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Notting Hill Subdivision 2128 Trim Road, Ottawa Planning Rationale

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**PLANNING RATIONALE, DESIGN BRIEF &
INTEGRATED ENVIRONMENTAL REVIEW STATEMENT (IERS)
IN SUPPORT OF APPLICATIONS FOR
SUBDIVISION & *ZONING BY-LAW* AMENDMENT**

**NOTTING HILL SUBDIVISION
2128 TRIM ROAD**

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On behalf of:
Notting Hill Realty Investments Inc.
c/o Regional Group of Companies

29 June 2018
Revision 1: 13 July 2018
Revision 2: 16 July 2018
Revision 3: 9 November 2018
Novatech File: 117155
Ref: R-2018-094

9 November 2018

Julie LeBrun, Planner III
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Attention: Julie LeBrun, Planner III

**Reference: Notting Hill Subdivision (formerly Legault Lands)
Planning Rationale, Design Brief & IERS for Subdivision & Zoning By-law
Amendment, Revision 3
2128 Trim Road
Our File No.: 117155**

Novatech has been retained by Notting Hill Realty Investments Inc. c/o The Regional Group of Companies to revise this Planning Rationale in support of applications for Subdivision and *Zoning By-law Amendment* for its property identified as Notting Hill Subdivision (formerly known as Legault Lands) at 2128 Trim Road herein called the 'Subject Site'.

The Subject Site is comprised of two undeveloped parcels within an existing community: a 3.4-hectare parcel west Portobello Boulevard and north of Aquaview Drive, and a 24-hectare parcel between Provence Avenue and Trim Road, north of Arrowgrass Way. Six (6) schools and one (1) future school are within 400m of the Site as seen on Figure 1. The Subject Site is shown on the Draft Plan of Subdivision in Appendix A. The Subject Site is in Ward 19 (Councillor Stephen Blais).

A pre-application consultation was held at City Hall on April 12, 2018 with comments from City staff delivered to Novatech by e-mail dated April 19, 2018. This report has been updated to reflect those comments received from City and technical review agencies.

Five hundred thirty-five (535) units are proposed for the Subject Site that include a mix of detached dwellings, townhouses and back-to-back townhouses as well as a 4000 m² community park. The Subject Site will be accessible from one new collector street between Trim Road and Provence Avenue and two local road connections to Aquaview Drive. The previous concept plan which featured an extension of Salzburg Drive through the Subject Site and a local road connection off Provence Avenue have been removed. This rationale is revised to address changes to the concept plan, missing zoning for the school and Transitway.

Sincerely,

NOVATECH



Robert Tran, M.PL.
Planner, Planning & Development

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1.0 INTRODUCTION

This Planning Rationale, Design Brief and Integrated Environmental Review Statement (IERS) demonstrates that the proposed development is consistent with the *Provincial Policy Statement* (2014), conforms to the *City of Ottawa's Official Plan*, and complies with the provisions of *Zoning By-law 2008-250*.

Novatech has been retained by Notting Hill Realty Investments Inc. c/o The Regional Group of Companies (the owner) to prepare this Planning Rationale in support of applications for Subdivision and Zoning By-law Amendment for lands at 2128 Trim Road.

The Subject Site is comprised of two undeveloped parcels within an existing community: a 3.4-hectare parcel west Portobello Boulevard and north of Aquaview Drive, and a 24-hectare parcel between Provence Avenue and Trim Road, north of Arrowgrass Way as seen in **Figure 1**. The Subject Site is in Ward 19 (Councillor Stephen Blais).

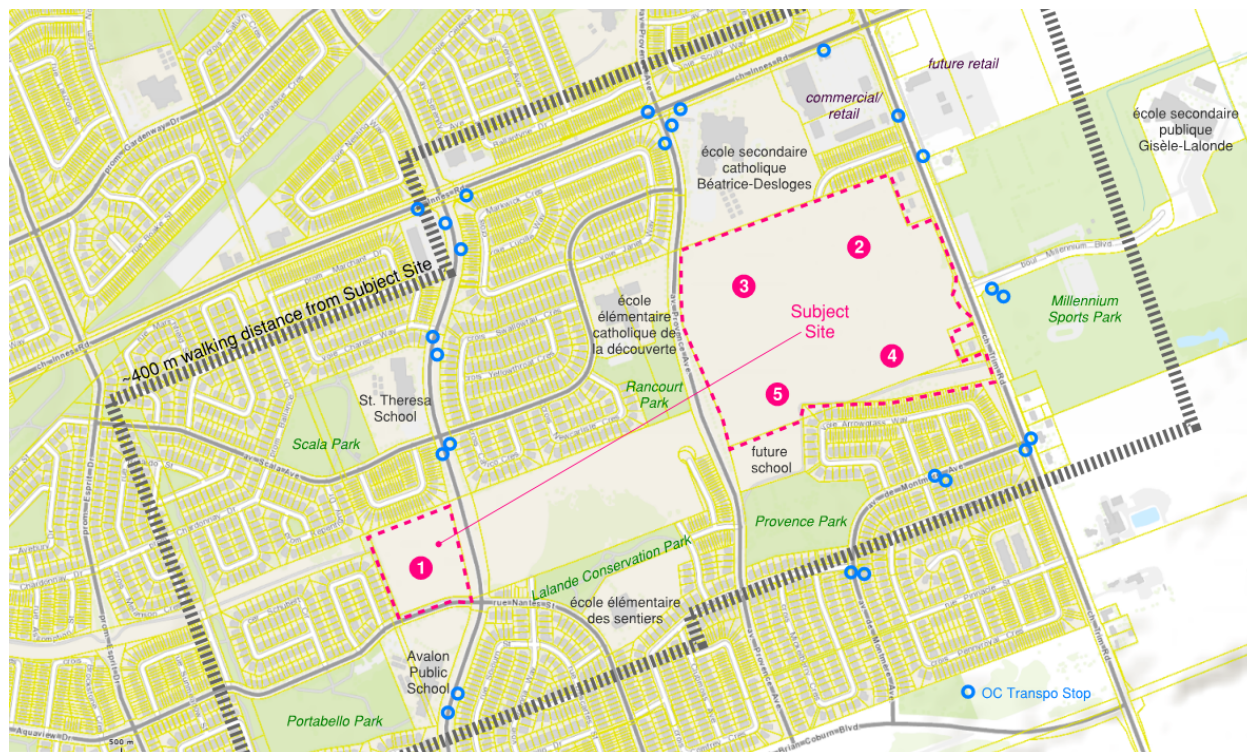


Figure 1: Location of Subject Site and Surrounding Land Uses within a 400m Radius

A pre-application consultation was held at City Hall on April 12, 2018 with comments from City staff delivered to Novatech by e-mail dated April 19, 2018. This report has been updated to reflect those comments received from City and technical review agencies.

