

# ***Agricultural Impact Assessment***

Fallis Line Residential Development

787 and 811 Fallis Line, Millbrook  
Part of Lot 11, Concession 5 former Twp. Of Cavan

Prepared by:

CLARK CONSULTING SERVICES LTD.

Offices: Kingston and Port Hope, ON

[www.clarkcs.com](http://www.clarkcs.com)

March 2021

Updated May 2021

Revised October 12, 2021





## Agricultural Impact Assessment 787 and 811 Fallis Line, Millbrook

Location: Part Lot 11, Concession 5, Geographic Township of Cavan  
Township of Cavan Monaghan, County of Peterborough  
Assessment Roll: 1509 010 020 21200 & 1509 010 020 21400  
CCS Project: No. 4700  
Date: March 30, 2021  
Updated: May 19, 2021  
Revised: October 12, 2021  
Prepared for: The Biglieri Group Ltd.  
Prepared by: Clark Consulting Services

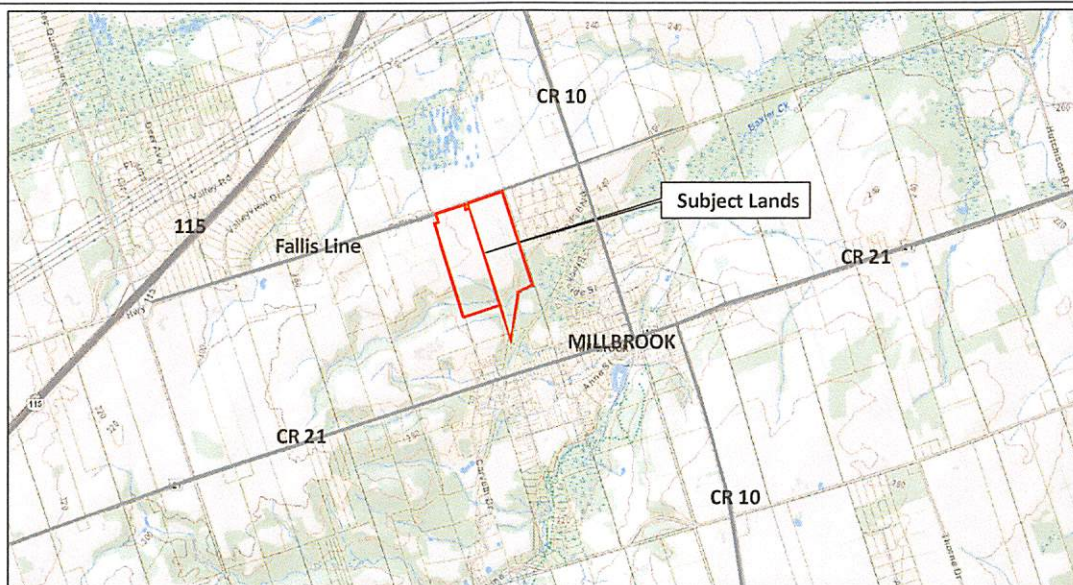
### 1. INTRODUCTION

Clark Consulting Services (CCS) was retained by CSU Development Inc., who are proposing a change in use for the subject lands, involving an extension to the existing urban area with a residential and commercial development for the subject lands.

The site of the proposed development is located west of County Road 10 on the south side of Fallis Line north of the village of Millbrook (*Figure 1-Location Map*).

The site is approximately 49.21 ha with approximately 528 m of frontage on Fallis Line. The proposed use is residential development as on the Draft Plan of Subdivision shown as *Figure 2-Draft Plan of Subdivision*. An AIA is required as the proposal converts lands currently being used for agricultural use to a non-agricultural use. These lands are in an area that is being considered for Urban development but is currently designated in a Prime Agricultural designation in both the County of Peterborough and the Township of Cavan Monaghan Official Plans. The AIA will assess the impact of this conversion on the adjoining agricultural uses and suggest methods of minimizing any impacts of this change in use.





**Figure 1 – Location Map**

This Agricultural Impact Assessment (AIA) follows the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) Draft Agricultural Impact Assessment (AIA) Guidance Document, March 2018.

In the preparation of this AIA, CCS has completed a review of the following documents:

- the OMAFRA Draft AIA Guidance Document (March 2018)
- the Soils Report for the County of Peterborough
- the preliminary engineering plans for the proposed development
- the Provincial Policy Statement (2020)
- the Growth Plan for the Greater Golden Horseshoe (August 28, 2020)
- the Official Plans of the County of Peterborough and the Township of Cavan Monaghan
- the Zoning By-law of the Township of Cavan Monaghan
- the soils capability mapping and aerial photos from the OMAFRA Agricultural Information Atlas, and
- the Agricultural System Mapping for the Greater Golden Horseshoe.

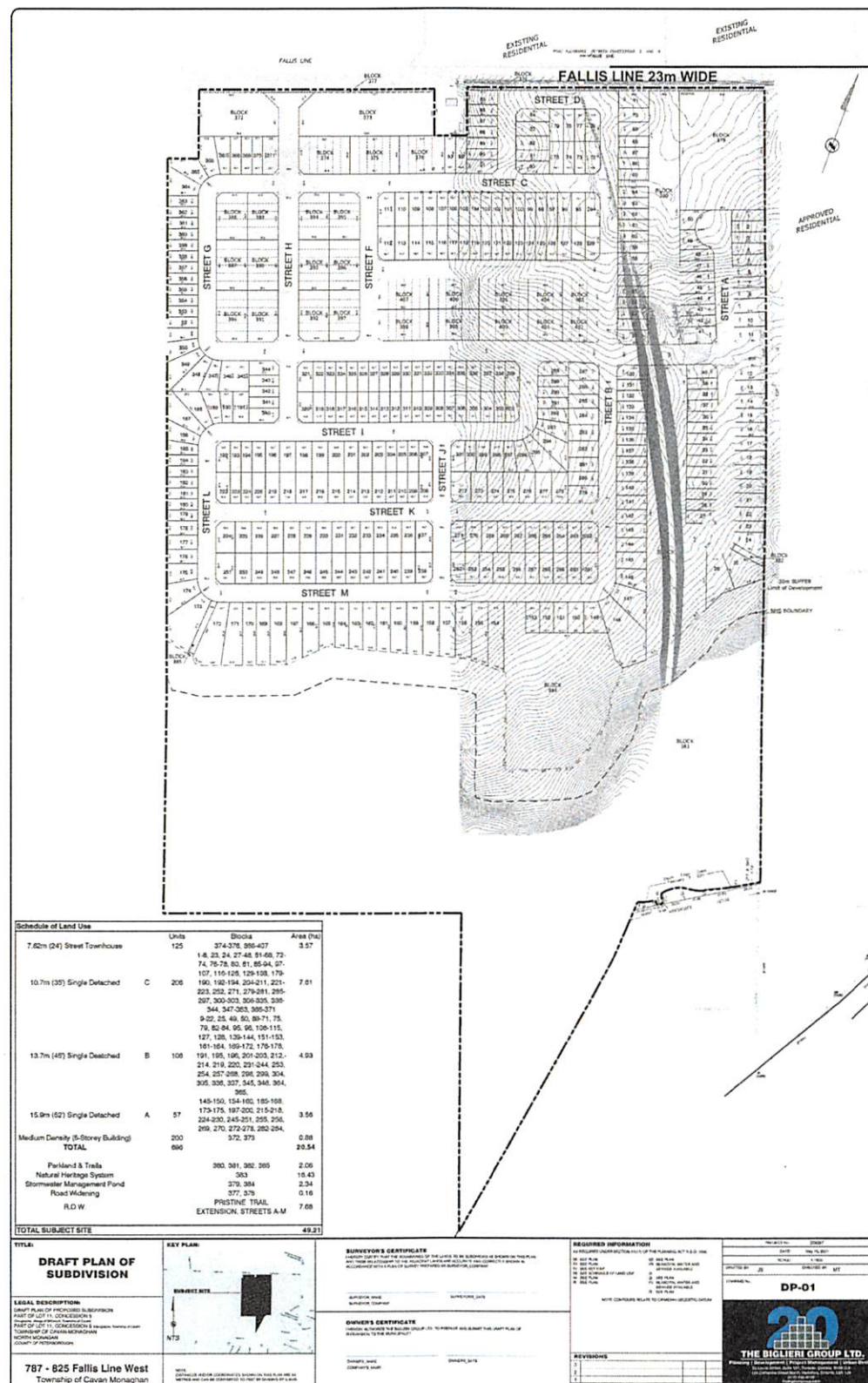
A site visit of the area, including a windshield survey of land use within 1,500 m of the subject property and existing livestock facilities within that area, was made on February 20, 2021. Individual farm owners were not contacted as the MDS setbacks as calculated did not extend close to the proposed development. This AIA report was subsequently completed.

