

# PLANNING JUSTIFICATION REPORT

3285, 3305 and 3288  
Borrisokane Road

Prepared by:



and



Prepared for:  
Barrhaven Conservancy  
Development Corporation

August 2020

18.619

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## 1 Introduction

WND Associates and J. F. Sabourin and Associates Inc. have been retained by Barrhaven Conservancy Development Corporation ('BCDC') to assist in the development approval processes for lands comprising 3285 and 3305 Borrisokane Road and a portion of 3288 and 3300 Borrisokane. (the 'Subject Lands').

The Subject Lands are within the urban area and are designated as '*General Urban Area*' (Ottawa Official Plan: Schedule "B"), which allows for a variety of urban land uses including residential, employment, commercial, recreational uses. More specifically, the South Nepean Area 8 and Areas 9 and 10 Secondary Plans, both as amended by Official Plan Amendment 212, designates these lands for residential land uses.

This Planning Justification Report has been prepared in support of an application for a Draft Plan of Subdivision to advance these lands' ability to develop for their designated urban residential purposes.

### 1.1 Subject Lands and Adjacent Area

As previously noted, the Subject Lands comprise 3285, 3305 and (a portion of) 3288 and 3300 Borrisokane Road; located within Barrhaven, south of Strandherd Drive and north of the Jock River (refer to **Figure 1**). The Subject Lands are approximately 88 hectares in area.

As illustrated on **Figure 1**, areas to the north, east and south of the Subject Lands have been developed, or are planned for, a wide range of urban land uses including:

- Retail and employment areas along Strandherd Drive/McKenna Casey Drive;
- Barrhaven Town Centre: a mixed use area at Greenbank Drive and Chapman Mills Road extension;
- Residential neighbourhoods (including complementary community facilities such as schools, parks, trail systems, etc.) to the north and east;
- Existing and planned employment uses to the north;
- The Jock River to the south: with residential neighbourhoods on the south side of the Jock River; and,
- Highway 416 to the west, with rural and agricultural areas beyond.



Figure 1: Existing Context Map

The existing site conditions comprise primarily of former and barren agricultural lands, extending to the banks of the Jock River on the south, the Fraser-Clarke Creek to the east and north, and the Foster Creek to the west. The river, and associated tributaries, are lined with sparse vegetation, varying from large trees and shrubs, to riparian hedgerows. Natural drainage courses, such as the Foster Creek and Fraser-Clarke Creek run through the site.

## 1.2 Jock River Flood Plain Mapping

Following the submission and confirmation of a site specific elevation survey in May 2020, the RVCA updated their regulatory mapping of the Jock River in July 2020 (see **Figure 2**). This boundary between the flood plain and the developable lands is reflected on the Draft Plan of Subdivision, identifying the Jock River open space blocks and the residential lot fabric (refer to **Figure 2**).

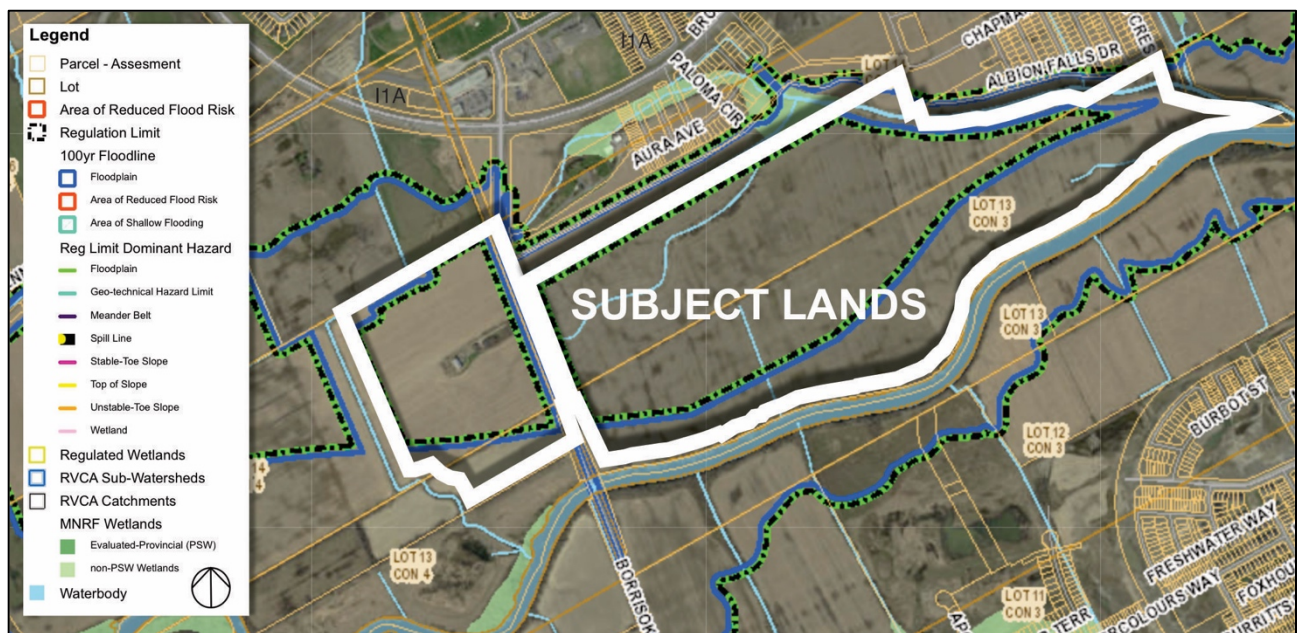


Figure 2: Rideau Valley Conservation Authority Flood Plain Mapping

This boundary between the flood plain and the developable lands is reflected on the Draft Plan of Subdivision, identifying the Jock River open space blocks and the residential lot fabric (refer to **Figure 3**).



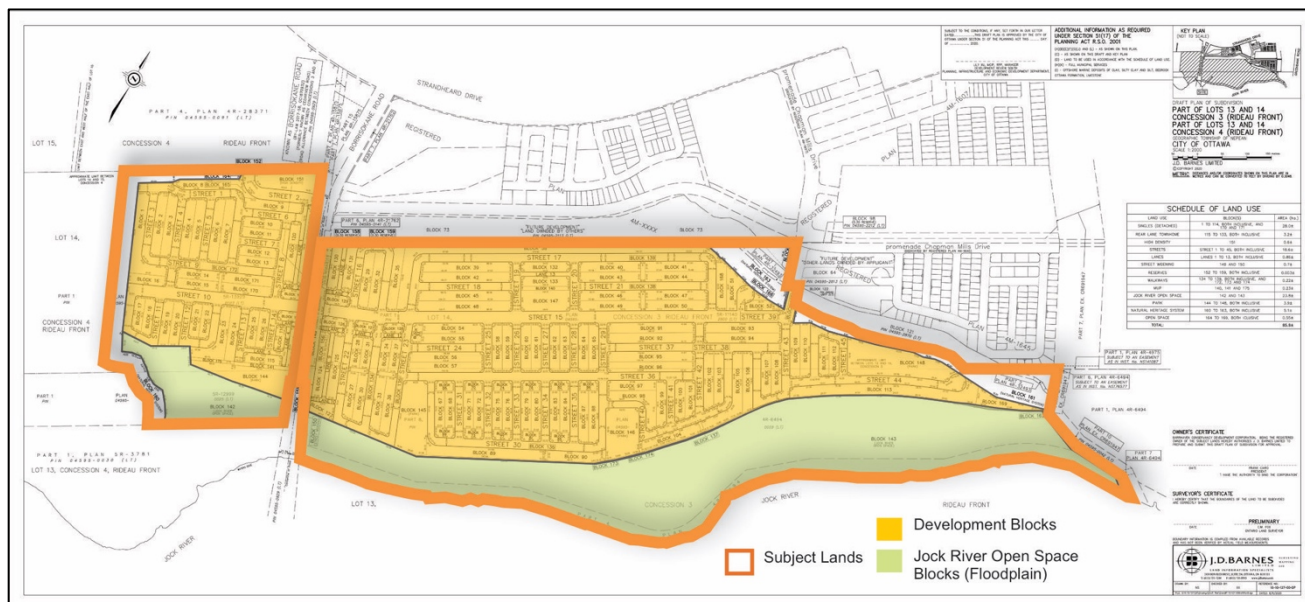


Figure 3: Development and Open Space Blocks

### 1.3 The Development Concept

The overarching objective of the proposed development will be to create a community defined by its direct adjacency to a rich open space system which includes the Jock River corridor and fosters its proximity to the existing Barrhaven community, including the Barrhaven Town Centre as shown on **Figure 4**.

