existing natural areas such as woodlots, wetlands and stream corridors
- Pasture lands for grassland breeding birds such as bobolink and Eastern meadowlark
- Barns and open structures for bird nesting

Final determination as to whether SAR or their habitat is present within the Study Area will have to be determined through an EIS, as SAR or their habitat cannot be determined definitively through a desktop assessment. While the SAR screening cannot determine if any of the species are found within the Study Area, it demonstrated that there are numerous species potentially present within the Study Area and as such, the screening information has been used to inform/verify that existing features such as wetland and woodlands should be retained until such time that field studies can determine otherwise.

5. Development Limit

Natural heritage constraints to development have been determined based on existing policies and aerial imagery and fall into the following three categories:

- Wetlands
- Woodlands
- Stream corridors (watercourse, floodplain and riparian zone)

Setbacks have been assigned to each of the constraint categories and are as follows:

- Provincially Significant Wetlands – 30 m
- Locally Significant Wetlands – 30 m
- Significant woodlands – 15 m
- Other woodlands – 10 m
- Fisheries setback – 15 m from edge of bank

In addition to the natural heritage constraints listed above, hazard constraints must also be considered and will be administered by the Conservation Authorities. The primary hazard constraint that needs to be considered is the Regulatory Flood Limit, which is provided through the Conservation Authorities. GRCA mapping provides regulatory limits; however, the NVCA mapping does not provide the regulated flood limits.

Based on the lack of in-field confirmatory surveys, and the conservative approach taken within this assessment, all regulated watercourses have been identified as features to be retained as open features. It is assumed that all regulated watercourses provide direct fish habitat functions. However, based on a review of aerial imagery, many watercourses appear to be functioning as agricultural drains; they generally appear to have been straightened and no longer support natural planforms. As a result, it is likely that while the watercourses are to be retained, they can mostly likely be realigned if natural channel principals are followed.

Maps 1 and 2 provide the natural heritage constraints with their setbacks as defined above.

Areas identified as regulated by the Conservation Authorities will require a permit for any site alteration or development. They do not represent areas of no development, however portions of the regulated areas which are deemed to be hazard lands (such as flood zones and wetlands) are undevelopable.

6. Closing



A desktop natural heritage constraints analysis has been completed for four properties located within the Town of Melancthon in Dufferin County. The constraints analysis was based on local and county policies in addition to federal and provincial regulations. Through desktop background reviews, several natural heritage features were brought forward as potentially occurring within the Study Area limits. Mapping which outlines these natural heritage development constraints, and their applicable setbacks was also prepared. It is important to note, this assessment did not include confirmatory fieldwork, inventories or characterizations to verify the ecological quality of any identified natural heritage features. As such, this assessment cannot be used to definitely determine the limits of the natural heritage constraints and to set final development limits. An EIS will be required to finalize the limits of the natural features and the development limits of the Study Area.

Regards,

GEOPROCESS RESEARCH ASSOCIATES INC

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Natural Heritage Constraints Analysis

Prepared for AJGL Group Inc.

August 18, 2023

Prepared by:



Brittany Quesnel, B.A., CERPIT
Ecologist

Reviewed by:



Ken Glasbergen, M.Sc., ERPG
Principal, Senior Ecologist

Disclaimer

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Information obtained during the site investigations or received from third parties does not exhaustively cover all possible environmental conditions or circumstances that may exist in the study area. If a service is not expressly indicated, it should not be assumed that it was provided. Any discussion of the environmental conditions is based upon information provided and available at the time the conclusions were formulated.

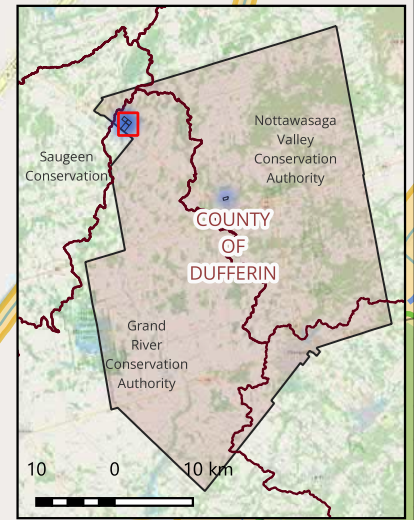
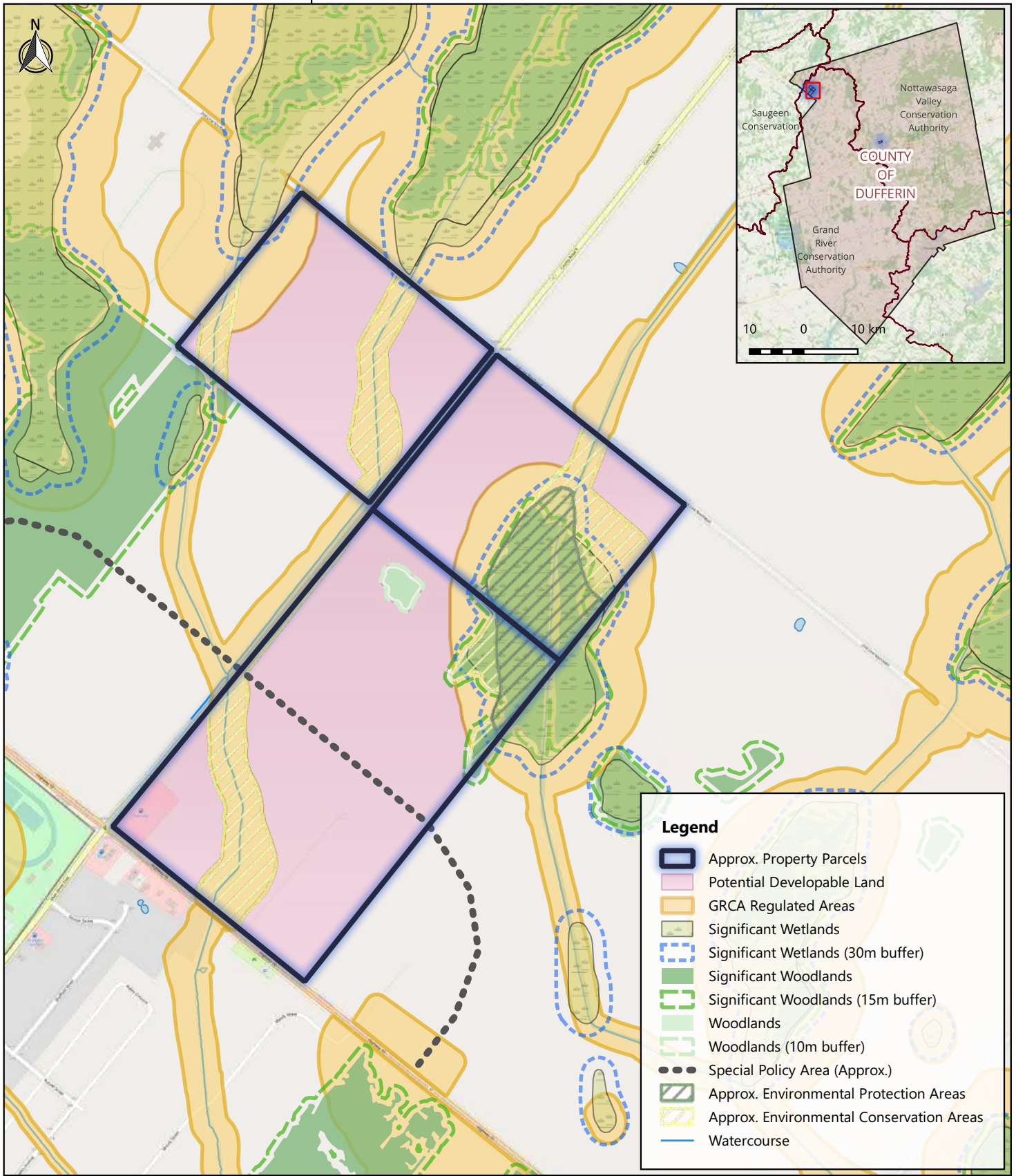
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Project Number P2023-769



Maps

550000



Legend

- Approx. Property Parcels
- Potential Developable Land
- GRCA Regulated Areas
- Significant Wetlands
- Significant Wetlands (30m buffer)
- Significant Woodlands
- Significant Woodlands (15m buffer)
- Woodlands
- Woodlands (10m buffer)
- Special Policy Area (Approx.)
- Approx. Environmental Protection Areas
- Approx. Environmental Conservation Areas
- Watercourse

550000



0 250 500 m

NAD83 / UTM zone 17N (EPSG:26917)

Notes:

- [1] Significant Wetlands and Woodlands approximate Dufferin County and Town of Melancthon Official Plan data using Land Information Ontario layers
- [2] Property parcel(s) are approximate based on data provided to GRA
- [3] Base map is from Open Street Map