## **2. PROPOSAL**

The proposed development would see a residential subdivision located on the site as illustrated in *Figure 2-Draft Plan of Subdivision*. It illustrates the proposed development and its relationship to the environmental features located on the subject lands. The site design identifies these features as areas to be protected.







**Figure 2 – Draft Plan of Subdivision**

Our review of agriculture in the area indicated that the northern portion of the site adjacent to Fallis Line is actively cultivated.

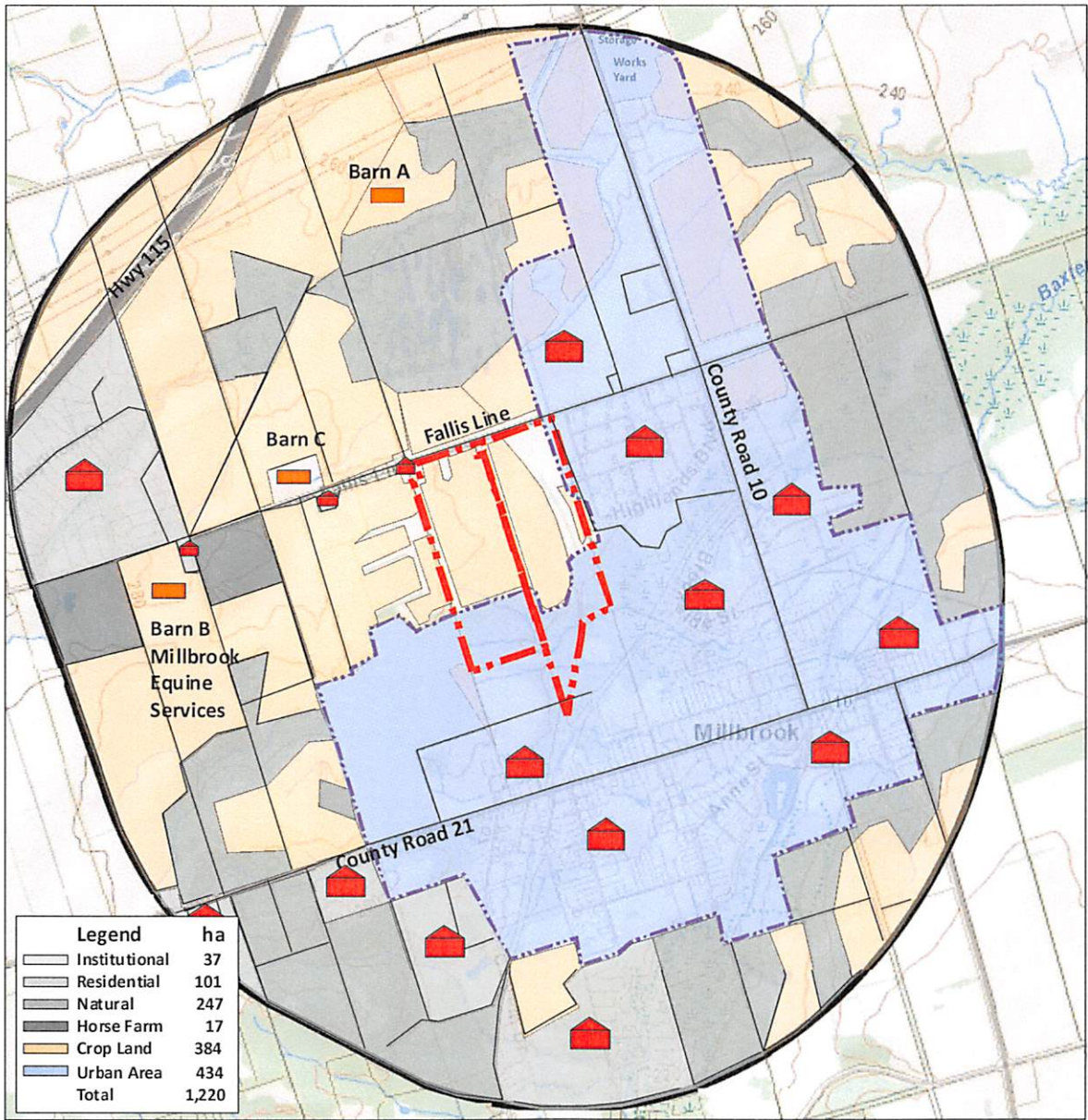


Figure 3 – Land Use Map

The nature of the local land use is illustrated in *Figure 3* based on our site visit and review of available aerial photos. Millbrook and the subject lands are in an area of active agriculture. The beige areas on *Figure 3* represent lands under cultivation. The northern portion of the subject lands are currently used for agriculture. The southern portion of the subject lands abut natural areas within the urban boundary.





The existing Settlement Boundary is illustrated on *Figure 4 - Township of Cavan Monaghan Official Plan*. This boundary does not include the proposed development portion of the subject lands. An extension of the Settlement Boundary will be required.

### **3. PURPOSE OF AN AGRICULTURAL IMPACT ASSESSMENT (AIA)**

An Agricultural Impact Assessment is defined in the Greenbelt and Growth Plan as: "*A study that evaluates the potential impacts of non-agricultural development on agricultural operations and the Agricultural System and recommends ways to avoid or, if avoidance is not possible, minimize and mitigate adverse impacts*".

An Agricultural Impact Assessment:

- Identifies and assesses potential impacts from development on agriculture (including impacts to farmland, farm operations and the surrounding area, within the Greater Golden Horseshoe impacts on the Agricultural System).
- Recommends measures or strategies to avoid impacts (e.g., consider alternative locations where possible).
- Recommends measures to minimize or mitigate impacts (e.g., through design, use of buffers, etc.).
- Addresses site rehabilitation for agriculture, where applicable.

The Draft Agricultural Impact Assessment (AIA) Guidance Document (OMAFRA) provides valuable information in completing an AIA. Section 1.7 of the document recommends that individuals preparing AIAs confirm their qualification to complete the review and that they have no perceived or actual conflicts of interest in association with the AIA.