The Jock River Open Space System (JROS) will be a key feature of this community, promoting physical activity and public health, structuring existing natural features and restoring the river corridor, and creating a new destination within Barrhaven. As noted in the NAK Urban Design Brief (July 2020), the Jock River Corridor lands:

*“... will be transformed from an area barren of activity and natural habitat, to lands embedded with environmental and sustainable practices, aimed at increasing biodiversity, showcasing ecological strategies and improving overall community health. In an effort to ease accessibility to this key open space feature, neighbourhood streets and the interface of the residential development will be supported by well-activated streetscapes, clear connections, terminating views and lookouts. Many of the parks within The Conservancy East will also serve as gateways into the Jock River Open Space System.”*

The Jock River corridor is proposed to be activated through a series of active and passive recreational spaces and inclusion of educational opportunities. The corridor will be connected to the Subject Lands and the broader community through multi-directional community linkages. Existing natural features, such as tree canopy, wildlife habitat and fish habitat, will be preserved and the riparian ecosystem will be enhanced and conserved through creation of diverse habitats.

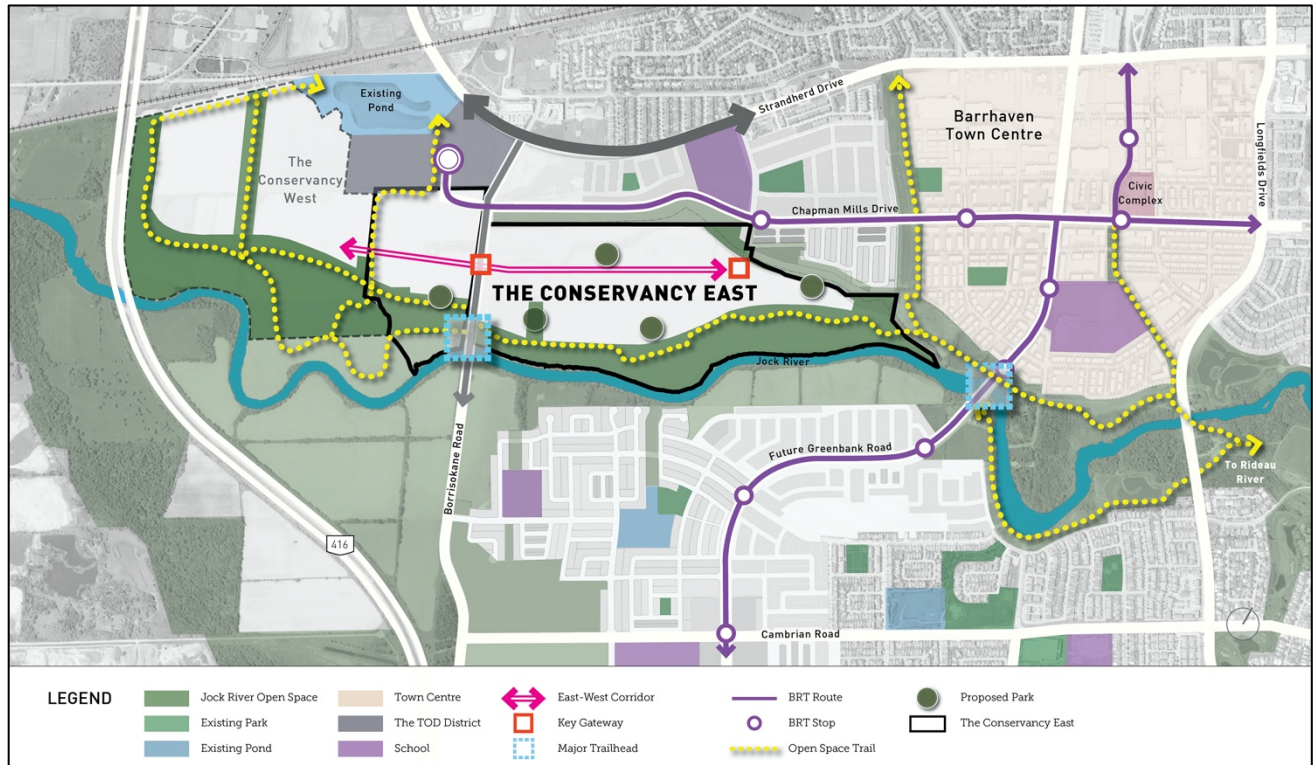


Figure 4: Barrhaven Conservancy East Community Structure [NAK Design Strategies]

The core development principles include:

- Enhancement of the Jock River corridor, incorporating sustainable practices and environmental stewardship measures;
- Inclusive of a variety of connected active and passive open spaces, supportive of healthy living;
- Establishment of an integrated network of trails, pathways and streets, linking to the Jock River corridor and the existing community;
- Support for the Transit-Oriented District located in the southwest quadrant of Borrisokane Road and Strandherd Drive;
- Provision of a variety of grade-related housing types responsive to a diversity of households; and,
- A commitment to a high quality of community and architectural design throughout the community.

The Chapman Mills Bus Rapid Transit ('BRT'), is situated immediately north of the Subject Lands. This transit route connects the Barrhaven Civic and Town Centres to the northeast of the Subject Lands to the proposed terminus BRT stop and associated park and ride facility located in the southwest quadrant of Borrisokane Road and Strandherd Drive. The quadrant would support a potential higher density mixed use development area associated with this transit infrastructure. The development concept provides support for this important transit corridor through strong pedestrian connections (sidewalks and open space trails) providing residents with access to the transit network. Further, higher density housing forms, such as townhouses are situated in close proximity to the transit station.

In terms of community pedestrian connectivity, public sidewalks associated with the local road system will provide connectivity. Further, a number of internal pathways will bisect the larger residential blocks, as needed, together with several connections to the Jock River open space block, where a series of trails (connecting to Borrisokane Road and areas to the east of the Subject Lands) are contemplated (See Figure 11 of the NAK Urban Design Brief).

The road network provides for a centralized east-west collector road (24 m right-of-way width), which provides for a northerly connection to lands northeast of the Subject Lands. An internal grid local road system (16.5 m and 14 m typical rights-of-way widths) provides access to the individual residential lots and blocks.

As located and designed, the parks within the development will form key features of the open space system and will include a variety of amenities and unique designs that appeal to a diversity of ages and abilities. All residential development will be within a 400m radius of a park. Connections to these parks will be provided through the community's active mobility and street network. Four of the five parks will also act as gateways, and connect directly to, the Jock River corridor.

The residential built form will incorporate a unique architectural character that is compatible with the surrounding residential communities and is primarily composed of low to medium density housing forms. The community will include bungalow and two-storey single-detached housing; traditional townhomes along with interspersed rear lane product; and, a future mid-rise block incorporated into a TOD node west of Borrisokane Road.

Further details of the development concept are set out in the NAK Urban Design Brief (July 2020) which includes urban design guidelines to direct the future development of the Subject Lands.

## 1.4 The Draft Plan of Subdivision

The Draft Plan of Subdivision application will support the development of a river centric residential community (as shown on **Figure 5**) and will support the reactivation and restoration of the Jock River corridor. The various neighbourhoods will be comprised of single detached dwellings and townhouses and rear lane single-detached and townhouse products. together with a series of parks oriented to the natural heritage system (refer to **Table 1**). A future block to accommodate higher density residential uses will also be provided near the future TOD located west of Borriokane Road.