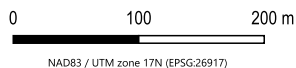
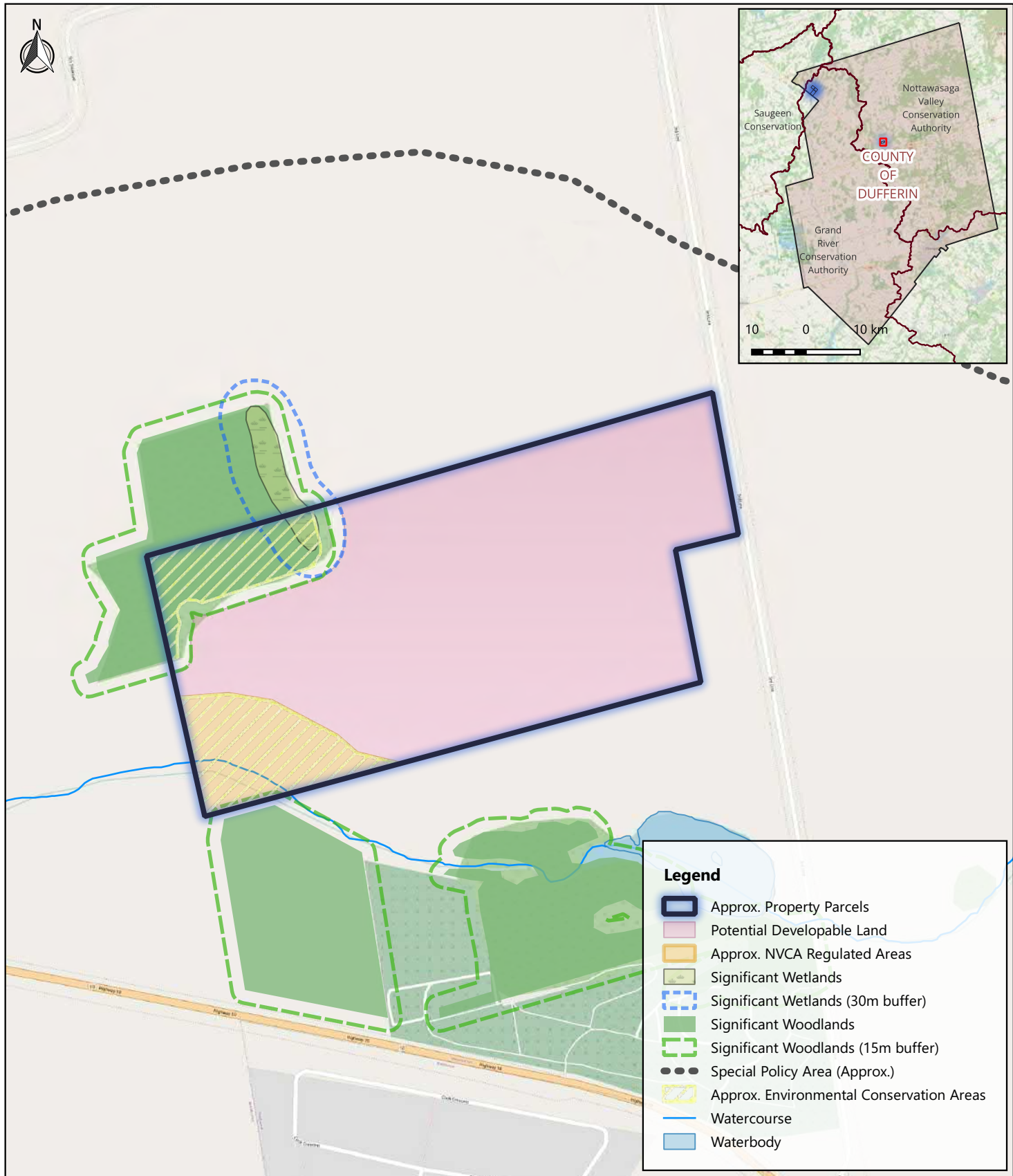
Map 1.

158567 Highway 10, 198602 2nd Line N.E.,
and 199022 2nd Line N.E.

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 CHECKED BY: KG DATE: Aug 18, 2023

Natural Heritage Constraints Analysis

AJGL Group Inc.



Notes:
 [1] Significant Wetlands and Woodlands approximate Dufferin County and Town of Melancthon Official Plan data using Land Information Ontario layers
 [2] Property parcel(s) are approximate based on data provided to GRA
 [3] Base map is from Open Street Map

Map 2.

476234 3rd Line

Natural Heritage Constraints Analysis

AJGL Group Inc.

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 CHECKED BY: KG DATE: Aug 18, 2023



Appendix

Species at Risk Screening Resources



Table A 1. SAR screening resources

Screening Resource	Description
Natural Heritage Information Center (NHIC)	The Natural Heritage Information Center (NHIC), operated by the Ontario Ministry of Natural Resources and Forestry, collects, reviews, manages and distributes information on Ontario's biodiversity. Data distributed by the NHIC is used in conservation and natural resource management decision making and was a primary resource for this report. Through the NHIC Make-a-Map tool, data on species, plant communities, wildlife concentration areas and natural areas is made accessible to the public and professionals using generalized 1-kilometer grid units to protect sensitive information. The mapping interface provides current and historical occurrences of SAR within the specified grid unit. The database also identifies environmental designations which provide insight into habitat potential including wetland, areas of natural and scientific interests and woodlands.
Breeding Bird Atlas	The atlas divides the province into 10×10 km squares and then birders find as many breeding species as possible in each square. Atlasers who know birds well by song complete 5-minute "Point Counts", 25 of which are required to provide an index of the abundance of each species in a square. Data from every square are mapped to show the distribution of each species. Point count data from each square show how the relative abundance of each species varies across the province.
eBird	eBird data document bird distribution, abundance, habitat use, and trends through checklist data collected within a simple, scientific framework. Birders enter when, where, and how they went birding, and then fill out a checklist of all the birds seen and heard during the outing. eBird's free mobile app allows offline data collection anywhere in the world, and the website provides many ways to explore and summarize your data and other observations from the global eBird community. eBird hotspots that are within 1 km of the Study Area are selected for species review.
Ontario Moth Atlas	The Ontario Moth Atlas is a project of the Toronto Entomologists' Association. The atlas currently covers about 250 species from 7 of the best-known families. The atlas presently includes 62,000 records. The last update of the atlas was in April 2020. The atlas is updated at least every 3 months. Most atlas data come from iNaturalist records. However, there is some data from Chris Schmidt of Agriculture Canada, the BOLD (Barcode of Life Datasystems) project of the University of Guelph, and from other records submitted directly to the TEA. The atlas uses the same 10×10 km squares at the Breeding Bird Atlas.
Ontario Butterfly Atlas	The Ontario Butterfly Atlas is a project of the Toronto Entomologists' Association (TEA). The TEA has been accumulating records and publishing annual seasonal summaries (Ontario Lepidoptera) for 50 years, with the first edition appearing in 1969. Atlas data comes from eButterfly records, iNaturalist records, BAMONA records, and records submitted directly to the TEA. The atlas uses the same 10×10 km squares at the Breeding Bird Atlas.
i-Naturalist	i-Naturalist is a nature app that helps public identify plants and animals. Using algorithms as well as scientists and taxonomic experts' multiple observations can be identified at a research scale. This data generated by the iNat community can be used in science and conservation. The program actively distributes the data in venues where scientists and land managers can find it. I-Naturalist has a project group for (NHIC) Rare species of Ontario. GeoProcess only records observations with-in 1 km of the Study Area.
Fisheries and Ocean Aquatic Species at Risk Maps	The DFO has compiled critical habitat and distribution data for aquatic species listed under the Species at Risk Act (SARA). The interactive map is intended to provide an overview of the distribution of aquatic species at risk and the presence of their critical habitat within Canadian waters. The official source of information is the Species at Risk Public Registry. Using this map, a 1 km radius circle is outlined around aquatic features located within the Study Area.

Appendix B – Site Servicing Investigation Letter

Prepared by SCS Consulting Group Ltd.

Mr. Eric Silverberg
Roxborough Developments Ltd.
5734 Yonge Street, Suite 508
Toronto, Ontario, M2M 4E7

Dear Mr. Silverberg:

Re: **Proposed Site Servicing for
198602 2nd Line, Township of Melancthon (Northeast of Dundalk)
County of Dufferin, Ontario**

We are writing to provide a preliminary overview of the servicing potential for the lands located at 198602 2nd Line in the Township of Melancthon, County of Dufferin. The subject lands are immediately northeast of the Township of Southgate's Settlement Area of Dundalk, in the County of Grey (refer to **Figure 1** below). The site is west of the 2nd Line, south of Dufferin County Road 9. The approximate site area is 27.46 ha (67.86 acres).



Figure 1 – Site Location (GeoWarehouse, 2023)

Existing Topography

The figure below shows that the site falls from west to east. There is a high point with an elevation of approximately 528m in the west corner of the site close to Dufferin County Road 9. The north portion of the site falls south gently towards the Bradley Municipal Drain to a grade of approximately 520m.