Five hundred thirty-five (535) units are proposed for the Subject Site that include detached dwellings, townhouses and back-to-back townhouses as well as a new 4000 m² community park. The Subject Site will be accessible from one new collector street between Trim Road and Provence Avenue and two local road connections to Aquaview Drive. The previous concept plan which featured an extension of Salzburg Drive through the Subject Site and local road connection off Provence Avenue have been removed.

The requirement for parkland will be addressed through the dedication of a new 4000 m² community park, previous dedications and dedication of additional parkland through future development applications in the area.

1.1 Site Description and Surrounding Uses

The Subject Site has an area of 27.54ha over two undeveloped parcels. 3.07ha will be dedicated to the City for the future Bus Rapid Transit (BRT) transitway. The Subject Site includes PINs 145642337, 145254170, 145640273, and 145640274.

Both parcels of the Subject Site are currently used as farmland. The western parcel is bound to the north by residential development, to the east by Portobello Boulevard, to the south by Aquaview Drive and to the west by residential development and a City owned pathway. The eastern parcel is bound to the north by Beatrice-Désloges Catholic High School and residential development along Salzburg Avenue, to the east by Trim Road, to the south by the future transit way (BRT) and to the west by Provence Avenue.

The subject site is designated and zoned in the following planning documents as:

Official Plan, Schedule B: General Urban Area

Zoning By-law 2008-250: Development Reserve (DR)

For more information on the planning policy and regulation context see Section 2.0 of this report.

1.2 Proposed Development and Supporting Studies

Proposed units, lots and blocks are identified on the Draft Plan in Figure 2 and in **Table 1**. A larger copy of the revised Draft Plan is found in **Appendix A: Draft Plan of Subdivision**. Descriptions of each application follow.

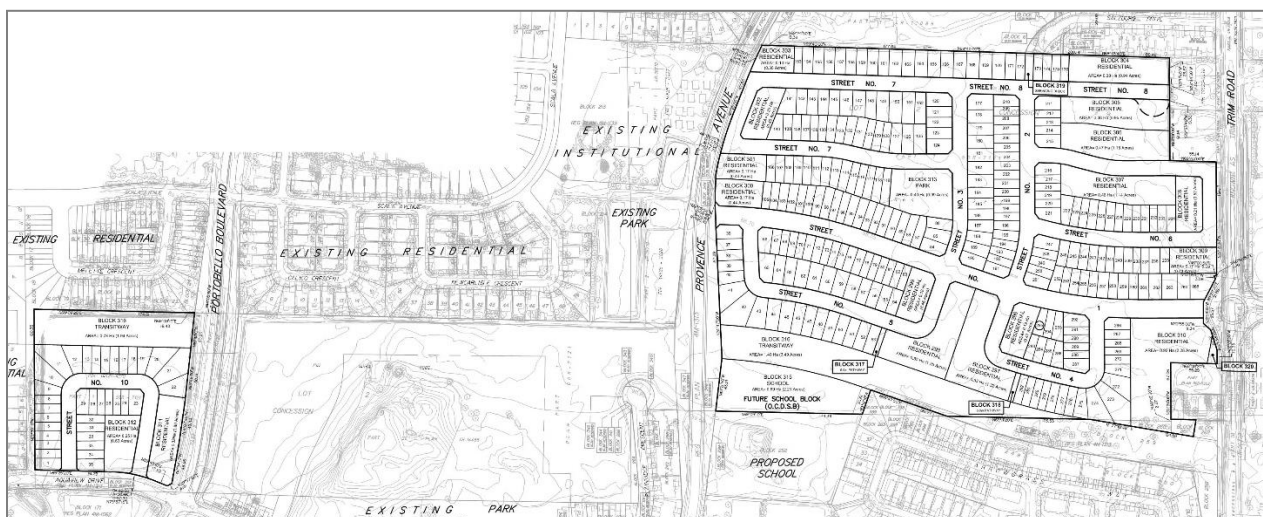


Figure 2: Excerpt from revised Draft Plan

Table 1: Proposed Units, Lots and Blocks

Unit Type	Detached Dwellings	Townhouses	Back-to-Back Townhouses	Land Dedication
# Units	295	200	40	-
Lots	295	-	-	-
Blocks	-	16	1	7

1.2.1 Proposed Subdivision

The Draft Plan of Subdivision is prepared by Novatech and includes 295 single detached lots; 17 multi-unit residential blocks; two (2) transitway blocks; four (4) park or pathway blocks; and, one (1) future school block.

A variety of sizes of detached dwellings and townhouses are proposed, which will total 535 units. Phase 4 includes back-to-back townhouses at the corner of Trim road and the future transitway. The total units are shown in **Table 2**. Phasing is shown on the Concept Plan in **Figure 3**.

Table 2: Proposed Units Breakdown

Units Breakdown by Phase (see Concept Plan for Phasing)							
Phase	50' singles	42' singles	35' singles	31' singles	Townhouses	Back-to-back Towns	Total Units in Phase
1 (Aquaview)		6	23	6	24		59
2 (Trim)	5	5	43	32	91		176
3 (Trim)	21	23	42	32	30		148
4 (Trim)		3	12	12	27	40	94
5 Trim)	10	20			28		58
TOTAL	36	57	120	82	200	40	535



Figure 3: Excerpt of revised Concept Plan

The requirement for parkland will be addressed through the dedication of a new 4000 m² community park, previous dedications and dedication of additional parkland through future development applications in the area.

All units will be within 400m of an existing or proposed transit stop. The Millennium Bus Rapid Transit (BRT) station, near Gisèle-Lalonde Public High School is within 600m of the lots in Phases 2 and 4. A future BRT transitway bisects the Subject Site. Blocks 316 on the Draft plan will be dedicated to the City of Ottawa to accommodate this future transitway.

The previous concept plan proposed ten (10) new local streets (labelled Streets 1-10 on the Draft Plan). However, revisions to the concept plan have altered the street number layout and removed Street No. 9 from the proposed development. For the purposes of keeping with the completed engineering and technical studies, the ten (10) local streets will still be referred to in those studies and reports.

The proposed development street layout will feature a modified grid and crescent pattern, which is similar to adjacent existing developments. The previous concept plan which featured an extension of Salzburg Drive into the proposed development has been removed to address concerns raised by the public and replaced with pedestrian pathway to provide connection between the two developments.

Access and egress will be gained to Phase 1 of the proposed development in two locations off Aquaview Drive. Two accesses and egresses to Phases 2-5 are proposed – one from Trim Road, and one from Provence Avenue. A 22m ROW cross-section is proposed for Street 1 whereas the remaining local streets will be 18m ROW width or 16.5m ROW width for window streets as identified on the Draft Plan.