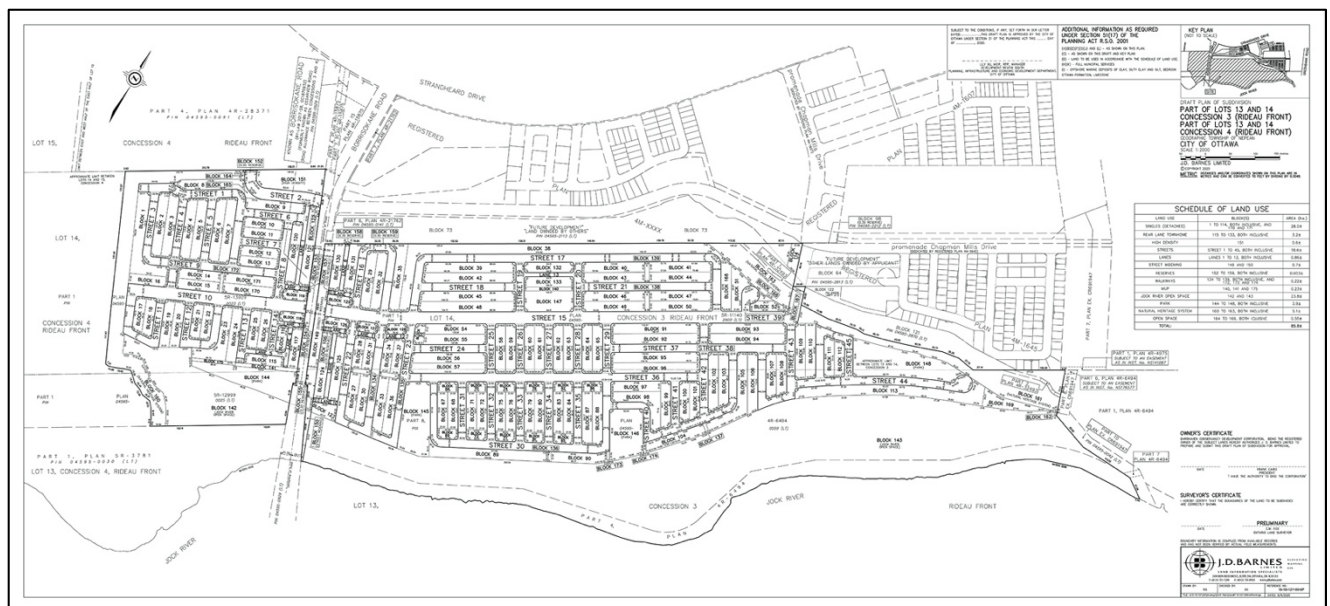


Figure 5: Draft Plan of Subdivision



Table 1: Schedule of Land Use

SCHEDULE OF LAND USE		
LAND USE	BLOCK(S)	AREA (ha.) +/-
SINGLES (DETACHED)	1 to 114, and 170 to 171	28.0
REAR LANE TOWNHOME	115 to 133	3.2
HIGH DENSITY	151	0.6
STREETS	Streets 1 to 45	18.6
LANES	Lanes 1 to 13	0.86
STREET WIDENING	149 and 150	0.7
RESERVES	152 to 159	0.003
WALKWAYS	134 to 139, and 172 to 174	0.22
MUP	140 to 141, and 175	0.23
JOCK RIVER OPEN SPACE	142 and 143	23.8
PARK	144 to 148	3.9
NATURAL HERITAGE SYSTEM	160 to 163	5.1
OPEN SPACE	164 to 169	0.55
<b>TOTAL:</b>		<b>85.8</b>

Parks, open space, natural heritage and Jock River corridor lands comprise approximately 38% of the lands subject to the Draft Plan of Subdivision application.

The proposed development will accommodate approximately 1,450 units. The resultant net residential density, based on the Official Plan definition of net residential lands, is approximately 45 units per hectare which represents an efficient use of these urban residential lands.

## 2 Planning Framework

The purpose of the report is to evaluate the proposed Official Plan Amendment with respect to its consistency/conformity with the 'Provincial Policy Statement 2020, the *Planning Act* and City of Ottawa Official Plan, as amended.

The Amendment is evaluated within as part of Provincial and municipal planning policies contained in the following statutory planning documents:

- Provincial Policy Statement 2020;
- City of Ottawa Official Plan and Official Plan Amendment 212;
- South Nepean Area 8 and Areas 9 and 10 Secondary Plans, as amended; and,
- Zoning By-law 2008-250.

The following sections review and analyze the proposed development in the context of the above noted policy and regulatory documents.

### 2.1 Planning Act

Decisions under the *Planning Act*, including the approval of a draft Plan of Subdivision, must have regards to matters of Provincial interest, which includes (among other matters):

- The protection of ecological systems (s. 2(a));
- The orderly development of safe and healthy communities (s. 2(h));
- The adequate provision of a full range of housing, including affordable housing (s. 2(j));
- The adequate provision of employment opportunities (s. 2(k));
- The protection of public health and safety (s. 2(o)); and,
- The appropriate location of growth and development (s. 2(p)).

The Ottawa Official Plan, including the Secondary Plans for South Nepean Area 8 and Areas 9 and 10, were undertaken pursuant to section 2 of the *Planning Act* and therefore, the implementation of the goals, objectives and policies of these plans would, in turn, have regards for matters of Provincial interest.

Further, the site-specific conditions of Draft Plan of Subdivision approval, can be used to ensure that matters of Provincial interest as addressed and secured (as appropriate) before development is permitted to proceed. Therefore, through application of the mechanisms provided for in the *Planning Act*, in our opinion, the implementation of development approvals for the lands can proceed in a manner provided for under the *Planning Act*.

### 2.2 Provincial Policy Statement

The Provincial Policy Statement, 2020, ("PPS") came into effect May 1, 2020 and, pursuant to section 3 of the *Planning Act*, is meant to provide further direction on matters of Provincial interest related to land use planning and development. The document, through the *Planning Act*, directs that decisions affecting planning matters "shall be consistent with" the policy statement.

In our opinion, as discussed below, development of the Subject Lands area will proceed in a manner consistent with the PPS.

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Section 1.1.1 of the PPS, promotes the establishment of healthy, liveable and safe communities through (among other matters):

*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;*

The Subject Lands are located within the urban boundary/area and form part of the 'settlement area', where the PPS directs the majority of growth and development to occur. The proposed development includes a range of single detached and townhouse and (potential future high density) housing that address market demand, together with parks and open space to meet the City's long-term growth. Further, development approvals for these lands will contribute to the PPS (Section 1.4.1) policy that municipalities maintain a minimum 15-year residential land supply, with such land supply to be comprised of both residential intensification/redevelopment lands, and greenfield lands designated and available for residential development (such as the Subject Lands).

In terms of short-term housing supply, the PPS (Section 1.4.1) requires that municipalities maintain, at all times, land with servicing capacity sufficient to provide at least a 3-year supply of residential units available through zoned sites for residential intensification/redevelopment, and through lands in draft approved and registered plans. Draft plan approval of the Subject Lands will contribute to this 3-year supply.

The proposal is anticipated to result in net environmental gains, improving the quality and quantity of water as directed in Section 2.2 resulting from the proposed restoration of the Jock River corridor lands and enhancements to tributary watercourse vegetated buffers. The Enhanced Environmental Impact Review has determined that no negative environmental impacts to the Jock River watershed are expected. The public health and safety policies related to hazard lands as per Section 3.0 of the PPS are therefore respected as there is no development proposed to occur on the flood plain lands. The lands affected by the 100-year flood plain of the Jock River shall be conveyed to the City of Ottawa as open space/constraint lands.

In our opinion, the applications are consistent with the current PPS.

## 2.3 Official Plan

The Ottawa Official Plan designates (Schedule B therein) the Subject Lands as (refer to **Figure 6**):

- 'Major Open Space' along the north side of the Jock River; and,
- 'General Urban Area'.

The 'General Urban Area' (urban) designation permits all types and densities of housing, as well as employment, retail uses, service, industrial, cultural, leisure, greenspace, entertainment and institutional uses.

The *Major Open Space* designation reflects components of the City's Greenspace Network; in this instance, the corridor along the Jock River within the Subject Lands. The intent is that the open space lands associated with the Jock River corridor will be placed in public ownership.

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Official Plan Amendment 212 (approved April 2018) refined the limits of the Major Open Space designation and such limits are reflected in the Draft Plan of Subdivision.

