

## **Creekside Phase II**

Planning Rationale Zoning By-law Amendment + Plan of Subdivision March 15, 2022

# FOTENN

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## 1.0 Introduction

Fotenn Planning + Design has been retained by Cardel Homes to prepare a Planning Rationale in support of applications for Zoning By-law Amendment and Plan of Subdivision relating to the property municipally known as 2770 Eagleson Road (the "subject lands").

The development represents Phase II of Cardel's Creekside community, following the construction of Phase 1 to the west. Phase 1 contained 51 units, and Phase 2 is proposed to feature 454 units, including detached, semi-detached, and townhouse units.

## 1.1 Subject Lands

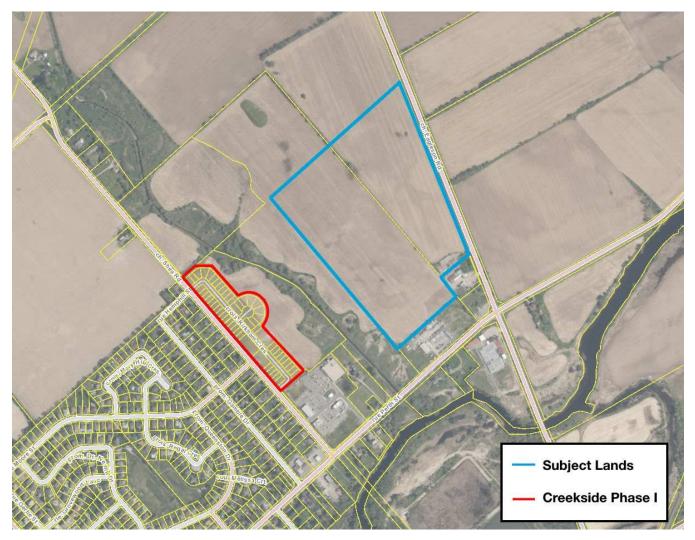


Figure 1: Subject lands in context

The lands are located on the west side of Eagleson Road, north of Perth Street, in the northeast corner of the Village of Richmond (Figure 1). The irregular-shaped property includes approximately 555 metres of frontage on Eagleson Road, and a total area of approximately 24.5 hectares (61 acres).

The lands are generally flat and grassed, with limited trees or other vegetation. Previous land uses were limited to agriculture uses, and there are currently no permanent structures on the site. A swale is located along the Eagleson Road frontage.



Figure 2: Area Photos. 1) Subject Lands from Eagleson Road; 2) Subject Lands looking northwest; 3) Nearby Drummond's Gas; 4) E-Block Auction Lot

## 1.2 Location and Context

The following land uses are located in the area surrounding the site:

**North:** Immediately north of the lands are rural areas outside the Richmond Village boundary. As they are designated prime agricultural lands, farming and related uses predominate in this area.

**East:** Directly to the east of the lands is Eagleson Road, a rural arterial road that represents the eastern boundary of the Village of Richmond. Beyond Eagleson Road are rural lands used for agriculture.

**South:** South of the lands are numerous industrial and commercial uses inside Richmond Village. A property accommodating outdoor light industrial storage fronts onto Eagleson Road south of the lands. At the northwest corner of Eagleson Road and Perth Street is a gas bar. Southwest of the lands, fronting onto Perth Street, is an outdoor storage

yard associated with an online auction house and RV sales operation. On the south side of Perth Street are various commercial and residential uses.

**West:** West of the lands is the Flowing Creek Drain. This watercourse has corresponding floodplains to the east and west of the bed and connects to the Jock River south of Perth Street. Further west of the site is Creekside Phase I, which is centred on Kirkham Crescent. South of the Phase I development at Shea Road and Perth Street is a commercial shopping centre anchored by a grocery store. West of Shea Road features various typologies of residential development.

## 1.3 Transportation

Eagleson Road is classified as an "Arterial Road" on Schedule G – Rural Road Network of the Official Plan (Figure 2). Its nearest intersection is with Perth Street, which is also an Arterial Road.

Bus routes serving the Village of Richmond include Route 283, a Connexion bus that runs on weekdays to the Tunney's Pasture station, and Route 301, a "No Charge" route which runs from Richmond to Carlingwood and back, through Kanata on Mondays only. Route 283 can be accessed from Perth Street, and Route 301 from Shea Road. Richmond Village also includes an OC Transpo Park & Ride.

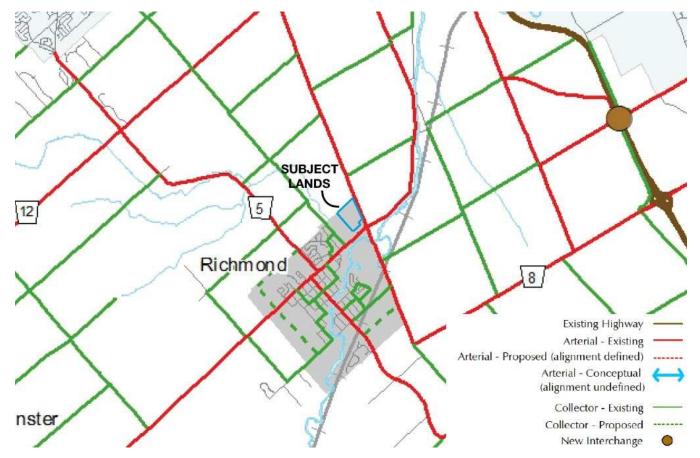


Figure 3: Schedule G of the Official Plan - Rural Road Network

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## 2.0 Proposed Development

Cardel proposes to develop the lands with a range of residential housing types, as well as supporting infrastructure. The subdivision will be serviced through a municipal well water system, while connecting to the Village of Richmond municipal sanitary servicing network. A stormwater pond is proposed to be located adjacent to a 1.2-hectare park block. The proposed road network consists entirely of public roads, all designed to City standards.

A total of 454 units are proposed for the complete buildout of the subdivision. Of the total, 250 units (55%) will be detached, 130 units (29%) will be townhouses, and 74 units (16%) will be semi-detached units.

The subdivision will be supported by a community park. At 1.2 hectares in area, the land dedication reflects the requirements of the City of Ottawa Parkland Dedication By-law and meets the size requirements for a neighbourhood park. The park is centrally-located within the subdivision, with frontage on two public streets. The location adjacent to the stormwater management pond allows for the co-location of amenities and a greater sense of space at the centre of the community.

The subdivision will be accessed by two (2) road connections to Eagleson Road. The street network is designed to provide each street with at least two intersecting street connections, enhancing connectivity. The majority of streets achieve a 20-metre cross-section to ensure that all utilities and tree elements can be accommodated. Two (2) window streets are proposed along Eagleson Road to allow for pedestrian connections, create passive surveillance on Eagleson Road, and provide visual interest. Larger detached dwellings are proposed to face Eagleson Road on Lots 1-5 and 229-233.

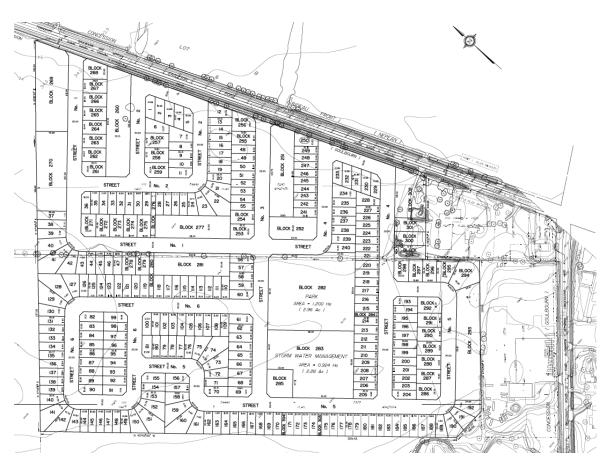


Figure 4: Proposed Plan of Subdivision



Figure 5: Concept Plan

Pedestrian pathways are provided between streets and blocks to enable convenient pedestrian movement between destinations. In particular, Block 284 facilitates a pedestrian connection between Street 4 and the park block. Block 285 represents a 10-metre-wide drainage corridor to facilitate the decanting of the stormwater management pond to the Flowing Creek Drain.

