

Draft Plan of Subdivision & Zoning By-law Amendment Application

2009 & 2013 Prince of Wales Drive, Ottawa ON

Planning Justification Report and Design Brief



Prepared for Alex Sivasambu
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1 Introduction

Arcadis Professional Services (Canada) Inc. (“Arcadis”) was retained by Alex Sivasambu to prepare a Planning Justification Report and Design Brief in support of a Draft Plan of Subdivision and Zoning By-law Amendment application for the lands known municipally as 2009 and 2013 Prince of Wales Drive Ottawa, Ontario (the “site” or “subject site”).

The Owner is proposing to subdivide the lands to accommodate 7 single-detached dwellings through a Draft Plan of Subdivision. A Zoning By-law Amendment to rezone the property from R1E to R1XX is requested.

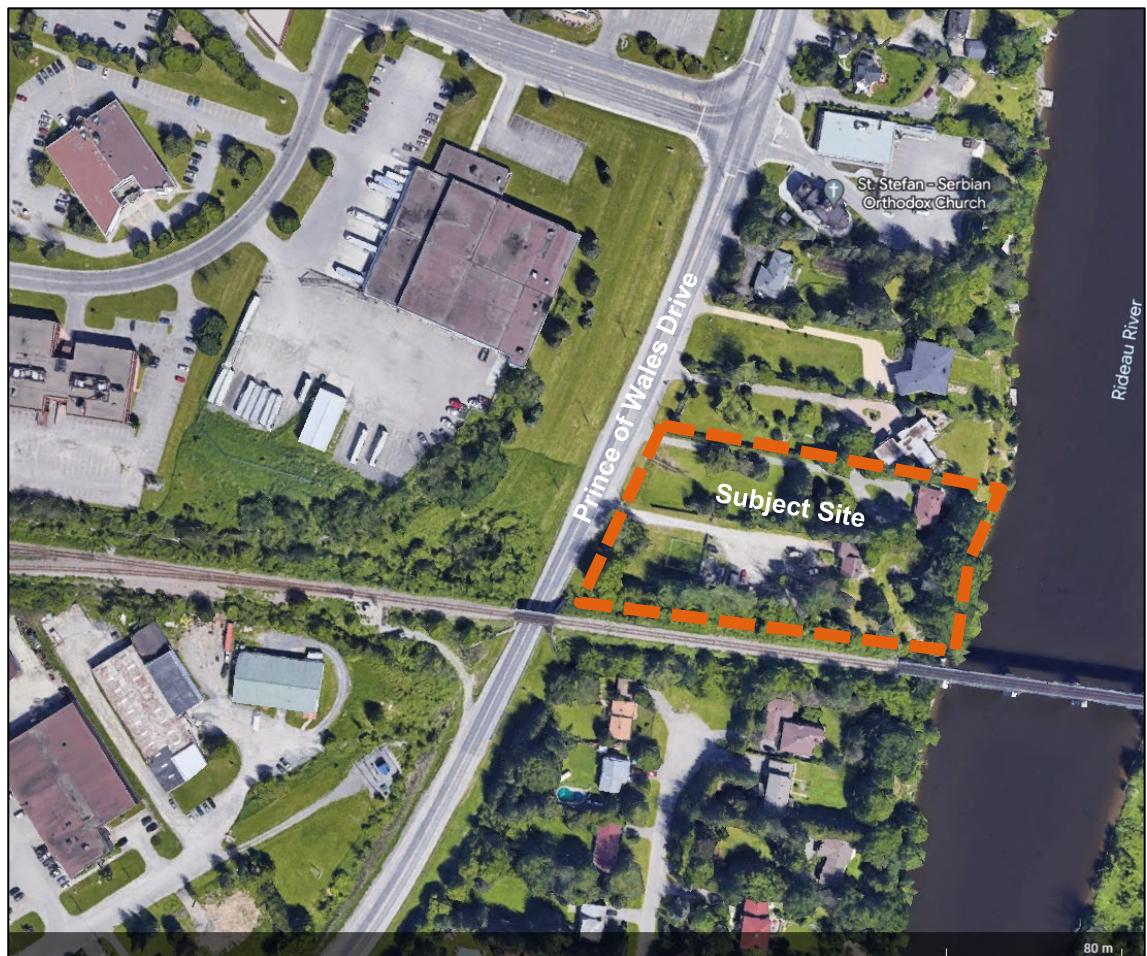
This Planning Justification Report and Design Brief describes the proposed development and surrounding context, provides an overview of the development application, and establishes a professional planning rationale for the application by demonstrating how the proposed development conforms to applicable planning policy and represents good planning.

2 Subject Site and Surrounding Context

2.1 Subject Site

This Draft Plan of Subdivision and Zoning By-law Amendment application is for a 1.12 ha site comprised of two adjacent lots municipally known as 2009 and 2013 Prince of Wales Drive, and legally described as PART OF LOT 11, REGISTERED PLAN 404, AS IN NS45013; OTTAWA/NEPEAN and PART OF LOT 11 AND LOT 12, REGISTERED PLAN 404, AS IN NS28050; OTTAWA/NEPEAN, respectively. Current uses include a detached dwelling at 2009 Prince of Wales Drive (northern lot) and a detached dwelling and detached garage at 2013 Prince of Wales Drive (southern lot). The proposal for the subject site will densify the existing property to include six new low-rise detached residential dwellings in addition to the existing dwelling at 2009 Prince of Wales on the subject site. The residential dwelling and garage at 2013 Prince of Wales drive will be demolished.

Figure 1: Subject Site.



2.2 Existing Site Conditions and Surrounding Context

The site is located within the greenbelt in the Hunt Club South Industrial neighbourhood. The immediate surroundings are generally characterized by residential and industrial uses. Located within Nepean, the site is bounded by Prince of Wales Drive to the west, the CN Rail corridor to the south, the Rideau River to the east, and neighbouring residential property to the north. The

presence of Riverside Drive, Merivale Road, and West Hunt Club Road in proximity connects the area to larger arterials. The surrounding development is low-rise industrial and institutional, open space, or low-density residential.

Within the 100m radius surrounding the subject site, there are several low-density residential dwellings, including those immediately north of the subject site, as well as south of the CN Rail line. The subject site is also connected to Prince of Wales Drive within the 100m radius, as well as the CN Rail corridor and the Rideau River, part of the Rideau Canal World Heritage Site. The surrounding urban pattern is characterized by single detached dwellings on large lots, often situated on small local streets with limited active transportation facilities. From Prince of Wales Drive, views of the site had previously been comprised of existing trees and other natural growth, although such vegetation has been damaged by recent inclement weather and ice storms. On the eastern side, the subject site slopes down towards the Rideau River with views from the river towards the site characterized by trees and other vegetation. Within a 400m radius, there is the presence of industrial land use to the west of Prince of Wales Drive both north and south of the rail line, as well as limited commercial and institutional uses. On the eastern bank of the Rideau River is open space, as well as some residential lands towards the southeast.

Figure 2: Surrounding Context within 100m and 400m.



Figure 3. Site photo key map.



NORTH

Immediately north of the site is a residential property with a single detached dwelling. A hedge between the subject site and neighbouring property to the north provides privacy between the two lots. Further to the north is the St. Stefan Serbian Orthodox Church.

Figure 4: View 1 on key map looking west of the northern edge of the subject site.



Figure 5: View 2 on key map looking north of the northeastern edge of the subject site.



EAST

Immediately east of the site is the Rideau River. Within view of the southern limit of the site is a CN rail line bridge. Further to the east across the river is open space and two high-rise apartment buildings.

Figure 6: View 3 on key map looking southeast from the eastern edge of the site.



Figure 7: View 4 on key map looking south of the eastern edge of the site.



SOUTH

Immediately south of the site is an elevated CN rail line. Between south property line and rail line is a vegetated slope. Overhead wires and posts line the vegetated slope. South of the rail line are low-rise residences.

Figure 8: View 5 on key map looking south from the centre of the site.



Figure 9: View 6 on key map looking east of the southern edge of the site.



WEST

Immediately west of the site is Prince of Wales Drive which acts as a north-south corridor leading to Hunt Club Road to the south and Baseline Road/Heron Road to the north. West of Prince of Wales Drive is an industrial business park.

Figure 10: View 7 on key map looking north from the northern edge of the site.