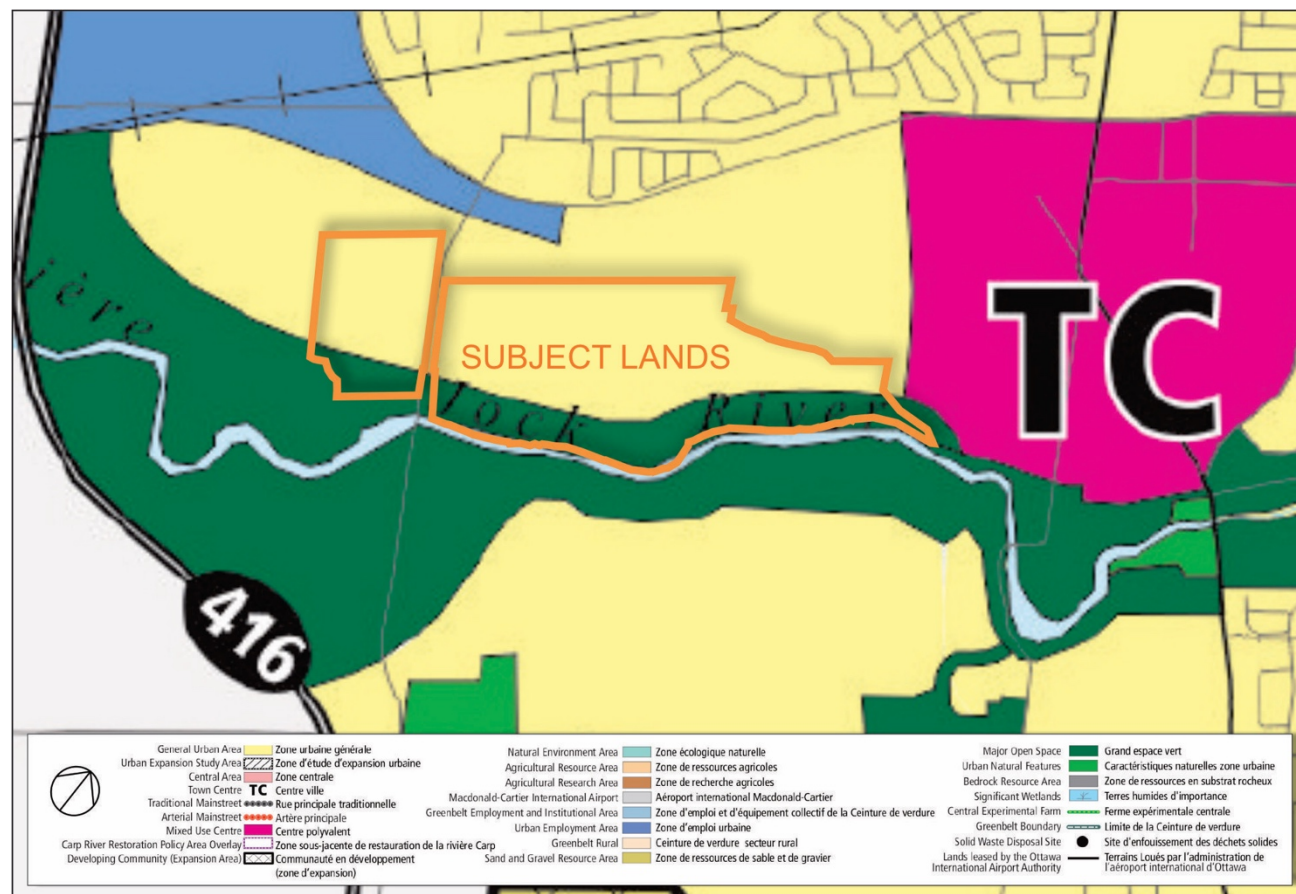


Figure 6: City of Ottawa Official Plan Schedule B Urban Policy Plan

Section 2.4 of the Official Plan deals with “Maintaining Environmental Integrity” and the policies contained therein address how to protect and enhance the quality of the City’s environment through (among other matters):

- Identifying and projecting natural features;
- Planning on the basis of the natural systems defined by watersheds;
- Managing groundwater resources; and,
- Planning for forests and other greenspaces.

In particular, Section 2.4.2: Natural Features and Functions which includes (among other components) natural corridors such as flood plains that are identified through planning or environmental studies as being important linkages between other features such as wetlands, valleylands, etc. The Jock River is part of this linked system of watercourses, valley lands and other natural features with interrelated functions that require protection and support. Lands along the Jock River which encompass the regulatory flood plain are identified as open space blocks with the Draft Plan of Subdivision and are intended to protect and enhance the natural heritage system associated with the Jock River. The proposed development is in keeping with policies of Section 4, discussed further below.



Section 2.4.3: Watershed and Subwatershed Plans of the Official Plan addressing watershed planning as an integrated, ecosystem approach to land use planning with defined watershed boundaries. The Subject Lands are situated within the Jock River Reach 1 Subwatershed Plan (JRR1SWSP). These Official Plan policies indicate that through the identification of natural features and functions within a particular area, watershed planning identifies considerations that should be applied to setbacks from water bodies, stormwater management requirements, protection of significant natural features and habitat linkages, and opportunities to rehabilitate degraded areas or otherwise enhance the environment.

At the time the JRR1SWS was approved in 2006, and based on the available information regarding development potential at that time, limited consideration was given to the Subject Lands. For this reason, the City acknowledged that further study was required for the areas north of the Jock River, to finalize the conceptual stormwater management and natural environment plans.

To address the limitations of the existing subwatershed plan, and promote additional environmental coordination, the technical studies (Enhanced Environmental Impact Statement and Master Infrastructure Review) prepared in support of this application provide additional information and guidance. Similar to an Environmental Management Plan and Master Servicing Study, these reports expand upon the objectives and direction provided by the JRR1SWS, and integrate the restoration and protection of the natural environment features and function of the area with the proposed community design and servicing strategies. The reports address such matters as:

- the investment in establishing appropriately wide robust vegetated setbacks from the watercourses on and adjacent the site;
- wetland creation to re-establish lost habitat and diversity in this reach of the Jock River;
- tree planting to restore forest cover and canopy objectives along the Jock River and tributary corridors;
- natural feature improvements to existing features such as meadow and aquatic habitat) and the creation of new features (e.g., habitat for Species at Risk),
- creation of passive recreational activities such as pathways and access to water opportunities for the public in the open spacer corridor, and
- stormwater management designed to maintain natural drainage, hydrate new wetland areas and provide appropriate water quality and thermal mitigation for the receiver.

Section 2.4.5: Greenspaces of the Official Plan addresses a broad range of greenspaces such as wetlands, forest, parks, stormwater management facilities, National Capital Commission lands, etc. Supported by the City's Greenspace Master Plan, the Official Plan policies support the achievement of the Greenspace Master Plan strategies through (among other matters);

- Establishing a target of 4.0 hectares per 1,000 population for open space, park etc. purposes (or approximately 16-20% of the gross land area);
  - Increasing forest cover to 30% of the entire City by protecting existing trees and supporting tree planting through the development process;
  - Public acquisition of lands for greenspace purposes;
  - Implementing the City's multi-use pathway system; and,
  - Securing access to greenspace in partnership with private entities.
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When applied to the Draft Plan of Subdivision, the parks, Jock River corridor, natural heritage and other open space areas represent approximately 38% of the gross land area of the Subject Lands, which satisfies these Official Plan policies.

Particular attention to tree planting is proposed within the Jock River corridor, which lands will be transferred into public ownership.

Public access to the Jock River corridor has been provided through locating park blocks abutting these open space lands; and, pedestrian connections and single-loaded streets. Finally, the multi-use pathway system (as identified on Schedule C of the Official Plan) has been implemented within the limits of the Subject Lands (see Figure 11 of the NAK Urban Design Brief and Figure 20 of the CGH Traffic Impact Assessment reports).

As directed in Section 4.1 of the Official Plan, the proposed development is consistent with direction and policies identified in the secondary plans for the area as detailed in Section 2.5 of this report. Through these detailed development applications, the matters set out in Section 4 of the Official Plan (as discussed below), together with other relevant Official Plan land use policies contained in the relevant Secondary Plan related to greenfield development lands can be achieved, such as a range/mix of housing, efficient development densities, providing appropriate community amenities (such as parks, pathways, etc.), will be secured.

Although a portion of the Subject Lands are identified as flood plain on Schedule K, only the proposed open space blocks along the Jock River corridor are within the flood plain. Section 4.8.1.2 of the Official Plan indicates that refinements and updates to the *Flood Plain* mapping may be undertaken without the need to amend Schedule K. As previously discussed, the RVCA has updated its flood plain mapping of the 100-year flood plain and regulatory boundary consistent with the approvals granted under permit RV5-4419. The policy specifically contemplates that Schedule K will be updated by the City at the time of a comprehensive Official Plan review, or at the time that any technical corrections are made to the Official Plan by the City and the revised flood plain mapping would be reflected on Schedule K at that time. As previously noted, no residential development is proposed within the flood plain.