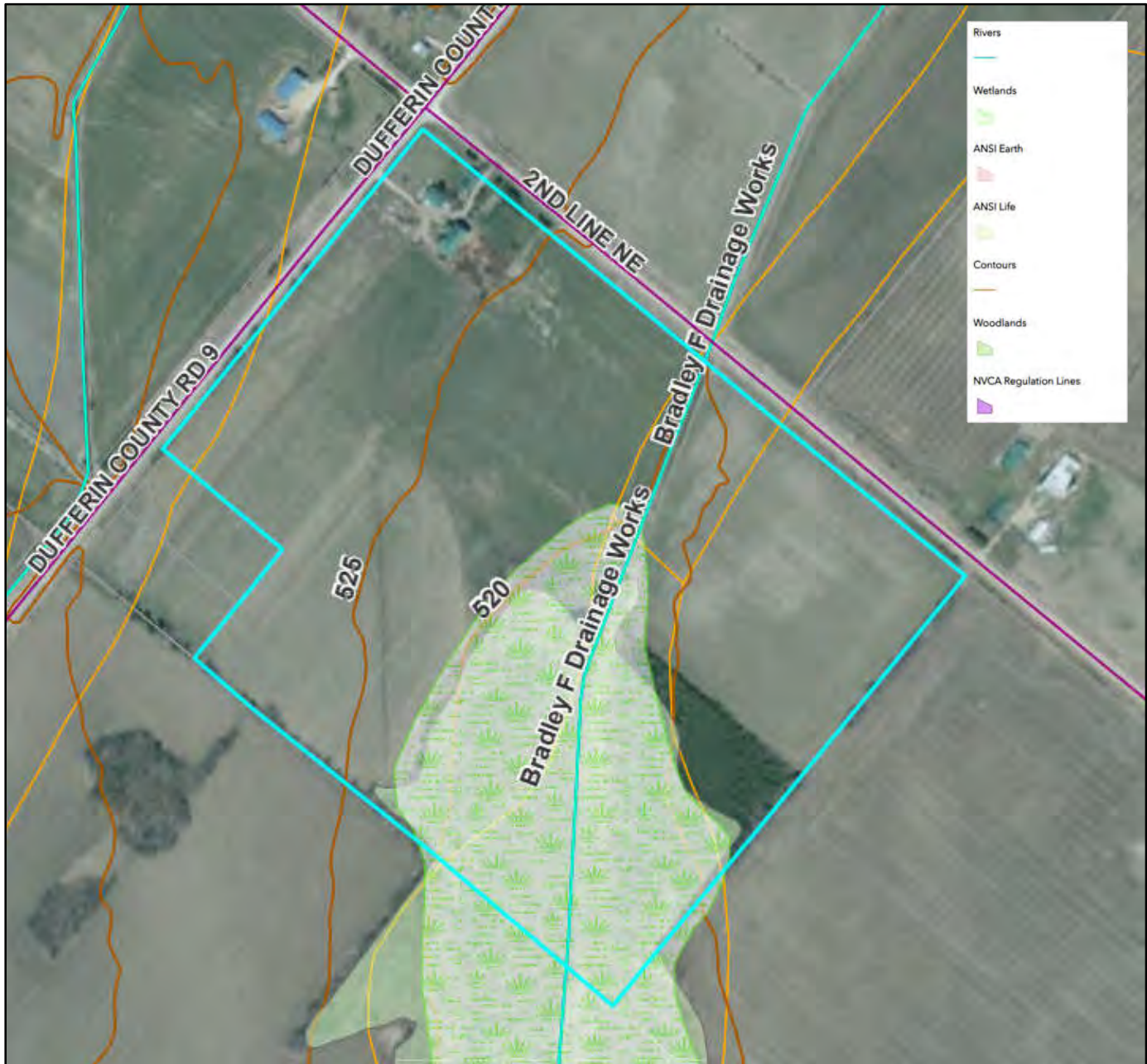


Figure 2 – Existing Topography (Dufferin County Interactive Map, 2023)



Generic Regulation Mapping and Preliminary Natural Heritage Review

The subject parcel is in the Grand River Conservation Authority (GRCA) jurisdiction. Crossing from the north side of 2nd Line to the south, the Bradley Municipal Drain bisects the subject property from north to south. The Municipal Drain has a regulated area, as shown in **Figure 3** below. Agricultural drains can be relocated as long as the associated floodplain volume remains. Additionally, the southern corner of the site includes a regulated wetland area. The nature of the regulated feature and associated impacts on developable area will be subject to further study and coordination with GRCA.

The initial assessment was undertaken in conjunction with a preliminary review of environmental constraints and opportunities prepared by Palmer (refer to **Figure 3** below).

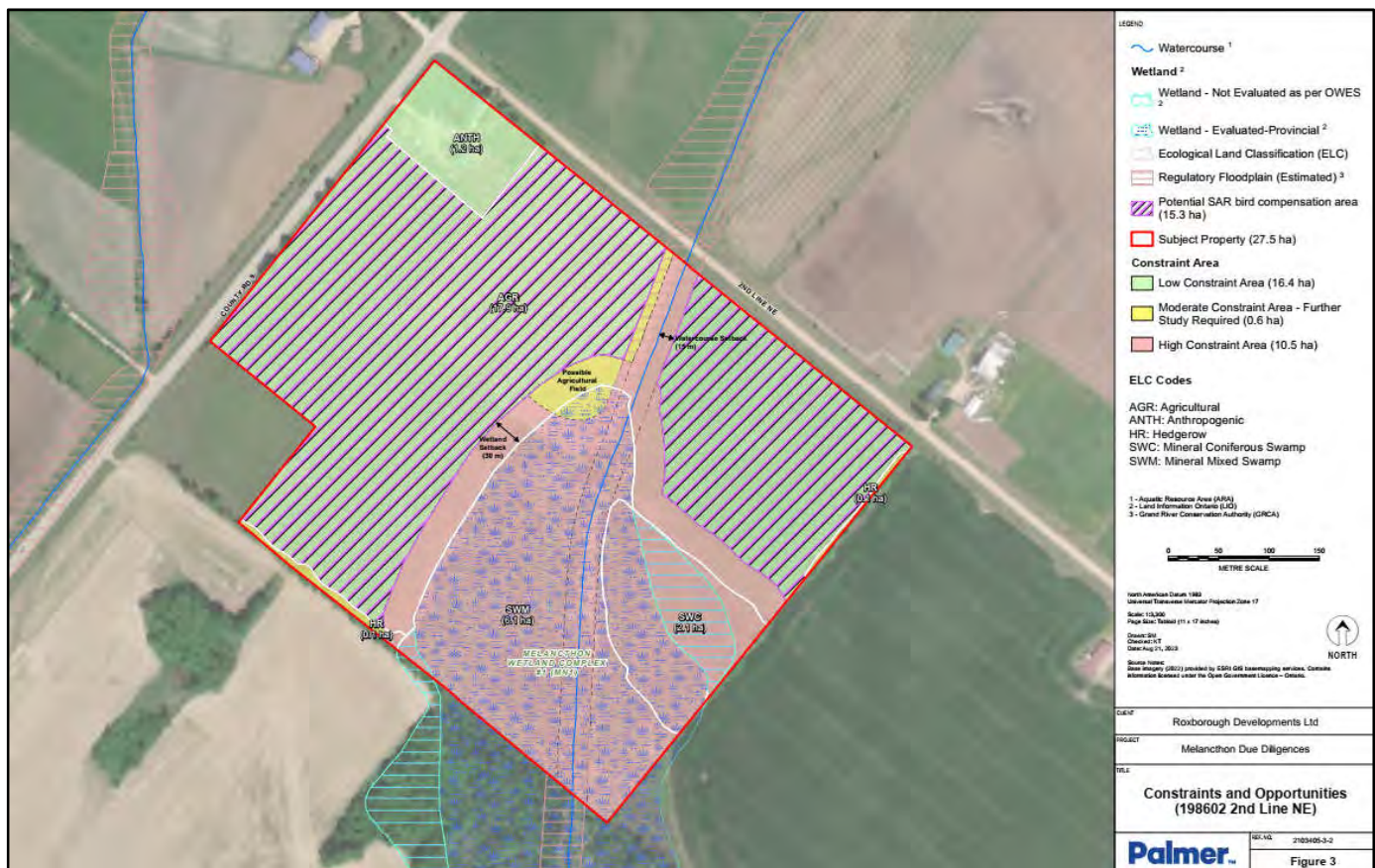


Figure 3 – Constraints and Opportunities (Palmer, 2023)



Proposed Sanitary Servicing

The subject parcel is northeast of the Township of Southgate's Settlement Area of Dundalk. An agreement to service from the Township of Southgate with the Township of Melancthon would allow this site to be serviced by connecting to the existing sanitary sewer at the end of Main Street East. The existing 250mm dia. PVC sanitary sewer's elevation is higher (526m) than the existing elevation of the subject site (520m). Therefore, the development would require a sanitary pumping station to pump flows via a 1.2km forcemain connecting to the existing Main Street East sewer (refer to **Figure 4** below).

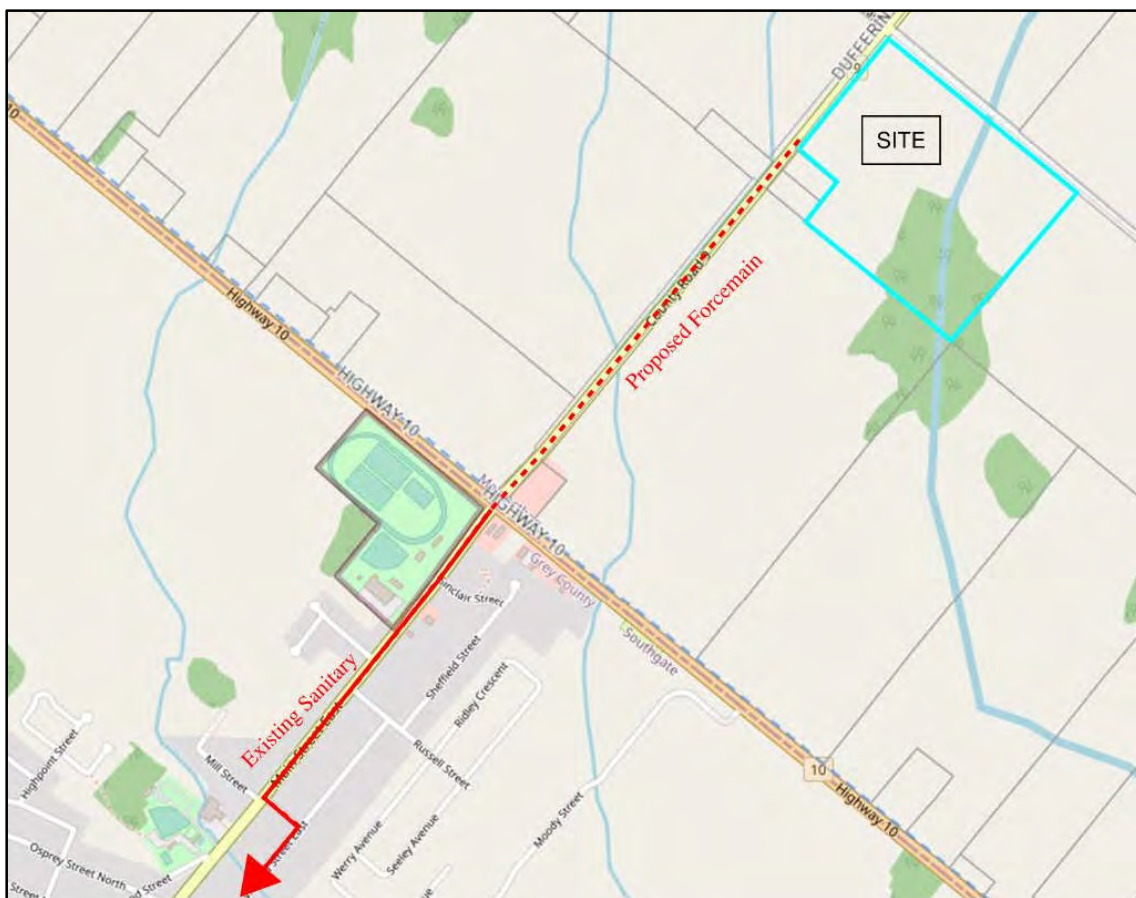


Figure 4 – Proposed Sanitary Servicing (Dufferin County Interactive Map, 2023)

Ultimately, the sanitary flows will be conveyed to the existing Dundalk Water Pollution Control Plant (WPCP) located on Eco Parkway, outletting to the Foley Municipal Drain, subject to confirmation of capacity in the downstream system by the Township of Southgate (refer to **Figure 5** below).