Trim Road is anticipated to be widened as per the *Transportation Master Plan* and the *Official Plan* Annex 1. Trim Road has already been built to the full urban cross-section. Widening has already been taken adjacent to the development in fulfillment of Annex 1 (37.5m). No additional lands are required for widening from the Subject Site.

The buildout of the subdivision is anticipated to begin in 2019 with the last phase starting in 2024, dependant on market conditions. Full buildout is expected by 2025.

The design details are described in the Design Brief in Section 2.2.1 of this report.

Details of applicable policies and regulations and proposed regulation changes are found in Section 2.0 of this report.

1.2.2 Proposed Zoning By-law Amendment

Residential uses are permitted on the Subject Site subject to a *Zoning By-law* amendment.

Current Zoning

The majority of the Subject Site is currently zoned *Development Reserve (DR)*. Small portions of the Subject Site are zoned R1UU[691] and R3Y[708], which follows the zoning of the abutting residential development.

Proposed Zoning

The applicant is proposing that DR-zoned lands be rezoned to R3Z for all residential uses and portions of the Transitway except for the back-to-back townhouses, the community park and the future school block as seen on Figure 4. The back-to-back townhouses are proposed to be built as a planned unit development under the R3Z[2059] zone. The community park is proposed to be zoned O1. The Future School Block and a portion of the Transitway will be rezoned to I1B. The proposed zones are subject to review.

A draft zoning schedule is in **Table 3**. The proposed zoning key plan is in **Figure 4**.

It should be noted that Section 87(1) of the *Zoning By-law* states, “A rapid-transit network and related construction, staging and repair works to support a rapid transit network are permitted in all zones”. Considering transitways are permitted in all zones a separate zone is not required for the transitway. The adjacent residential and institutional zones follow the centreline of the transitway, which is keeping with standard practice for road ROW.

Table 3: Draft Zoning Schedule

Zone	Draft Zone Exception Text	Lot(s) and/or Block(s) on Draft Plan
R3Z		Lots 1-295 Blocks 296 – 309, 311 – 312, 316 (portions of)
R3Z[2059]	Provisions for townhouse dwellings that are vertically attached in the rear and side: -minimum lot area is 84m ² -no rear yard setback is required -minimum interior side yard setback is 1.5m -maximum lot coverage is 70% -maximum number of units per building is 12 -air conditioner condenser may be located in a front yard when units are attached back to back	Block 310
O1		Block 313
I1B		Block 316 (portion of), 315

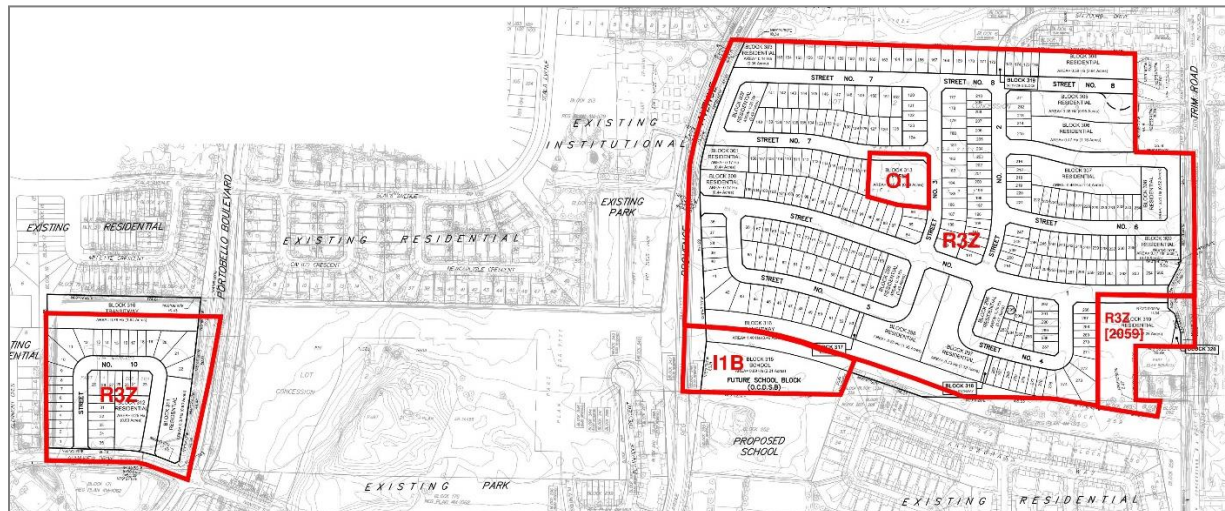


Figure 4: Proposed Zoning Key Plan

1.2.3 Supporting Plans and Studies

The following plans and studies are provided as part of the applications described above. Fifteen (15) copies of plans and three (3) copies of reports are required.

Plans:

1. Draft Plan of Subdivision (complete with the topographic survey)
2. Phasing Plan (shown on Concept Plan)

Studies/Reports:

3. Planning Rationale, Design Brief and IERS
4. Site Servicing and Stormwater Management Design Brief
5. Traffic Impact Assessment (TIA)
6. Noise Feasibility Study
7. Geotechnical Study
8. Phase 1 Environmental Site Assessment
9. Environmental Impact Statement/Tree Conservation Report (EIS/TCR)
10. Archaeological Site Assessment Stage 1
11. Archaeological Site Assessment Stage 2

2.0 POLICY AND REGULATORY FRAMEWORK AND PLANNING RATIONALE

The following section will demonstrate how the proposed Subdivision and Zoning By-law Amendment applications are consistent with relevant *Provincial Planning Statement* policies, conform to City of Ottawa *Official Plan* and comply with the Ottawa's *Zoning By-law* regulations.

Other relevant planning guidelines include the City of Ottawa's *Building Better and Smarter Suburbs* plan and the *Urban Design Guidelines for Greenfield Neighbourhoods*.

2.1 Provincial Policy Statement

The 2014 Provincial Policy Statement (PPS) provides policy direction on land use planning and development matters of provincial interest, as set out in Section 2 of the Planning Act. All decisions affecting planning matters are required to 'be consistent with' relevant policies of the PPS. Bulleted text describes how the proposed zoning amendment and subdivision are consistent with the preceding PPS policy.

Section 1.1 of the PPS speaks to managing and directing land use to achieve efficient and resilient development and land use land patterns.

Settlement Areas

Policy 1.1.3.1 states, "Settlement areas shall be the focus of growth and development, and their vitality and regeneration shall be promoted."