There is a similar 'Flood Plain' area identified on Schedule L2 – 'Natural Heritage System Overlay' of the Official Plan (refer to **Figure 7**) based on earlier flood plain mapping, which has now been updated by the RVCA. Flood plains are identified by land elevation in relation to the adjacent watercourse 100-year water elevation and the RVCA has confirmed that the proposed development lands are not within the flood plain based on current mapping

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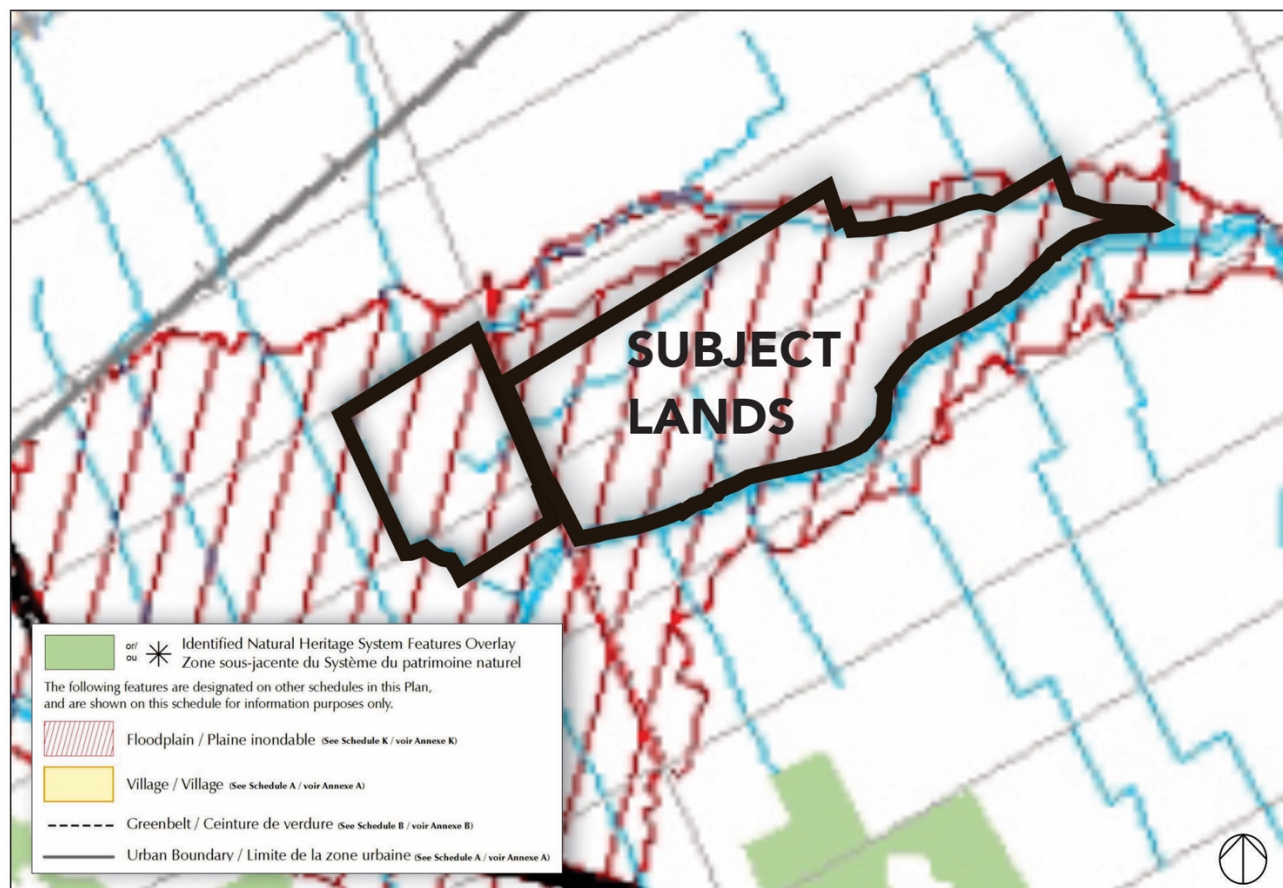


Figure 7: City of Ottawa Official Plan Schedule L2 Natural Heritage System Overlay (South)

An Environmental Impact Statement has been provided with the application, provided in accordance with the requirements of Section 4.2 of the Official Plan. A summary of the Environmental Impact Statement can be found in Section 3.2 of this report.

Section 4.3: Walking, Cycling, Transit, Roads and Parking Lots directs the consideration of the adequacy of the transportation network in subdivisions, including travelling by means of walking, cycling and transit. These matters have been considered in the CGH Transportation Transportation Impact Study submitted with this application and summarized in Section 3 of this report. This report identifies transit as being a key priority for the building of this subdivision, including the extension of the Chapman Mills BRT to the TOD area located in the southwest quadrant of Borrisokane Road and Strandherd Drive.

Two engineering reports have been prepared to address servicing in accordance with Section 4.4: Water and Wastewater Servicing of the Official Plan and are discussed in Section 3 of this report.

As per Section 4.4.1: Development in a Public Services Area, an Adequacy of Services Report has been prepared. This report is based on the conclusions of the accompanying Master Infrastructure Review which considers and evaluates various options for water and sanitary services. Preferred options are identified and recommended. Briefly, water supply is expected to be connected through the Town Centre Lands along Chapman Mills Drive and shall conform to all City and MECP guidelines and Policies and capacity in the SNC sanitary sewer has been confirmed and the development is expected to connect at a future Chapman Mills Drive manhole.

A Stage 1-2 Archeological Assessment has been prepared in accordance with Section 4.6: Cultural Heritage Resources and concluded that no further archaeological investigations of the lands were required.

The objectives of the Environmental Protection policies in Section 4.7 are based on design with nature principles that support natural features and functions. The development proposal initially identified the natural features and functions on the subject lands and prepared both the development layout and servicing design to support and enhance these components. This proposal is supported by an Enhanced Environmental Impact Statement which contains a Tree Conservation Report and an Integrated Environmental Review Statement. A detailed Erosion and Sediment Control Plan will be prepared as a condition of draft approval.

The majority of the site is former tilled farmland, extending directly to the Jock River Vegetation on the site will be preserved and protected within the proposed Jock River open space corridor and along the tributaries. The proposed plan maintains this existing vegetation and enhances it through additional planting of trees and other indigenous species suitable for the area (refer to **Figure 8**).

The proposed development plan also includes extensive tree planting in the previously tilled land along the river corridor and within the residential community. The stormwater management plan shall provide quality control treatment in advance of directing stormwater to hydrate new wetlands which will also provide thermal mitigation and finishing water quality benefits prior to entering the Jock River.

The subdivision layout establishes 30 metre setbacks on either sides of the tributary watercourses, and significantly larger buffers of 80 to 400 metres along the Jock River which include tree planting, meadows, the construction of new wetland areas and low impact passive recreation opportunities.

The lower reaches of the Fraser Clarke Watercourse are currently subject to an approved realignment program under a separate development project to enhance aquatic habitat along the channel. Under the current project, the new lower channel will be retained and situated within a 65 m wide corridor with enhance riparian vegetation.

The upper half of the Fraser Clarke Watercourse will require a realignment northward (requiring a permit from the RVCA) to accommodate the required 30 m setback. The realignment will provide the opportunity to improve both the hydrology and riparian corridor of the feature. This realignment corrects a previous realignment that inadvertently imposed setbacks onto the subject property.