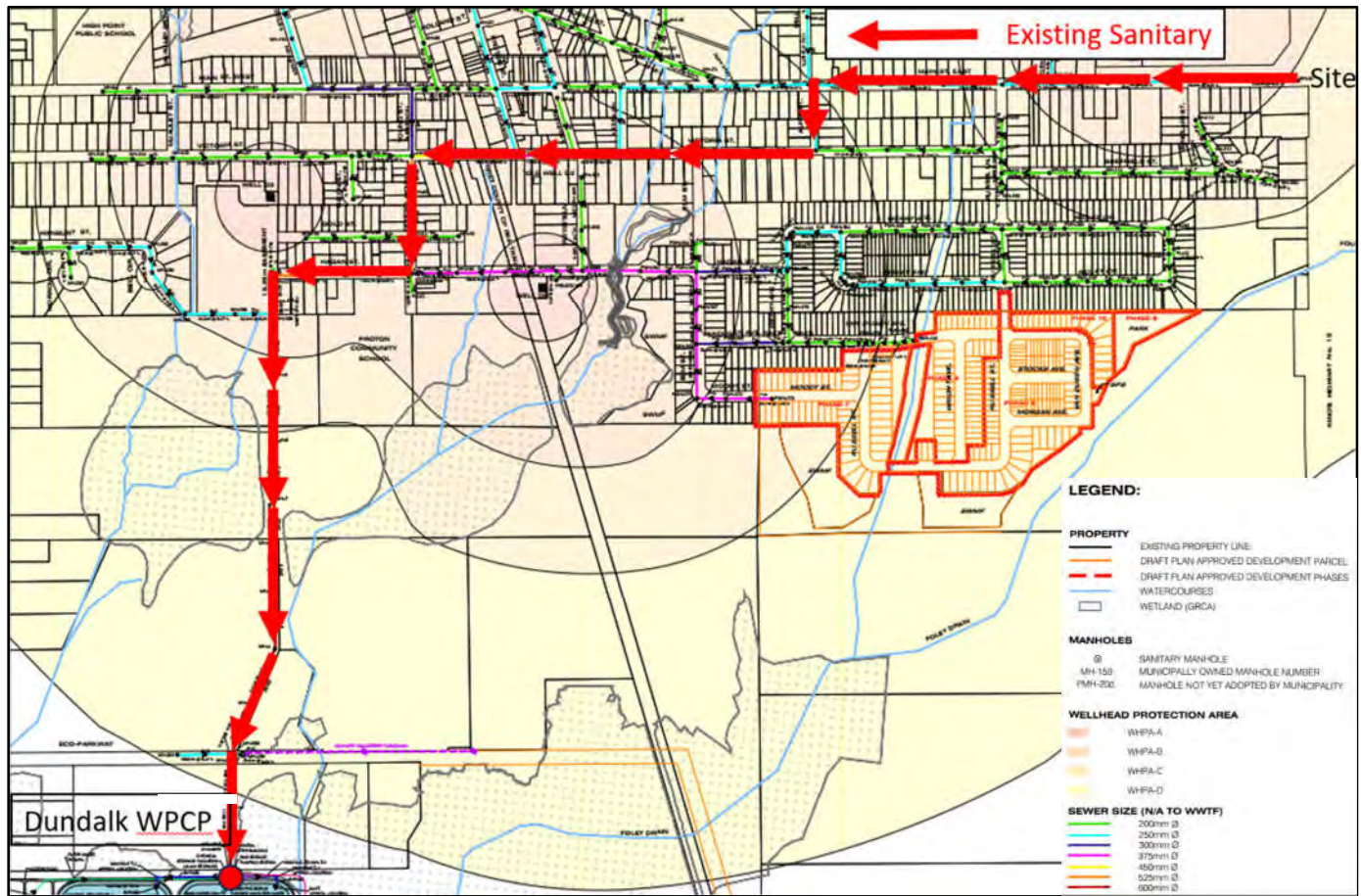


Figure 5 – Dundalk Sanitary Collection System (Triton Engineering Services Limited, 2022)

Alternatively, a new wastewater treatment plant can be constructed on the subject land to accept flows from this parcel and other future development in this immediate area. The agricultural drain (Bradley Drain) flowing through the center of the site could provide a surface outlet, subject to an assimilative capacity analysis. The Bradley Drain ultimately drains to the Grand River. Alternatively, a pumped connection to the Foley Municipal Drain or an on-site sub-surface effluent discharge bed could be considered.



Proposed Water Servicing

The subject parcel is located northeast of the Township of Southgate's Settlement Area of Dundalk. An agreement to service from the Township of Southgate with the Township of Melancthon would allow this site to be serviced by connecting to the eastern end of the Main Street East watermain (refer to **Figure 6** below). The existing 250mm dia. PVC watermain must be extended 1.2km east along Dufferin County Road 9 to the west property limits (refer to **Figure 7**). Looping of the system may ultimately be required through future proposed development areas or via a dual watermain to the site.

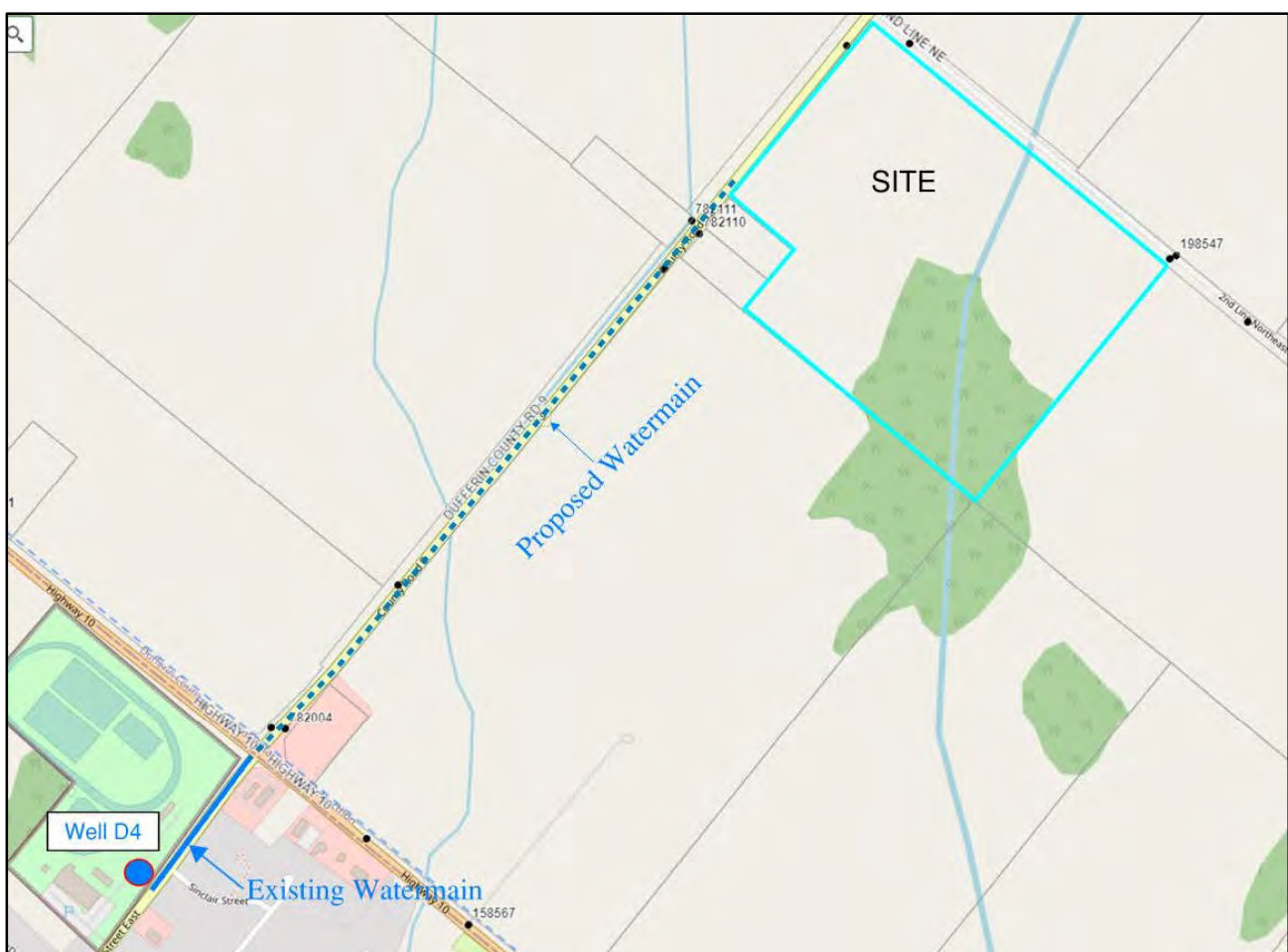


Figure 6 – Proposed Water System (*Dufferin County Interactive Map, 2023*)