- The proposed zoning and subdivision is located on lands designated by the City of Ottawa as settlement area (*General Urban Area*).

Policy 1.1.3.4 states, "Appropriate development standards should be promoted which facilitate intensification, redevelopment and compact form, while avoiding or mitigating risks to public health and safety."

- The proposed zoning and subdivision consists of smaller single detached lots and townhouse lots, as well as medium density 'back-to-back' townhouse lots. These dwellings will be supported by a variety of amenities within a 5-10-minute walk, such as new and existing neighbourhood parks, schools and school parks, a district park and essential commercial services as seen in **Figure 1**.

Policy 1.1.3.6 states, "New development taking place in designated growth areas should occur adjacent to the existing built-up area and shall have a compact form, mix of uses and densities that allow for the efficient use of land, infrastructure and public service facilities."

- The proposed zoning and subdivision is located within the City of Ottawa's *General Urban Area* and is occurring adjacent to existing built-up lands. The proposed development is largely comprised of compact built form and densities. Commercial and Institutional Uses surround the site as shown on **Figure 1**.

Housing

Policy 1.4.3 states,

Planning authorities shall provide for an appropriate range and mix of housing types and densities to meet projected requirements of current and future residents of the regional market area by:

...

b. permitting and facilitating:

1. all forms of housing required to meet the social, health and well-being requirements of current and future residents, including special needs requirements; and
2. all forms of residential intensification, including second 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; and
 - e. establishing development standards for residential intensification, redevelopment and new residential development which minimize the cost of housing and facilitate compact form, while maintaining appropriate levels of public health and safety.
- The proposed development offers a mix of lot sizes for detached dwellings and townhouses.
 - The location of the proposed density offers future residents access to the adjacent school and park, nearby future business area, transit options.
 - The proposed development will provide some new residential housing that is compact in form that can minimize the costs of housing.

Public Spaces, Recreation, Parks, Trails and Open Space

Policy 1.5.1 states,

Healthy, active communities should be promoted by:

- a. planning public streets, spaces and facilities to be safe, meet the needs of pedestrians, foster social interaction and facilitate active transportation and community connectivity;
 - b. planning and providing for a full range and equitable distribution of publicly-accessible built and natural settings for recreation, including facilities, parklands, public spaces, open space areas, trails and linkages, and, where practical, water-based resources;
 - c. providing opportunities for public access to shorelines; and
 - d. recognizing provincial parks, conservation reserves, and other protected areas, and minimizing negative impacts on these areas.
- The street pattern and sidewalk locations provide pedestrians safe access to major destinations, including parks, other pathways, schools and retail.
 - Green mid-block pathways link new local streets for easier foot travel.
 - A variety of park types surround proposed development including one (1) *district park* (Cumberland Millennium Sports Park), four (4) *neighbourhood parks* (Rancourt, Scala, Portobello and Provence Parks), six (6) *school parks* (École Secondaire Catholique Béatrice-Desloges, École Élémentaire Catholique de la Découverte, St. Theresa School, Avalon Public School, École Élémentaire des Sentiers and École Secondaire Publique Gisèle-Lalonde), one (1) conservation park (Lalande Conservation Park) and linear parks and trails throughout the greater neighbourhood. A Multiuse Path (MUP) is connected to the southern edge of the Subject Site. Within the proposed development is a new community park.

Sewage, Water and Stormwater

Section 1.6.6 of the PPS guides development with regards to sewage, water and stormwater. Policy 1.6.6.2 states, “Municipal sewage services and municipal water services are the preferred form of servicing for settlement areas.”

- The proposed development will use exclusively municipal sewage, water and stormwater services.

Transportation Systems

Policy 1.6.7.4 of the PPS states, “A land use pattern, density and mix of uses should be promoted that minimize the length and number of vehicle trips and support current and future use of transit and active transportation”.

- Future residents of the proposed development will have access to existing and/or proposed and/or future transit stops and/or stations within a 400m walking distance.

2.2 Official Plan (OPA 180)

Relevant sections and policies of the Official Plan are listed below. Bulleted text describes how the proposed zoning amendment and subdivision are consistent with the preceding OP policy.

Land Use Designation

OP Section 3.6.1 - Land Use Designations

The current *City of Ottawa Official Plan* (OPA 180) Schedule B designates the Subject Site as *General Urban Area* as seen in **Figure 5**.

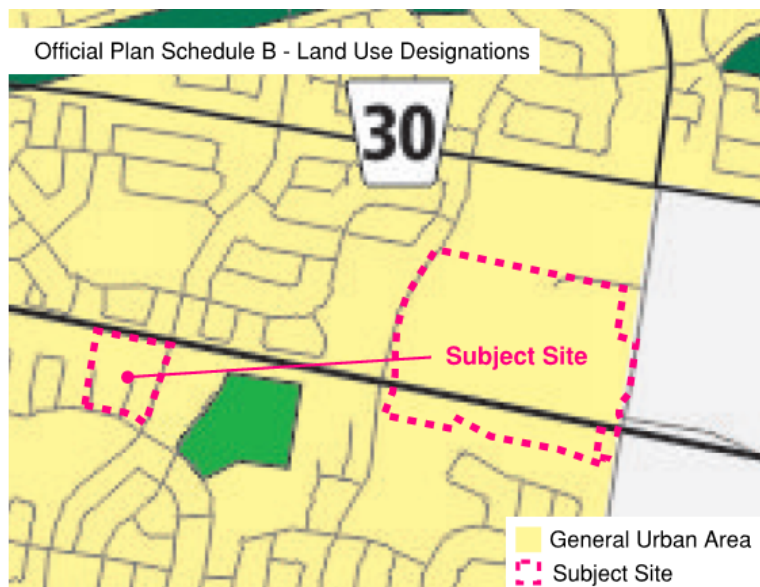


Figure 5: Official Plan Land Use Designation

Section 3.6.1 of the Official Plan states that the General Urban Area “permits the development of a full range and choice of housing types to meet the needs of all ages, incomes and life circumstances, in combination with conveniently located employment, retail, service, cultural, leisure, entertainment and institutional uses.” Applicable policies under Section 3.6.1 are listed below:

Policy 1 states, “General Urban Area areas are designated on Schedule B. The General Urban Area designation permits many types and densities of housing, as well as employment, retail uses, service, industrial, cultural, leisure, greenspace, entertainment and institutional uses.”

- The proposed single detached dwellings and townhouses are permitted at the density proposed. The development is situated amidst a variety of parks, greenspaces, schools, commercial resources and City recreation facilities.

Policy 2 states, “The evaluation of development applications, studies, other plans and public works undertaken by the City in the General Urban Area will be in accordance with Section 2.5.1 and Section 4.11.”