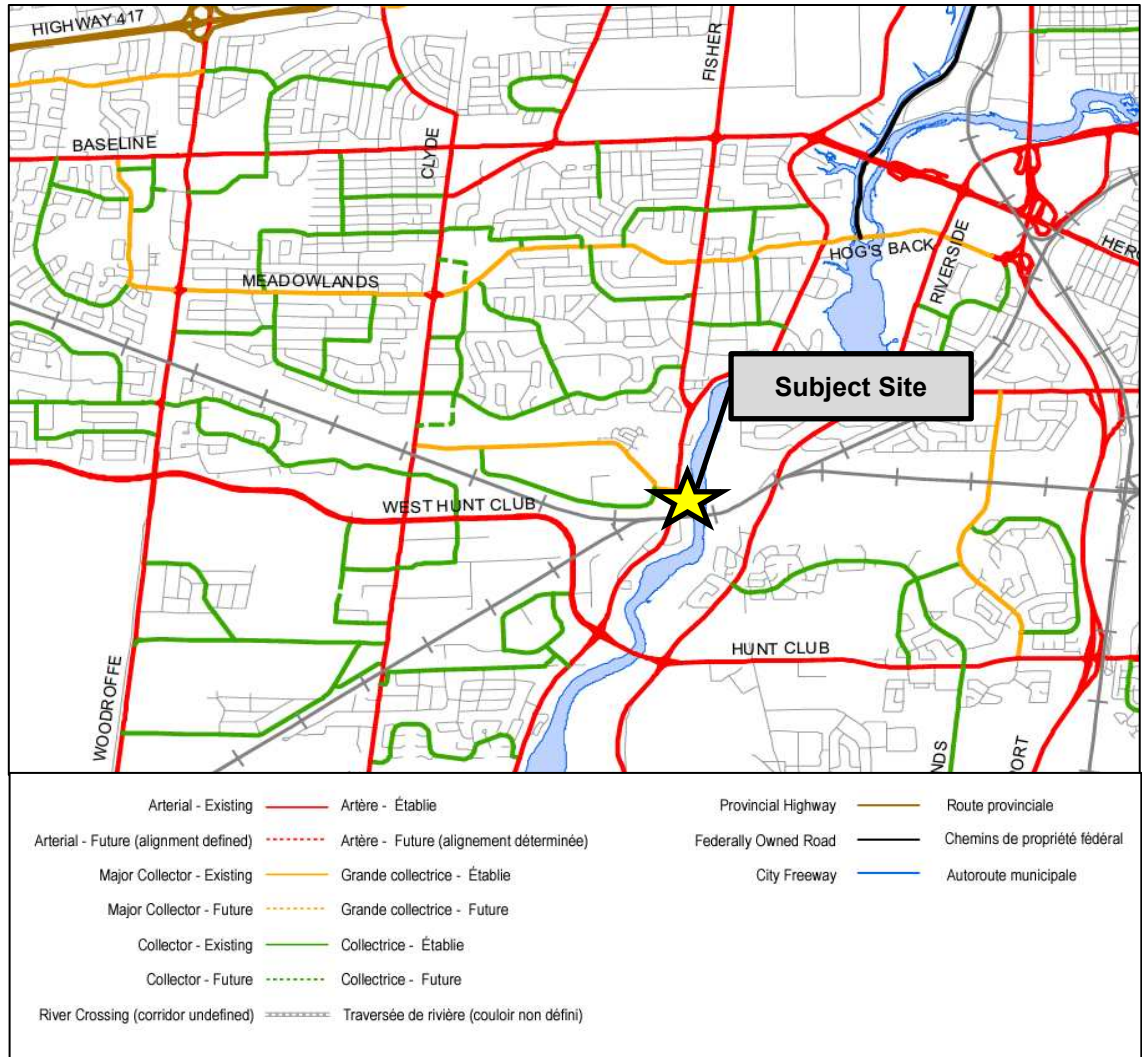
Figure 11: View 8 on key map looking south from the northwestern corner of the site.



2.2.1 Road Network

The site is located on Prince of Wales Drive, a north-south arterial road. To the west is Colonnade Road North, a major collector, connecting to Merivale Road, a north-south arterial. Prince of Wales connects to the east-west arterial West Hunt Club Road to the south, as demonstrated in Figure 12 below.

Figure 12: City of Ottawa Official Plan Schedule C4: Urban Road Network.



2.2.2 Public Transit

The site is relatively disconnected from public transit and is not within proximity to any transit priority corridors. The nearest transit priority corridors are on Hunt Club Road (1.2 km) and Fischer Avenue (900 m). The nearest O-Train station is on the other side of the Rideau River at Greenboro Station, with no direct public transportation routes to the station from the site. The site is bordered to the south by the protected transportation corridor along the CN Rail line used by Via Rail, but the site is not in proximity to any passenger rail stations.

Figure 13: City of Ottawa Official Plan Schedule C2 – Transit Network.

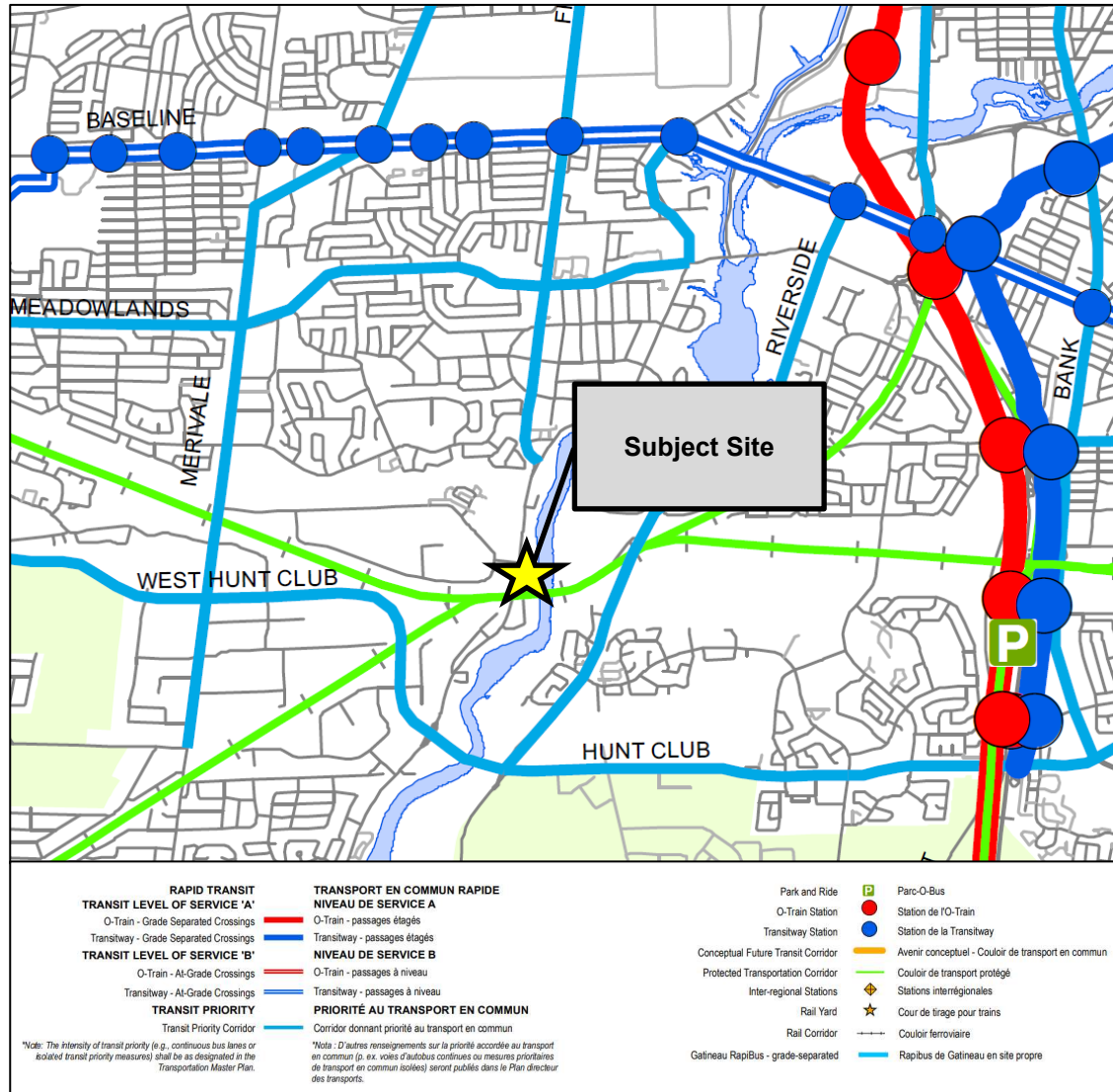
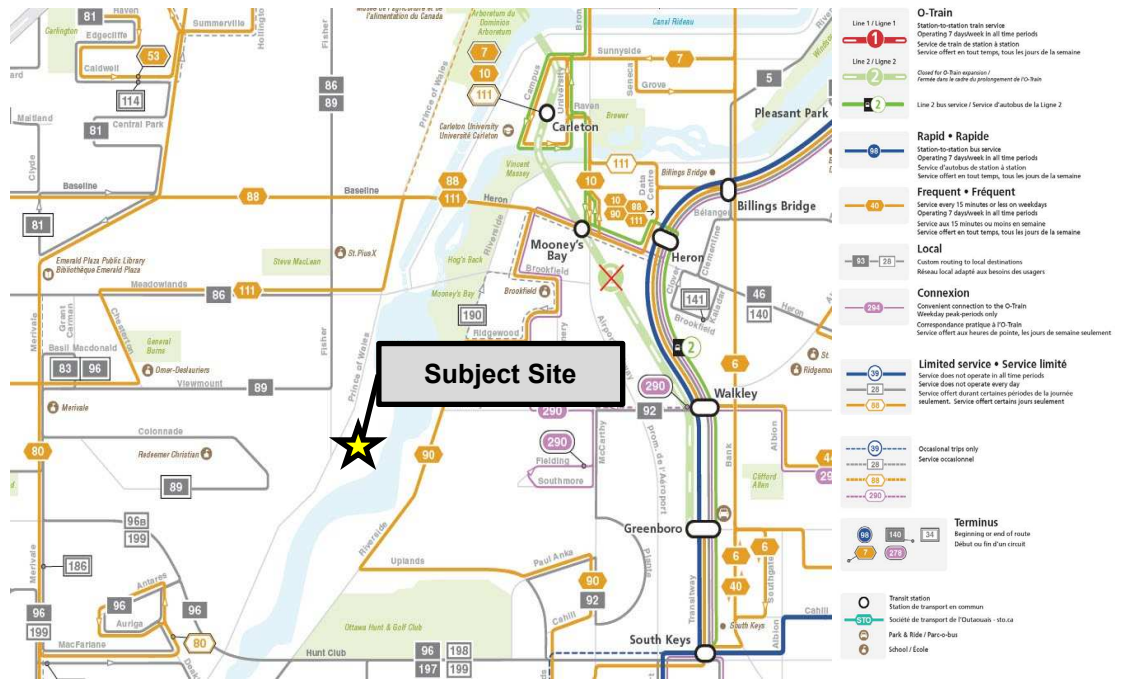


Figure 14: OC Transpo System Map.