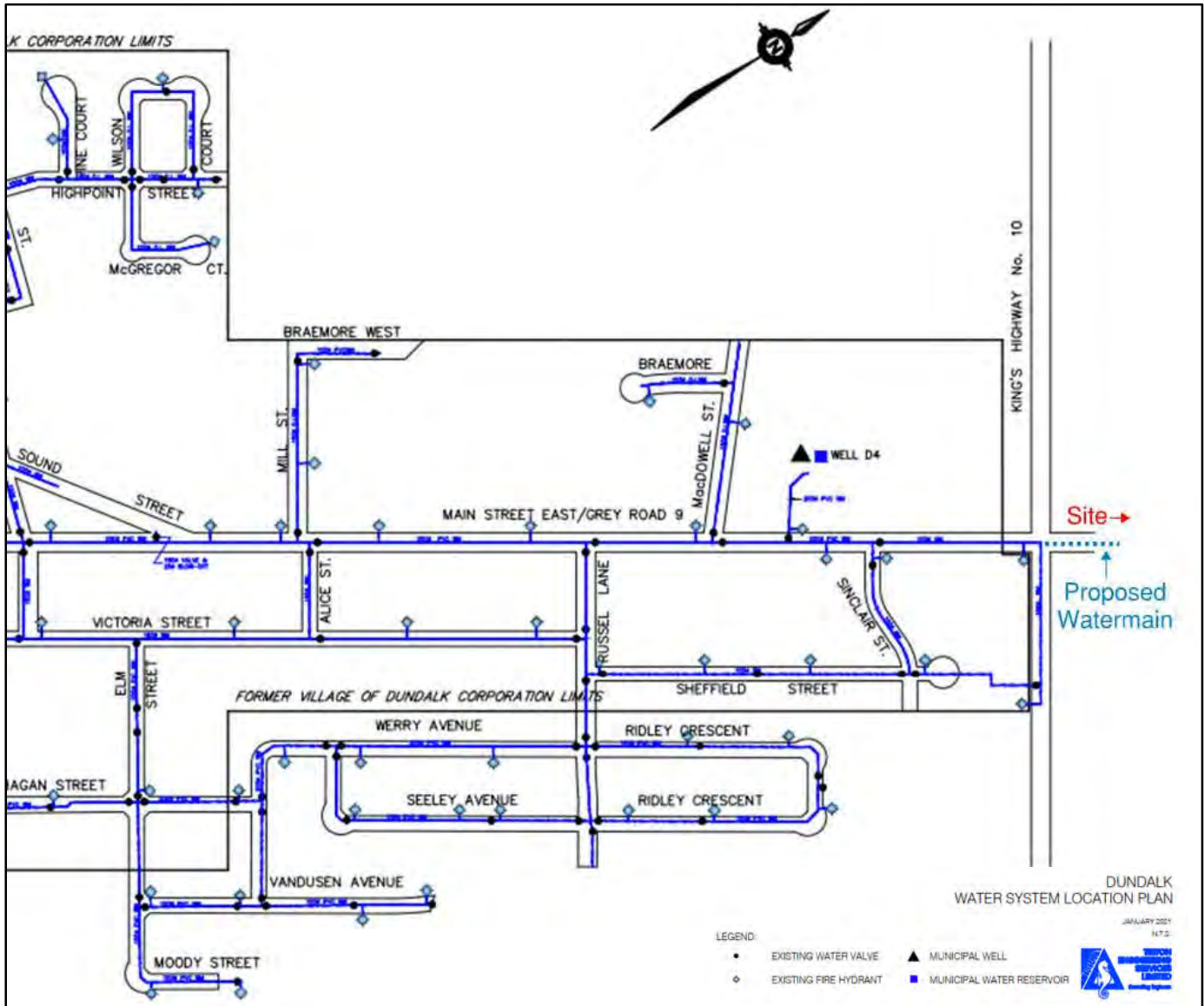


Figure 7 – Dundalk Water System (Triton Engineering Services Limited, 2022)

The Town of Southgate operates a well-based water system with above-ground reservoir storage

A hydraulic analysis will be necessary to confirm the appropriate infrastructure sizing and configuration to provide adequate supply and pressure to service the proposed development and to confirm that the existing water storage and supply infrastructure is adequate to service the subject lands or if upgrades are required.

Re: | **Proposed Site Servicing for
198602 2nd Line, Township of Melancthon (Northeast of Dundalk)
County of Dufferin, Ontario**

File #: 2598
August 22, 2023
Page 8 of 8

Summary

In summary, the site can be serviced from the existing municipal water and wastewater system located southwest of the site, subject to the Township of Southgate's confirmation of capacity and allocation for the Dundalk Settlement Area. A servicing agreement must be in place between the Township of Southgate and the Township of Melancthon.

Alternatively, a new on-site wastewater treatment facility can be considered as an alternative servicing solution.

Please contact the undersigned if you have any questions or require additional information.

Sincerely,

SCS Consulting Group Ltd.



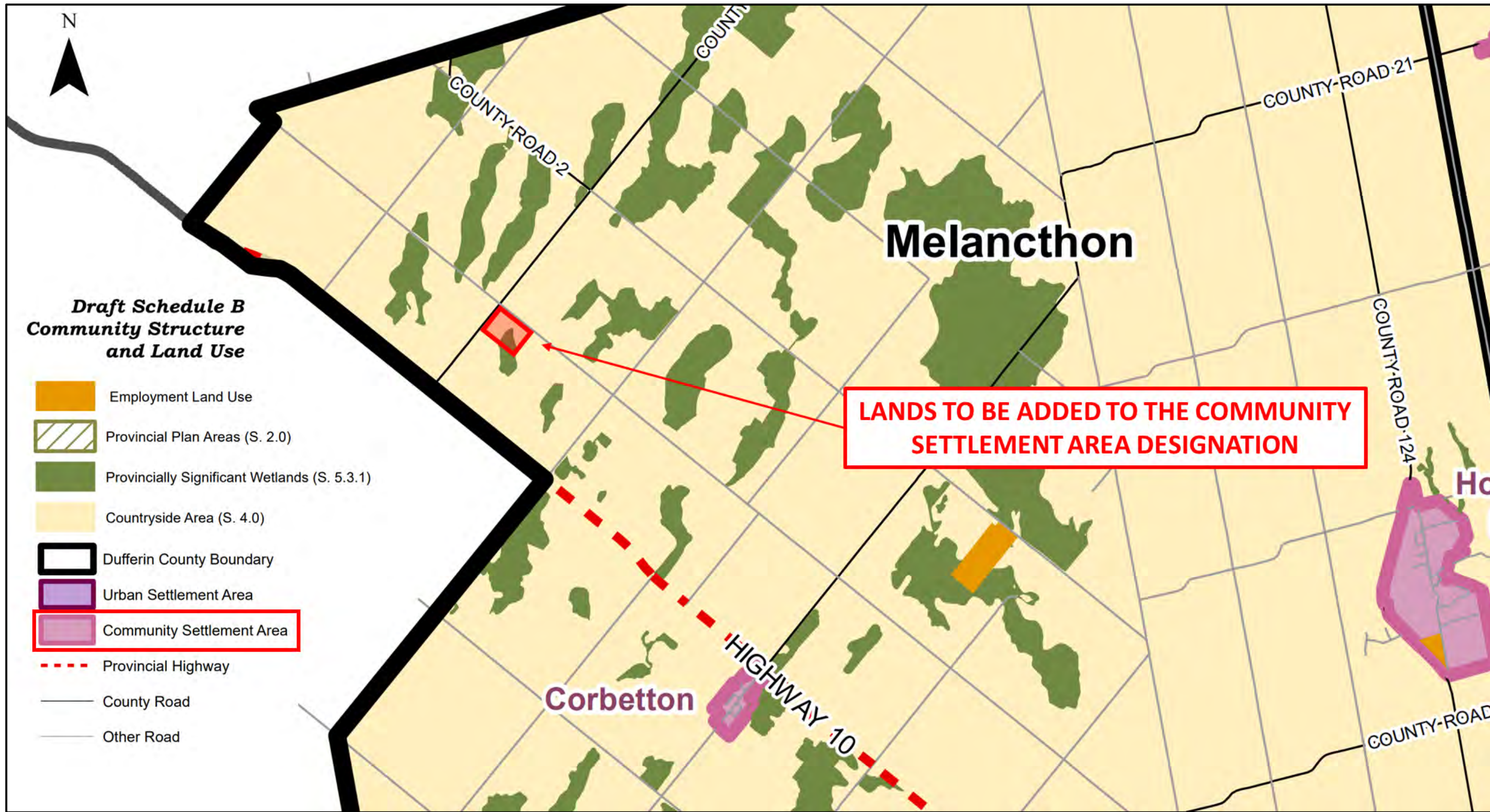
Steve Schaefer, P. Eng.
Principal
sschaefer@scsconsultinggroup.com

P:\2598 476145 3rd Line Melancthalon (Dundalk)\Design\Reports\Servicing Investigation\198602 2nd Line NE, Dundalk\2023 08(Aug) 21 - Rev. Preliminary Servicing Brief\2598-cew-Site Servicing Investigation Letter-198602 2nd Line, Melancthon-22Aug23.docx