The water well infrastructure is proposed in Block 302, adjacent to Eagleson Road. The location of the well block is chosen to reduce noise and disruption to residential dwellings and users of the park. The proposed well block location is not anticipated to result in impacts on or from the gas station to the south, nor the agricultural uses to the north or east. The wellhead protection study anticipated to be required as a condition of approval for the subdivision will contain a detailed review to determine if any mitigation measures are required, consistent with the provisions of the Clean Water Act.

As the lands are located inside a floodplain overlay in the Zoning By-law, a cut-and-fill permit is required from the Rideau Valley Conservation Authority. The application will be submitted to the Conservation Authority separately from the Planning Act applications to the City of Ottawa.



Figure 6: Sample Single Detached Model Renderings



Figure 7: Sample Townhome Renderings

The dwellings proposed to be constructed through this Plan of Subdivision will be composed of an array of distinctive models which incorporate classic, resilient construction materials, while maintaining an aesthetic diversity to provide variety and interest. The models will maintain the village character of Richmond through the use of peaked roofs, stone/brick cladding, and colour tones which reflect the established development. The townhome models make use of articulation cuts to provide definition at the streetscape level and break up the mass of the overall buildings.

Land Use	Unit Count	Total Area (m <sup>2</sup> )	Blocks
Single Detached	250 (55%)	99,986	1 – 250
Townhomes	130 (29%)	31,043	251, 252, 260, 269, 270, 277, 281, 293
Semi-Detached	74 (16%)	23,887	253-259, 261-268, 271-275, 278, 279, 286-292, 294-301
Streets	-	63,800	1-6
Park Land	-	12,000	282
Walkways	-	1,229	276, 280, 284, 285
Stormwater Lands	-	9,240	283
Pumping Station	-	1,307	285
Other	-	2,561	302
Total	454	245,053	-

Allocation of land uses in the subdivision are summarized in Table 1 below:

Table	1.	I and	Ilse	Allocations	

## 2.1 Public Consultation Strategy

All public engagement activities will comply with Planning Act requirements, including circulation of notices and the Statutory Public Meeting. The following Public Engagement steps and activities have already been undertaken in preparation of this application submission or will be undertaken in the following months after the application has been submitted:

- / The Ward Councillor will be notified by the City of Ottawa's "Heads Up" e-mail once the application is received.
- / The City will provide notification to residents and local registered Community Associations.
- / The City will hold a Statutory Public Meeting under the Planning Act, with attendance from the applicant team.
- / The City will hold a Statutory Public Meeting for the Zoning By-law Amendment at Planning Committee.

## 3.0 Policy & Regulatory Framework

### 3.1 Planning Act

Section 51(24) of the Planning Act establishes criteria for considering Plans of Subdivision with regards to the "health, safety, convenience, accessibility for persons with disabilities and welfare of the present and future inhabitants of the municipality." A response to each of the criteria from Section 51(24) is provided below.

a) The effect of development of the proposed subdivision on matters of provincial interest (as referred to in section 2).

The proposed subdivision advances matters of provincial interest in Section 2 of the Planning Act and the Provincial Policy Statement.

b) Whether the proposed subdivision is premature or in the public interest

The proposed applications build on the policy intent established in the City of Ottawa Official Plan and the Richmond Secondary Plan. The applications are not premature and are in the public interest.

c) Whether the plan conforms to the official plan and adjacent plans of subdivision, if any

The proposed plan of subdivision conforms to the policies of the Official Plan and Secondary Plan. It does not conflict with adjacent plans of subdivision.

d) The suitability of the land for the purposes for which it is to be subdivided

The subject lands are suitable for development of residential uses and supporting infrastructure, as confirmed in the supporting technical studies submitted with the application.

e) The number, width, location and proposed grades and elevations of highways, and the adequacy of them, and the highways linking the highways in the proposed subdivision with the established highway system in the vicinity and the adequacy of them

The subject lands are accessed via Eagleson Road, which is identified as an arterial road on Schedule G- Rural Road Network of the City of Ottawa's Official Plan (2003). Arterial roads are intended to handle high levels of traffic and facilitate cross-town transit. The new public streets proposed in the subdivision are designed with sufficient rights-of-way to accommodate cross-sections that meet technical standards.

f) The dimensions and shapes of the proposed lots

The proposed lot dimensions and shapes are typical of contemporary subdivisions, generally being rectilinear with accommodations made for corner lots. All lots are of sufficient size for the dwelling types proposed.

g) The restrictions or proposed restrictions, if any, on the land proposed to be subdivided or the buildings and structure proposed to be erected on it and the restrictions, if any, on adjoining land

A Zoning By-law Amendment application is proposed to request appropriate zoning provisions to permit the proposed development.

h) Conservation of natural resources and flood control

The enclosed engineering reports and studies indicate that the proposal has sufficiently accommodated for environment-related development concerns. A cut-and-fill application will be submitted to the Rideau Valley Conservation Authority, and stormwater within the development will be captured in a stormwater management pond.

i) The adequacy of utilities and municipal services

The enclosed engineering reports confirm that municipal services are adequate to service the proposed development. Connections to other utilities will be planned through detailed design.

j) The adequacy of school sites

#### No new schools are proposed in the subdivision.

k) The area of land, if any, within the proposed subdivision that, exclusive of highways, is to be conveyed or dedicated for public purposes

#### A total 12,000 square metres of parkland is proposed as part of the Plan of Subdivision application.

I) The extent to which the plan's design optimizes the available supply, means of supplying, efficient use and conservation of energy

#### The proposed Plan of Subdivision will be built out to the standards of the Ontario Building Code.

The proposed Plan of Subdivision satisfies the applicable requirements established in Section 51(24) for evaluating applications for Plan of Subdivision.

### 3.2 Provincial Policy Statement (2020)

The Provincial Policy Statement (PPS) establishes policy direction for land use planning in the Province of Ontario that encourages planning and development that is environmentally sound, economically strong, and that enhances quality of life. The PPS promotes intensification of built-up areas to efficiently use land where existing infrastructure and public service facilities are readily available to avoid unjustified and uneconomic expansions. The policies relevant to the subject application are as follows:

**1.1.1** Healthy, liveable and safe communities are sustained by:

- a) promoting efficient development and land use patterns which sustain the financial wellbeing of the Province and municipalities over the long term;
- b) accommodating an appropriate affordable and market-based range and mix of residential types (including single-detached, additional residential units, multi-unit housing, affordable housing and housing for older persons), employment (including industrial and commercial), institutional (including places of worship, cemeteries and long-term care homes), recreation, park and open space, and other uses to meet long-term needs;
- c) avoiding development and land use patterns which may cause environmental or public health and safety concerns;
- d) promoting the integration of land use planning, growth management, transit-supportive development, intensification and infrastructure planning to achieve cost-effective

development patterns, optimization of transit investments, and standards to minimize land consumption and servicing costs;

- e) promoting the integration of land use planning, growth management, transit-supportive development, intensification and infrastructure planning to achieve cost-effective development patterns, optimization of transit investments, and standards to minimize land consumption and servicing costs; and
- g) ensuring that necessary infrastructure and public service facilities are or will be available to meet current and projected needs.
- **1.1.3.1** Settlement Areas shall be the focus of growth and development.
- **1.1.3.2** Land use patterns within settlement areas shall be based on densities and a mix of land uses which, among others:
  - a) efficiently use land and resources;
  - b) are appropriate for, and efficiently use, the infrastructure and public service facilities which are planned or available, and avoid the need for their unjustified and/or uneconomical expansion;
  - c) minimize negative impacts to air quality and climate change, and promote energy efficiency;
  - d) prepare for the impacts of a changing climate; and
  - e) support active transportation.
- **1.1.3.4** Appropriate development standards should be promoted which facilitate intensification, redevelopment and compact form, while avoiding or mitigating risks to public health and safety.
- **1.1.3.6** New development taking place in designated growth areas should occur adjacent to the existing builtup area and should have a compact form, mix of uses and densities that allow for the efficient use of land, infrastructure and public service facilities.
- **1.1.4** Healthy, integrated and viable rural areas should be supported by, among others;
  - a) building upon rural character, and leveraging rural amenities and assets;
  - b) accommodating an appropriate range and mix of housing in rural settlement areas; and
  - c) using rural infrastructure and public service facilities efficiently.
- **1.1.4.2** In rural areas, rural settlement areas shall be the focus of growth and development and their vitality and regeneration shall be promoted.
- **1.1.4.3** When directing development in rural settlement areas, planning authorities shall give consideration to rural characteristics, the scale of development and the provision of appropriate service levels.
- **1.4.3** Planning authorities shall provide for an appropriate range and mix of housing options and densities to meet projected market-based and affordable housing needs of current and future residents of the regional market area by, among others:

b) permitting and facilitating:

1. all housing options required to meet the social, health, economic and well-being requirements of current and future residents, including special needs requirements and needs arising from demographic changes and employment opportunities; and

2. all types of residential intensification, including additional residential units, and redevelopment in accordance with policy 1.1.3.3;

c) directing the development of new housing towards locations where appropriate levels of infrastructure and public service facilities are or will be available to support current and projected needs;

d) promoting densities for new housing which efficiently use land, resources, infrastructure and public service facilities, and support the use of active transportation and transit in areas where it exists or is to be developed;

f) establishing development standards for residential intensification, redevelopment and new residential development which minimize the cost of housing and facilitate compact form, while maintaining appropriate levels of public health and safety.

- **1.5.1** Healthy, active communities should be promoted by, among others:
  - a) planning public streets, spaces and facilities to be safe, meet the needs of pedestrians, foster social interaction and facilitate active transportation and community connectivity;
  - b) planning and providing for a full range and equitable distribution of publicly-accessible built and natural settings for recreation, including facilities, parklands, public spaces, open space areas, trails and linkages, and, where practical, water-based resources.
- **1.6.1** Infrastructure and public service facilities shall be provided in an efficient manner that prepares for the impacts of a changing climate while accommodating projected needs.

Planning for infrastructure and public service facilities shall be coordinated and integrated with land use planning and growth management so that they are:

- a) financially viable over their life cycle, which may be demonstrated through asset management planning; and
- b) available to meet current and projected needs
- **1.6.6.1** Planning for sewage and water services shall, among others:
  - a) accommodate forecasted growth in a manner that promotes the efficient use and optimization of existing municipal sewage services and municipal water services;
  - b) ensure that these systems are provided in a manner that:
    - 1. can be sustained by the water resources upon which such services rely;
    - 2. prepares for the impacts of a changing climate;
    - 3. is feasible and financially viable over their lifecycle; and
    - 4. protects human health and safety, and the natural environment;
  - c) integrate servicing and land use considerations at all stages of the planning process; and
  - d) be in accordance with the servicing hierarchy outlined through PPS policies.
- **1.6.6.2** Municipal sewage services and municipal water services are the preferred form of servicing for settlement areas to support protection of the environment and minimize potential risks to human health and safety. Within settlement areas with existing municipal sewage services and municipal water services, intensification and redevelopment shall be promoted wherever feasible to optimize the use of services.
- **1.6.6.6** Subject to the hierarchy of services provided in policies 1.6.6.2, 1.6.6.3, 1.6.6.4 and 1.6.6.5, planning authorities may allow lot creation only if there is confirmation of sufficient reserve sewage system capacity and reserve water system capacity within municipal sewage services and municipal water services or private communal sewage services and private communal water services.
- **1.6.6.7** Planning for stormwater management shall:
  - a) be integrated with planning for sewage and water services and ensure that systems are optimized, feasible and financially viable over the long term;

- b) minimize or, where possible, prevent increases in contaminant loads;
- c) minimize erosion and changes in water balance, and prepare for the impacts of a changing climate through the effective management of stormwater, including the use of green infrastructure;
- d) mitigate risks to human health, safety, property and the environment;
- e) maximize the extent and function of vegetative and pervious surfaces; and
- f) promote stormwater management best practices, including stormwater attenuation and reuse, water conservation and efficiency, and low impact development.
- **1.6.7.1** Transportation systems should be provided which are safe, energy efficient, facilitate the movement of people and goods, and are appropriate to address projected needs.
- **1.6.7.4** A land use pattern, density and mix of uses should be promoted that minimize the length and number of vehicle trips and support current and future use of transit and active transportation.
- **1.6.8.1** Planning authorities shall plan for and protect corridors and rights-of-way for infrastructure, including transportation, transit and electricity generation facilities and transmission systems to meet current and projected needs.
- **3.1.1** Development shall generally be directed to areas outside of hazardous lands adjacent to river, stream and small inland lake systems which are impacted by flooding hazards and/or erosion hazards.

The proposed development is consistent with the policies of the PPS. The proposal features development in a rural settlement area, where services are available and transportation trips can be minimized. The proposed mix of dwelling types contributes to a range of housing types in the area, creating housing opportunities for a variety of incomes and life stages. Supporting studies confirm that the proposed infrastructure is appropriate, safe, and sustainable. In particular, the water well block will be assessed in a wellhead protection study through the detailed design process, in accordance with the Clean Water Act.

## 3.3 City of Ottawa Official Plan (2003, as amended)

#### SUBJECT Urban Area (see Schedule B) LANDS Urban Expansion Study Area 5 Greenbelt (see Schedule B) Village Agricultural Resource Area General Rural Area **Rural Natural Features Area** Bedrock Resource Area Richmond Sand and Gravel Resource Area Natural Environment Area Major Open Space Significant Wetlands Carp Airport **Rural Employment Area** Carp River Restoration Policy Area Silica Sand Deposit 10 Θ Solid Waste Disposal Site Urban Area Boundary Lands leased by the Ottawa ------International Airport Authority City Boundary

#### 3.3.1 Village Designation

Figure 8: Schedule A of the Official Plan - Rural Policy Plan

The subject lands are designated "Village" on Schedule A – Rural Policy Plan of the City of Ottawa's Official Plan (Figure 8). Policy 7 of Section 2.2.1 directs that the City will accommodate at least 50 percent of rural growth in Villages, where infrastructure and community facilities already exist.

Within Villages, the City encourages the delivery of municipal and community programmes and facilities, the development of residential uses in a variety of forms and modest employment opportunities, in the form of commercial, tourism and small-scale industrial development. Large- and medium-scaled villages are to contain the majority of new housing in the rural area. The Village policies applicable to the development are detailed below:

- 4. The intensity and distribution of land uses within a Village will be determined in the context of:
  - a. Any plan for the Village contained in Volume 2, or a community design plan where such a plan has been undertaken;
  - b. The ability to support development on private water and wastewater services or on municipal services where such exist.

- 10. A wide range of housing forms to meet the needs of the Village's population will be permitted in Villages. The form and scale of development will be limited by the available servicing methods and subject to the policies of Section 4.4 on water and wastewater servicing.
- 12. When reviewing development applications, the City will consider:
  - a. The relevant provisions of the village secondary plan or community design plan;
  - b. Those matters addressed in Section 2.5.1 and Section 4.11 related to compatibility and community design;
  - d. Whether the proposed development is located on a road with sufficient capacity to accommodate the anticipated traffic generated;
  - e. How the development supports a pedestrian and cycling environment and links the site to the surrounding neighbourhood;
  - f. How the application of good design is used to ameliorate the effects of a higher intensity use of land on the surrounding uses;
  - g. The extent to which greenspace targets in Section 2.5.4 are met;
  - j. The demand that the use will raise to extend Public Service Areas or expand capacity in public water and wastewater services; and
  - k. Any other applicable policies found within the Official Plan related to development review.

#### **Design Considerations**

Section 2.5.1 of the Official Plan contains design objectives that are intended to be applied to new development. The design objectives of Section 2.5.1 are met by the proposed plan of subdivision in the following ways:

#### Enhance the sense of community by creating and maintaining places with their own distinct identity

The subdivision will contribute to the sense of community through the provision of new housing, reflecting the low- and medium-density housing in the village.

#### Define quality public and private spaces through development

The proposed plan of subdivision thoughtfully integrates a new municipal park, which represents a quality public space supporting surrounding private housing.