2.2.3 Active Transportation

The site is located on Prince of Wales Drive, an existing arterial road. Under Ottawa’s Official Plan, the Transportation Master Plan, and the Active Transportation Master Plan, all arterial and collector roads are designated for cycling routes that will be upgraded to include cycling facilities over the long term. It is understood that the eventual widening of Prince of Wales Drive will include new cycling infrastructure and a multi-use path. At this time, Prince of Wales does not have designated cycling facilities or sidewalks.

Figure 15: City of Ottawa Official Plan Schedule C3: Active Transportation Network, Urban – Major Pathways.

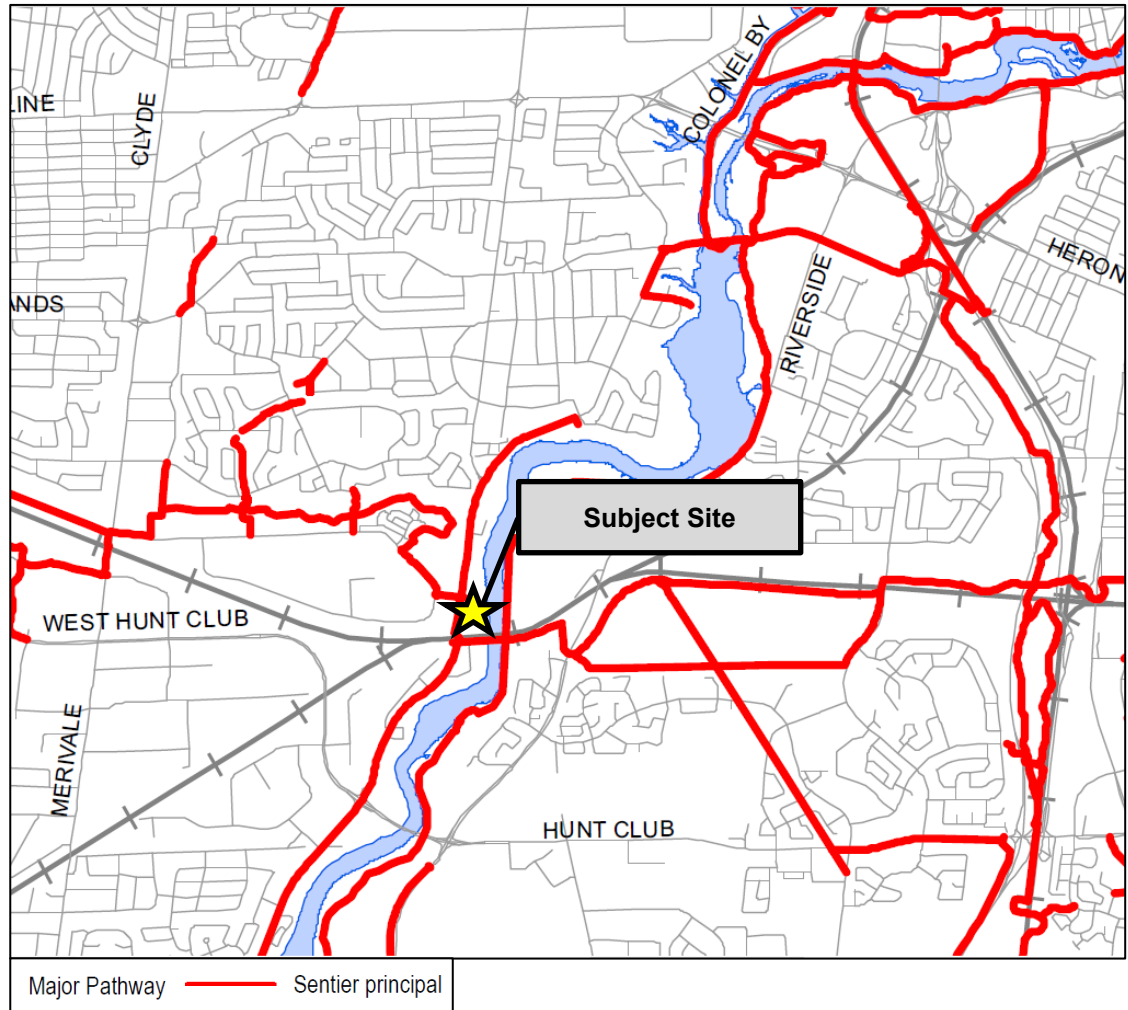
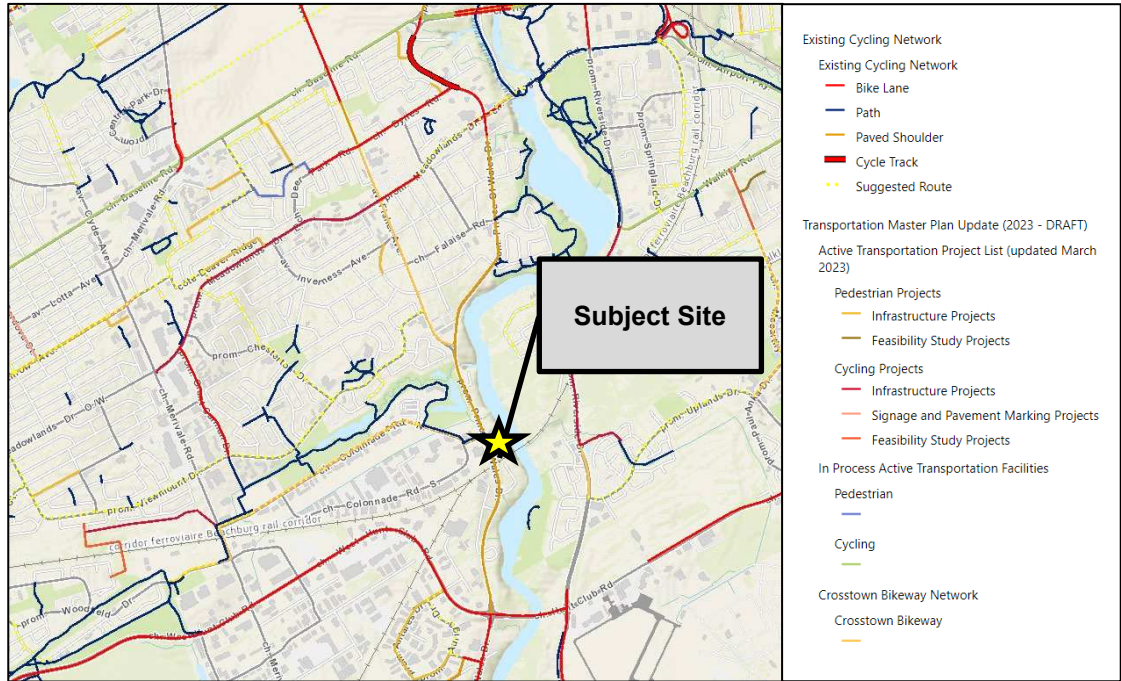


Figure 16: Active Transportation Network and Planned Projects, GeoOttawa.



3 Development Proposal

In addition to this Planning Justification Report, the required elements of a Design Brief have also been included within this report. As requested by City of Ottawa staff, the Design Brief provides an overview of the design elements of the proposed development.

3.1 Site Description

The subject site is divided into eight lots, structured around a private road at the northern edge of the site that connects to Prince of Wales Drive. The existing residential dwelling at 2009 Prince of Wales Drive will remain, as well as the wood frame deck, within Lot 1 at the northeastern corner of the site. Lot 2 will take up the southeastern corner of the site with the remaining river frontage. Lots 3 to 7 will run along the new private road and each of the 7 lots have buildable areas ranging from 115 m² to 393 m². Lot 8 has no buildable area and borders Prince of Wales Drive to the west of the site. The 897 m² Lot 8 is reserved for stormwater management and will be retained by the Owner. On Lots 1 to 7, proposed uses include detached residential dwellings. All proposed lots include a 30 m setback from the CN Railway right-of-way, as well as stable slope and watercourse setback allowances impacting the buildable areas on Lots 1 and 2.