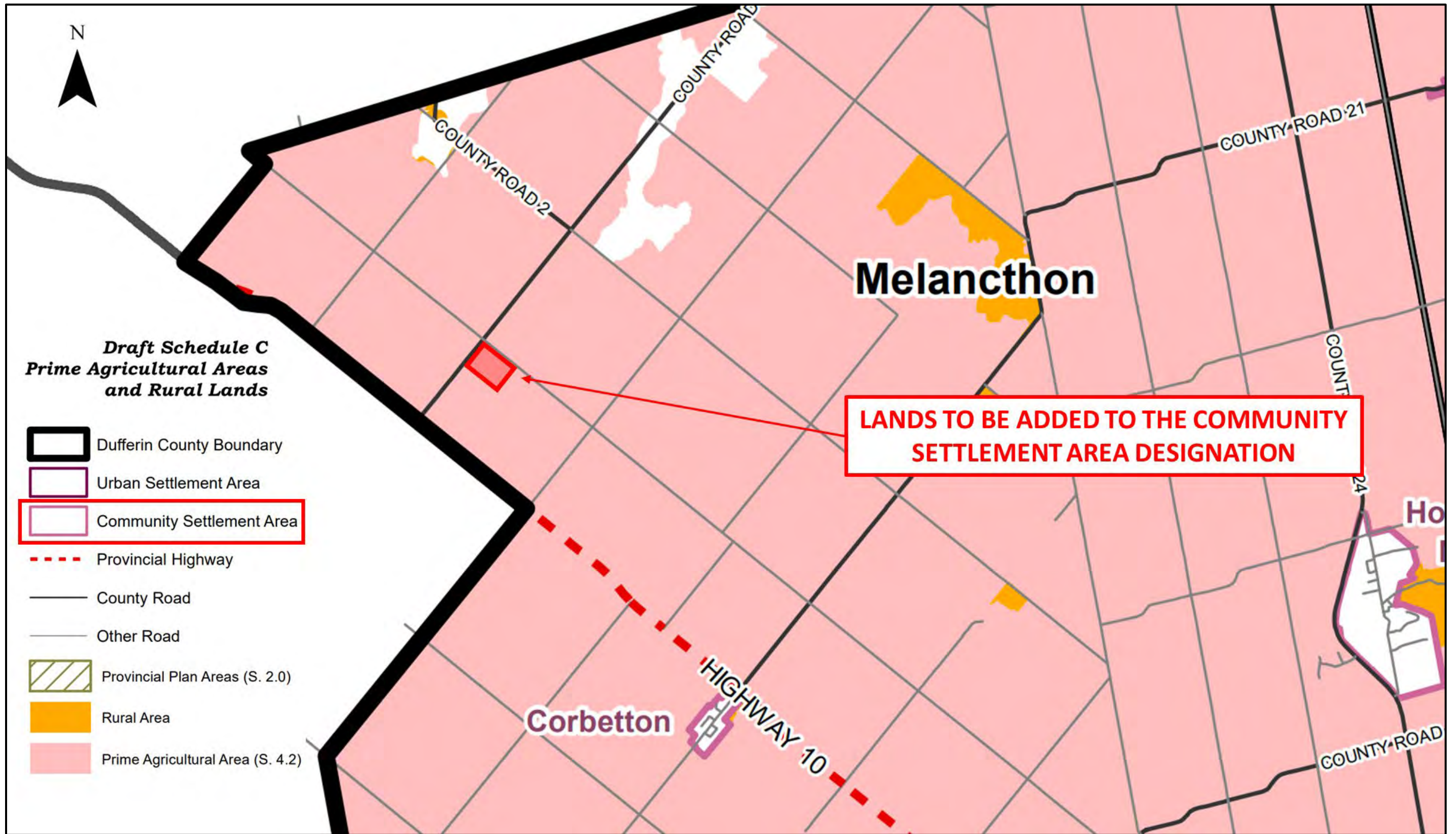
Appendix C – Draft Schedule B of OPA 3

Proposed Changes to Draft Schedule B – Community Structure of OPA 3



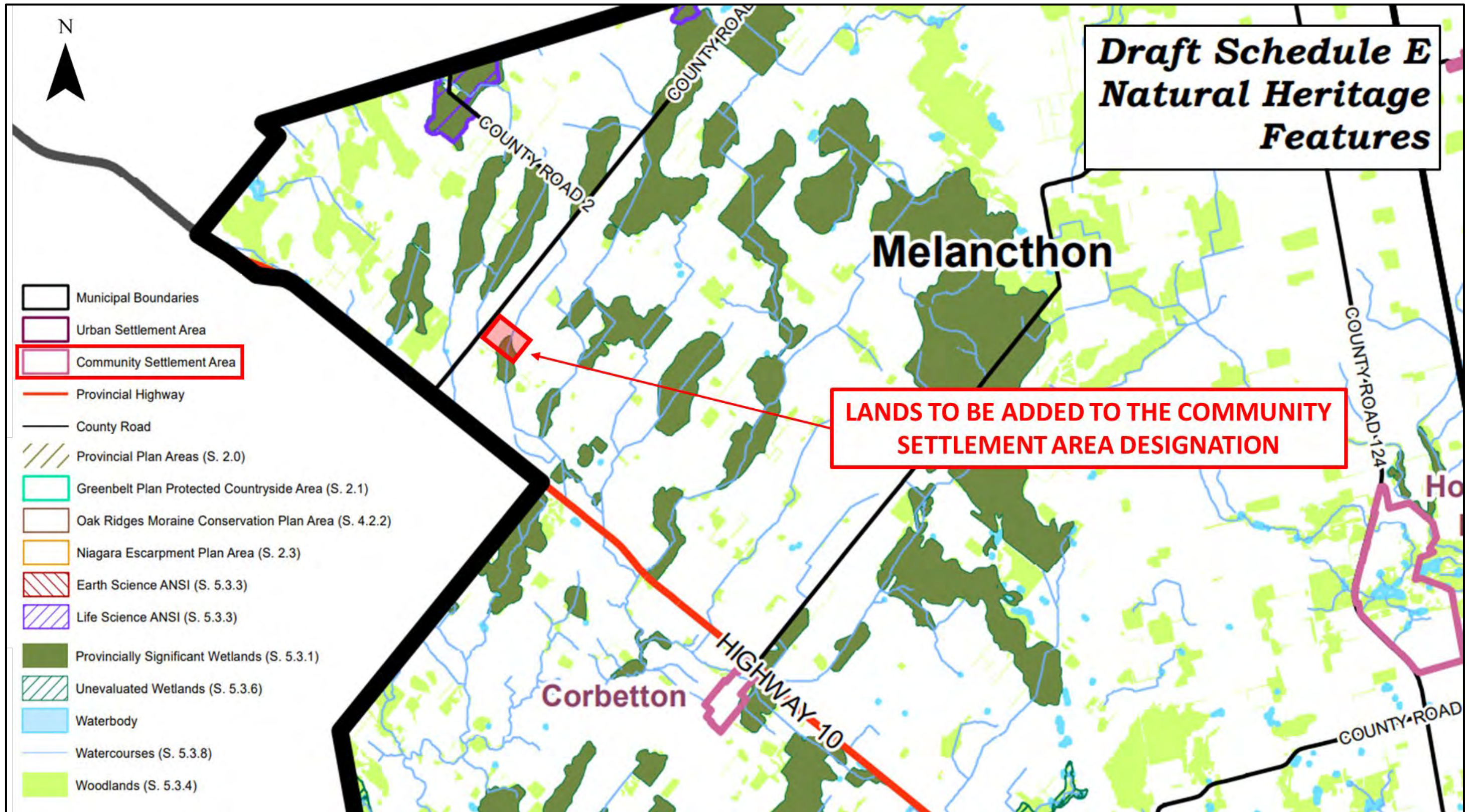
Appendix D – Draft Schedule C of OPA 3

Proposed Changes to Draft Schedule C – Prime Agricultural Areas and Rural Lands of OPA 3