#### Create places that are safe, accessible and are easy to get to, and move through

The proposed ground-oriented, street-fronting units will contribute to a pleasant pedestrian realm and will also generate passive surveillance, increasing actual and perceived safety.

#### Ensure that new development respects the character of existing areas

The proposed built form is compatible with the existing residences in the immediately surrounding area.

# Consider adaptability and diversity by creating places that can adapt and evolve easily over time and that are characterized by variety and choice

The proposed subdivision reflects the evolution of Richmond Village, proposing a range of units that allow existing residents within the broader area to continue to live within the community as they move through their lifecycle.

#### Understand and respect natural processes and features in development design

The proposed development includes a stormwater management pond to ensure control of water quality and quantity into Flowing Creek.

# Maximize energy-efficiency and promote sustainable design to reduce the resource consumption, energy use, and carbon footprint of the built environment.

The proposed subdivision is considered infill development, which will add more residents within an existing serviced area. The proposed subdivision will result in efficient use of existing village land and existing infrastructure, such as pipes, roads, transit, schools, and parkland.

#### Urban Design and Compatibility (Section 4.11)

Section 4.11 addresses issues of urban design and compatibility. The following policies are applicable to the subject lands and have been evaluated with respect to the proposed subdivision.

Table 3: Urban Design and Compatibility Criteria of Section 4.11 of the Official Plan

Policies	Proposed Subdivision
Views	The Official Plan does not designate any protected views in proximity to the subject lands. Given the low-rise nature of the proposed subdivision, the subdivision will not impact the existing skyline.
Building Design	All units are proposed to front directly onto a municipal street, which maintains the character of the existing streetscape. The dwellings feature architectural characteristics and a range of building materials that are reflective of the existing character of Richmond.
Massing and Scale	As the development will consist only of low-rise dwellings, no privacy, overlook, or shadowing impacts are anticipated.
Outdoor Amenity Areas	Similar to the existing homes in the area, each of the proposed units will have a rear yard. A minimum rear yard setback of 6.0 metres is proposed for the detached and townhouse units, which is appropriate and compatible with the zoning of the existing units in the area. The outdoor amenity space for the back-to-back townhouses is provided in the form of a balcony.

#### A Strategy For Parks

Section 2.5.4 of the Official Plan identifies policies for implementing parkland. In particular, Policy 4 states the following:

New Parks provided in urban areas and Villages will have the following characteristics:

- a. Contribute to the equitable distribution of these areas within the community;
- b. Be easily accessible by foot or by bicycle from homes and linked to other greenspaces;
- c. Are visible from many vantage points within the community;
- d. Have significant street frontage, in proportion to their size, often fronting on two or more streets depending on their shape and function.
- e. Designed to be engaging and useful spaces for people across a wide spectrum of age, socio-economic demographics and recreational interests.

# The proposed parkland contributes to the overall distribution throughout the Village of Richmond. It is accessible by pedestrians, has ample frontage on two streets, and will be visible from multiple vantage points in the community.

Section 4.4 contains policies for Water and Wastewater Servicing. Applications located in a public service area are required to include how public services will support the development.

Schedule K – Environmental Constraints of the Official Plan (Figure 6) illustrates environmental constraints to be considered during development, including unstable slopes and floodplains of the adjacent Flowing Creek Drain to the west.

Policy 4.8.1 of the Official Plan refers to Flood Plains. The policies are discussed below:

#### Limits of the Flood Plain

- 1. The flood plain for river, stream and small inland lake systems, means the area, usually low lands adjoining a watercourse, which has been or may be subject to flooding during the one in 100-year flood and are designated on Schedule K. High points of land within a flooded area are considered part of the flood plain.
- 2. The extent of the one-in-100-year flood will be determined by consulting flood plain maps prepared by the Mississippi Valley, Rideau Valley, and South Nation Conservation Authorities and, in conjunction with the conservation authorities, by considering other information such as land surveys and engineering drawings that provide detailed site-specific geodetic elevation information prepared by an Ontario Land Surveyor or a qualified Professional Engineer. The City will map the most up to date information as the flood plain overlay in the Comprehensive Zoning By-law. The flood plain information on Schedule K of the Official Plan will be updated at the time of a comprehensive review or at the time technical corrections are made to the Plan, through an omnibus Official Plan amendment.

#### Implementing this policy, the Flood Plain overlay is applied to the Zoning By-law on a portion of the subject lands.

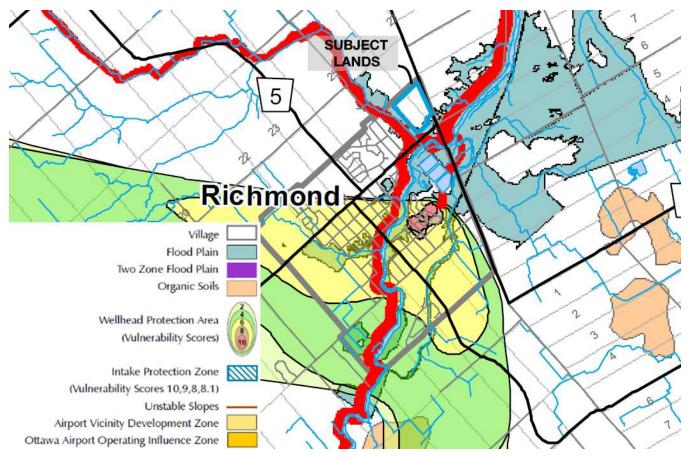


Figure 9: Schedule K of the Official Plan - Environmental Constraints

The proposed development conforms with the policies of the Official Plan. The development directs growth to a rural Village, where existing infrastructure and services are present. The subdivision is designed to include a variety of dwelling types, a connected street network, central public park, and stormwater management facility. Public water

services will be provided through a new municipal well, while connecting to the existing municipal sanitary services network.

### 3.4 Richmond Secondary Plan

The Richmond Secondary Plan is intended to provide detailed policy direction to guide growth and development in the Village. The policies should be read in conjunction with Volume 1 of the Official Plan and the Village of Richmond Community Design Plan (CDP). The subject lands are identified as the Northeast Development Lands on Schedule A (Land Use) and are generally designated Residential – One and Two Unit, with a Park designation and Interim Floodplain overlay. There is also a Potential Convenience Commercial Uses symbol applied at the northeast corner of the lands.

Development in the Western Development Lands, Northeast Development Lands and Industrial Lands shall be on the basis of public communal well services. Development in the remainder of the village shall be based on private or communal wells, unless it is deemed necessary to convert the village to a communal well system.

All new development in Richmond shall be connected to the central wastewater collection system. No new development shall be permitted until the wastewater system can provide the capacity in accordance with the Master Servicing Study. Existing wastewater infrastructure services shall be upgraded over time to provide the required capacity for the full development of the Village of Richmond.

#### Residential – One and Two Unit

The Residential – One and Two-Unit designation is the predominant residential designation in the village. It provides for a range of ground-oriented, low-density residential and associated uses including detached and semi-detached dwellings.

- 1. Uses permitted on lands designated Residential One and Two-Units include: detached and semi-detached dwellings, duplexes, bed and breakfast, home-based businesses, and retirement homes converted.
- 2. A limited number of multiple attached dwellings not including apartments or stacked townhouses may be permitted by zoning amendment at the following locations, as long as the immediate area is surrounded by a significant band of detached and semi-detached dwellings:
  - a. On an arterial or collector road
  - b. Abutting a park or designated open space
  - c. At the edge of a neighbourhood
- 3. The maximum building height shall be approximately three and a half storeys.
- 4. Upon submission of a development application in the Residential One and Two-Unit designation, the proponent will demonstrate conformance to Schedule B Parks, Open Space and Pathways Plan in the Community Design Plan.
- 5. The City will evaluate a development proposal in the Residential One and Two-Unit designation against its ability to meet City Design Guidelines and the Community Design Plan.
- 6. New plans of subdivision will use the historical grid pattern for streets and will ensure equitable access to parks and other open spaces as required by the Official Plan.

#### Northeast Development Lands

The maximum density for large-lot one- and two-unit large lots is 17 units per net hectare. The City may approve greater densities through a Zoning By-law Amendment process. While the proposed single-detached dwellings exceed the maximum density, the largest lots are strategically located along window streets facing Eagleson Road, establishing a strong relationship with the entry point to the Village.