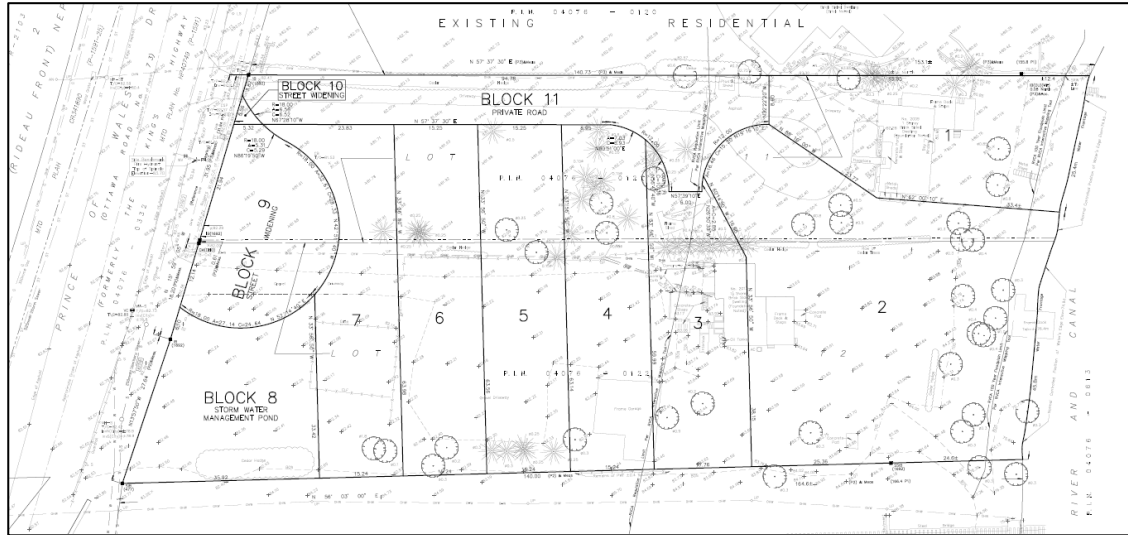
Table 1: Lot information for proposed lots with buildable area.

Lot	Lot Area	Buildable Area
Lot 1	1163 m ²	115 m ²
Lot 2	2795 m ²	268 m ²
Lot 3	888 m ²	240 m ²
Lot 4	952 m ²	372 m ²
Lot 5	965 m ²	387 m ²
Lot 6	971 m ²	393 m ²
Lot 7	925 m ²	260 m ²

The long rectangular lot dimensions allow for oversized rear yards that respect the CN Railway setbacks and allow for ample yard space. Buildings will be low-rise detached residential dwellings facing onto a private road. No lot will have direct frontage onto Prince of Wales Drive and a natural barrier of trees and other vegetation will be reinstated between the subject site and Prince of Wales Drive to maintain similar frontage into the public realm as shown in Figure 17 to Figure 23.

After completion of an EA in 2011, Prince of Wales Drive is currently projected to be expanded to include two lanes in each direction, as well as the potential for bike lanes and a multi use paths in each direction. This expansion would include adding a service road parallel to Prince of Wales Drive to provide access to properties along the segment of Prince of Wales Drive between Colonnade Road and the subject site. This service road would terminate in a cul-de-sac cutting into the existing property limits of 2009 and 2013 Prince of Wales Drive. The plan of subdivision accounts for the road widening plans by carving out the land required by the City to complete the future road widening project (Figure 17). Lot 7 is partially impacted by the road widening, however, it can still accommodate a single detached dwelling as the remainder of the lot is still large enough and wide enough.

Figure 17. Draft Plan of Subdivision.



3.2 Design Proposal

Streetscape

The proposed pavement width of the private road is 6 m. Along the northern limit of the private road is a large existing hedge which will continue to maintain privacy between the proposed dwelling units and the neighbouring property. Trees are proposed along the southern edge of the road in the front yards. Front yard setbacks of 4.5 m to the building face, and 6 m from garages will allow for soft landscaping in the front yards which will contribute to a pleasing streetscape and additional trees on site.

Building Design

The buildings will be single detached respecting the low-rise nature of the existing dwelling to be retained and the surrounding neighbourhood. The materials and architectural design will be of high quality contributing to an attractive built environment, consistent with best practices in design and in keeping with the City of Ottawa's established design guidelines.

Sustainability

The intent of the subdivision is to sell the lots to individual purchasers to design and build the structures. It will be the future owner's decision to incorporate sustainability features beyond the minimum requirement. It should be noted however that upgraded building components are a requirement due to the proximity to the roadway, railway, and aircraft paths. Required upgraded components such as high STC rated walls, double or triple glazed windows, and roof assembly have a dual effect of protecting from sound and insulating the building from energy loss.

Tree retention along the Rideau River and tree planting along Prince of Wales Drive will contribute to enhancing the urban tree canopy, particularly as several trees on site were recently destroyed during high wind events and an impactful ice storm. Additional trees to replace the lost canopy are proposed in addition to new trees within the front and rear yards of the proposed dwelling units. A stormwater management feature at the rear of the site will mitigate against more frequent and intense rainstorms in addition to controlling overland waterflows on site and ensuring a controlled release of stormwater back into the Rideau River. Additional details regarding the stormwater management strategy are found within the submitted civil engineering documents and reports.

Heritage

The Rideau River is a heritage feature. As demonstrated in Figure 22 and 23, the view from the river will be protected due to the number of mature trees that will be retained on site. As a result of the steep grades along the river edge and railway line, heavy vegetation cover, and through sensitive design and placement of the dwelling units, the proposed development will have a minimal impact on the views from the river.

Figure 18. Proposed Site Plan.



Figure 19. Steep slope and heavy vegetation along Rideau River edge.



Figure 20. 3D rendering from Prince of Wales Drive.



The bird's eye view shown in Figure 20 demonstrates the connection of the private road to Prince of Wales Drive. The future cul-de-sac is dashed in the foreground. A large mature hedge the length of the new private road will remain and continue to provide screening for the neighbouring property at 2005 Prince of Wales Drive from the new development. Trees are proposed to be planted along Prince of Wales Drive where existing trees were damaged in a recent storm. Trees are also proposed along the south side of the property shielding the new development from the railway while contributing to the urban tree canopy, and along the new private road. Deep rear yards face south for ample amenity space while maintaining a 30 m setback from the railway's property line to the residential building in keeping with CN railway regulations and separation distances.

Figure 21. 3D rendering from Prince of Wales Drive at ground level.



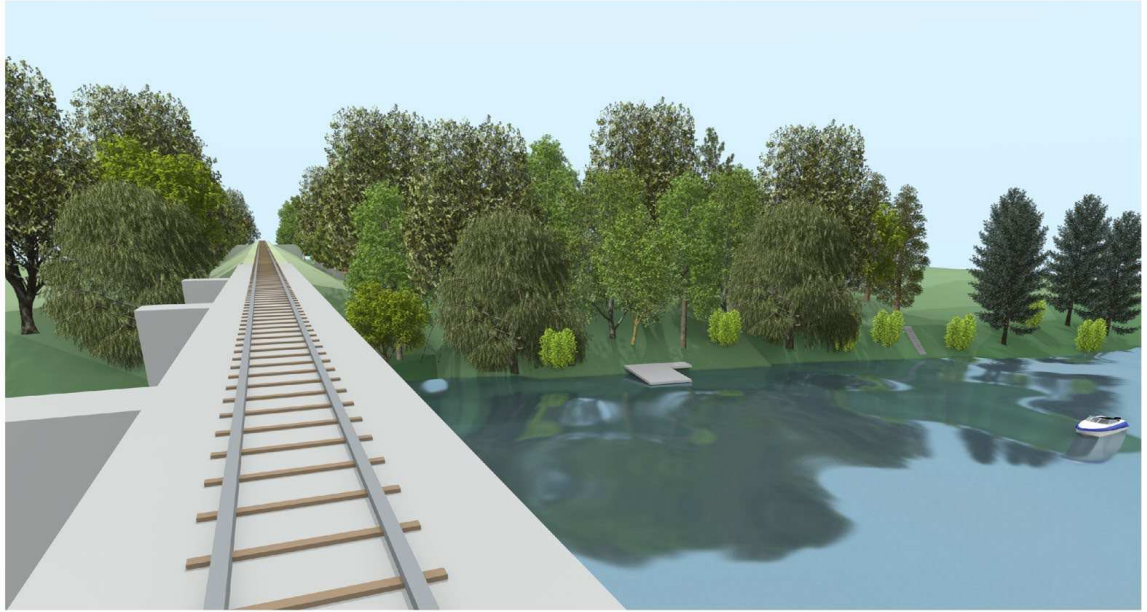
The approach from Prince of Wales Drive to the new private road will find the new residences set back from Prince of Wales Drive to accommodate a future service road and cul-de-sac which the new private road and adjacent neighbouring driveways will connect into once conveyed to and built by the City of Ottawa. This configuration will eventually eliminate the need for new residents of the development to turn directly onto Prince of Wales Drive and require them to take the service road up to the signalized intersection north of the subject site at the intersection of Colonnade Road and Prince of Wales Drive. An existing mature hedge along the northern limit of the new private road will remain and new trees will be planted along Prince of Wales Drive south of the future cul-de-sac. Street trees will be planted along the private road in front of each new dwelling. Houses will be setback along the new private road a minimum of 4.5m with garages setback 6m allowing for front yard soft landscaping, street trees and street lighting. Driveways for the 7 lots will connect into the new private road with no residence facing Prince of Wales Drive.

Figure 22. 3D rendering from Rideau River.



This bird's eye view depicts the 7 new lots with buildable areas located south of the private road. The deep backyards face south and terminate with a landscaped ditch which serves as a stormwater ditch and safety measure from the railway. Mature trees will remain undisturbed along the riverbank as well as the rail line, and the home located closest to the river is existing and will remain. An existing dock and stairs leading to it will remain for use by Lots 1 and 2.

Figure 23. 3D rendering from Rideau River at the rail line.



Existing mature trees and landscaping will remain along the riverbank. A new house on Lot 2 will be set back from the river's edge to respect the watercourse setback and stable slope setback and will be screened from the river by existing vegetation. An existing home on Lot 1 will remain along with existing vegetation. The neighbouring house at 2005 Prince of Wales (right side of illustration and obscured from view due to vegetation and angle of bank) is closer to the river than the new proposed dwellings in this subdivision. Due to the mature vegetation, the steep riverbank and setbacks, the new subdivision will have little to no impact on the view from the river.