- These sections are addressed further in this report.

Transportation

OP Section 4.3: Walking, Cycling, Transit, Roads, and Parking Lots

Policy 1 states, “The transportation network in new plans of subdivision will provide the opportunity for direct transit routes through the community and for all buildings to be within 400 metres walking distance of a transit stop.”

- The proposed development to the west is within 400m of transit stops on Portobello that offers OC Transpo routes 233 and 33, and the 94 on Innes Road. The proposed development to the east is within 400m of transit stops on Trim Road 22, 94, 122, 30 and 630 and the 94 on Innes Road.
- OC Transpo will provide transit service on Provence Avenue and Street No. 1 along with the buildout of this development.

Policy 5 states, “The City will require a transportation impact assessment report, which may be a community transportation study, transportation impact study, or transportation brief to be submitted where the City determines that the development may have an impact on the transportation network in the surrounding area.”

- A Transportation Impact Assessment was prepared by Novatech dated July 2018 and revised November 2018 for the applications noted in this report. See Section 2.2.2 of this report for more information.

Site Servicing

OP Section 4.4.1: Servicing in Public Service Areas

Policy 1 states, “The City will require development applications in Public Service Areas to be supported by an assessment of the adequacy of public services.”

- A Site Servicing and Stormwater Management Design Brief dated June 29, 2018 was prepared by Novatech to assess the serviceability of the subject site. This report also discusses how run-off from the proposed development will be managed. See Section 2.2.2 of this report for more information.

Heritage and Archaeological Resources

OP Section 4.6.1 – Heritage Buildings and Areas

- No heritage buildings or areas are located on or adjacent to the Subject Site.

OP Section 4.6.2: Archaeological Resources

Policy 1 states, “Where development is proposed on land where archaeological potential exists, as identified on the City of Ottawa map *Areas of Archaeological Potential* the City will require an archaeological resource assessment to be conducted by an archaeologist licensed under the Ontario Heritage Act...”.

- A Stage Two Archaeological Assessment dated June 20, 2018 was completed by Paterson Group following the recommendations of the Stage 1 report. Based on the Stage 2 report, further archaeological studies are not required. For more information see Section 2.2.2 of this report.

Environmental Protection

OP Section 4.7.2 – Protection of Vegetation Cover

Policy 1 states, "...applications for subdivision, condominium and site plan approval, affecting vegetation cover on site, will be supported by a Tree Conservation Report and a Landscape Plan."

- A Tree Conservation Report (TCR) dated July 04, 2018 was prepared by Muncaster Environmental Planning Inc. and submitted in combination with the Environmental Impact Statement (EIS) prepared by the same company. A Streetscaping Plan will be submitted following of Draft Plan Approval. For more information about the TCR (and EIS) see Section 2.2.2 of this report.

OP Section 4.7.4 – Protection of Endangered and Threatened Species

Policy 2 states, "... Significant habitat of endangered and threatened species will be identified by: ... An Environmental Impact Statement in areas where there is potential for significant habitat to exist..."

- An Environmental Impact Statement (EIS) dated July 04, 2018 was prepared by Muncaster Environmental Planning Inc. to study the natural environment features, including the potential for specimen trees and Species at Risk. See Section 2.2.2 of this report for more information on the EIS.

OP Section 4.7.6 – Stormwater Management

Policy 1 states, "A stormwater site management plan will be required to support subdivision and site-plan applications."

- A Site Servicing and Stormwater Management Brief that includes a stormwater management review was prepared by Novatech an dated June 29, 2018. The brief addresses any relevant policies of the Official Plan and other City of Ottawa engineering requirements. See Section 2.2.2 of this report for more information.

Noise

OP Section 4.8.7 – Environmental Noise Control

Policy 3 states, "Development proposals for new noise sensitive land uses will require a noise feasibility study and/or detailed noise study in the following locations: ... (b) 100 metres from the right-of-way of: (i) an existing or proposed Arterial, Collector or Major Collector Road identified on Schedules E and F..."

- A Noise Feasibility Study for traffic noise from Aquaview Drive, Provence Avenue, Salzburg Avenue, Street 1, Portobello Boulevard and Trim Road was prepared by Novatech and dated June 29, 2018. The report precedes a Detailed Noise Impact Assessment, which will be required at detailed design stage (following Draft Plan Approval). See Section 2.2.2 of this report for more information.

Greenspace

OP Section 4.10 - Greenspace Requirements

Policy 1 states, “As a condition of development or redevelopment, the City will acquire land for park purposes through the provisions of the *Planning Act*, in a way that best meets park and recreation needs of the community.”

- The requirement for parkland will be addressed by a combination of the dedication of a new 4000 square metre community park to be built in Phase 3, previous dedications and dedication of additional parkland through future development applications in the area.

2.2.1 Design Brief

A Scoped Design Brief is required for the Zoning By-law Amendment Application as identified in Section 5.2.6 of the Official Plan and the Design Brief Terms of Reference (TOR). Responses to the following are provided as the contents of this Design Brief:

- Section 1 of the City of Ottawa’s *Design Brief Terms of Reference* (TOR);
- Sections 2.5.1 and 4.11 of the *City of Ottawa Official Plan* (OP);
- Objectives from the City of Ottawa’s *Building Better and Smarter Suburbs* (BBSS);
- Objectives of City of Ottawa’s *Urban Design Guidelines for Greenfield Neighbourhoods*.

Design Brief Terms of Reference

Items in Section 1 of the TOR are included throughout this report as required by the TOR.

Official Plan

Section 2.5.1 outlines the Official Plan’s Design Objectives and speaks to achieving development that “enhances the established community” and “coexists with existing development”. The following is a review of the seven stated design objectives and summary of how the proposal is consistent with these objectives:

1. To enhance the sense of community by creating and maintaining places with their own distinct identity.
 - The proposed draft zoning enables a low-rise residential identity with easy access to commercial, institutional and recreational uses. The proposed development will integrate into the existing developed neighbourhood.
2. To define quality public and private spaces through development.
 - New quality park spaces will be added as described in this report. All new lots will have private front and rear yard amenity space, except for the back-to-back townhouses, which will have front yard amenity space.
3. To create places that are safe, accessible and are easy to get to, and move through.
 - A series of pedestrian sidewalks are located throughout the subdivision to facilitate safe movement to and from, and within, the neighbourhood as seen in **Figure 6**.