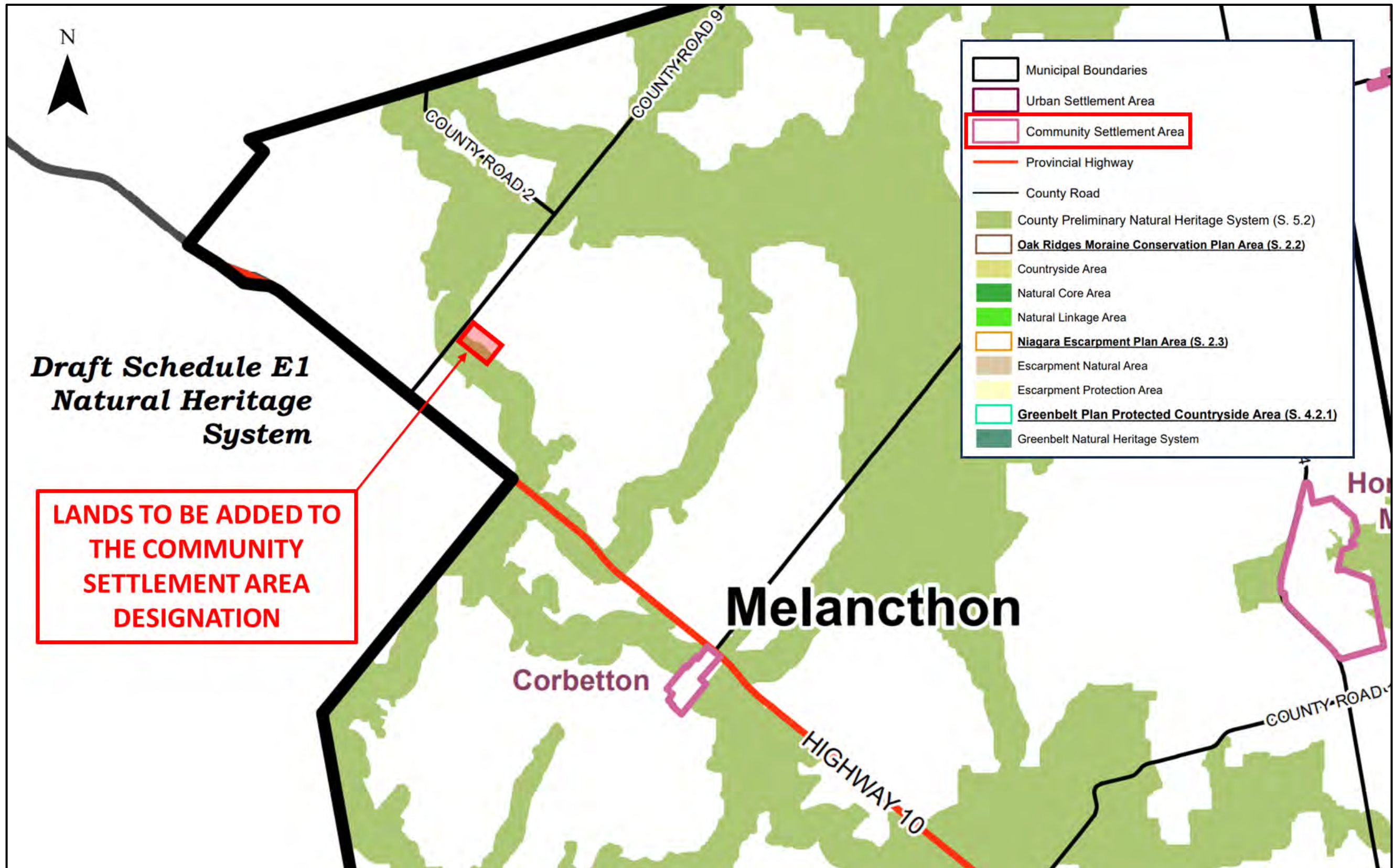
Appendix E – Draft Schedule E of OPA 3

Proposed Changes to Draft Schedule E – Natural Heritage Features of OPA 3



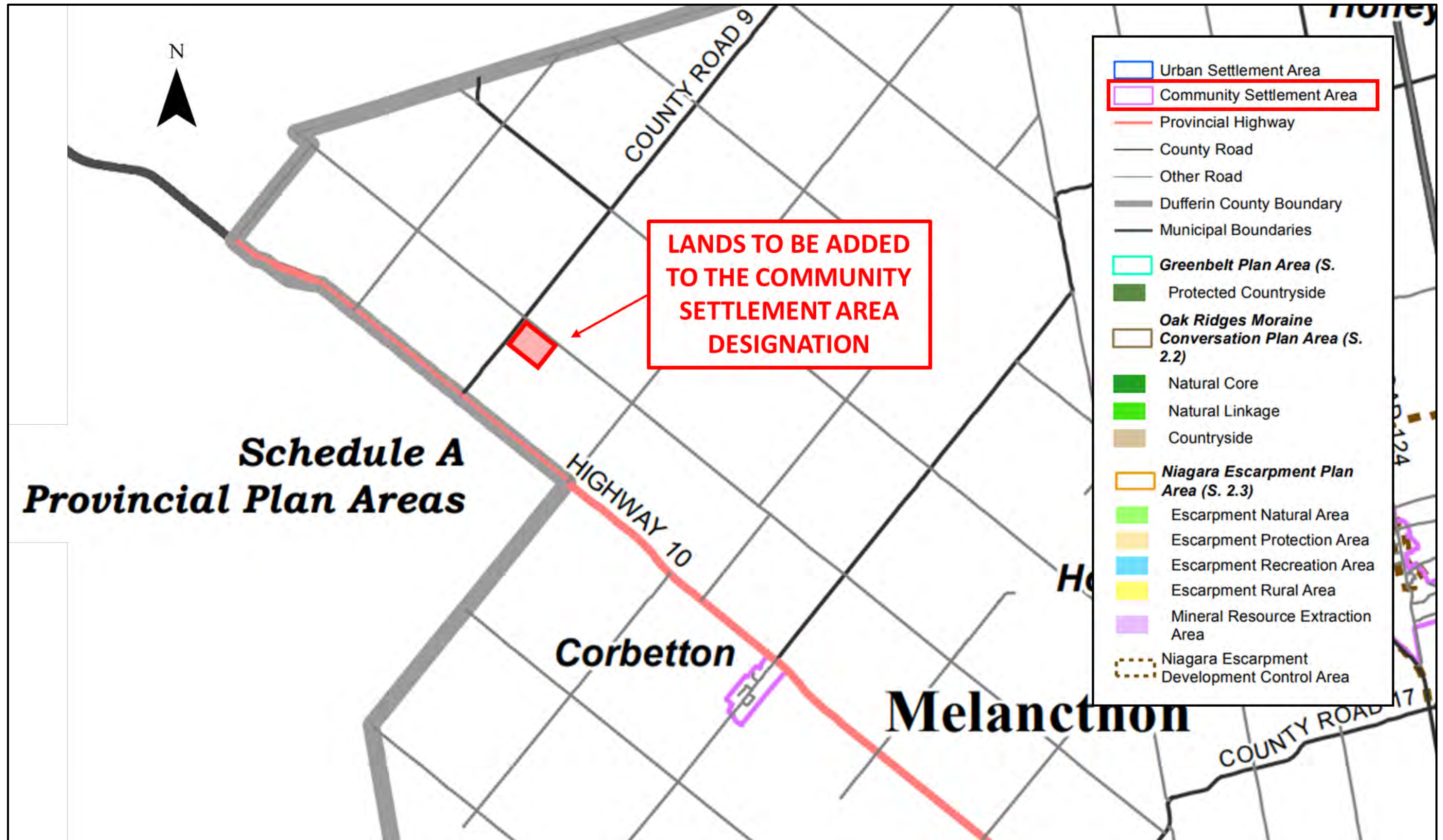
Appendix F – Draft Schedule E1 of OPA 3

Proposed Changes to Draft Schedule E1 – Natural Heritage System of OPA 3



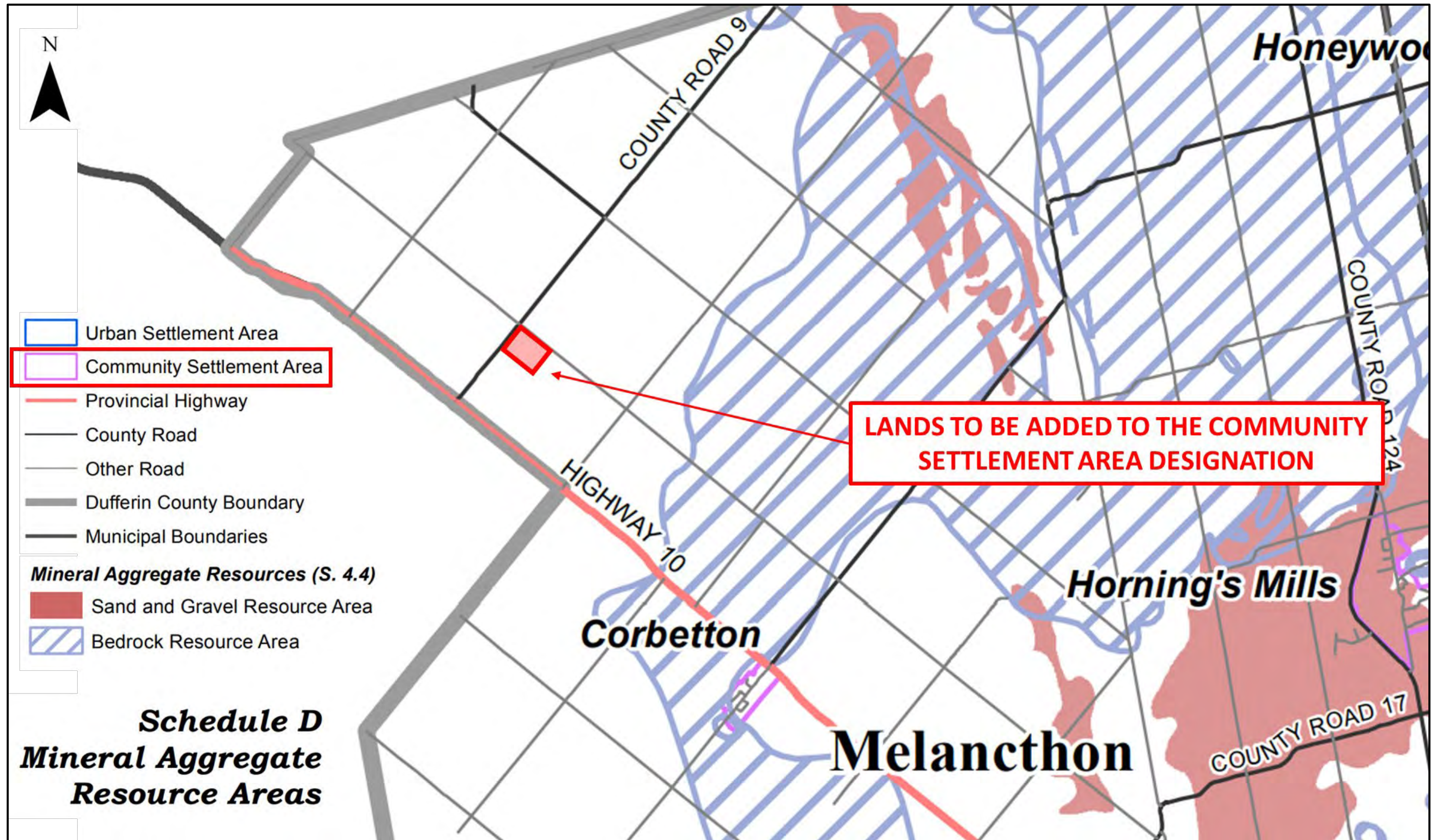
Appendix G – Schedule A of the Dufferin County Official Plan

Proposed Changes to Schedule A – Provincial Plan Areas of the Dufferin County Official Plan



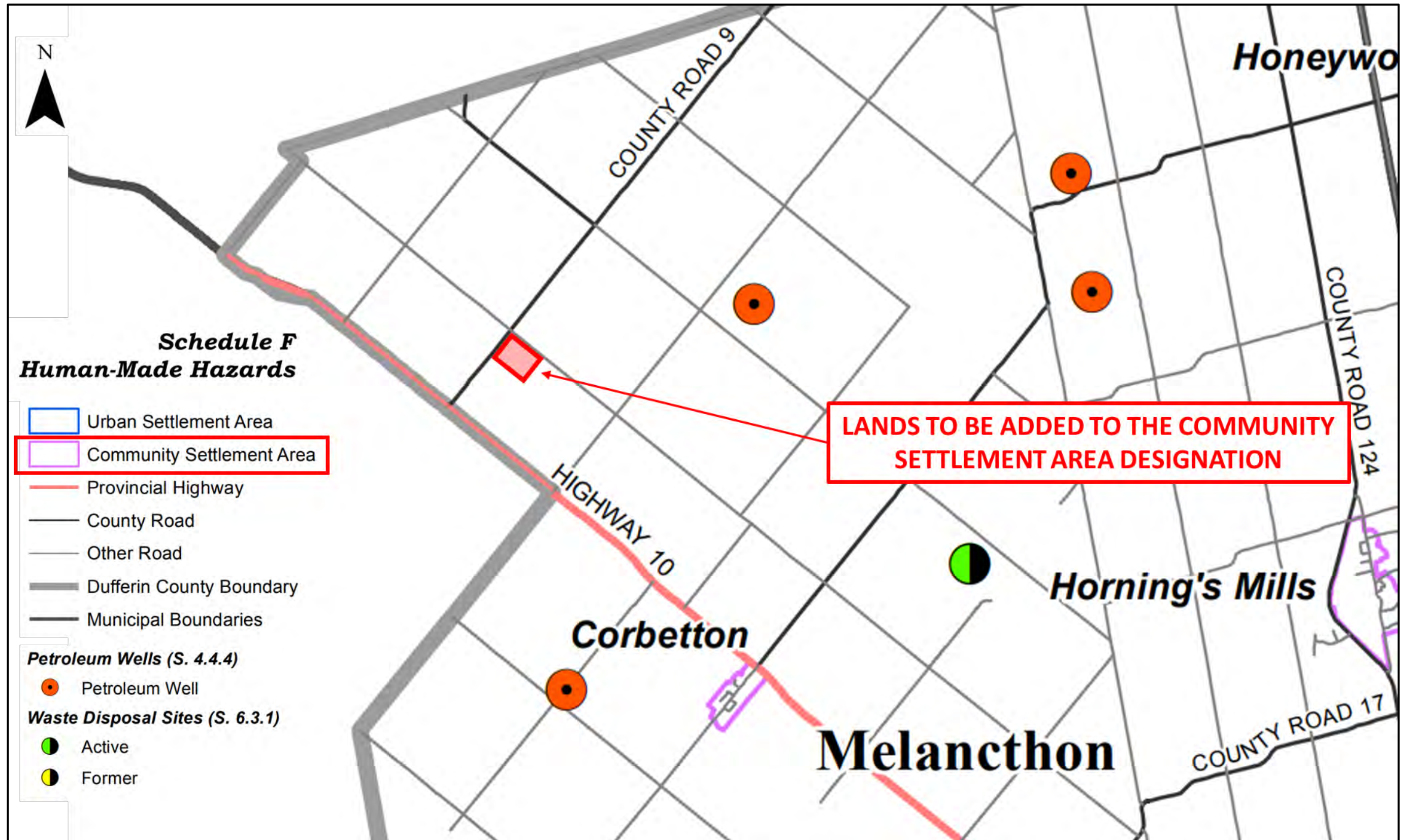
Appendix H – Schedule D of the Dufferin County Official Plan