*Attachment "A"* to this report includes the CV of the reviewer, Bob Clark, his professional qualification, and a statement declaring he has no perceived or actual conflict of interest in the completion of this Peer Review.

### **4. PLANNING POLICY**

The following policy analysis reviews the requirements and provisions relating to the preparation of an Agricultural Impact Assessment, as well as the applicable planning policy which applies to the subject lands.

#### **4.1. PROVINCIAL POLICY STATEMENT (2020) (PPS)**

The Provincial Policy Statement (2020) (PPS) provides for the protection of prime agricultural lands and the designation of Prime Agricultural Areas. Section 2.3.5 allows planning authorities to exclude land from prime agricultural areas for expansions of settlement areas during a comprehensive review conducted in accordance with Section 1.1.3.8. Such a review must demonstrate that (1.1.3.8):



c) in *prime agricultural areas*:

1. the lands do not comprise *specialty crop areas*;  
*The Subject Lands are not Specialty Croplands.*
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*.  
*The Subject Lands are an isolated area of Prime Agricultural designated lands that are immediately adjacent to the Settlement Area.*

d) the new or expanding *settlement area* is in compliance with the *minimum distance separation formulae*; and  
*The MDS Review did not identify any conflicts with existing livestock facilities.*

e) impacts from new or expanding *settlement areas* on agricultural operations which are adjacent or close to the *settlement area* are mitigated to the extent feasible.

This report concludes that the conversion of these lands to Urban Development, although it will remove lands from agricultural production, will not impact agricultural production on adjacent agricultural lands.

The County of Peterborough is currently reviewing the Prime Agricultural Areas. The Subject Lands will be included in this review for an expansion of the Millbrook Settlement Area.

#### **4.2. GROWTH PLAN FOR THE GREATER GOLDEN HORSESHOE (2020) (GPGGH)**

The entire County of Peterborough is within the GPGGH and land use within the County is subject to policies contained within this document.

Section 4.2.6 provides policies for an Agricultural System. The Agricultural System has two components: an agricultural land base and an agri-food network which includes infrastructure, services, and assets important to the viability of the agri-food sector. Although a portion of the subject lands is used agriculturally, the lands are cropped. No other agriculturally related use was identified.

It is our opinion that the subject lands comply with the GPGGH with respect to the applicable agricultural policies as part of the agricultural land base. An Urban Boundary Extension will be required for the proposed development.

#### **4.3. COUNTY OF PETERBOROUGH OFFICIAL PLAN (COP)**

The County OP provides for conformity with the local municipal official plan land designations. In this case, the Township of Cavan Monaghan Official Plan is reviewed in Section 4.5 below and discusses the designations within the subject lands.





#### 4.4. TOWNSHIP OF CAVAN MONAGHAN OFFICIAL PLAN

The Official Plan of the Township of Cavan Monaghan includes a detailed plan of the Millbrook Urban Area as Schedule A-1. An excerpt from this Schedule is reproduced as Figure 4. The Subject Lands have been outlined in red. The Schedule outlines the Millbrook Settlement Area with a purple line which includes a portion of the Subject Lands but excludes the north-west portion. The Urban Settlement Area extends north-east of the Subject Lands.

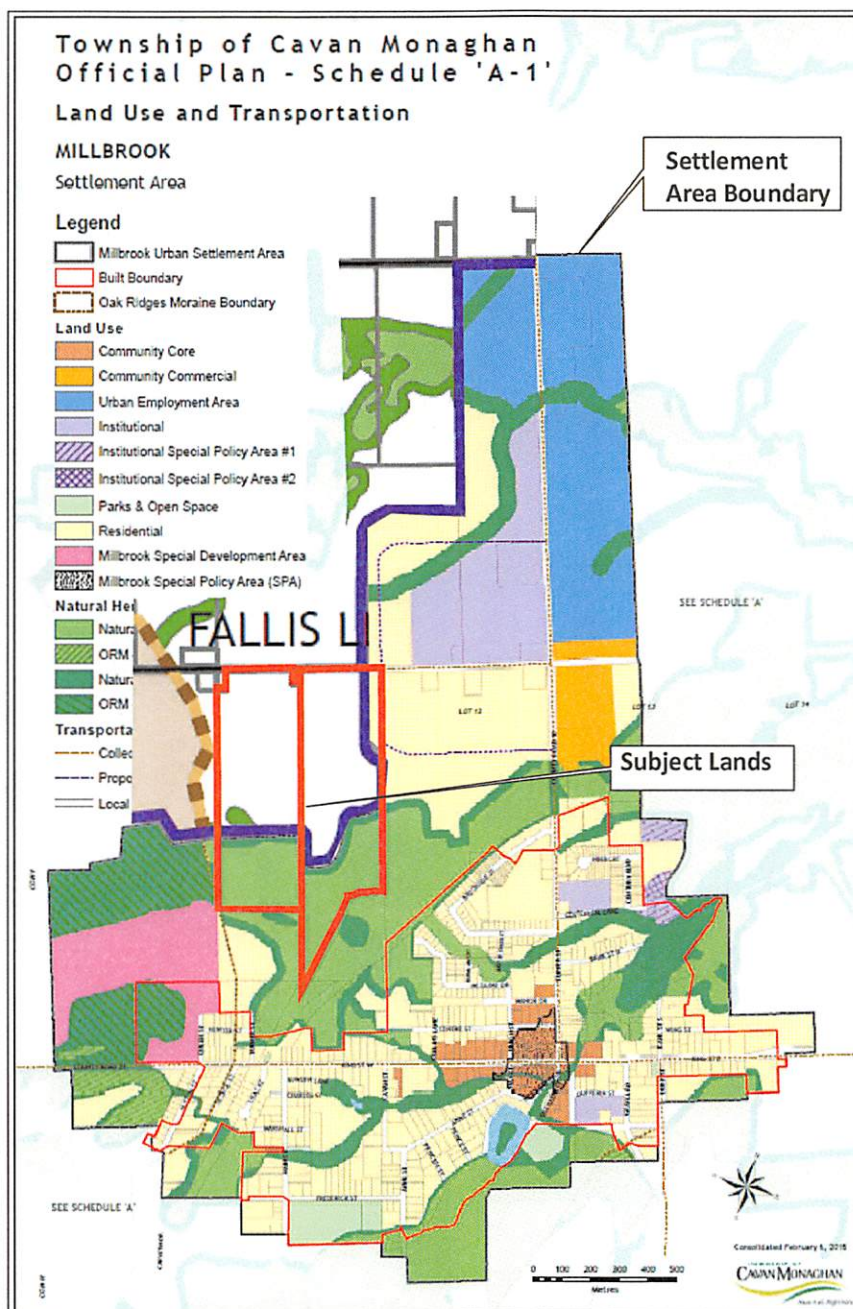


Figure 4 – Township of Cavan Monaghan Official Plan





#### 4.5. TOWNSHIP OF CAVAN MONAGHAN ZONING BY-LAW

The Township of Cavan Monaghan Zoning By-law No 2018-58 zones the subject lands as Future Development (FD), Natural Linkage (NL), Natural Core (NC) and Agricultural (A) as illustrated on Figure 5. These zones closely follow the designations on the Official Plan.