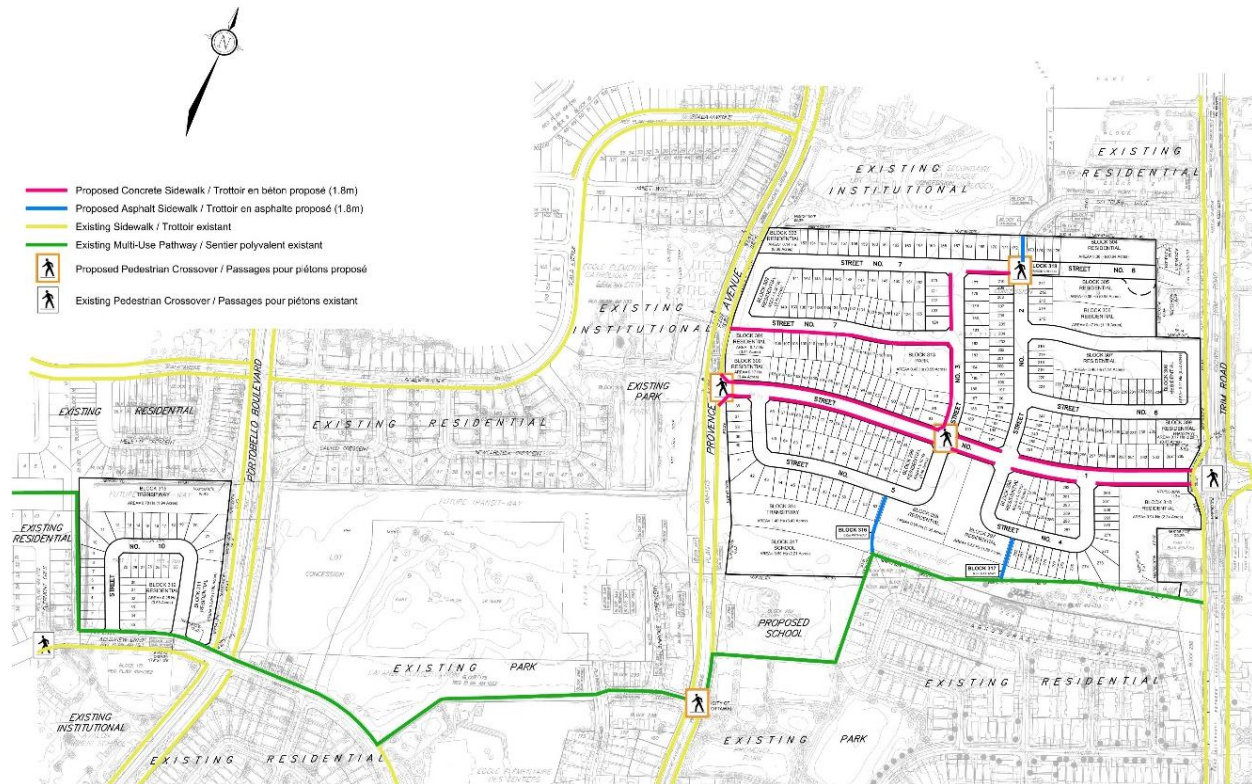


Figure 6: Proposed Pathways

4. To ensure that new development respects the character of existing areas.
 - The proposed zoning allows for detached dwellings and townhouses, which extends the character of existing neighbourhood. Single lots vary in width between 9.44m and 15.24m (31' and 50').
5. To consider adaptability and diversity by creating places that can adapt and evolve easily over time and that are characterized by variety and choice.
 - The proposed zoning is not intended to evolve in the near or longer-range future. It is consistent with the Plans for the area. The zoning allows for the proposed buildings, which offer three housing choices in a variety of sizes.
6. To understand and respect natural processes and features in development design.
 - The proposed zoning has been informed by the recommendations of a range of studies examining the natural landscape and topographic constraints of the site.
7. To maximize energy-efficiency and promote sustainable design to reduce the resource consumption, energy use, and carbon footprint of the built environment.
 - The proposed zoning enables smaller lot widths and building types to be permitted.

Section 4.11: Urban Design and Compatible Development speaks to neighbourhood or site-scale issues such as noise, light spillover, parking and access, shadowing, and microclimate on proposed and existing development. Policies of Section 4.11 are divided into several broad categories. Discussion of how the proposed development satisfies these policies follows.

Views. According to the *Official Plan* no significant view sheds were identified within the Subject Site. Many residents will have views onto the community park. The grid street pattern provides for views down each street to enable intuitive navigation through the neighbourhood whether by foot or vehicle.

Massing and Scale. The proposed zoning enables a variety of low-rise residential building forms. The proposed development is one- or two- single detached dwellings, townhouses and back-to-back townhouses. The subdivision has been designed with consideration of the size and form of residential blocks and lots with respect to achieving an intuitive internal street layout.

Outdoor Amenity Areas. In addition to the community park and abundance of nearby parks, school parks, and trails the proposed residences will have private access to rear yard amenity area that complies with the *Zoning By-law* provisions, except those back-to-back townhouses.

Guidelines: Building Better and Smarter Suburbs (BBSS)

The BBSS Guidelines, while not policy nor regulation, outline some of the expectations Ottawans have for new suburbs. Strategic Directions that have been met in the proposed zoning amendment (and subdivision) are noted in parentheses in the following notes. These notes respond are sorted by the nine (9) topics in the Guidelines.

Note: Unaddressed Guidelines do not apply to this application. ***A full list of the Strategic Directions is provided in Appendix B: Urban Design Strategic Directions and Guidelines.***

Strategic Direction (SD) Topics	Proposed Development
1. Street Network and Land Use (SD: 1-12)	The proposed street network ties into the municipal grid and is based on a modified grid pattern (SD: 1 and 2). The street network ensures direct pedestrian and cycling connectivity to key destinations in the community (SD: 3). Trim Road is the only arterial road near the proposed lands, which is a boundary road on the far east side of the proposed subdivision (SD: 4). Proposed roadways must be designed to City design standards (SD: 5) and any traffic calming design will be included if in City design standards (SD: 6). No roundabouts are proposed within the development (SD: 7). Cycling facilities will be accommodated in the future Transitway abutting the subdivision (SD: 8). No reverse frontage lots are proposed (SD: 9). Transit planning will occur as required under normal planning process (SD: 10). Home-based businesses are permitted in all residential zones (SD: 11). It is not currently possible to require builders to include utilities in basements through the planning process (SD:12).
2. Parks and Open Space (SD: 1-4)	The proposed community park in Phase 3 is on a corner lot to enable access (SD: 3). Where possible, at least one tree will be planted on every new lot subject to the <i>Tree Planting on Sensitive Marine Clay Soils 2017 Guidelines</i> (SD: 4)