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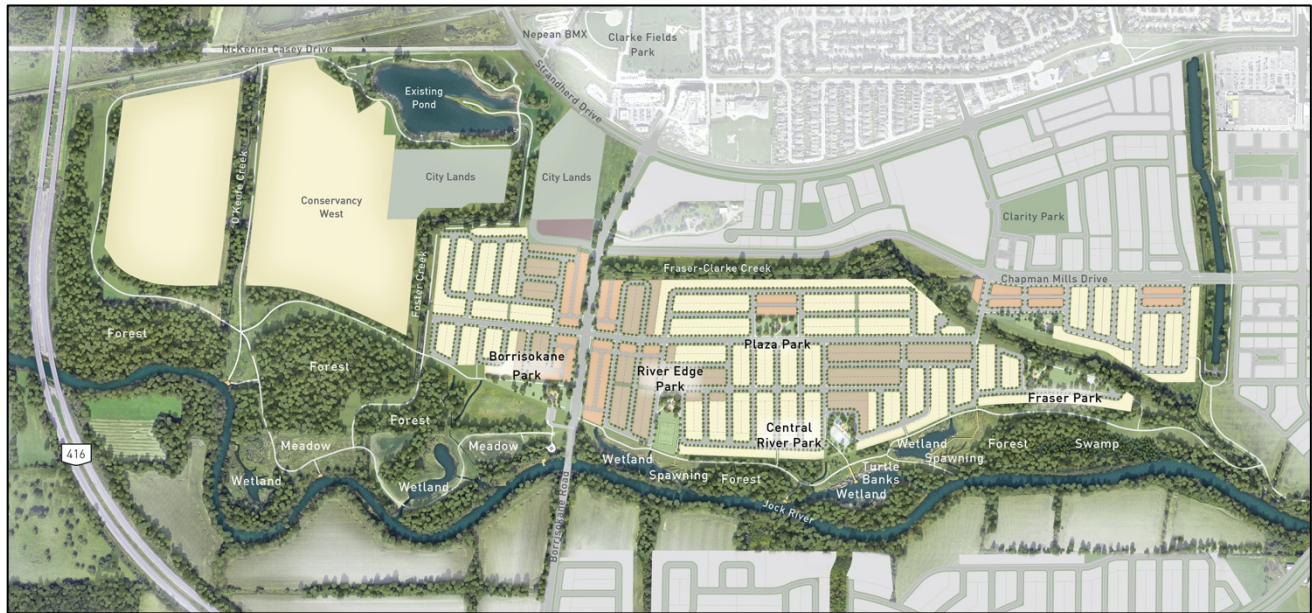


Figure 8: Barrhaven Conservancy East Master Plan [NAK Design Strategies]

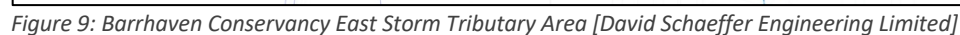
The Tree Conservation Report indicates there are no trees located within the residential development areas. Trees within 30 m of each side of the tributaries will continue to be protected by the open space blocks. Trees within the Jock River corridor open space blocks are detailed in the Tree Conservation Report and the canopy shall be enhanced as part of the Jock River Open Space restoration work, in consultation with City and RVCA staff.

Species at risk on or adjacent the subject lands could potentially include Bank Swallow, Butternut Tree and Snapping Turtles. The implementation of suitable mitigation measures is expected to remove any potential impacts to these species.

The stormwater management strategy for the site considers the natural drainage patterns, site constraints, the requirements of the receiver and opportunities to support the Jock River Open Space environmental restoration as per Section 4.7.6 of the Official Plan. The natural drainage towards the Jock River, comprising surface flows and existing tributaries, is proposed to be replicated in the design of multiple stormwater outlets contributing flow at different discharge points along the Jock River (refer to **Figure 9**). Within the development area, stormwater is collected and conveyed by underground pipe sewer, and passed through a local OGS unit which provides 80% TSS removal (enhanced quality control) at the south boundary of the development area. These multiple drainage points outlet to naturalized wetlands and channels within the open space blocks which provide polishing and thermal mitigation prior to outletting to the Jock River. The naturalized wetlands in turn benefit from hydration provided by the stormwater inputs and flows are contributed to the receiver at multiple points.

Quantity controls are not required in the reach of the Jock River in accordance with the subwatershed study, however management for erosion control, if required, will be accommodated.

Constraint considerations on the site such as clay soils, high water table and grade raise restrictions limit the opportunities to implement effective LID measures, and will result in the requirement for sump pump servicing of residences.



In our opinion, the development applications conform to, and will implement the land use designations and policies of, the City of Ottawa Official Plan, as amended.

- To delete the *Commercial Recreation* designation for the Subject Lands and provide for a Residential designation;
- To delete the policy references to a Two-Zone approach to flood plain identification/management; and,
- To incorporate additional policies indicating that the Jock River regulatory flood line (together with any required flood mitigation or stormwater control facilities) will be deemed to be the limit of the *Conservation* – designated lands.

The updated flood plain boundary, as shown on Figure 2, has been respected in the delineation of the development land and the establishment of open space blocks for conservation purposes in the proposed Draft Plan of Subdivision.

In our opinion, the proposed development conforms to Official Plan Amendment No. 212.

## 2.5 South Nepean Secondary Plans

The South Nepean Area 8 Secondary Plan (which applies east of Borrisokane Road) is intended to provide additional policy guidance on an area-specific basis, which informs development applications filed within its boundary. Schedule A of the South Nepean Area 8 Secondary Plan, as amended by Official Plan Amendment 212, designates the Subject Lands as follows:

- 'Conservation' for areas along the Jock River; and,
- 'Residential'.

South Nepean Areas 9 and 10 Secondary Plan (which applies west of Borrisokane Road), as amended by Official Plan Amendment 212, similarly provides an area-specific policy framework and designates the Subject Lands as follows:

- 'Conservation' for areas along the Jock River; and,
- 'Residential'.

The South Nepean Area 8 Secondary Plan contains a number of goals and objectives, to which the proposed development contributes (where relevant), as follows:

1. To provide a land use pattern which complements land uses proposed for Planning Areas 9 & 10 and the Activity Centre.  
*The proposed development orients higher density, grade-related residential uses along Borrisokane Road.*
  2. To provide a mix of primarily residential uses as well as employment uses to build on and complement the locational opportunities of the Strandherd Drive corridor which links Highway #416 to the Activity Centre.  
*The proposed development provides for a range of grade-related residential housing forms, together with future higher density residential uses in proximity to a transit station west of Borrisokane Road.*
  3. To conserve the Jock River floodplain and utilize the recreation potential that may be available from it.  
*The updated area of the Jock River floodplain will be conserved and passive recreational uses will be incorporated within the floodplain.*
  6. To provide a transportation network of roads which blends into and integrates with the existing and planned network.  
*The proposed internal collector road (and its future connections) will appropriately integrate with the existing /planned transportation network.*
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7. To provide for a convenient and safe pedestrian and bicycle network.  
*The pedestrian network will be comprised of sidewalks along public roads and a series of dedicated connections leading to key neighbourhood elements, such as the local parks and Jock River open space area. The bicycle network will be comprised of the local public road network and the dedicated connections noted previously.*
8. To enable the provision of an efficient local transit service and to recognize and protect for the long term provision of a rapid transit corridor.  
*Local transit service can use the internal collector road.*
9. To provide a cost effective and flexible strategy for the provision of infrastructure.  
*The extension of water and wastewater services utilizes capacity in the existing system which supports the economic feasibility of the public services. The stormwater servicing strategy relies on natural drainage patterns, supports efficient land use and supplements hydration in the constructed wetland features.*

The South Nepean Areas 9 and 10 Secondary Plan also contains a number of goals and objectives, to which the proposed development contributes (where relevant), as follows:

1. To have regard for provincial and federal planning policies and initiatives.  
*The proposed development is consistent with Provincial policies.*
  2. To blend new residential areas with existing residential communities.  
*The proposed development will integrate with existing neighbourhoods through the road and open space systems and compatible residential land uses.*
  3. To provide recreation, open space and education facilities that are conveniently located and contribute to the quality of residential areas.  
*Local parks are dispersed through the development and oriented to natural heritage features.*
  4. To provide for a range of housing types with a transition of density from the west to the east.  
*Single-detached townhouse units are distributed throughout the proposed development with a concentration of townhouse units occurring along the west side of Borrisokane Road, in proximity to the planned BRT transit line.*
  6. To conserve the Jock River flood plain and utilize the recreation potential that may be available from it.  
*The Jock River flood plan is retained as open space, accessible for passive recreation use.*
  10. To enhance views and vistas into and within South Nepean.  
*Views into the Jock River open space corridor are provided through parks and single-loaded road linkages.*
  11. To provide a transportation network of roads that blends into the existing network.  
*The proposed east-west collector road connects through other development lands to the north east and to Chapman Mills Drive beyond. This collector road will ultimately connect to additional lands to the west of Borrisokane Road.*
  12. To provide a convenient and safe pedestrian and bicycle network.  
*The developed incorporates a variety of different means of travel throughout the community which connect users to major greenspace elements, such as parks and the Jock River corridor.*
  13. To enable the provision of local transit service and recognize the long term provision of Rapid Transit Corridor service.  
*Local transit connections, through the proposed east-west collector road, will ultimately connect to the rapid transit corridor located north of the proposed development.*
  14. To provide a cost effective and flexible strategy for the provision of infrastructure.
  15. *The extension of water and wastewater services utilizes capacity in the existing system which supports the economic feasibility of the public services. The stormwater servicing strategy relies on natural*
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*drainage patterns, supports efficient land use and supplements hydration in the constructed wetland features. To enable phasing of development as a logical extension of the existing community. The proposed development connects to the existing road and servicing network and provides appropriate opportunities for integrated development to occur on lands to the west of the Subject Lands.*

The proposed Draft Plan of Subdivision also conforms to the following development requirements as set out in the South Nepean Area 8 Secondary Plan:

- Maximum building height of the grade-related residential uses proposed will not exceed 10.7 metres;
- Provision of a neighbourhood park that is surrounded on three sides by road and abutting a stormwater management facility;
- Accommodation of public linkages to the Jock River floodplain;
- Provision of appropriate stormwater management facilities, based on detailed engineering design;
- Provision of a modified urban grid local road network; and
- Provision of sidewalks along at least one side of each public road.