#### The Floodplain

The floodplain is a limitation on the underlying land use designation in that no new development is permitted.

Principles of Development include:

- 1. The policies in section 4.8.1 of the City's Official Plan shall apply to all land identified as floodplain as shown on Schedule A of this Plan.
- 2. The floodplain is subject to change by the Rideau Valley Conservation Authority. Any changes approved by the RVCA will not require an amendment to this Plan.
- 3. Four floodplain areas are designated as Interim Floodplain on Schedule A. This indicates that the Rideau Valley Conservation Authority has either a) approved a change in principle or b) received an application to modify the floodplain in these areas. The reference to interim on Schedule A means that if and when the RVCA changes their floodplain mapping for these lands, then development can proceed based on the underlying land use designations and in accordance with the Demonstration Plans without amending the floodplain as shown on Schedule A to the Community Design Plan or the Secondary Plan.

#### Parks

Lands that are designated Parks are intended to be used for park and recreational purposes and normally provide a range of publicly accessible facilities for residents and visitors. Policies include:

- 1. Uses permitted on lands designated parks include: a park, recreational and athletic facility, environmental preserve and an education area.
- 2. Parks will be developed in consultation with local residents and parks planning staff and should be based on the following:
  - Pedestrian connections should be provided to sidewalks and pathways
  - The park should be exposed to local streets with a minimum of two street frontages
  - Crime Prevention through Environmental Design (CPTED) should be considered in the design of the park
  - The park should not be located immediately adjacent to school properties but may be associated with other community facilities or infrastructure
  - The park will not be used as part of, or associated with, the function of the stormwater management system.
- 3. The Parks, Open Space and Pathways Plan, as shown on Schedule B of the Community Design Plan, should be consulted to ensure a high degree of connectivity between parks and the rest of the village.
- 4. New parks will be required in the Western and Northeast Development Lands and in the Industrial lands as shown on Schedule A. Their specific locations will be determined through the development review process.

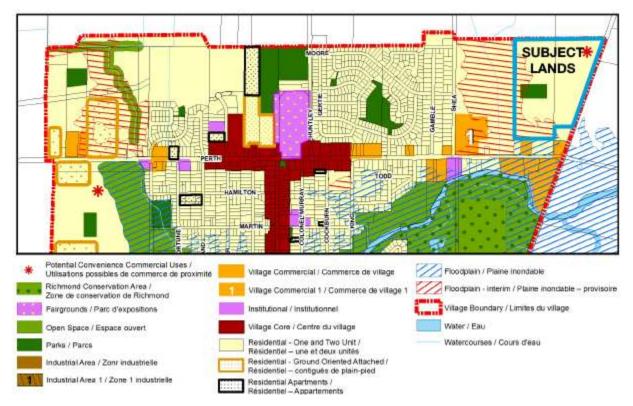
The proposed development generally conforms to the policies of the Richmond Secondary Plan. The proposed dwelling types conform with the prevailing Residential One- and Two-Unit designation, with townhouses generally distributed along edges of the community or near the park block.

The proposed street pattern is designed to enhance connectivity in the subdivision, with all streets designed with connections to at least two other streets.

The overall proposed density of the development is appropriate for the lands, as confirmed through submitted technical studies, and is generally consistent with proposed densities in other greenfield subdivisions in Richmond Village. The largest lots accommodating detached dwellings are oriented towards Eagleson Road, to maintain visibility from the arterial road leading to the village core.

A park is proposed in the subdivision, aligning with Schedule B of the CDP, which will be accessible to residents within and beyond the subdivision. A footbridge connecting Phases 1 and 2 is not proposed at this time due to engineering challenges and impacts to environmental features.

The Interim Floodplain Overlay will be removed through a separate permitting process with the Rideau Valley Conservation Authority. No safety impacts related to flooding are anticipated following development.



While shown as a possible use on Schedule A, a retail use is not proposed for the northeast corner, in part due to grading challenges in that location.

Figure 10: Schedule A – Land Use, Richmond Secondary Plan

## 3.5 Village of Richmond Community Design Plan (CDP)

As the Village of Richmond Community Design Plan (CDP) provides the basis for the Secondary Plan, much of the policy direction is identical in both documents. This section addresses policies that are referenced specifically in the CDP document.

#### Parks

Section 4.7 of the CDP discusses the policies relating to the establishment of Parks within the Richmond Village. The applicable policies are discussed below:

- Uses permitted on lands designated parks include: a park, recreational and athletic facility, environmental preserve and an education area.
  A park is proposed in the subdivision.
- 2. Parks will be developed in consultation with local residents and parks planning staff and should be based on the following:
  - Pedestrian connections should be provided to sidewalks and pathways **The park will be accessible by pedestrian connections.**
  - The park should be exposed to local streets with a minimum of two street frontages The proposed park has two local street frontages.
  - Crime Prevention through Environmental Design (CPTED) should be considered in the design of the park The park will be sufficiently covered by site lighting, and nearby housing will have windows which provide passive surveillance onto the park.
  - The park should not be located immediately adjacent to school properties but may be associated with other community facilities or infrastructure
     The park is not adjacent to a school block.
  - The park will not be used as part of, or associated with, the function of the stormwater management system. The park is not proposed to be used as part of a stormwater management system.
- The Parks, Open Space and Pathways Plan, as shown on Schedule B of the Community Design Plan, should be consulted to ensure a high degree of connectivity between parks and the rest of the village.
  Schedule B (Figure 9) identifies a park being envisioned on the subject lands in a comparable scale and location to that which is proposed. Sidewalks will connect from Eagleson Road to the park block, providing access to residents from elsewhere in Richmond Village.
- New parks will be required in the Western and Northeast Development Lands and in the Industrial lands as shown on Schedule A. Their specific locations will be determined through the development review process.
  A park is proposed in the subdivision, which is located in the Northeast Development Lands.

#### **Neighbourhood Parks**

- 3. As a focal point, neighbourhood parks will provide a local gathering and recreational space for nearby residents. They are generally located in the centre of each neighbourhood within approximately a 5-minute walking distance for most residents. Each neighbourhood park will incorporate a variety of active recreational opportunities such as children's play areas, outdoor rinks, splash pads, pedestrian walkways, and seating areas or other facilities determined by the City of Ottawa.
  - The size of a neighbourhood park is to be no less than 0.8 ha (2.0 acres).

• Parking areas are not required within a neighbourhood park. A neighbourhood park of 1.2 hectares is proposed.

#### **Guidelines for Residential Subdivision Design**

- 1. A modified grid pattern similar to the established military grid in the older part of the Village should be used, modified to today's operating requirements. Suburban-style road patterns, such as curvilinear streets, P-loops, and dead ends should be avoided.
- 4. Development should provide pathway connections and, where possible, these pathways should link with the village's pathway network.
- 5. Sustainability measures, such as solar orientation, energy conservation and the greening of the village, should be encouraged and supported in the design of subdivisions.
- 8. Large-lot, village-style detached dwellings should be mixed with other types of dwellings along targeted and highly visible streets. These village-style streetscapes may contain some or all of the following features:
  - a) Larger lots.
  - b) Wooden and rock fences and hedgerows
  - c) Garages as separate buildings either beside or behind the principal building.
  - d) Natural driveways where only the tire treads are hard-surfaced, or where the driveway is made of permeable material.
  - e) Small ornamental flower gardens similar in style to those in the older part of the village
- 9. Setbacks from the curb or sidewalk to the abutting building elevation should:
  - a) Be close enough to create a sense of intimacy along the streetscape.
  - b) Be set back further than suburban buildings
  - c) Provide enough space to park a vehicle
  - d) Provide enough space to plant a tree in the front yard

#### Variation in Design

- 10. To avoid repetition, a variety of attached and detached building types that include a range of design features should be provided along each street or block.
- 11. For attached dwellings block lengths should be 5 units or less, with the maximum block length of 6 units used sparingly.
- 12. For detached dwellings,
  - a. Use wide, short lots rather than narrow, deep lots because they feel more spacious and less dense
  - b. Do not replicate the same design next door, across the street or on either side across the street
  - c. Use wrap-around porches on corner lots

#### Landscaping, Fencing and Parking

- 14. Street trees, landscaping and pedestrian lights should be incorporated into development.
- 15. Sufficient screening, landscaping and wide side yards should be provided to minimize the impact of abutting non-residential uses.