3. Stormwater Management (SD: 1-6)	(No response required. Strategic Directions in this section are all City-oriented.)
4. School Sites (SD: 1-9)	(No schools are proposed. A partial school block is proposed.)
5. Parking (SD: 1-7)	Garages are no longer permitted by the Zoning By-law to extend beyond the front wall of any residential building and therefore none will be proposed nor built (SD: 2). <i>(Remaining Strategic Directions are City-oriented).</i>
6. Road Right-of-way (SD: 1-10)	Roads must be designed to City requirements (SD: 1-5, 10) and any traffic calming design and transit will be included if in City design standards (SD: 6, 7). City of Ottawa Cross Sections ROW 16.5, ROW-18JT, and ROW-22 are proposed.
7. Rear Lanes (SD: 1-4)	(No rear lanes are proposed.)
8. Trees (SD: 1-4)	A streetscaping plan (landscape plan) will be submitted prior to draft plan approval that must meet City standards (1,2). A Facility Fit plan will be submitted for the community park that must meet City standards (SD: 3). Where possible, at least one tree will be planted on every new lot and two trees on corner lots subject to the City's <i>Tree Planting in Sensitive Marine Clay Soils – 2017 Guidelines</i> . As part of this proposed development, existing trees will be kept to the greatest extent possible, such as those on the northern boundary of the western parcel. (SD: 4).
9. Utility Placement (SD: 1-6)	Utilities will be underground (SD: 1, 5-6). The design of utilities underground will not impact trees on private property to the greatest extent possible. The placement of utilities and trees are subject to the City's <i>Tree Planting in Sensitive Marine Clay Soils – 2017 Guidelines</i> and it is not possible to determine their final locations until detailed engineering stage (following Draft Plan Approval) (SD: 2-3).

Guidelines: Urban Design Guidelines for Greenfield Neighbourhoods

Note: Unaddressed Guidelines do not apply to this application. **A full list of the Guidelines is provided in Appendix B: Urban Design Strategic Directions and Guidelines.**

Guideline (GL) Topic	Proposed Development
When structuring the layout of the neighbourhood... (GL: 1-20)	<p>The proposed zoning and subdivision design are subject to geotechnical and soils studies, as well as environmental reviews such as a Phase 1 Environmental Site Assessment, Tree Conservation Report and an Environmental Impact Statement. (GL: 1) The Site is on fallow farm fields that contain few existing hedgerow trees and no natural features. (GL: 2-4, 6) Existing trees will be preserved to the greatest extent possible, and many new trees will be planted on private property and within the streetscape (approximately one tree per lot) subject to the City's <i>Tree Planting in Sensitive Marine Clay Soils – 2017 Guidelines</i> (GL: 3-5). Green spaces and public ROW are connected to draw residents to parks, institutions and commercial areas. No stormwater pond is proposed and therefore will not need to be integrated into the greenspace network (GL: 7). Medium to higher-density lots and blocks are proposed closer to transit locations as shown on the Draft Plan in Table 1: Proposed Units, Lots, Blocks (GL: 9). The street pattern facilitates ease of access for residents to existing schools, parks, transit and commercial areas (GL: 10). New local streets are proposed that connect to existing streets (Trim, Provence, and Aquaview) and all proposed streets in Phases 2-5 are within 400m of either a collector or an arterial (Provence, Street 1 or Trim) and streets in Phase 1 are within 400m of a major collector (Portobello) (GL: 11-12). Most street blocks are less than 100m in length and the remainder are approximately 100-250m in length (GL: 13). The street orientation is predominantly east-west as shown in Draft Plan in Table 1: Proposed Units, Lots, and Blocks (GL: 14).</p> <p>The new community park is located on the corner of two streets in Phase 3 (GL: 20).</p>
When designing streets and streetscapes... (GL:21-33)	<p>City of Ottawa Cross Sections are proposed for the new local and collector streets, which can accommodate a variety of elements as required by the City (GL: 21, 26). Most rear yards (outdoor living areas) will not be affected by noise from arterial or collector streets, however a handful of properties in Phases 2 -5, as well those lots in the eastern street block of Phase 1, will be affected, as detailed further in the Noise Feasibility Study (GL: 22). A streetscaping plan will be required following draft plan approval and entrances to neighbourhoods will be addressed at that stage (GL: 25, 27).</p>
When designing residential buildings and sites... (GL: 34-46)	<p>In the R3Z zone the minimum front yard setback is 3m, which will allow for a number of tree varieties. The lot fabric as seen in</p>

	the Concept Plan dictates that building widths will vary significantly to provide visual interest. Detached dwellings of various sizes and townhouses occupy each street block (GL: 34-35). All buildings front onto a street (GL: 37). The Zoning By-law does not permit garages to extend beyond the front wall of a building and driveways are not permitted to be wider than the garage door (GL: 44). Shared driveways are desirable given that they enable enough space for on-street parking, in addition to the benefits listed. Shared driveways for townhouses will be accommodated to the greatest extent possible (GL: 45).
When designing non-residential buildings and sites... (GL: 47-53)	(No non-residential building nor sites are proposed.)
When designing greenspaces... (GL: 54-59)	A Facility Fit Plan for the new community park will be provided to the City prior to Draft Plan approval.
When designing and locating utilities and amenities... (GL: 60-65)	New transit stops will be proposed on Street 1 and Provence Avenue as described further in the TIA (GL: 61). A streetscape plan will be submitted following draft plan approval that use City of Ottawa Cross Sections.

2.2.2 Integrated Environmental Review Statement

Recommendations from the required studies are listed below. They have informed the design of the Subject Site in terms of grading, drainage, site services, fire protection, transportation, building structure material requirements, and any mitigative measure needed to address contamination (if any) or species at risk.

The site as proposed meets all regulatory requirements described in each plan and study. Some standard items requiring further information (e.g. prior to Draft Plan Approval, following Draft Plan Approval or upon Site Plan Control approval) include and are not limited to:

1. Facility Fit Plan for new community park
2. Detailed engineering servicing, grading and stormwater plans
3. Streetscape Plan (following detailed engineering)
4. Detailed Noise Impact Assessment
5. OC Transpo input on location of transit stops

The result of the combined recommendations is that, technically, development could occur as proposed on the Draft Plan of Subdivision. Development would be subject to the recommendations of each report as guided by government regulation and best practices.

Site Servicing and Stormwater Management Design Brief

A Site Servicing and Stormwater Management Design Brief consistent with the Master Servicing Study (*Gloucester and Cumberland East Urban Community Expansion Area and Bilberry Creek Industrial Park Master Servicing Update* by Stantec dated July 2006) was completed by Novatech and dated June 29, 2018. The report concludes:

1. The watermain flows will be supplied by the on-site loop connecting to the 300mm dia. watermain on Aquaview Drive for Phase 1 and to the 400mm dia. watermain on Trim Road, 200mm dia. on Salzburg Drive and 400mm dia. on Provence Avenue for Phases 2-5.
2. The sanitary flows will be collected by the on-site sanitary sewer system and directed to either Aquaview Drive for Phase 1 and Trim Road for Phases 2-5.
3. The stormwater flows will be collected by the on-site storm sewer system and directed to either Aquaview Drive for Phase 1 and Provence Avenue for Phases 2-5.
4. All existing water, sanitary and storm systems have sufficient capacity for the proposed development.