The proposed development is consistent with Section 7.0 infrastructure policies except where the details do not account for i) development in this area or ii) where references have become outdated through infrastructure development and implementation that has occurred in the past 15 years since the plan was prepared.

- Although the South Nepean Master Servicing Study and South Nepean Master Drainage Plan did not fully consider the development of these, stormwater will be managed in accordance with the strategic approach taken in the Area 8 plan. Stormwater shall be collected by storm and treated in accordance with requirements of the receiver. The regulatory floodplain and watercourse setbacks will be dedicated to the municipality.
- Sanitary sewer service is provided through extensions of the existing system which has sufficient capacity available.
- Water supply is to be provided with from existing capacity available from existing areas and facilities.
- Utilities shall be expanded where required.

## **2.6 Zoning By-law**

The majority of the Subject Lands are zoned 'Development Reserve ('DR')' in By-law 2008-250, with a small portion of the subject site (along the north and east bank of the Jock River being zoned 'Open Space 1 ('O1') Zone' (refer to **Figure 10**). The Subject Lands are also subject to a 'Flood Plain Hazard Overlay' (identified by the hatched area on the Figure below) which prohibits the uses permitted by the underlying DR and OS1 zoning.

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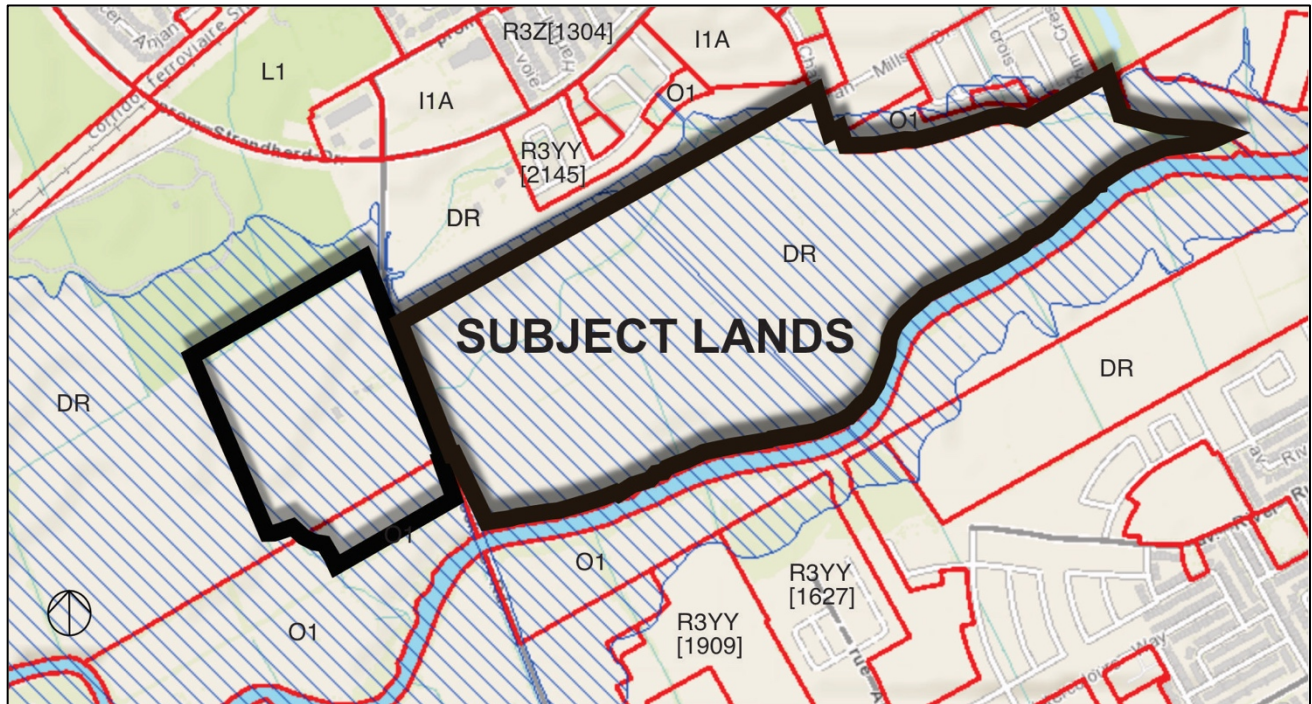


Figure 10: City of Ottawa Zoning By-law No. 2008-250

Pursuant to the updated flood plain boundary having been established by the RVCA, it is anticipated that the City will pass an administrative Amendment to By-law 2008-250 to align the Flood Plain Hazard Overlay with the current boundary. Subsequently, BCDC will file a further application to amend By-law 2008-250 to the Zone categories that reflect the uses and development blocks advanced within the Draft Plan of Subdivision.

## 2.7 Other City Initiatives

Several other City initiatives are to be considered in the preparation and evaluation of a greenfield residential development, including Building Better and Smarter Suburbs (2015) and Design Guidelines for Greenfield Neighbourhoods (2007).

While the recommendations of Building Better and Smarter Suburbs are related to Community Plans (as opposed to individual subdivision plans), the following principles have been incorporated into the proposed Draft Plan of Subdivision and are further described and illustrated in the NAK Urban Design Brief:

- Inclusion of a grid-like street network that connects to transit and supports active transportation through inclusion of pedestrian and cycling paths through a 'complete streets' approach and also connects the open space and park facilities;
- Implementation of traffic calming measures, where appropriate;
- Advancement of appropriate-scaled local and collector roads;
- Avoidance of reverse frontage lots;
- Provision of parks that address the City's park size and design criteria;
- Location of parks that directly abut, and connect with, the Jock River corridor open space lands;
- Appropriate on-site and street parking opportunities; and,
- Inclusion of rear lane accessed housing, where appropriate.

Design Guidelines for Greenfield Neighbourhoods illustrate the City's expectations for greenfield neighbourhoods and are to be considered through the processing of plans of subdivision. The following principles have been incorporated into the proposed Draft Plan of Subdivision and are further described and illustrated in the NAK Urban Design Brief:

- Establishing a connected network of parks and greenspaces that is structured by the existing Jock River natural heritage feature;
  - Conservation of natural features, including healthy trees, associated with the Jock River flood plain corridor;
  - Focussing higher density housing forms (in this instance townhouses) to, among other areas, the Borrisokane arterial road and future BRT transit stop;
  - Including rear lane accessed housing in appropriate locations;
  - Providing appropriate collector and local road connections to adjacent developments to complete the road network;
  - Providing appropriately-scaled block sizes to enhance pedestrian access;
  - Locating parks that directly abut, and connect with, the Jock River corridor open space lands;
  - Distributing parks so that they are located within 5-minute walk/400 metres of the majority of residents;
  - Providing parks with at least two street frontages; and,
  - Incorporation a high standard of urban design and architectural design in the built-form (see NAK Urban Design Brief for details).
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### 3 Supporting Studies

The following provides a summary to the technical studies prepared in supported of these applications.

#### 3.1 Urban Design Brief

NAK Design Strategies has prepared an Urban Design Brief (August 2020) describes the overall goals and objectives for the proposed development. As stated in the report:

*The directives outlined in this document will foster the expansion of an existing community into one centered on innovation, sustainability, connectivity and accessibility.*

The proposed development:

*... will showcase compatible yet innovative community design and a commitment to environmental stewardship.*

The Urban Design Brief addresses (among other matters) the Barrhaven and Subject Lands context; the overall community vision and design principles; the community structure and concept plan; design objectives for the Jock River corridor; the network of parks and open spaces and, the proposed street and active mobility networks. The proposed built form and housing typologies are also described.