#### Streetscape Design Along Arterial and Collector Roads

Rural Arterial (Eagleson Road):

- / Limited access permitted
- / No Sidewalks
- / Buildings to face the street
- / Paved shoulders and ditches
- / A sidewalk to be installed on the west side of Eagleson Road between the Industrial Lands and the Northeast Development Lands

# The proposed development conforms with the policies of the Village of Richmond CDP, and meets several applicable guidelines.

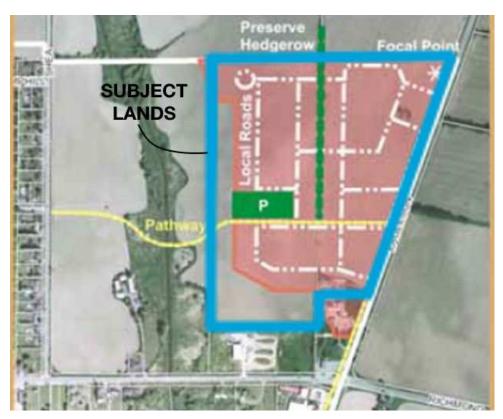


Figure 11: Richmond CDP - Demonstration Plan for Northeast Development Lands

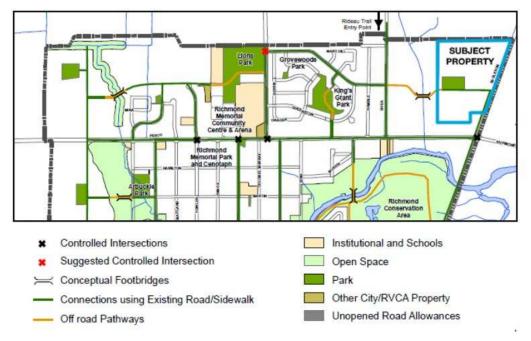


Figure 12: Schedule B of Richmond CDP - Parks, Open Space and Pathways Plan

## 3.6 Design Guidelines for Rural Villages

The purpose of these guidelines is to provide design guidance to assess, promote and achieve appropriate development in Villages.

The following guidelines have been applied to the proposed subdivision design:

#### **Guideline 3:**

Avoid the development of looping, circuitous, suburban-style roadway patterns. New roadway patterns should be direct and reflect the traditional development pattern that exists in the village core. Patterns should also provide multiple pedestrian, bicycle and vehicular connections to adjacent and future development.

#### Guideline 5:

Establish a variety of lot sizes in residential developments. Creating a mix of lot sizes promotes a range in dwelling types and, in turn, creates housing options for residents. Explore innovative servicing methods where lot sizes may be restricted by servicing capabilities.

#### Guideline 6:

Develop of mix of housing designs along neighbourhood blocks to avoid a mass produced or "cookie cutter" appearance. Varied housing styles, colours and materials create a visually interesting streetscape and village atmosphere.

#### Guideline 9:

Provide direct pedestrian connections between adjacent uses within villages to ensure safe and convenient pedestrian movement.

#### Guideline 19:

Reduce the environmental footprint of buildings by meeting or exceeding environmental and energy efficiency rating standards, incorporating renewable or alternative energy systems, maximizing indoor water efficiency, retaining stormwater on site, reducing the use of potable water for irrigation, and reducing resource consumption.

#### Guideline 20:

Ensure new buildings are compatible with adjacent development by using a common scale, massing and height to complement the existing context. New buildings, including gas stations, should respond to the village context.

#### Guideline 22:

Avoid developing buildings with blank facades along public rights-of-way. New buildings should follow the existing architectural pattern and rhythm established by adjacent development. Visually divide large facades into smaller sections using a human-scale, windows, bays and articulation to reduce the perception of massing.

#### Guideline 23:

Orient buildings to frame the street. Primary façades should parallel the street and entries should be clearly visible and connect to the public sidewalk.

#### Guideline 24:

Unless the village core is historically characterized by a wide variety of setbacks, align new building facades to create a visually continuous streetscape.

#### Guideline 27:

Enhance gathering places by including design elements such as play areas, landscaping, street furniture, public art and/or other attractive features that reflect community character. Gathering places have activities and/or services that promote safe community interaction, exchange and congregation.

# By incorporating an array of the applicable Design Guidelines for Rural Villages, the proposal satisfies the City's direction for the establishment of compatible, functional and appealing Rural Villages.

## 3.7 New City of Ottawa Official Plan (Forthcoming)

The New Official Plan was adopted by Council on October 27th, 2021 and is currently under review at the Ministry of Municipal Affairs and Housing (MMAH) for final approval. The City has the goal of becoming the most liveable mid-sized City in North America. By 2046, the City's population is expected to be 1.4 million. The new Official Plan is intended to create a flexible, resilient City where people want to live/work/play. The main thrust of the plan is to achieve more growth by intensification than by greenfield development.

Policy directions include:

- / Achieve an intensification target of 60% by 2046;
- / Orient land use designations around nodes, corridors, and neighbourhoods;
- / Evolve to denser, walkable, 15-minute neighbourhoods;
- / A renewed emphasis on building form; and
- / Establishing minimum densities for new developments in proximity to important rapid transit stations.

#### **Transect Policy Areas**

Schedule A of the Draft Official Plan divides the City into six concentric policy areas called Transects. Each Transect represents a different gradation in the type and evolution of built environment and planned function of the lands within it, from most urban (the Downtown Core) to least urban (Rural). Throughout the Transect policies, references are made to urban and suburban built form and site design. The Transect Policies provide direction on minimum and maximum height based on context through the type of Transect and designation.

The subject property is in the **Rural Transect**. The Rural Transect Area, accounts for approximately 80% of the City's total land area. The use of land in this Transect area varies in intensity from untouched natural areas and cultivated farmland to more intense development within villages and commercial-industrial areas. The policies for this transect are intended to ensure environmental protection, economic enhancement, and liveability for those who choose rural life.

- / Built form, where development is permitted shall be low-rise. Mid-Rise buildings may be permitted within Villages as identified in a Secondary Plan.
- / Development in Villages will be context sensitive and characteristic of the rural area.
- / Secondary plans will guide the evolution of Villages to become 15-minute neighbourhoods with vibrant core areas.
- / High-intensity rural industrial uses will be directed to locations near highway interchanges and on major roads.

#### Designation

Within each Transect, designations further articulate maximum building heights and minimum densities. The subject lands are designated "Village." Villages play an important role in the vitality and identity of the rural area. The majority of development within the Rural area occurs within Villages in order to reduce conflicts with other uses such as agriculture, mineral extraction, Rural Industrial and Logistics and areas of natural significance.

#### Policies state:

- 1) Villages are designated on Schedule B9.
- 2) The distribution of land uses and permitted development within a Village shall be identified by:
  - a) A secondary plan in Volume 2; and

b) Based on the ability to support development on private water and wastewater services or on municipal services where such services exist.

#### **Richmond Secondary Plan**

The policies in the updated Village of Richmond Secondary Plan are generally identical to those of the existing Secondary Plan, with only minor changes to select policies and nomenclature.

Among the minor changes is that references to the Community Design Plan have generally been deleted, including the reference to Schedule B.

The proposed development conforms with the policies of the new City of Ottawa Official Plan, including the policies of the updated Village of Richmond Secondary Plan.