A portion of the Subject Lands are currently being actively used for agricultural uses and are zoned in a Future Development (FD) and Agricultural (A) zone. Thus, not only the Official Plan but the Zoning By-law anticipates the conversion of some of the developable lands on the Subject Lands to be non-agricultural uses.

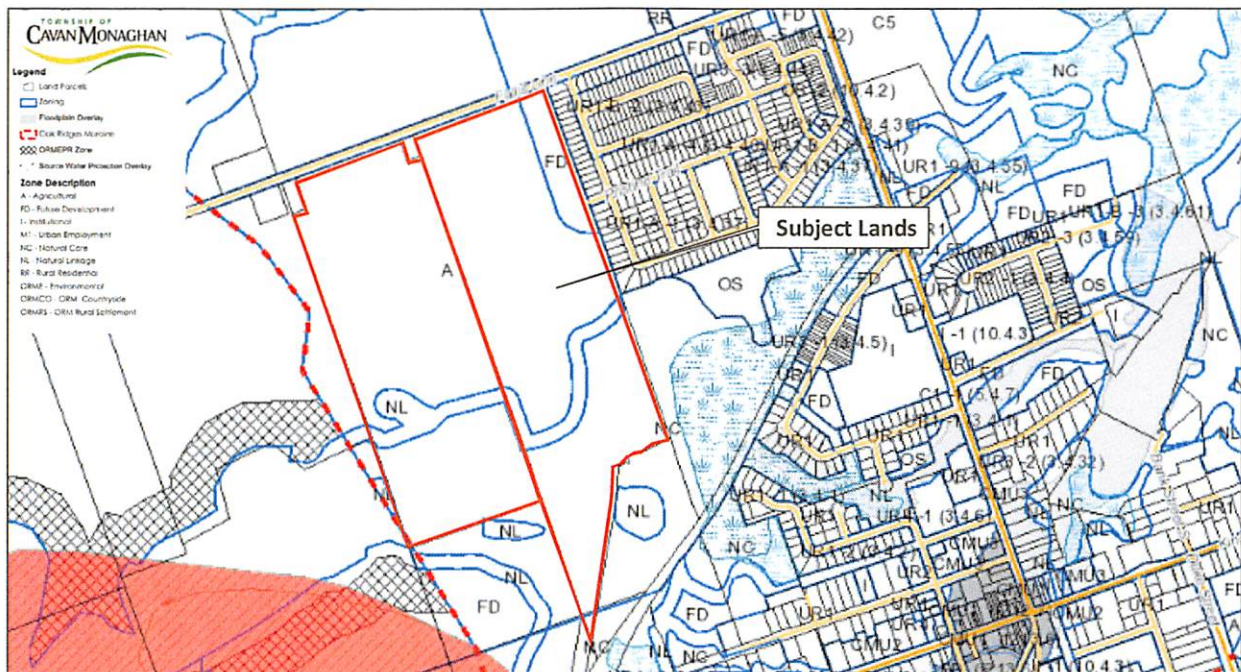


Figure 5 – Township of Cavan Monaghan Zoning By-law

#### 5. AIA STUDY COMPONENTS

##### 5.1. PROCESS

This study is based upon several site visits, the review of the land use in the area and a review of planning documents, and a telephone consultation with Municipal Planning Staff to provide up-to-date knowledge of local matters that should be addressed in the AIA.

##### 5.2. Study Areas

The primary study area comprises the entire subject lands (i.e., the lands where the development is proposed). A Draft Plan of Subdivision has been provided (Figure 2). This allows the direct impacts to be assessed. The development area has been defined and the portions of the site to be protected as Environmental Areas have been identified.



The secondary study area includes lands that could potentially be impacted by the development. An area 1.5 km from the subject lands has been identified as outlined in *Figure 3* and forms the basis for the review of land use and potential impacts. The rationale for the 1.5 km as the investigation distance is tied to the size of MDS I setbacks. Generally, MDS I setbacks deal sufficiently with odour issues and therefore can be a good basis for investigating other impacts such as noise, traffic and hydrological changes. Furthermore, a 1.5 km radius will provide an appropriate area to assess community and economic impacts to the Agricultural System.

### 5.3. Land Use

Based on our site visit, a land use map (*Figure 3*) has been prepared.

The subject lands (Fallis Line) are approximately 49 ha. These lands include cultivated fields in the developable areas. The remainder of the subject lands are natural areas with some thinly wooded areas.

The bulk of the soils on the subject lands, including the open tilled lands, are described as Otonabee loam in the Soil Survey Report No 45 for Peterborough County prepared in 1981.

The Soil Report describes the Otonabee soils as being developed on glacial till comprised of calcareous loam and sandy loam and has been developed on drumlinized landform. This landform consists of elevated areas which slope down to low wet areas. On those flat areas, the soils are good soils for the production of hay and grain crops. However, the report advises that good management practices are imperative as loss of topsoil through erosion is a real concern on soils with thin top soils and moderate to steep slopes.

The report describes the farming activity as predominantly livestock oriented with beef cattle as the major livestock type.

The Canada Land Inventory classifies the bulk of the lands as 60% Class 1 and 40% Class 4 due to topographic limitations (*Figure 6*). This capability classification corresponds to the Otonabee loam soils. The steeper soils have a capability classification of Class 5 and the low-lying wet soils are classified as Muck.

*Figure 3* presents the land use information as determined through the windshield survey and aerial review. The traditional 100-acre farmstead is evident with regular farmsteads. The associated Barns are identified with a series of letters, i.e. Barn A.

The bulk of the non-farm uses are located within the Urban Settlement Area and the development area to the north-west. The Urban Settlement Area represents approximately 35.6% of the total area outlined on *Figure 3*. Tilled areas represent and 48.9% of the area outside the Urban Settlement Boundary. Natural areas include wooded and low-lying lands form a significant portion of the Rural portion. There is another residential area to the west of the subject lands. Otherwise, there are few non-farm uses in the immediate area around the subject lands.





The level of tile drainage is limited according to the OMAFRA Agricultural Tile Drainage mapping.

Our review of the farming operations through our windshield survey and our knowledge of the area suggests that farmlands in the large study area are focused on livestock production with croplands focused on providing feed for these livestock and cash cropping, which is dominating agriculture in other portions of the rural agricultural areas.