#### 3.2 Environmental Impact Statement

An Enhanced Environment Impact Statement has been prepared by Kilgour & Associates (July 2020) to determine potential impacts of the proposed residential development on existing natural heritage features and provide mitigation and/or design recommendations to protect these features. The report concludes that the proposed development is in keeping with the recommendations in the Jock River Reach One Subwatershed Study

Appropriate watercourse setbacks and a naturalized corridor along the Jock River are correctly established. Wetland and forest cover, with a recreational pathway system along its northern edge are consistent with guidance documents. Previously developed natural features (i.e., fish habitat compensation pond and the Foster Dry pond) will not be negatively impacted, but shall be integrated and enhanced within the restored corridor. These and other proposed natural feature improvements will benefit the ecological diversity of the Site while simultaneously creating recreational opportunities for the public. No significant negative impacts are anticipated to species-at-risk or their habitats, or to significant natural heritage features present in the broader project vicinity under the proposed project.

Requirements from the subwatershed study related to stormwater management are addressed under the servicing studies for the area.

#### 3.3 Master Infrastructure Review

The Master Infrastructure Review, July 2020 (prepared by David Schaeffer Engineering Limited) considers and evaluates various options for water and sanitary services. Preferred options are identified and recommended.

Water supply is expected to be connected through the Town Centre Lands along Chapman Mills Drive and shall conform to all City and MECP guidelines and Policies.

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Capacity in the SNC sanitary sewer has been confirmed and the development is expected to connect at a future Chapman Mills Drive manhole.

The stormwater management strategy for the site maintains the natural drainage pattern via surface flows and existing tributaries, by establishing multiple stormwater outlets contributing at different discharge points along the adjacent Jock River. Within the development area, stormwater is collected and conveyed by underground pipe sewer, and passed through a local OGS unit which provides 80% TSS removal (enhanced quality control) at the south boundary of the development area. These OGS's outlet to the naturalized wetlands and channels within the open space blocks which provide polishing and thermal mitigation prior to outletting to the Jock River. The naturalized wetlands in turn benefit from hydration provided by the stormwater inputs.

Quantity controls are not required in the reach of the Jock River in accordance with the subwatershed study; however, management for erosion control, if required, will be accommodated.

### **3.4 Traffic Impact Assessment**

With respect to the broader effects of the proposed development, in accordance with City guidelines, a Traffic Impact Assessment has been prepared (CGH Transportation; May 2020) which considered future traffic conditions in the AM/PM peak hours, arising from the proposed development and other area developments within a 2029 and 2034 horizon. Significant area-wide capacity constraints are identified as a result of existing traffic conditions, together with growth generated by all future developments (particularly along Strandherd Drive), and AM/PM turning movement at other area intersections such as Cambrian Road/Borrisokane Road.

The report compiles a list of potential area-wide solutions from infrastructure items approved through the Transportation Master Plan, the Development Charge Bylaw, various EAs and noted within various Barrhaven Community Design Plans, including:

- New Re-Aligned Greenbank Road, from Chapman Mills Drive to Cambrian Road
- Re-Aligned Greenbank Road extension south of Cambrian Road
- Widening of Cambrian Road from the Re-Aligned Greenbank Road to the existing Greenbank Road
- Widening of Jockvale Road from Cambrian Road to Prince of Wales Drive
- Widening of Barnsdale Road between Highway 416 and Prince of Wales Drive
- New interchange at Barnsdale Road and Highway 416
- Chapman Mills Drive BRT Corridor

Of these items, only the new interchange at Barnsdale Road and Highway 416, and the Chapman Mills BRT component of the Re-Aligned Greenbank Road are considered viable for reducing vehicle volume along the area road network. The remaining items would increase capacity to the already congested corridors and exacerbate the problems noted at bottle neck locations.

As previously noted, The Chapman Mills Bus Rapid Transit ('BRT'), is situated immediately north of the Subject Lands. This transit route connects the Barrhaven Civic and Town Centres to the northeast of the Subject Lands to a future terminus BRT stop, associated park and ride facility located and potential higher density mixed use development area, in the southwest quadrant of Borrisokane Road and Strandherd Drive. Accordingly, excellent accessibility to the transit network will be available to residents of the proposed development.

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In terms of the internal road network, local roads will have 16.5 metre and 14 metre rights-of-way (the latter being single-loaded local roads), with a 24 metre right-of-way for the internal, east-west collector road. Traffic calming will be addressed at pedestrian and cycling track crossings (subject to further detailed design arising from the application review). The NAK Urban Design Brief identifies locations for appropriate traffic calming and safe intersection design.

The active transportation network includes a pedestrian network along local and collector roads and dedicated rights-of-way connecting to local parks and the Jock River Corridor (see Figure 20 of the CGH Transportation report). The active network also incorporates cycling routes connecting to existing or planned routes in adjacent lands. Direct connections of the active network to the future Chapman Mills BRT stops and a future stop at Borrisokane Road have also been incorporated into the development.

### **3.5 Environmental Site Assessment**

The Phase One Environmental Site Assessment, October 2018 (prepared by Golder Associates Ltd.). The report concludes that, based on the Subject Lands' prior agricultural and residential use, they do not require a further investigation to support their development for urban residential purposes.

### **3.6 Geotechnical Investigation**

The Geotechnical Investigation, September 2019 (prepared by Paterson Group Inc.) reviewed available subsurface soil and groundwater information prepared by others and provided geotechnical recommendations for the design of the proposed residential development, including construction considerations which may affect its design. The investigation concludes that the Subject Lands are suitable for the proposed residential development, utilizing conventional shallow footings placed on undisturbed clay surfaces or engineered fill; further, grade raise restrictions are recommended due to the presence of silty clay deposits which will also result in specific area restrictions on tree planting.

### **3.7 Stage 1 – 2 Archaeological Assessment**

The Archaeological Assessment, December 2019 (prepared by Paterson Group Inc.) reviewed the archaeological potential of the Subject lands and concluded that no further archaeological study would be required prior to development. The report was accepted and entered into the Ontario Register of Archaeological Reports in February 2020.

### **3.8 Traffic Noise Feasibility Assessment**

A traffic noise assessment, July 2020 (prepared by Gradient Wind) considered the effects of traffic noise on the proposed residential development, including noise from Borrisokane Road, the proposed east-west collector and the proposed BRT transitway to be located north of the Subject Lands.

The results of the current study indicate that noise levels due to roadway traffic over the site will range between approximately 52 and 70 dBA during the daytime period (07:00-23:00), with the highest future traffic noise levels occurring in proximity to the intersection of Borrisokane Road and the proposed internal collector road. Outdoor living areas that side and/or front onto Borrisokane Road or the proposed minor collector may require industry-standard noise control measures such as central air conditioning, upgraded building components and acoustic barriers. A further assessment will be undertaken at the subdivision detailed design stage which will consider a variety of noise control measures and identify whether warning clauses may be required on purchase/sale and lease agreements.

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## 4 Public Consultation Strategy

In partnership with the City of Ottawa, all public engagement activities will comply with *Planning Act* requirements, including the circulation of notices.

The following Public Engagement steps and activities are proposed:

- Notification of Ward Councillor, Councillor Harder, prior to application submission (completed);
- Community “Heads Up” and technical circulation to local registered Community Associations (City of Ottawa); and,
- Statutory public meeting for Draft Plan of Subdivision, to be held by Client in collaboration with Councillor Harder and the City of Ottawa.

Due to COVID-19, alternative public consultation processes may be required, such as an online Community Information and Comment Session.

## 5 Conclusion

In brief summary, as detailed in this report, we are satisfied that the proposed Draft Plan of Subdivision is appropriate for approval, as follows:

- The application has regard to matters of Provincial interest;
- The application is consistent with the Provincial Policy Statement, 2020;
- The application conforms to, and implements, the Official Plan (as amended) and relevant Secondary Plans;
- The proposed development will realize urban residential development within the delineated urban area and support the completion of the Barrhaven community ;
- The resultant development promotes efficient, cost-effective development and land use pattern;
- The proposed development is supportive of, and accessible to, the City’s planned transit network for the Barrhaven community;
- A net environmental gain and objectives of the subwatershed study and local natural heritage policies is achieved through investment in the ecological restoration of the open space along the Jock River corridor, to be dedicated to the City of Ottawa through this process; and,
- The development resulting from the applications can be adequately serviced by extensions of the existing municipal infrastructure.

We recommend approval of the Draft Plan of Subdivision to the City.

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