Figure 24. View from private road with elevations and landscaping features.



4 Planning Policy and Regulatory Framework

4.1 Bill 109 and Bill 23

Bill 109

Bill 109 passed first reading on March 30, 2022 with the second and third readings occurring on April 4, 2022 and April 14, 2022 respectively. On April 14, 2022 *Bill 109* received Royal Assent providing legislative direction for the implementation of the *More Homes for Everyone Act, 2022*. Through *Bill 109*, the province mandated a series of changes that affect the development application review process. For instance, Zoning By-law Amendment application timelines are limited to 90 days. If the timeline is not met, the applicant will be refunded the application fee.

Bill 23

On November 28th, 2022 the government of Ontario's *Bill 23, More Homes Built Faster Act* received Royal Assent. *Bill 23* was tabled in support of the Provincial Government's *Housing Supply Action Plan*, which seeks to address the province's housing crisis. The government has previously pledged to table a new housing bill every year, and this legislation follows upon *Bill 109 (the More Homes for Everyone Act, 2022)*, passed earlier this year, and other moves aimed at increasing the housing supply by incentivizing the construction of 1.5 million homes over the next 10 years. Notable changes include a reduction in the maximum parkland dedication rates for land and cash-in-lieu; the 36 Conservation Authorities being streamlined into a single regulation and updating regulated areas and permit requirements; third-party appeals will largely be prohibited; and Development Charge exemptions made for affordable and attainable housing, non-profit IZ units and secondary suites (similar policies introduced for Community Benefit Charges and Parkland Dedication).

Not all proposed changes come into force immediately. Some came into effect on January 1st, 2023, while some will be put into effect on July 1st, 2023. Several other policy directions listed above are still being determined or are reliant on future regulations for implementation at the Municipal level.

4.2 Planning Act

The Ontario *Planning Act* sets out matters of provincial interest that planning authorities, including council of a municipality, should respect. This application supports the following policy direction as described in Part 1 of the *Planning Act*:

- (a) *the protection of ecological systems, including natural areas, features and functions;*
- (d) *the conservation of features of significant architectural, cultural, historical, archaeological or scientific interest;*
- (f) *the adequate provision and efficient use of communication, transportation, sewage and water services and waste management systems;*
- (h) *the orderly development of safe and healthy communities;*
- (p) *the appropriate location of growth and development;*
- (r) *the promotion of built form that,*
 - i. *is well-designed,*
- (s) *the mitigation of greenhouse gas emissions and adaptation to a changing climate.*

The proposed development is situated within an established neighbourhood promoting the efficient use of land and services in keeping with the above noted directives. The proposed development would contribute to more density on a currently underdeveloped lot, particularly given the proximity to employment activity, transportation infrastructure, parks and recreational areas, and other amenities. The sloped terrain at the shore of the Rideau River will help to protect and conserve natural areas, ecological systems, and heritage attributes of the riverside site. The built form, landscaping plan, and plan of subdivision demonstrate good design within the existing neighbourhood to support efficient use of infrastructure and orderly development in a location appropriate for growth. The proposed development also includes stormwater management infrastructure to help manage increasing rainfall arising from climate change. Safety risks associated with the CN Rail line are addressed through mitigative design measures such as the railway setback and proposed ditch.

4.3 Provincial Policy Statement (2020)

The 2020 Provincial Policy Statement (PPS) provides policy direction on land use planning matters of provincial interest. Land use planning decisions in Ontario should be consistent with the PPS which includes direction on Building Strong and Healthy Communities, Wise Use and Management of Resources, and Protecting Public Health and Safety. Below is a summary of the policy direction provided within the PPS applicable to this application.

Section 1.1.1 promotes healthy, liveable and safe communities by:

- a) *promoting efficient development and land use patterns which sustain the financial well-being 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)*
- 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*
- g) *ensuring that necessary infrastructure and public service facilities are or will be available to meet current and projected needs*
- h) *promoting development and land use patterns that conserve biodiversity*

Section 1.1.3.2 supports land use patterns that:

- 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*

Section 1.4.3 encourages planning authorities to provide for housing options and densities that meet projected housing needs of current and future residents of the regional market area by:

- 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

The proposed development is situated on a lot with the ability to support infill development, thus promoting intensification and efficient land use in keeping with the noted PPS policies. The property is located within an established neighbourhood with a variety of uses such that the area is already serviced by infrastructure and community facilities and is consistent with policies that promote efficient forms of development. Residential dwellings are setback appropriately from the rail line and mitigation measures are designed to ensure safety. Existing and planned projects for the transportation network, notably the Prince of Wales Drive widening, provide opportunities to support active transportation in the future.

4.4 City of Ottawa Official Plan

The City of Ottawa Official Plan (“OP”) was amended and passed by Council on October 27th, 2021. The OP was updated further and adopted on November 24th, 2021. The OP was approved with modifications by the Ministry of Municipal Affairs and Housing on November 4th, 2022. The OP provides a vision for the future growth of the City and a policy framework to guide its development to the year 2046. Additionally, the modifications included by the Minister seek to bring the policies of the plan in line with new provincial legislation implemented through the new Bill 109 and Bill 23.

4.4.1 Outer Urban Transect

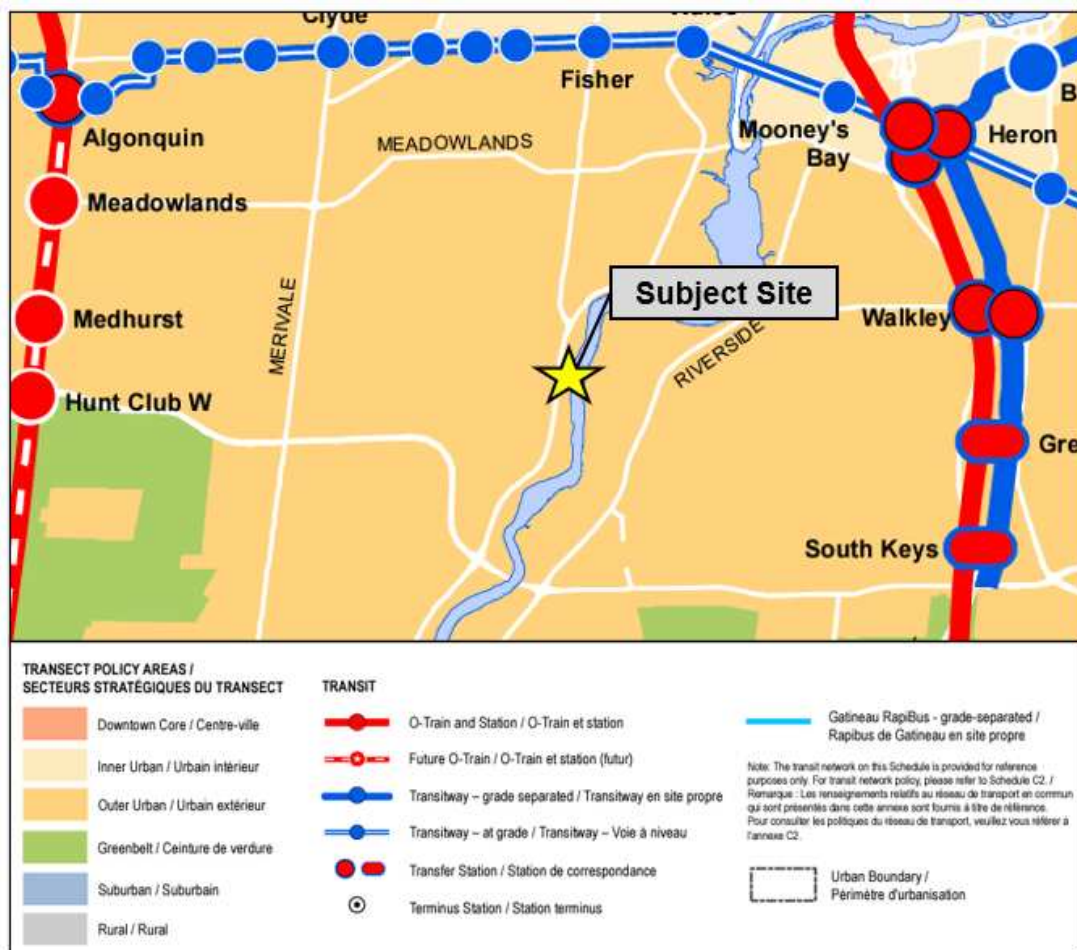
The subject site falls within the *Outer Urban Transect* within a *Neighbourhood* designation according to Schedule A of the OP (Figure 25). According to Section 5.3.1 of the OP, the *Outer Urban Transect* is generally characterized by suburban development with low- to mid-density development. Section 5.3.1 supports low-rise, ground-oriented development within *Neighborhoods*. The target density of the *Outer Urban Transect* is 40-60 dwellings per net hectare. Section 5.3.4 encourages development within *Neighborhoods* located within the *Outer Urban Transect* that transitions away from the suburban model towards built forms that are more urban in nature. Suburban and urban characteristics as defined in the OP are shown in Table 2 below.

Table 2: Official Plan Table 6 - General Characteristics of Urban Built Form and Suburban Built Form and Site Design.