Proposed Changes to Schedule D – Mineral Aggregate Resource Areas of the Dufferin County Official
Plan



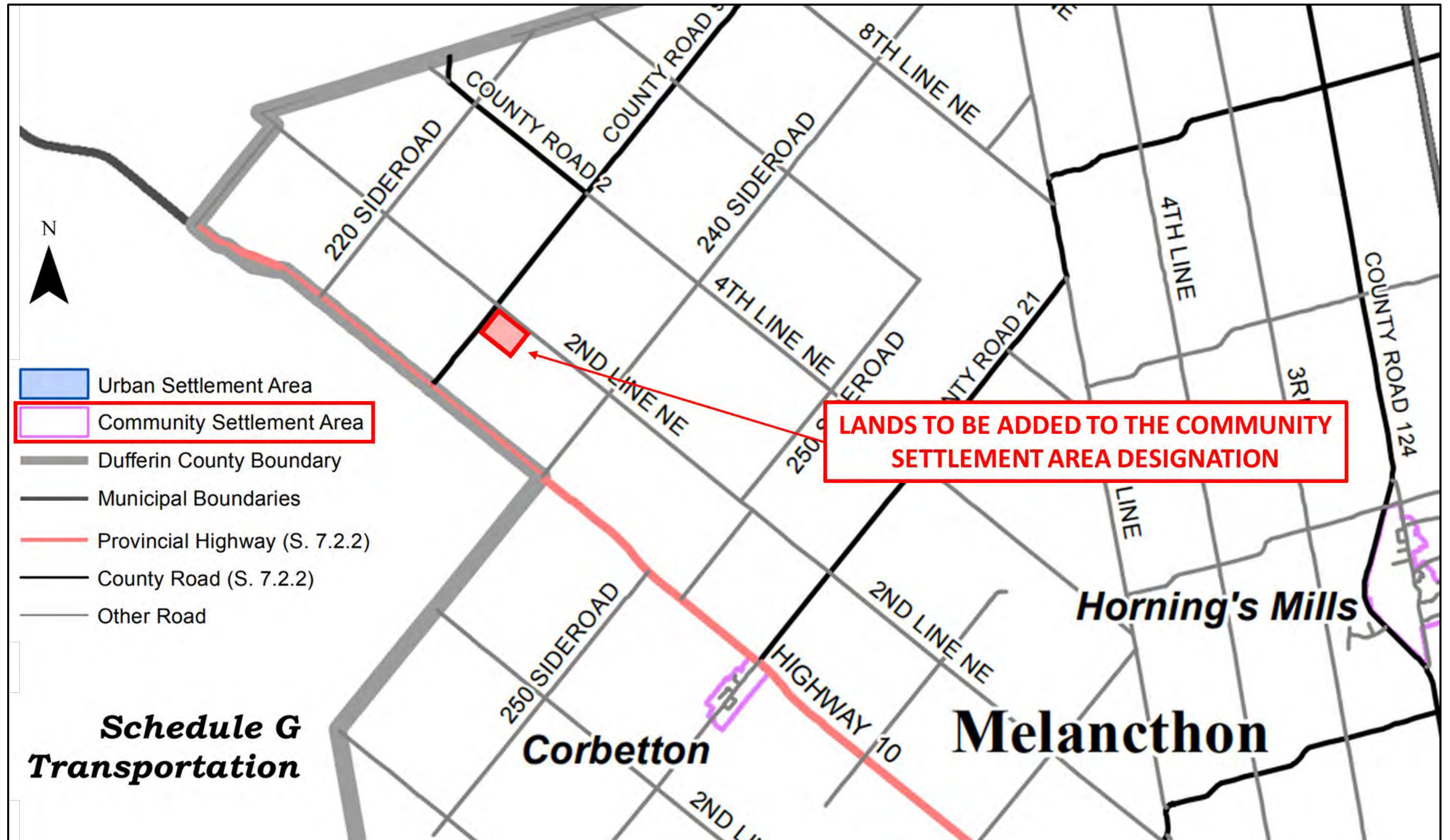
Appendix I – Schedule F of the Dufferin County Official Plan

Proposed Changes to Schedule F – Human Made Hazards of the Dufferin County Official Plan



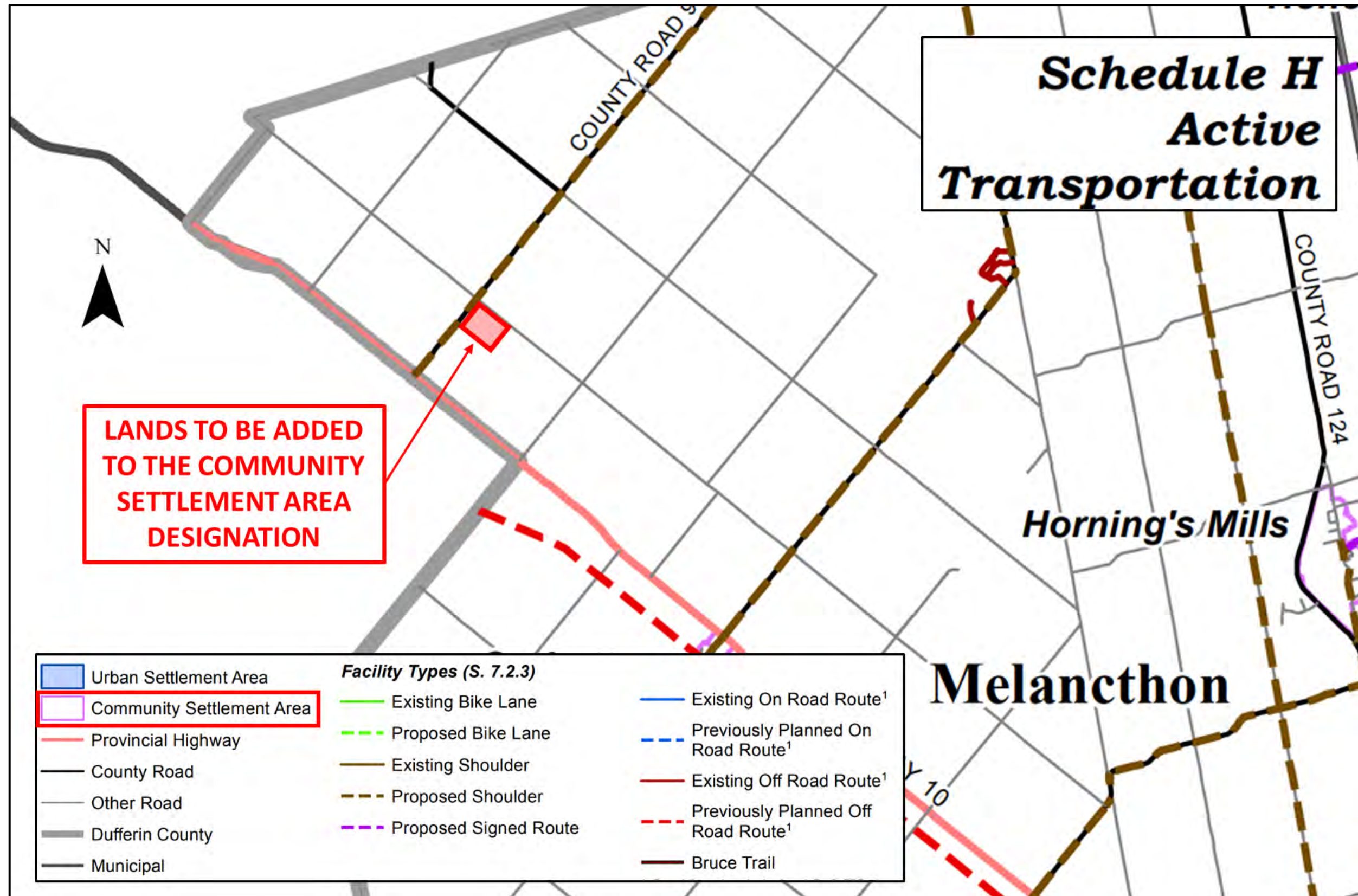
Appendix J – Schedule G of the Dufferin County Official Plan

Proposed Changes to Schedule G –Transportation of the Dufferin County Official Plan



Appendix K – Schedule H of the Dufferin County Official Plan

Proposed Changes to Schedule H – Active Transportation of the Dufferin County Official Plan



Appendix L – Appendix 3 of the Dufferin County Official Plan

Proposed Changes to Appendix 3 – Potential Forest Hazard Classification for Wildfire of the Dufferin
County Official Plan