## 4.0 Zoning By-law

## 4.1 Zoning Description

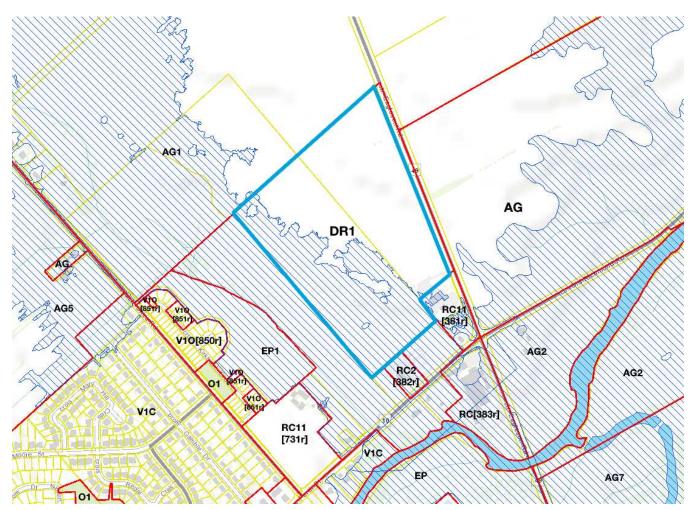


Figure 13: Zoning Overview

The subject lands are zoned Development Reserve, Subzone 1 (DR1) in the City of Ottawa Comprehensive Zoning By-law (2008-250) (Figure 10). The purpose of the DR zone is to:

- / Recognize lands intended for future urban development in areas designated as General Urban Area and Developing Communities in the Official Plan;
- / Limit the range of permitted uses to those which will not preclude future development options; and
- / Impose regulations which ensure a low scale and intensity of development to reflect the characteristics of existing land uses.

Permitted uses within the DR zone include: agricultural use, emergency service, environmental preserve and education area, forestry operation, group home, home-based business, marine facility, one detached dwelling accessory to a permitted use, park, secondary dwelling unit and urban agriculture.

#### Section 58 - Flood Plain Overlay

As shown in Figure 13, a Flood Plain Overlay is applied to the subject lands. The corresponding zoning by-law provisions in Section 58 take precedence over those of the underlying zone. The provisions apply to land uses within an area affected by a flood plain overlay, restricting development to minimize the threat of injury or loss of life and prohibit land uses where hazardous substances could contaminate potential flood waters; where flooding may compromise the ability to deliver essential services; or where flooding may cause unacceptable risk of property damage:

1. **General Provisions -** Despite the provisions of the underlying zone or other zoning provisions of the Zoning Bylaw, development is prohibited within any area subject to a floodplain overlay.

A component of the Zoning By-law Amendment is to alter the Flood Plain Overlay to remove it from the proposed residential development area. In support of this process, a Cut-and-Fill permit has been submitted to the Rideau Valley Conservation Authority.

## 4.2 Proposed Amendment

A Zoning By-law Amendment is requested to rezone the site from "Development Reserve, Subzone 1 (DR1)" to appropriate zones to accommodate the proposed uses. Proposed zones include:

- / Village Second Density Residential Zone, Subzone E, Urban Exception XXXX (V2E[XXXX]) for all residential uses; and
- / Parks and Open Space Zone (O1) for the park block, stormwater pond, and well block.

The purpose of the V2 - Village Residential Second Density Zone is to:

- 1. Permit detached and two-unit dwellings in areas designated as Village in the Official Plan, and historically zoned for such low density use;
- 2. Allow a limited range of compatible uses, and
- 3. Regulate development in a manner that adopts existing land use patterns so that the low density, low profile form of a neighbourhood is maintained.

The proposed development is evaluated against the V2E zone provisions in Table 1.

Table 1: Zoning Provisions			
Zoning Mechanism	V2E Provisions	Proposed	Compliance
Minimum Lot Width (m)	10 m per dwelling unit	Detached dwellings: 10 m	$\checkmark$
		Semi-detached dwellings: 9 m	×
		Townhouse dwellings: 6 m	×
Minimum Lot Area (m²)	Detached: 300 m <sup>2</sup> Semi-detached:	Detached dwellings: 300 m <sup>2</sup>	$\checkmark$
	400 m <sup>2</sup>	Semi-detached dwellings: 280 m <sup>2</sup>	×
		Townhouse dwellings: 180 m <sup>2</sup>	×

Minimum Front Yard setback (m)	6 m	6.0 m	$\checkmark$
Minimum Rear Yard Setback (m)	7.5 m	6.0 m	×
Minimum Interior Side Yard Setback (m)	1.5 m	Detached dwellings: Total setback 1.8 m, with one minimum yard no less than 0.6 m	×
		Semi-detached / townhouses: 1.2 m	×
Minimum Corner Side Yard Setback (m)	6 m	3.0 m	×
Maximum Height (m)	11 m	-Varies, but under 11 m-	$\checkmark$
Maximum Lot Coverage (%)	20%	55%	×

### 4.3 Relief Requested

As indicated in Table 1, a site-specific zoning exception will be required to permit the proposed development. The following provisions are proposed for the site-specific exception:

#### Additional Permitted Uses

Consistent with the zoning approach elsewhere in Richmond Village, "townhouse dwelling" is proposed to be added as an additional permitted use in the site-specific exception. The proposed approach simplifies zoning in the subdivision, rather than applying a different zone to the townhouse units.

#### **Minimum Lot Width**

The proposed minimum lot widths for the semi-detached and townhouse dwellings are 9 metres and 6 metres, respectively. Both lot widths are consistent with lots accommodating these dwelling types elsewhere in Richmond Village, and are reasonable for the proposed dwelling design.

#### **Minimum Lot Area**

The proposed minimum lot areas for the semi-detached and townhouse dwellings are 280 square metres and 180 square metres, respectively. Similar to the proposed lot widths, these areas are consistent with lots accommodating these dwelling types elsewhere in Richmond Village, and are reasonable for the proposed dwelling design.

#### **Minimum Rear Yard Setback**

The proposed rear yard setback is 6 metres for all dwelling types, aligning with standard setbacks in other greenfield subdivisions in Richmond Village.

#### Minimum Interior Side Yard Setback

The minimum interior side yard setback for detached dwellings is proposed to be a total of 1.8 metres, with one side no less than 0.6 metres. Minimum interior side yard setbacks are proposed at 1.2 metres for semi-detached dwellings and townhouse dwellings. As with the rear yard setbacks, these setback requirements are established elsewhere in Richmond Village, and are generally consistent with the 1.5-metre interior side yard setback requirement in the V2E subzone.

#### Minimum Corner Side Yard Setback

A minimum corner side yard setback of 3.0 metres is proposed for all dwelling types. The proposed setback is reasonable for these dwelling types, and generally aligns with the corner side yard setback requirements on other recent greenfield subdivisions in Richmond Village.

#### Maximum Lot Coverage

A maximum lot coverage of 55% is proposed for all dwelling types in the subdivision. The proposed rate of lot coverage is generally consistent with site-specific zoning for other greenfield subdivisions in Richmond Village, and is even more restrictive than many recently-approved zoning amendments for those developments.

## 5.0 Supporting Studies

## 5.1 Serviceability Report

Robinson Land Development was retained by the applicant to prepare a Serviceability Report for Phase 2 of the Creekside Subdivision. Their report confirms that the site can be adequately serviced with municipal infrastructure and can be designed to achieve the required stormwater management controls.

The grading for the Creekside 2 Subdivision will be designed to tie into existing elevations along the property boundaries and to minimize cut/fill volumes, where possible. Grades within the subject site must be set above the 100-year floodplain of the adjacent Flowing Creek Municipal Drain, which ranges from an elevation of 93.87 metres to 94.08 metres adjacent to the site.

The Creekside 2 Subdivision is proposed to be serviced by a new municipal well system. The proposed municipal well and its appurtenances will be contained within Block 302 of the Draft Plan of Subdivision. The communal well block will abut the internal road network (Street No. 4), but will be accessed via a new driveway connection to Eagleson Road, as requested by the City during pre-consultation meetings.

Submitted reports confirm that the proposed well system is feasible to provide water supply for domestic use and fire protection for the proposed Creekside 2 Subdivision and can be designed in accordance with the current Ottawa Water Design Guidelines.

Similarly, the proposed subdivision can be adequately serviced by municipal sanitary sewer system with the provision of a proposed wastewater pumping station and sanitary forcemains, to be designed by JL Richards. The proposed sanitary sewer network, including the gravity sewers, pumping stations and forcemains, can be designed in accordance with the current Ottawa Sewer Guidelines. The peak sanitary design flow from the ultimate development has been calculated to be less than the peak flow allocated in the Parsons study for the Northeast Development Lands.