URBAN	SUBURBAN
Shallow front yard setbacks and in some contexts zero front yards with an emphasis on built-form relationship with the public realm	Moderate front yard setbacks focused on soft landscaping and separation from the right-of-way
Principal entrances at grade with direct relationship to public realm	Principal entrances oriented to the public realm but set back from the street

Range of lot sizes that will include smaller lots, and higher lot coverage and floor area ratios	Larger lots, and lower lot coverage and floor area ratios
Minimum of two functional storeys	Variety of building forms including single storey
Buildings attached or with minimal functional side yard setbacks	Generous spacing between buildings
Small areas of formal landscape that should include space for soft landscape, trees and hard surfacing	Informal and natural landscape that often includes grassed areas
No automobile parking, or limited parking that is concealed from the street and not forming an integral part of a building, such as in a front facing garage	Private automobile parking that may be prominent and visible from the street

Figure 25: City of Ottawa Official Plan Schedule A – Transect Policy Area.

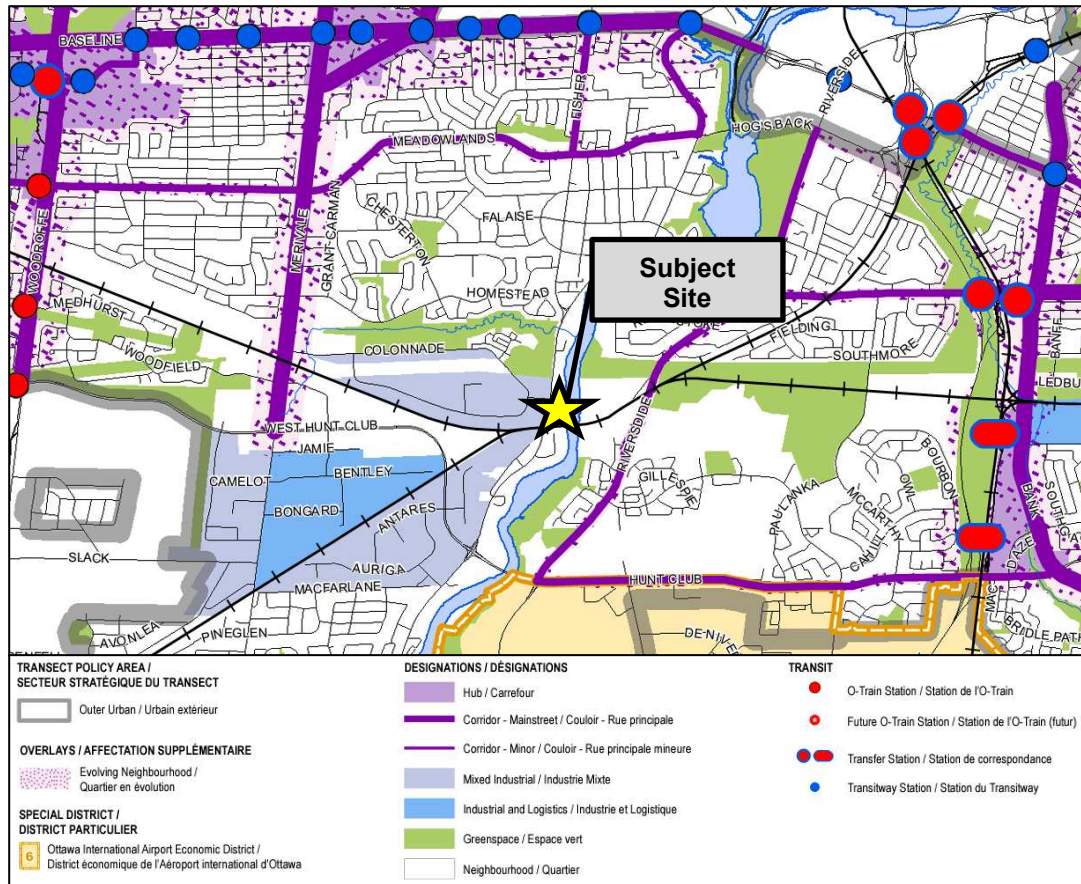


Section 5.3.1 provides direction for recognizing a suburban pattern of built form and site design within the *Outer Urban Transect*, while gradually evolving towards a 15-minute urban model.

2) The Outer Urban Transect is generally characterized by low- to mid-density development. Development shall be

a) Low-rise within Neighbourhoods and along Minor Corridors;

Figure 26: City of Ottawa Official Plan Schedule B3 – Outer Urban Transect.



Section 5.3.4 provides direction to the Neighbourhoods located within the Outer Urban Transect:

1) Neighbourhoods located in the Outer Urban area shall accommodate residential growth to meet the Growth Management Strategy. The Zoning By-law shall implement development standards that transition away from a suburban model and move towards urban built forms:

a) Allows and supports a wide variety of housing types with a focus on lower density missing-middle housing which generally reflects the existing built form context of the neighbourhood,

c) Generally provides for up to 3 storeys height permission, and where appropriate 4 storeys height permission to allow for ground oriented higher-density Low-rise residential development;

The proposed development is appropriate for the Neighbourhood policy area within the Outer Urban Transect designation as it adds additional housing units to an existing low-density residential lot. The proposed development reflects the surrounding built form while providing new low-rise residential development within the existing neighbourhood. Suburban character in line with the surrounding context is achieved through moderate

front yards, informal and natural landscaping, and private automobile parking accessible from a private road. The smaller lots and higher lot coverage ratio supports the evolution of these lands into a more urban environment that is desired for the Outer Urban Transect. The proposed development has a net density of 6.9 dwellings per net hectare which is appropriate for the scale and form of the Neighborhood within the Outer Urban Transect and an increase over the existing density of 1.79 dwelling units per net hectare. The development proposed of detached residential dwellings with garage and private parking is appropriate for the site context, given the relatively minimal presence of public transit and existing active transportation infrastructure within the vicinity.

4.4.2 Cultural Heritage

Section 4.5.2 of the OP provides instruction on management of heritage resources, namely:

4) Ottawa is the site of the Rideau Canal World Heritage Site, many National Historic Sites, and both privately- and publicly-owned buildings designated by the Federal Heritage Buildings Review Office. Development including or adjacent to these sites shall have regard for their cultural heritage value, as defined in Federal designation documentation and the City may require demonstration that development does not adversely impact these resources.

The Draft Plan of Subdivision includes 30 m setbacks from the Rideau River. As such, the cultural heritage elements of the Rideau Canal World Heritage site will be conserved, and development will not adversely impact the heritage site or the views from the river.

4.4.3 Water Resources

Section 4.9.3 of the OP provides instruction on development and site alteration near surface water features.

2) Where a Council-approved watershed, subwatershed or environmental management plan does not exist, or provides incomplete recommendations, the minimum setback from surface water features shall be the greater of the following:

- c) 30 metres from the top of bank, or the maximum point to which water can rise within the channel before spilling across the adjacent land; and*
- d) 15 metres from the existing stable top of slope, where there is a defined valley slope or ravine.*

Figure 27: Subject site stable slope allowance and watercourse setback.



The proposed development includes setbacks both from top of slope of 30 m (19 m stable slope allowance + 5 m toe erosion setback + 6 m access allowance) for new development and 30 m water course setback from the Rideau River, more than satisfying the requirements for setbacks from water courses. However, the existing building on Lot 1 will partially remain within this setback as a legal non-conforming dwelling, but the lot has been designed such that there is still 115 m² of legal buildable area should the existing structure ever be demolished and a new structure be constructed outside of the water course and top of slope setback.

4.4.4 Urban Design

Section 4.6 of the OP sets out an urban design framework in support of the City's urban design program and initiatives.

Section 4.6.2 provides guidance on development of Scenic Routes and Scenic Capital Entry Routes:

4) *Development abutting Scenic Routes shall contribute to conserving or creating a desirable context by such means as:*

- a) *Protecting the opportunity to view natural and cultural heritage features;*
- b) *Preserving and restoring landscaping, including but not limited to distinctive trees and vegetation along the right of way;*

5) *Where Scenic Routes are also identified as Scenic Capital Entry Routes on Schedule C13, development and capital projects should also:*

- b) *Contribute to the image of Ottawa as the Capital city by providing landscape and aesthetic improvements, including buildings that enhance the urban character, where possible.*

Section 4.6.6 promotes the sensitive integration of new development in a way that intensification targets are met while also considering liveability.

6) Low-rise buildings shall be designed to respond to context, and transect area policies, and shall include areas for soft landscaping, main entrances at-grade, front porches or balconies, where appropriate. Buildings shall integrate architecturally to complement the surrounding context.

The proposed development includes restoring and planting trees along the western limit of the site, abutting the Scenic Capital Entry Route along Prince of Wales Drive. Due to the grading of the site, the river is not visible from Prince of Wales Drive, but the existing trees and shoreline will not be developed in order to protect the Rideau Canal World Heritage site and its views. The proposed buildings will be low rise residential dwellings, in keeping with neighbourhood context and surrounding built form.

4.5 Urban Design Guidelines

Urban Design Guidelines for Low-rise Infill Housing

The City of Ottawa updated their Urban Design Guidelines for Low-rise Infill Housing in May 2022. The guidelines are applicable to ground-oriented infill development including single detached, semidetached, duplex, triplex, townhouses, stacked townhouses, low-rise apartments of four or more units, and other ground-oriented housing typologies. The document includes design recommendations for streetscapes, landscaping, building design, parking and garages, heritage building alterations and additions, service elements, and infill on narrow lots, with the objective of enhancing the public realm, promote efficient land use patterns, ensure infill fits into the existing neighbourhood context, promote quality building design, and encourage environmental sustainability. Below is a non exhaustive list of guidelines that the proposed development satisfies:

Streetscapes

Guideline 1.1 Contribute to an inviting, safe, and accessible streetscape by emphasizing the ground floor and street façade of infill buildings. Locate principal entries, windows, porches and key internal uses at street level.