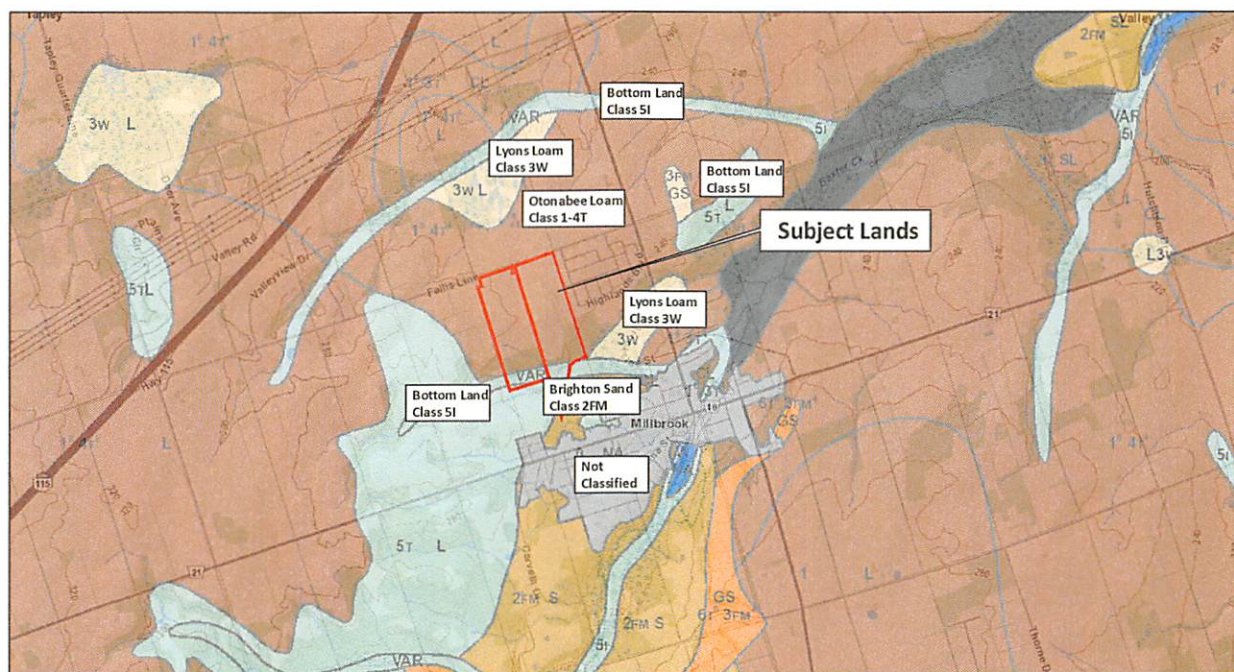


Figure 6 – Soils Mapping

#### 5.4. Minimum Distance Separation

The introduction of non-farm uses into a Prime Agricultural Area requires consideration of compatibility with existing farming activities. One of the most controversial is the proximity to livestock facilities, which can cause concerns with adjacent land uses principally due to odour. The Ministry of Agricultural Food and Rural Affairs have established a process for determining appropriate separation distances for new non-farm uses in relation to existing livestock operations. This process is referred to as an MDS I Calculation and requires the determination of the type and size of the livestock operation and the calculation generates a recommended separation distance. This process is described in the Ministry's Publication 853. The calculation can be prepared manually or with the use of the Ministry's calculator located in the AgriSuite program.

Publication 853 contains several guidelines to assist in addressing the unique situations that do not lend themselves to calculation. Based on our review of the livestock facilities adjacent to the subject site and the presence of a number of non-farm uses, Guideline 12 has been applied. This Guideline permits a reduced MDS I setback provided there are four or more non-agricultural uses, residential use and/or dwellings closer to the subject livestock facility than the proposed development and those four or more non-agricultural uses, residential uses and/or dwellings are:



- Located within the intervening area and a 120-degree field of view between the closest part of the proposed development or dwelling and the nearest livestock facility;
- Located on separate lots; and
- Of the same or greater sensitivity as the proposed development.

If all the above conditions are met, the MDS I setback for the proposed development or dwelling may be reduced such that it is located no closer to the livestock facility than the furthest of the four non-agricultural uses, residential uses and/or dwellings.

Guideline 12 has been applied to barns on County Road 21 on the west side of Millbrook. These barns are outside the Urban Boundary of Millbrook and are 1,000 m and more distant from the proposed developable areas. No MDS calculations have been made for these barns.

Barns A, B, and C are shown on the map. These are north-west of the subject lands. The separation distance from each of these barns is less than the actual distance. The development applications are not expected to impact these barns.

MDS I calculations have been prepared for these barns and these setbacks are shown graphically, relative to the subject lands, on *Figure 7 – MDS Sketch*. The calculation sheet is attached as *Attachment C*. The calculations use an estimate of the barn capacities. This capacity has been confirmed by inspection. The estimates are generally high, since CCS Staff did not make visits to the farms during Covid restrictions. The resulting setbacks from the barns are well short of the actual distances to the subject lands, therefore the applications meet the requirements of MDS.





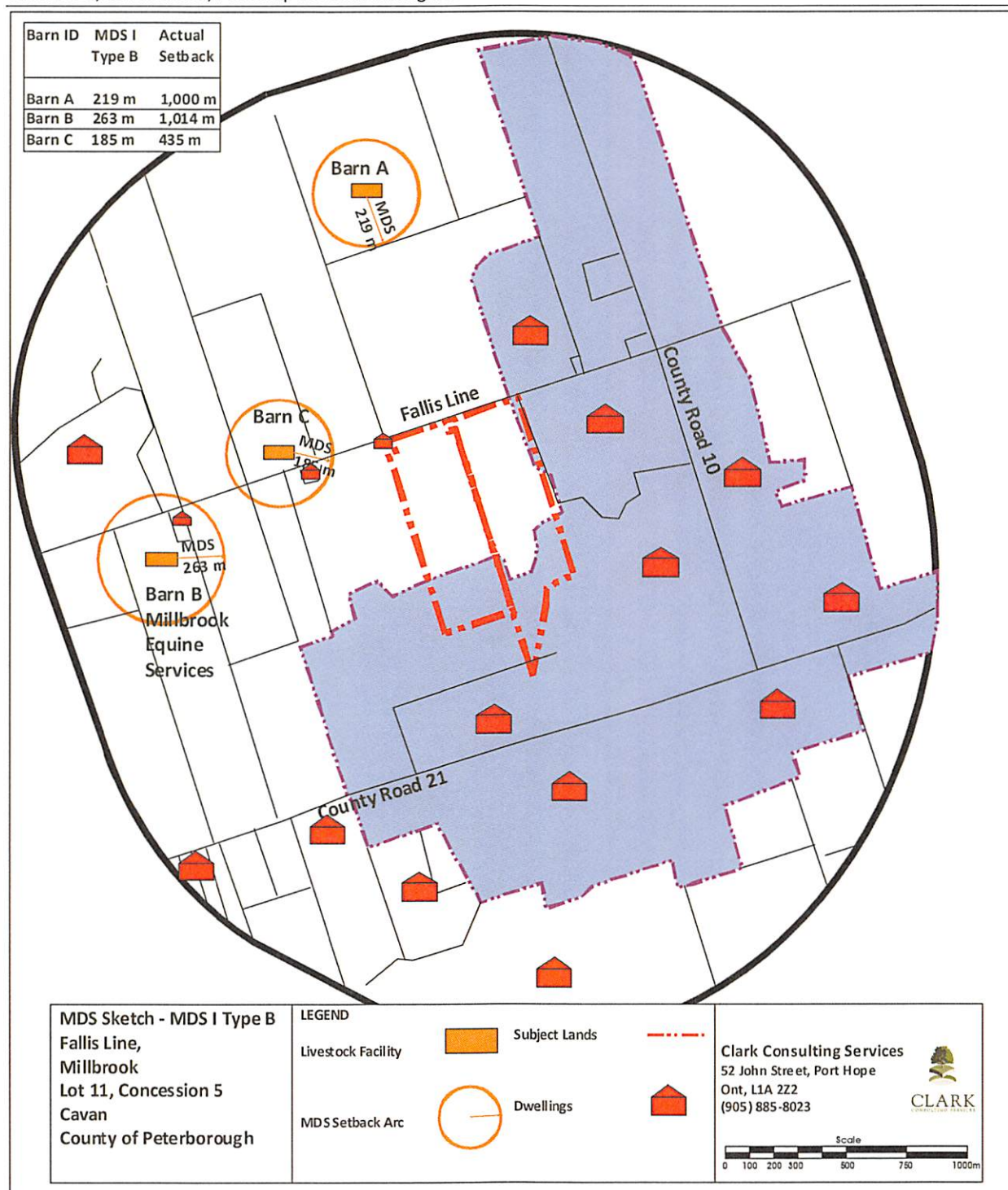


Figure 7 – MDS Sketch



## **5.5. Farm and Crop Type**

The comparison of 2016 and 2011 Census of Agriculture for the Township of Cavan North Monaghan confirms that the trend in number of farms declined with an increase in larger size farm operations. One of the largest declines was in the number of grain farms corresponding to the increase in size of the remaining farms.