The review concludes that the proposed subdivision can be adequately serviced with municipal infrastructure and can be designed to meet stormwater management requirements.

## 5.2 Environmental Impact Statement and Tree Conservation Report

An Environmental Impact Statement (EIS) and Tree Conservation Report (TCR) were completed by Muncaster Environmental Planning in support of the applications. The report notes that the subject lands are disturbed from a natural environment perspective by a dominance of cultivated agricultural fields. No Species at Risk utilization was observed or is anticipated for the site other than butternuts, which were not noted. No significant natural heritage features were observed on the site, with the Flowing Creek Municipal Drain located west of the site. There will be no site alterations within 30 metres of the watercourse or its tributaries.

Planting of native trees and shrubs will add to the features and functions of the site and, over time, will replace the limited functions of the scattered trees to be removed. With the proper implementation of the mitigation measures outlined in the report, no negative impacts will be anticipated on the natural environment features of the general area, including the Flowing Creek Municipal Drain corridor to the west.

## 5.3 Geotechnical and Hydro-Geological Investigation

GEMTEC was retained by the applicant to prepare a Geotechnical and Hydro-Geological Investigation. The purpose of the investigation was to identify the general subsurface conditions at the site by means of a limited number of boreholes and, based on the factual information obtained, to provide engineering guidelines on the geotechnical design aspects of

the project, including construction considerations that could influence design decisions. Based on the findings, the following recommendations are provided:

- / The development is underlain by deposits of sensitive silty clay, which has a limited capacity to support loads imposed by grade raise fill material, pavement structures and foundations for the houses. The placement of fill material on this site must therefore be carefully planned and controlled so that the stress imposed by the fill material does not result in excessive consolidation of the silty clay deposit. Concrete slabs, granular base materials, overall grade raise, and pavement structures are considered grade raise filling. Groundwater lowering also results in a stress increase on the underlying sensitive silty clay deposit.
- / The excavations for the foundations should be taken through topsoil to expose undisturbed native silty clay, and possibly into the glacial till. The sides of the excavations should be sloped in accordance with the requirements in Ontario Regulation 213/91 under the Occupational Health and Safety Act. According to the Act, the shallow native overburden deposits can be classified as Type 3 and, accordingly, allowance should be made for excavation side slopes of 1 horizontal to 1 vertical extending upwards from the base of the excavation.
- / The native silty clay deposits are considered suitable for the support of residential structures founded on conventional spread footing foundations.
- / In areas where proposed founding level is above the level of the native soil, or where subexcavation of disturbed material is required below proposed founding level, imported granular material (engineered fill) should be used.

The full report provides further guidelines for construction based on the observed subsurface conditions.

### 5.4 Water Supply Assessment

GEMTEC prepared a Water Supply Assessment for the proposed subdivision. The purpose of the study is to evaluate the potential for the use of a communal well(s) system to support the water requirements of the proposed Creekside 2 development, including groundwater quantity and quality. The report concludes the following:

- / The site is not considered to be hydrogeologically sensitive;
- / The water quality available from the test well is safe for consumption, however groundwater treatment for aesthetic parameters will be required;
- / The water quality determined in the course of the investigation is representative of long-term water quality and is consistent with water quality investigations of the Nepean Aquifer in the Ottawa area;
- / The quantity of groundwater available from the proposed water supply aquifer is sufficient for the proposed development and will sustain repeated pumping at the test rate and duration at 24-hour intervals over the long term; and
- / Interference between neighbouring private drinking water wells is expected to be minimal.

### 5.5 Roadway Traffic Noise Feasibility Assessment

Gradient Wind prepared a Roadway Traffic Noise Feasibility Assessment in support of this application. It was noted that the major sources of traffic noise impacting the residential subdivision are Eagleson Road and Perth Street.

The assessment is based on (i) theoretical noise prediction methods that conform to the Ministry of the Environment, Conservation and Parks (MECP) and City of Ottawa requirements; (ii) noise level criteria as specified by the City of Ottawa's Environmental Noise Control Guidelines (ENCG); (iii) future vehicular traffic volumes based on the City of Ottawa's Official Plan roadway classifications; and (iv) plan of subdivision drawings prepared by Annis, O'Sullivan, Vollebekk Ltd.

The results of the analysis indicate that noise levels will range between 56 and 68 dBA during the daytime period (07:00-23:00) and between 48 and 61 dBA during the nighttime period (23:00-07:00). The highest noise level (68 dBA) occurs at the west blocks and lots of the proposed development, which are closest to Eagleson Road.

Building components with a higher Sound Transmission Class (STC) rating will be required where exterior noise levels exceed 65 dBA. Additionally, Warning Clauses will also be required to be placed on all Lease, Purchase and Sale Agreements.

## 5.6 Transportation Impact Assessment

A Transportation Impact Assessment was prepared by CGH for the purpose of this application. The reports makes the following observations:

#### **Development-Generated Travel Demand**

- / The proposed development is forecasted produce 395 two-way people trips during the AM peak hour and 415 two-way people trips during the PM peak hour.
- / Of the forecasted people trips, 261 two-way trips will be vehicle trips during the AM peak hour and 295 twoway trips will be vehicle trips during the PM peak hour, based upon no bus service in the off-peak directions.
- / Of the forecasted trips, 40% are anticipated to travel north, 5% to the south, 25% to the east, and 30% to the west.

#### **Access Intersections Design**

- / The internal road network will connect to the adjacent arterial road network of Eagleson Road via two local road connections (Street 1 and Street 3).
- / The site accesses are proposed to be stop-controlled on the minor approaches.
- / The 2027 and 2032 future total access intersections operate well.
- / Northbound left-turn lane volume warrants are met for both intersections at both study horizons with the exception of the 2027 AM horizon for the Street 1 intersection.
- / No operational improvements are noted by the implementation of these turn lanes.
- / The northbound left-turn lanes are not recommended along Eagleson Road at the site access intersections

#### **Network Intersection Design**

- / Generally, the network intersections at the 2027 future total horizon will operate similarly to the 2027 background conditions.
- / Under the existing conditions, operations at the 2032 horizon are anticipated to further degrade in the PM peak hour with the addition of site traffic.

- / Assuming the City implements the Perth Street widening project, the operations at the intersection are forecasted to operate well, where the addition of site traffic may result in an increase in queueing on the eastbound approach during the PM peak hour.
- / The pedestrian LOS will not be met at the Eagleson Road and Perth Street/Old Richmond Road intersection in both existing and future conditions, which require crossing distances to be equal or less than three-lane widths.
- / The bicycle LOS will not be met at the Eagleson Road and Perth Street/Old Richmond Road intersection in existing condition, but will be met in future condition under the assumed conditions.
- / The storage lengths identified as being required within this study for the City's future design of the auxiliary turn lanes at the intersection of the Eagleson Road and Perth Street/Old Richmond Road are:
  - NBL: 65 metres
  - SBL: 38 metres
  - SBR: 55 metres
  - EBL: 45 metres
  - WBL: 38 metres

It is recommended by the report that, from a transportation perspective, the proposed development applications proceed.

## 6.0 Conclusions

It is our professional opinion that the application for Plan of Subdivision and Zoning By-law Amendment are appropriate, represent good planning, and are in the public interest.

The proposed development satisfies the criteria established in the Planning Act for subdivision applications. The development is also consistent with the Provincial Policy Statement (PPS) by providing efficient and appropriate development on lands within a rural settlement area, capitalizing on existing infrastructure. The range of proposed dwelling types contributes to the range of housing options available in the community.

The proposal conforms to the Official Plan's vision for managing growth and meets the policies of the Village designation. The proposed development also generally conforms to the policies of the Village of Richmond Secondary Plan.

The proposed Zoning By-law Amendment would apply a Village Second Density Residential [site-specific exception] zoning to the lands, which is consistent with the zoning in other greenfield subdivisions in Richmond. The proposed zoning relief is reasonable and appropriate for the lands.

Supporting studies confirm that the proposal is functional and appropriate.

Sincerely,

Scott Alain

Scott Alain, MCIP RPP Senior Planner

Jaime Posen, MCIP RPP Associate