Landscape

Guideline 2.1 Landscape the front yard and right-of-way to emphasize aggregated soft landscaping as much as possible and provide adequate soil volume for the planting of large sized trees.

Guideline 2.2 Where the soft surface boulevard in the right-of-way is limited, identify alternative areas for soft landscaping that can accommodate tree-planting

Guideline 2.3 Design buildings and parking solutions to retain established trees located in the right-of-way, on adjacent properties and on the infill site. To ensure their survival, trenching for services and foundations must take into account the extent of the tree's critical root zone. Replace trees with new ones if removal is justifiable.

Guideline 2.5 Plant trees, shrubs, and ground cover adjacent to the public street and sidewalk for an attractive sidewalk edge. Select hardy, salt-tolerant native plant material that can thrive in challenging urban conditions.

Building Design

Siting

Guideline 3.1.2 Locate and build infill in a manner that reflects the desirable planned neighbourhood pattern of development in terms of building height, elevation and the location of primary entrances, the elevation of the first floor, yard encroachments such as porches and stair projections, as well as front, rear, and side yard setbacks.

Mass/Height

Guideline 3.2.1 Design infill in a manner that contributes to the quality of the streetscape considers the impacts of scale and mass on the adjacent surrounding homes.

Architectural Style and Facades

Guideline 3.3.1 Design all sides of a building that face public streets and open spaces to a similar level of quality and detail. Avoid large blank walls that are visible from the street, other public spaces, or adjacent properties.

Guideline 3.3.4 Ensure that when one or more units are constructed on adjacent properties, they relate to each other and the existing fabric on street. At the same time, design the infill units with distinguishing characteristics (e.g., different materials, colours, rooflines, windows and door treatments) so that they have distinct identities.

Parking and Garages

Guideline 4.1 Where such features are permitted by the Zoning Bylaw, limit the area occupied by driveways and parking spaces to allow for greater amounts of aggregated soft landscaping in the front and rear yards.

Guideline 4.2 Where driveways and walkways are in close proximity to each other, use contrasting materials or landscaping to distinguish and highlight the walkway to front door.

Infill on Narrow Lots

Guideline 7.2 Do not create a dwelling on stilts as a means to provide parking under the dwelling or access to rear parking.

4.6 Macdonald-Cartier Airport Land Use Constraints and Zoning Regulations

4.6.1 Land Use Constraints Due to Aircraft Noise

Within Ottawa's Official Plan, Section 10.2.2 provides guidance on protections of airport and aircraft operations:

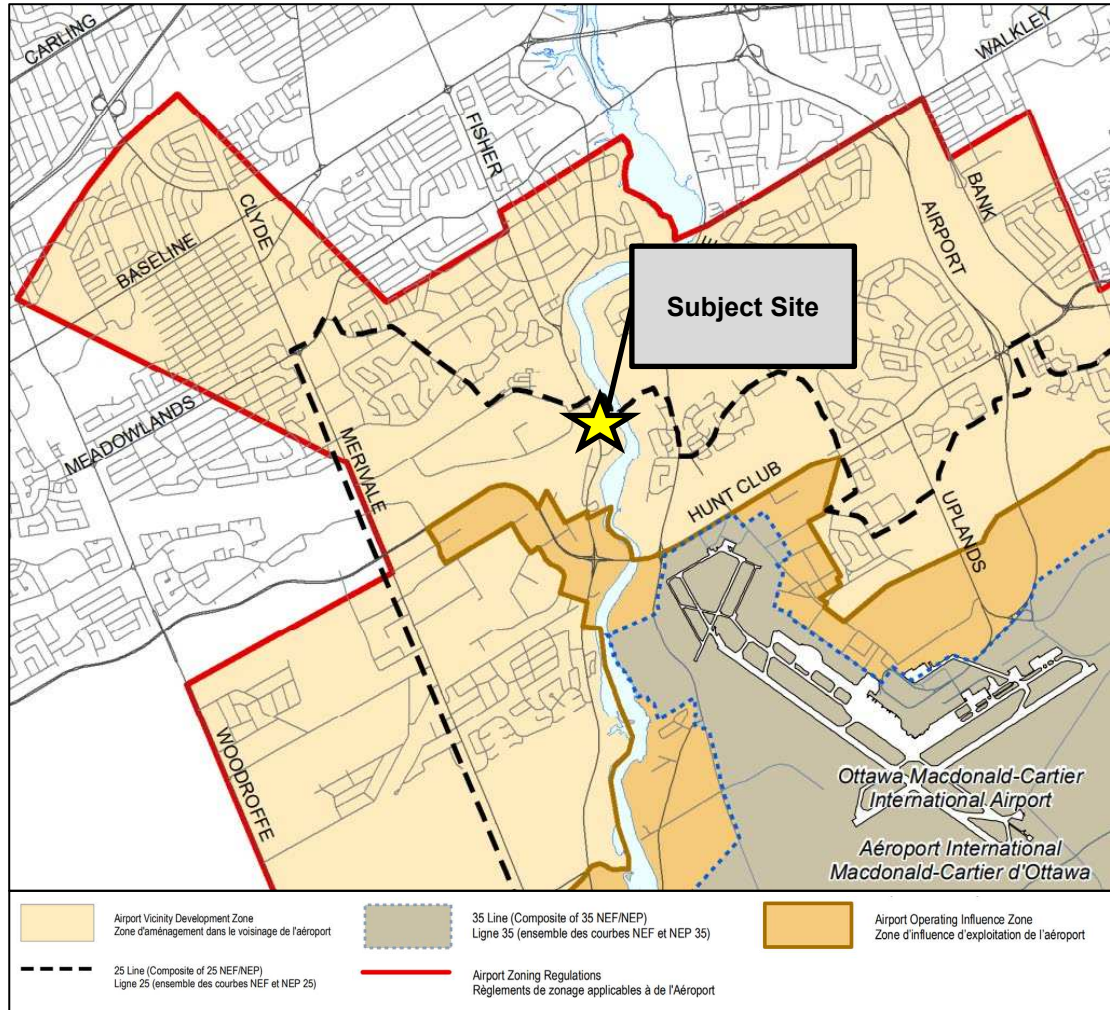
1) Development inside the Airport Vicinity Development Zone shall be consistent with applicable City, provincial and federal guidelines and regulations. In the event of a variation between City, provincial or federal guidelines, the most restrictive provisions shall be applied.

2) A noise control study consistent with the Council-approved Environmental Noise Control Guidelines is required as part of a complete application for any development proposal within the 25 Line (Composite of 25 NEF/NEP)

5) Within the Airport Vicinity Development Zone, noise-sensitive uses may be permitted between the 25 Line and the Airport Operating Influence Zone.

6) Development shall comply with the Ottawa Macdonald-Cartier International Airport Zoning Regulations as enacted under the federal Aeronautics Act.

Figure 28: City of Ottawa Official Plan Schedule C14 - Land Use Constraints due to Aircraft Noise



The proposed development site is located within the Airport Vicinity Development Zone as well as the 25 Line boundary. As such, the development is subject to a noise control study, submitted with this application. The completed noise study found the level of noise generated by air traffic and additional surface transportation to be sufficiently mitigated through upgraded building components with a higher STC rating, although a warning clause must be included within all Lease, Purchase, and Sale Agreements. The location between the 25 Line boundary and the Airport operating Influence Zone allows for noise sensitive uses such as the proposed residential use.

4.6.2 Federal Ottawa Macdonald-Cartier International Airport Zoning Regulations (SOR/2009-231)

Further airport zoning regulations are held under the Aeronautics Act as Federal Ottawa Macdonald-Cartier International Airport Zoning Regulations (SOR/2009-231). The proposed site lies within the *Outer Surface* lands.

Building Restrictions provide instruction on development height dependant on site location:

No person shall erect or construct, on land in respect of which these Regulations apply, a building, structure or object, or an addition to an existing building, structure or object, any part of which would, at the location of that part of the building, structure, object or addition, exceed in elevation

- (a) a take-off/approach surface;
- (b) the outer surface;
- (c) a transitional surface; or
- (d) a strip surface.

Part 3: Description of the Outer Surface defines the height of the surface as:

The outer surface is an imaginary surface established at a constant elevation that is 45.000 m above the assigned elevation of the airport reference points, except that, where that surface is less than 9.000 m above the surface of the ground, the outer surface is located at 9.000 m above the surface of the ground.

The height limit for development at the site is approximately 150 m. The proposed development allows up to 9.5 m in building height which is well below the height limit defined by the Outer Surface.

4.7 Zoning By-law (2008-250)

The site is zoned *R1- Residential First Density Zone, Subzone E (R1E)* and *O1-Parks and Open Space Zone* along the shoreline.

Figure 29: Subject Site Zoning.



The proposed development features detached residential dwellings. Below is a full list of permitted uses on lands zoned *R1E* zone as per the Zoning By-law:

- bed and breakfast
- detached dwelling unit

- group home
- diplomatic mission
- home-based business
- home-based daycare
- park
- retirement home, converted
- secondary dwelling units
- urban agriculture

Below is a full list of permitted uses on lands zoned O1 zone as per the Zoning By-law:

- environmental preserve and education area
- park
- urban agriculture

Existing and Proposed Zoning

The Zoning By-law Amendment application proposes the lands are rezoned from R1E to R1XX. The table below summarizes the required development standards for the existing zone (R1E) and proposed zone (R1XX) against the proposed development.