## **5.6. Economic and Community Benefits of Agriculture**

Agriculture forms an important component of the local economy, the trends which are evident both in the municipal-wide agricultural statistics and in particular in the agricultural uses in the immediate area confirm that agriculture has remained focused on livestock production. The absence of non-farm agricultural uses has allowed local agricultural community to maintain and expend individual farm production. Recent trends show a modest reduction in the number of livestock operations with a focus on beef cattle production. The Provincial Policy Statement recommends the protection of Prime Agricultural land, the subject lands have few competing land uses. The development proposed is immediately adjacent to the area designated as part of the Millbrook Urban Settlement Area. The area proposed for development is isolated from other active agricultural areas by the surrounding urban area to the east and the natural area to the south. The loss of productive capability will be minor when compared to the crop area in the remainder of the Review Area and the larger Municipality.

## **5.7. Assessment of Impacts**

In considering the potential impacts of the conversion of the subject lands to a non-farm use, the most obvious impact will be the restriction on adjacent agricultural land uses. This impact is viewed as minor. There is potential for impact to the immediately adjacent area to the west which will continue as cultivated cropland. Potential impacts from cropping operations such as application of fertilizer, pesticides and herbicides will need to be monitored. Tillage and harvesting activities may generate issues from noise and there is also the potential for trespass and damage to crops from adjacent urban uses. This is not unlike the existing situation for the existing Urban Boundary.

The establishment of buffers in the form of fencing and vegetation are recommended to provide an obvious boundary and to mitigate the impacts outlined above.

## **5.8. Study Conclusions and Recommendations**

In conclusion, the conversion of the subject lands to residential land uses will have a minimal impact due to the location of Natural Heritage Features and the current use of the abutting agricultural lands. The presence of existing non-farm uses in the immediate area of the subject lands have already initiated a transition in land use to the urban area. The conversion of the subject lands to urban uses will require an amendment to the Urban Settlement Boundary. This will require consideration of the Planning Justification. Based on the above review, it is our conclusion that the conversion of the subject lands to urban uses will have limited impact on the adjacent agricultural lands. These impacts include the loss of agricultural productive croplands due to the proposed





conversion of the subject lands to urban uses and the impact on adjacent agricultural uses to the west. Due to the lack of intensive agricultural uses and livestock facilities on these adjacent lands, the impact will be limited and can be mitigated through the design to include buffers and orientation of the urban land uses.

Clark Consulting Services (CCS) respectfully submits this Agricultural Impact Assessment. It has been prepared in accordance with the requirements of the OMAFRA Draft AIA Guidelines and has been prepared by a 'Qualified Person', Robert K. Clark, with appropriate qualifications and experience in the Province of Ontario. Mr. Clark has no perceived or actual conflicts of interest in preparing this AIA. Mr. Clark maintains membership in good standing with the Ontario Institute of Agrologists (P.Ag.). Mr. Clark is available for further comment where appropriate.

Sincerely,



Bob Clark, *P.Eng., P.Ag., MCIP, RPP, OLE*  
Principal Planner

Figures:

- Figure 1 - Location Map
- Figure 2 - Draft Plan of Subdivision
- Figure 3 - Land Use Map
- Figure 4 – Township of Cavan Monaghan Official Plan
- Figure 5 – Township of Cavan Monaghan Zoning By-law
- Figure 6 – Soils Mapping
- Figure 7 – MDS Sketch

Attachments:

- A – CV of Robert K Clark
- B – List of References
- C – MDS Calculations

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**ATTACHMENT A**  
**Curriculum Vitae - Robert K. (Bob) Clark**







#### Education

1972  
Master of Science,  
Resource Development and  
Resource Economics,  
University of Guelph

1970  
Bachelor of Science (Eng.)  
Water Resources Engineering,  
University of Guelph

#### CONTACT



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## ROBERT K. CLARK

Bob's career in the field of planning spans 46 years. He approaches each project with creativity and a strong intent to meet and exceed the client's expectations. The Planning Field is changing rapidly to address the changing needs of our communities. While financial viability remains an important consideration in all projects, increasingly, sustainability, impact on the environment, the health of the community and the individual are key aspects of successful projects. Clark Consulting Services was created to give Bob the freedom to take on projects that he found interesting and challenging as well as work in an atmosphere guided by the principles of honesty and integrity.

#### Professional Qualifications and Associations

Canadian Institute of Planners (MCIP)  
Ontario Professional Planning Institute (RPP)  
Ontario Institute of Agrologists (P.Ag.)  
Professional Engineers of Ontario (P.Eng.)  
Association of Ontario Land Economists

#### Professional Background

1994-Present – Clark Consulting Services  
Principal Planner, President

#### Expert Testimony

Qualified by the OMB to give expert testimony in the fields of:

- Land Use Planning
- Agricultural Land Evaluation
- Municipal Finance
- Land Economics
- Environmental Impact Assessment

## CURRICULUM VITAE

## Selected Experience

### ***Agricultural Land Assessments/Analysis (Project Manager and Senior Professional Agrologist/Pedologist on all projects)***

- Agricultural Lands Review, United Counties of Stormont, Dundas and Glengarry
- City of Kingston - Agricultural Study
- Stormont Dundas and Glengarry: Review of Prime Agricultural Area for Official Plan Update
- Capital Region Resource Recovery Centre, Agricultural Land Assessment (as part of Environmental Assessment) Russell and Boundary Road Sites
- Vale Agricultural Land Assessment Prince Edward County
- Dafoe Agricultural Assessment, City of Quinte West
- Desjardine, Agricultural Assessment, Township of Elizabethtown Kitley
- Sills Agricultural Assessment, City of Quinte West
- Lafleche Agricultural Assessment, Stormont, Dundas and Glengarry
- McQuillan Land Assessment, Haldimand Township
- Pepper/Hamilton Township
- Espie Agricultural Assessment Beckwith Township
- White Tail Golf Course Agricultural Assessment and Professional Evidence OMB
- Wesleyville Land Assembly, Municipality of Port Hope
- Baulch Road Land Review, Municipality of Port Hope
- Midtown Corridor Hamilton Township Land Evaluation
- Cavan Millbrook North Monaghan OP Prime Agricultural Land Evaluation
- Hamilton Township OP Prime Agricultural Land Evaluation
- Frontenac Islands OP Prime Agricultural Land Evaluation
- Campbellford Seymour Agricultural Land Evaluation
- Sidney Township OP Agricultural Land Evaluation
- South Fredricksburgh OP Agricultural Land Evaluation
- Agricultural Land Use Analysis, Former Township of Hope

### ***Agricultural Impact Assessment***

- Fenelon Falls Baptist Church
- Cation Ag Impact Assessment
- Brown Planning Justification including Agricultural Impact Assessment
- May Agricultural Assessment
- Peer Review of Agricultural Viability for planning applications, City of Oshawa
- White Tail Golf Course, City of Kawartha Lakes
- Snug Harbour, City of Kawartha Lakes
- Murray Hills Subdivision former Murray Township

Contact



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CURRICULUM VITAE



### ***Agricultural Land Assessments for Solar Installations***

-Agricultural Land Capability Assessment for Potential Solar Farm Installations to meet requirements of OPA FIT Program, (over 340 projects to date)

### ***Environmental Assessment***

-Public Works Garage, Class EA, Town of Gananoque,  
-Wilson Island Bridge (Socio-economic Assessment), County of Northumberland,  
Environmental Impact Assessment, private owners including Michael Lash, Eithery/Buttery Lands, Vanden Hoek site; Three Strand Development Group – Communal Sewage System.

### ***Environmental Impact Study/Statement***

Based on experience and training as a water resource engineer and pedologist, Mr. Clark has prepared Environmental Impact Studies/Statements for situations in which the primary issues relate to site grading, drainage and building location. Examples include:

- Lash Cottage addition (minor variance)
- Hog Island EIS (consent application)
- Eberle Farm lot creation ORMCP

### ***Official Plans, Official Plan Updates and Amendments***

Township of Cavan-Millbrook-North Monaghan, Township of Haldimand, Township of Hamilton, Township of Smith, Township of Lochiel, Township of Charlottenburgh, Town of Brighton, Township of Burleigh and Anstruther, Township of Sidney, Township of Frontenac Islands, Township of Hope, Town of Gananoque.

### ***Secondary Plans***

Fraserville Secondary Plan - Township of Cavan- Millbrook-North Monaghan; South Sidney Secondary Plan, Township of Sidney; Alcan District Area Study - City of Kingston; Shasta Secondary Plan - Town of Westminster, Baltimore-Creighton Heights Community Plan, Township of Hamilton, Southwest Industrial Sector Plan, Township of Hamilton, Jackson Creek West Secondary Plan, City of Peterborough.

### ***Growth Strategy Studies***

Township of Hamilton, Township of Manvers, Town of Cobourg/Township of Hamilton, Village of Stirling, Village of Cochrane, Township of Smith.

### ***Development Charges Studies***

Township of Murray, Township of Hamilton, Township of Smith, Township of Manvers, Town of Brighton, Township of Alnwick, Township of Haldimand, Township of Somerville, Township of Woodville, Townships of Anson, Hindon, Minden, Village of Omemee, Township of Galway, Cavendish & Harvey, Township of Fenelon, Township of Verulam, Township of Emily, Township of Eldon, Village of Fenelon Falls, Township of Smith-Ennismore, Township of Cavan-Millbrook-North Monaghan, Village of Bobcaygeon, Township of Brighton, Township of Centre Hastings, Town of Greater Napanee, County of Victoria, Township of Cramahe, Municipality of Campbellford/Seymour, Village

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## **CURRICULUM VITAE**

of Colborne, City of Kawartha Lakes, The Township of Frontenac Islands, The Township of Alnwick/Haldimand, Municipality of Trent Hills, Township of Rideau Lakes, Township of Asphodel Norwood, County of Peterborough, Municipality of Trent Lakes.

#### ***Municipal Financial Impact Assessments***

Sandy Point Recreation Development, Harvey Township, Reference Plan Development, Cavan Township, Township of Manvers, Township of North Monaghan.

#### ***Zoning By-laws/By-law Amendments***

Township of Cavan-Millbrook-North Monaghan; Township of Frontenac Islands; Township of Percy, Township of Alnwick, Town of Campbellford, Town of Brighton, Village of Madoc, Town of Picton

#### ***Aggregate Resource Planning***

Review of Aggregate Potential for Official Plans and Zoning By-laws

Howe Island Gravel Pit – review of proposal; prepare report to Council with planning documents; provide professional opinion evidence at OMB Hearing; Stonescape II Quarry Appeal – review of proposed quarry, preparation of planning review, attendance at OMB Hearing; Codrington Pit Proposal – review of proposed pit, advice to adjacent land owner, monitor approvals

#### ***Official Plans, Official Plan Updates and Amendments***

Township of Cavan-Millbrook-North Monaghan, Township of Haldimand, Township of Hamilton, Township of Smith, Township of Lochiel, Township of Charlottenburgh, Town of Brighton, Township of Burleigh and Anstruther, Township of Sidney, Township of Frontenac Islands, Township of Hope, Town of Gananoque.

#### ***Recent Renewable Energy Projects***

Planning Approvals, Wolfe Island Wind Farm, Township of Frontenac Islands; Gas fired Peaking Plant Location study; Epcor, Skypower; Solar Farm; Algonquin Power. – Wind Farm

#### ***Watershed Plans***

South Sidney Watershed, Lower Trent Region Conservation Authority; Storm Water Management Plan, Town of Delhi; Oshawa Creek Watershed Master Plan, City of Oshawa.

#### ***Waterfront Studies***

Town of Deseronto, Town of Deep River, City of Kingston.

Tourism Development Studies

Ministry of Industry and Tourism, Tourism Development Strategy Trenton Cornwall and Renfrew

- Kingston Zones, County of Northumberland Tourism Planning Study.

Contact



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## CURRICULUM VITAE



### ***Socio-Economic Assessments***

TransCanada Pipelines Transco Project, Brampton to Burlington Gas Pipeline, TransCanada Pipelines, Eldorado Nuclear Hexafluoride Refinery, Hope Township site, Wilson Island Bridge, County of Northumberland, Three Strand-Communal Sewage System EA.

### ***Recreational Studies***

Riverwalk-Minden, Georgian Trail, Township of Collingwood, Recreation Master Plan, Township of Cavan, Beavermead Park Redevelopment Plan, City of Peterborough,; Rail Corridor Study, County of Victoria; Pangman Conservation Area Master Plan, Lake Simcoe Region Tourism Study, ESI - Sir Sandford Fleming College, provided Social-Economic Impact Assessment for the Millennium Trail Master Plan, County of Prince Edward.

### ***Advisory Services including Planning Appraisals***

Township of Cavan-Millbrook-North Monaghan; Township of Frontenac Islands; Township of North Monaghan, Township of Smith, Township of Burleigh and Anstruther, Municipality of Sherbourne McClintock and Livingstone, Township of Stanhope, Township of Lutterworth, Township of Hope, Township of Hamilton, Township of Alnwick, Township of Percy, Township of Seymour, Town of Campbellford, Town of Gananoque, Village of Hastings, Township of Haldimand, Municipality of Trent Hills, County of Prince Edward

### ***Industrial Development Studies***

City Owned Industrial Land Study, City of Kingston; Lucas Point, Town of Cobourg, Township of Charlottenburgh, Town of Brighton, Great Lakes Deep Water Port Industrial Site Development Plan, Township of Hallowell; Draft Plan of Subdivision; Cataraqui Business Park, City of Kingston.

### ***Economic Development Studies***

Accommodation Evaluation, Township of Asphodel-Norwood; South Dundas Economic Development Study, South Dundas Economic Development Commission, Almonte Economic Development Study, Town of Almonte and Township of Ramsay; Best Use Study, Douro-Dummer Township.