Table 3: Zoning By-law Provisions for Zone R1E (existing zoning) and RXX (proposed zoning) against proposed development.

	R1E PROVISIONS	R1XX PROVISIONS	PROPOSED DEVELOPMENT
Minimum Lot Area	1,390 m ²	240 m ²	830 m ²
Minimum Lot Width	19.8 m	9 m	14.11 m
Minimum Front Yard Setbacks	7.5 m	4.5 m*	4.5 m
Minimum Corner Yard Setbacks	4.5 m	3 m	3 m
Minimum Interior Side Yard Setback	0.9 m on one side and 1.2 m on the other	total is 1.8 m, with one yard, no less than 0.6 m**	total is 1.8 m, with one yard, no less than 0.6 m
Minimum Rear Yard Setback	12 m	6 m	30 m
Maximum Building Height	Schedule 342, is 8.5 m; in all other cases, 11 m	9.5 m	9.5 m
Maximum Lot Coverage	15%	none	38%

* Minimum front yard setback is 6 m for any attached garage (By-law 2020-288)

** Despite the minimum interior side yard setback provision in column VIII of Table 156A, the combined minimum required interior side yard setback for interior or through lots in Area A on Schedule 342 where the lot width is:

- (i) 36 metres or greater: must increase by 1 m for each additional 1 m of lot width, to a maximum of 40% of the lot width, and
- (ii) with one yard no less than the minimum interior side yard setback of the applicable zone or subzone. (By-law 2020-288)

According to the Table above, the proposed development meets all the provisions of the R1XX zone.

Parking and Queuing and Loading Provisions

The proposed development includes a private road. The table below summarizes the required development standards against the proposed development.

Table 4. Zoning By-law Parking Queuing and Loading Provisions.

PART 4 – PARKING QUEUING AND LOADING PROVISIONS		
	REQUIRED	PROPOSED
Minimum Required Drive Aisle Width	6 m	6 m
Minimum Parking Space Rate for Detached Dwelling in Area C on Schedule 1A	1 parking space per dwelling unit	1 parking space per dwelling unit (minimum)

Setback from Rail

Within the City of Ottawa’s Zoning By-law 2008-250 Consolidation, General Provisions Section 68 provides guidance for railway rights of way:

(3) No building within 30m of a railway right-of-way is to be used for a residential use building, day care or school.

The developable area of each lot is defined by the 30 m railway right-of-way. The setbacks are respected as demonstrated in the draft plan of subdivision.

Setback from Watercourse

General Provisions Section 69 provides instruction on setback from watercourses:

(2) Except for flood or erosion control works, or a public bridge or a marine facility, no building or structure, including any part of a sewage system, which does not require plan of subdivision, or site plan control approval, shall be located closer than:

- (a) 30 m to the normal high-water mark of any watercourse or waterbody, or*
- (b) 15 m to the top of the bank of any watercourse or waterbody, whichever is the greater.*

(3) Development requiring a plan of subdivision or that is subject to site plan control must provide the watercourse or waterbody setbacks set forth in subsection (2) unless, as established through conditions of approval, a different setback is determined to be appropriate in accordance with the criteria set forth in the Official Plan. (By-law 2009-347)

The proposed development includes a 30 m setback from the top of slope and a 30 m setback from the Rideau River, more than satisfying the requirements of Section 69 of the Zoning By-law.

Airport Operations

General Provisions Section 70 in the Zoning By-law pertains to protecting airport operations:

(1) The Airport Operating Influence Zone (AOIZ) and the Airport Vicinity Development Zone (AVDZ) are defined planning areas based on the 2013 Noise Exposure Forecast (NEF) and the 2023 Noise Exposure Projection (NEP) aircraft contours. These zones, as shown on Schedule 6, apply development restrictions to protect lands uses and activities from noise impacts emanating from the aircraft and airport operations and to conversely protect airport operations from potential

complaints arising from the development of residential and noise sensitive uses too close to the airport. Policies relating to these zones are detailed in Section 4.8.6 – Land-Use Constraints Due to Airport and Aircraft Operations. The AVDZ also incorporates elements of the Ottawa Macdonald-Cartier International Airport Zoning Regulations. (By-law 2020-299)

(2) Airport Zoning Regulations made pursuant to the Aeronautics Act (Canada) also apply to private property in the vicinity of the Ottawa Macdonald-Cartier International Airport. The regulations prevent lands adjacent to and in the vicinity of the airport from being used or developed in a manner that is incompatible with the operation of the airport or the safe operation of aircraft or causes interference with navigational aids and communications. Constraints to development include obstacle limitations surfaces, natural growth, bird hazards and interference with communications and aeronautical facilities. Airport Zoning Regulations and the regulation of all matters of aviation are administered by Transport Canada and will prevail in the event of a conflict with the provisions of this by-law.

The proposed development is not anticipated to cause adverse impacts to airport operations.

4.8 Public Consultation Strategy

In 2022, initial conversations took place with City Staff to introduce an initial concept for the site and seek input. Following submission of this application, a Statutory Public Meeting will be held to inform interested stakeholders of the proposed Zoning By-law Amendment.

The following is a list of engagement completed to date:

- A Pre-Application Consultation meeting was held on April 8th, 2022. Comments and a list of required plans and studies was sent by City Staff to the applicant on April 29th, 2022.

Below is a list of planned consultation activities:

- Notify the Ward Councillor, Councillor Sean Devine, of the proposed development upon submission of application to discuss the proposed development.
- Notification of public for the Statutory Public Meeting to be completed by the City of Ottawa.
- Statutory Public Meeting for the Zoning By-law Amendment will take place at the City of Ottawa Planning and Housing Committee.

5 Supporting Studies

Noise and Vibration Assessment

The Transportation Noise and Vibration Assessment prepared by Gradient Wind for 2009-2013 Prince of Wales Drive found that ground surface transportation from Prince of Wales Drive and the Via Rail corridor, as well as air traffic from the Ottawa Macdonald-Cartier International Airport, will be of a sufficient volume to require building materials with higher Sound Transmission Class (STC) ratings. Units will also require central air conditioning to allow occupants to keep windows and doors closed to maintain a comfortable living environment regarding both volume and temperature. Construction of a noise wall to diminish the volume from the rail corridor was explored, but opportunities to do so were not considered technically and administratively feasible. Vibrations on the site were determined to be under the threshold to cause issues for regenerated noise or vibrations. A Warning Clause will be required in all Lease, Purchase and Sale Agreements for the noise generated from surface transportation and air traffic, as well as a Via Rail warning clause.

Geotechnical Study

LRL Associates Ltd. prepared a geotechnical study in support of this development application. The recommendations include retaining existing vegetation near the slope, and specifications regarding grade raises, drainage, and fill materials. A setback of 19 m from the top of slope along the Rideau River is recommended according to the slope stability analysis.

Environmental Impact Study

The EIS prepared by LRL Engineering confirmed with appropriate mitigation measures, the impacts on both fish habitat, as well as the habitat of other species, will be negligible. The development will respect the 30m setback from the Rideau River and is not anticipated to negatively impact fish habitat. The site may be a suitable habitat for other species (Midland Painted Turtle, Barn Swallow, Cupped Fringe Lichen, etc.), however basic mitigation measures will avoid any adverse impacts.

Environmental Site Assessment – Phase 1

The Phase 1 ESA completed by LRL Engineering identified potential environmental concerns that would require a Phase 2 ESA to confirm the presence or absence of potential contaminants and any impact they may have. Areas of particular concern is the central portion of the site for high risk of PHC, VOC and PAH due to an AST, as well as the southern portion for high risk of PAH, PHC, VOC, and metals from the presence of the rail line. The northwestern portion of the site is considered low-medium risk due to the proximity of industrial uses on Colonnade Road, where potential contaminating uses include gasoline and associated products storage in fixed tanks, as well as and pulp, paper and paperboard manufacturing and processing.

Transportation Impact Assessment

The TIA completed by Novatech noted several potential conflicts within the already congested segment of Prince of Wales, particularly during the AM/PM peak. For the subject site, it is recommended that left turns out of the private road are not permitted during peak hours. Right turns out of the private road are acceptable during peak hours, with acceptable delays anticipated. Southbound traffic on Prince of Wales Drive seeking to access the private road by turning left during the AM peak may need to rely on courtesy, as the projected northbound queue at Prince of Wales Drive and Colonnade Drive is anticipated to block the site access in the AM peak. The private roadway should have a 6m width with a hammerhead at the terminus to allow vehicles to turn around. The widening of Prince of Wales Drive has the potential alleviate the congestion experienced at peak times, as well as providing opportunities for active transportation through cycling facilities and a multi-use path. The road widening project will also include a service road connecting to the private roadway on the subject site, where the service road will tie into the traffic signal at the intersection of Prince of Wales Drive and Colonnade Road. The timing of this project has not been confirmed but was proposed as part of the City of Ottawa's 2031 Network Concept and 2031 Affordable Network.

6 Conclusion

As demonstrated in this report, the proposed development is appropriate when considering applicable land use and urban design policies set out in the Provincial Policy Statement, City of Ottawa Official Plan, and Zoning By-law. The development conforms with the policies of the Official Plan and Design Guidelines. A Zoning By-law Amendment to rezone the property from R1E to R1XX is requested to recognize the conditions of the proposed plan of subdivision.

Arcadis is of the opinion that this Plan of Subdivision and Zoning By-law Amendment application for the proposed development on the subject site is an appropriate use for the lands, is consistent with the policy direction of the Official Plan and represents good land use planning. Arcadis supports this application and recommends that the application be approved accordingly.



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