### ***Housing Policy Statements***

Town of Cobourg.

### ***Solid Waste Management Studies***

County of Haliburton, Township of Hallowell, County of Northumberland, Seymour Township, National Capital Region, Lanark County, Snow Disposal Study, National Capital Region.

### ***Private Development/Projects***

Assist developers in the design and approval of both residential and industrial/commercial projects. References available upon request.

Contact



T 905-885-8023  
[bob@clarkcs.com](mailto:bob@clarkcs.com)  
[www.clarkcs.com](http://www.clarkcs.com)

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### ***Recent OMB Cases***

OMB Case No. PL090057 Lash  
OMB Case No. PL100622 – Reynolds  
OMB Case No. PL101329 – White Tail  
OMB Case No. PL100904 – Stonescape  
OMB Case No. PL090838 - Sepa  
OMB Case No. PL09841 - Bremer  
OMB Case No. PL100475 - McDonald  
OMB Case No. PL050584 – City of Ottawa  
OMB Case No. PL031324 – City of Ottawa  
OMB Case No. PL080239 – City of Ottawa  
OMB Case No. PL080373 – City of Ottawa  
OMB Case No. PL070728 - Carter  
OMB Case No. PL090147 – Semler  
OMB Case No. PL1000711 – Mound Brighton  
OMB Case No. PL011198 – City of Kingston, Alfred Street  
OMB Case No. PL030524 – City of Kingston  
OMB Case No. PL110520 - City of Niagara Falls  
OMB Case No. PL130785 – Township of McNab/Braeside  
OMB Case No. PL141138 – Evans  
LPAT Case No. PL 150192 – Municipality of Brighton  
LPAT Case No. PL160588 – Municipality of Trent Hills  
OMB Case No. PL170008 – Township of Brock  
OMB Case No. PL170878 – Burl's Creek  
LPAT Case No. PL171446 & PL 180385 – Municipality of Brighton  
LPAT Case No. PL170178 – Municipality of Clarington

Contact



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## **ATTACHMENT B**

### **List of References**

- Guidelines of Permitted Uses in Ontario's Prime Agricultural Areas, 2016, Ontario Ministry of Agriculture Food and Rural Affairs (OMAFRA), Publication 851
- Minimum Distance Separation (MDS) Document Formulae and Guidelines for Livestock Facility and Anaerobic Digester Odour Setbacks, 2016, OMAFRA Publication 853
- Implementation Procedures for the Agricultural System in Ontario's Greater Golden Horseshoe, February 2018, OMAFRA Publication 856
- Agricultural System Mapping Method, January 2018, OMAFRA, Technical Document
- Draft Agricultural Impact Assessment (AIA) Guidance Document, OMAFRA
- County Official Plan, County of Peterborough
- Preliminary Agricultural Impact Assessment
- Official Plan, Township of Cavan Monaghan
- Zoning By-law, Township of Cavan Monaghan
- Planning Justification Report



## **ATTACHMENT C**

### **MDS I Calculations**



# Minimum Distance Separation I

Worksheet 1

Prepared By: Hugh Stewart, Planner, Clark Consulting Services

**Description:** Millbrook East Development

**Application Date:** Thursday, March 25, 2021

**Municipal File Number:**

**Proposed Application:** New or expanding settlement area boundary  
Type B Land Use

**Applicant Contact Information**  
a a

## Location of Subject Lands

County of Peterborough, Township of Cavan-Millbrook-North Monaghan  
CAVAN, Concession: 5, Lot: 11  
Roll Number: 150901002021400

**Calculation Name:** *Barn A*

**Description:**

## Farm Contact Information

a a  
809 Larmer Line  
Millbrook, ON, Canada

## Location of existing livestock facility or anaerobic digester

County of Peterborough, Township of Cavan-Millbrook-North Monaghan  
CAVAN, Concession: 6, Lot: 11  
Roll Number: 150901003009405

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Feeders (7 - 16 months), Yard/Barn	40	13.3	167 m <sup>2</sup>



The livestock/manure information has not been confirmed with the property owner and/or farm operator.

**Existing Manure Storage:** V3. Solid, outside, no cover, >= 30% DM

**Design Capacity (NU):** 13.3

**Potential Design Capacity (NU):** 13.3

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.8	X	177.77	X	0.7	X
				2.2	
				=	
				219 m (719 ft)	1000 m (3281 ft)
				219 m (719 ft)	1000 m (3281 ft)

**Calculation Name:** *Barn B*

**Description:** Millbrook Equine Services

## Farm Contact Information

a a  
Millbrook Equine Services  
639 Fallis Line  
Millbrook, ON, Canada

## Location of existing livestock facility or anaerobic digester

County of Peterborough, Township of Cavan-Millbrook-North Monaghan  
CAVAN, Concession: 5, Lot: 9  
Roll Number: 150901002022000

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Large-framed, mature; > 680 kg (including unweaned offspring)	10	14.3	302 m <sup>2</sup>



# Minimum Distance Separation I

Worksheet 1

Prepared By: Hugh Stewart, Planner, Clark Consulting Services

Solid	Horses, Small-framed, mature; < 227 kg (including unweaned offspring)	5	2.5	81 m <sup>2</sup>
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	25	25.0	581 m <sup>2</sup>



The livestock/manure information has not been confirmed with the property owner and/or farm operator.

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 41.8

Potential Design Capacity (NU): 41.8

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X	243.57	X	0.7 X 2.2 = 263 m (861 ft)	1014 m (3327 ft)

Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
263 m (861 ft)	1014 m (3327 ft)

Calculation Name: **Barn C**

Description: 720 Fallis

## Farm Contact Information

aa  
720 Fallis Line  
Millbrook, ON, Canada

## Location of existing livestock facility or anaerobic digester

County of Peterborough, Township of Cavan-Millbrook-North  
Monaghan

CAVAN, Concession: 6, Lot: 10

Roll Number: 150901003006400

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Backgrounders (7 - 12.5 months), Yard/Barn [Livestock barn is currently unoccupied]	15	5.0	56 m <sup>2</sup>



The livestock/manure information has not been confirmed with the property owner and/or farm operator.

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 5.0

Potential Design Capacity (NU): 5.0

Factor A (Odour Potential)		Factor B (Size)		Factor D (Manure Type)		Factor E (Encroaching Land Use)		Building Base Distance F' (minimum distance from livestock barn)		(actual distance from livestock barn)	
0.8	X	150	X	0.7	X	2.2	=	185 m (606 ft)		435 m (1427 ft)	

Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
185 m (606 ft)	435 m (1427 ft)



## Minimum Distance Separation I

Worksheet 1

Prepared By: Hugh Stewart, Planner, Clark Consulting Services

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### Preparer Information

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Port Hope, ON, Canada L1A 2Z2  
Phone #1: 9058858023  
Email: bob@clarkcs.com

Signature of Preparer: \_\_\_\_\_

Hugh Stewart, Planner

Date: March 25, 2021

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### NOTE TO THE USER:

The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) has developed this software program for distribution and use with the Minimum Distance Separation (MDS) Formulae as a public service to assist farmers, consultants, and the general public. This version of the software distributed by OMAFRA will be considered to be the official version for purposes of calculating MDS. OMAFRA is not responsible for errors due to inaccurate or incorrect data or information; mistakes in calculation; errors arising out of modification of the software, or errors arising out of incorrect inputting of data. All data and calculations should be verified before acting on them.