Geotechnical Study

A Geotechnical Study dated completed June 22, 2018 and revised on July 5, 2018 by Paterson to determine the subsoil and groundwater conditions (by means of boreholes and test holes) and to provide geotechnical recommendations for the design of the proposed development (based on the results of the boreholes and other soil information available).

Some of the conclusions are:

1. Generally, the soil conditions encountered at the test hole locations consists of a thin layer of topsoil/organic layer followed by a sensitive silty clay deposit.
2. It is anticipated that the proposed buildings will be supported by shallow footings placed over stiff to firm silty clay bearing surface. Due to the presence of the sensitive silty clay layer, the proposed development will be subjected to grade raise restrictions.
3. A medium- to high-sensitivity clay soil was encountered between design underside of footing elevations and 3.5 m below finished grade as per City Guidelines (*Tree Planting in Sensitive Marine Clay Soils 2017*). Based on our Atterberg Limits test results, the modified plasticity limit generally exceeds 40%.
4. Large trees (mature height over 14 m) can be planted within the sensitive soils provided a tree to foundation setback equal to the full mature height of the tree can be provided (e.g. in a park or other green space).
5. Tree planting setback limits is 7.5m for small (mature tree height up to 7.5m) and medium size trees (mature tree height 7.5 m to 14 m) provided that the conditions set out in Section 6.8 of the report are met.
6. Recommendations for the detailed engineering design stage (following Draft Plan Approval) are listed in Section 7.0 of the report.

Environmental Impact Statement (EIS)

An EIS report dated July 4, 2018 was completed by Muncaster Environmental Planning Inc. to study the natural environment features, including the potential for specimen trees and Species at Risk. The EIS concludes:

1. No significant natural heritage features are on or adjacent to the proposed subdivision.
2. Implementation of the mitigation measures listed under the report subheading 'Impact Analysis and Recommendations' is required.

Tree Conservation Report (TCR)

A TCR dated July 04, 2018 was prepared by Muncaster Environmental Planning Inc. and is combined with the EIS report. The TCR notes:

1. Due to the density of the development and required urban servicing and associated grading no tree retention potential is anticipated.
2. In terms of planting sensitivities, tree and shrub species that have a high-water demand are not recommended for the site due to the clay soils.
3. A Tree Cut Permit will be required for all trees greater than 10cm dbh.
4. Implementation of the mitigation measures listed under the report subheading 'Impact Analysis and Recommendations' is required.

Phase 1 Environmental Site Assessment (ESA)

A Phase I ESA dated January 20, 2018 was completed by Paterson to research the past and current use of the site and study area and to identify any environmental concerns with the potential to have impacted the subject property. The report concludes:

1. A Phase II Environmental Site Assessment is not required for the property.
2. No environmental concerns were identified with respect to the historical use of the subject site, although it appears that there may be remnant building materials (concrete) present in the vicinity of the former house and farm buildings. The remnant building materials are not considered to pose a significant risk to the subject land but should be removed off-site for proper disposal in conjunction with future site development.
3. Two (2) potentially contaminating activities (PCAs) were identified at the City of Ottawa Trim Road Garage Depot, located within the Phase I-ESA study area, however, these PCAs are not considered to represent areas of potential environmental concern on the subject site.

Traffic Impact Assessment (TIA)

A Transportation Impact Assessment (TIA) was completed by Novatech dated July 2018 and revised November 2018 in support of the proposed development. The proposed roadways are shown on the Draft Plan tie into the existing surrounding network of roads and will be designed to support the proposed development.

The report conclusions include:

1. Street No. 1 has a proposed ROW width of 22m. This is consistent for a collector roadway, and is sufficient to accommodate transit service.
2. Streets No. 2-8, and 10 have a proposed ROW width of 18m. The window streets on Street No. 6 fronting Trim Road and Street No. 7 fronting Provence Avenue have a proposed ROW width of 16.5m. This is adequate given the context of the proposed site, a low-speed residential neighbourhood with limited opportunity for cut-through traffic.

3. 1.8m concrete sidewalks are proposed on both sides of Street No. 1, the west side of Streets No. 3, the south side of Street No. 7 crescent, and the south side of Street 8 between Street No. 2 and 3. Three 1.8 m asphalt pathway is proposed on Street No. 4 and Street No. 5, which will connect the proposed subdivision to the Trans-Orléans Pathway, and Street No. 8, which will connect the subdivision to the existing pathway on the north side of Salzburg Drive.
4. Existing OC Transpo routes 33 and 233 along Portobello will serve the stops adjacent to the proposed Phase 1 development.
5. Discussions with City staff confirmed that as the subdivision develops, OC Transpo will provide transit service on Provence Avenue and Street No. 1. Therefore, no capacity problems are anticipated as a result of transit trips generated by Phases 2-5 of the development.
6. All new residents will have access to transit stops within a 400m walking distance.

Noise Feasibility Study

A Noise Feasibility Study dated June 29, 2018 was completed by Novatech to assess the environmental impact of noise to the outdoor, review the feasibility of various noise mitigation methods, and confirm the noise levels can be reduced to the City of Ottawa approved levels.

This report confirms the predicted outdoor noise levels for the proposed Notting Hill Subdivision from traffic is in excess of the City of Ottawa's guidelines for Lots 1-2, 20-22, 35-43, 82-84, 186-187, 250-251, 266, 267, 293 and Blocks 297-298, 300-301, 303, 304-306, 309, 311-312 as shown on the Noise Control Plan (117155-NC).

To mitigate the noise levels and inform potential buyers/tenants, the following noise attenuation measures are proposed:

1. The installation of acoustic noise barriers as indicated on the Noise Control Plan (117155-NC). During detailed design the grading of the site will need to be confirmed; if substantial grading revisions are proposed, the outdoor noise calculations/attenuation measures will be required to be revised.
2. The inclusion of a noise warning clause registered on title and incorporated into the sales/rental agreements of the units requiring outdoor noise attenuation.
3. Indoor noise mitigation methods and additional warning clauses to be registered on title and into the sales/rental agreements are to be confirmed during detailed design.

Archeological Assessment Stages 1 and 2

The Stages 1 and 2 reports are awaiting MOECC approval.

A Stage 1 Archaeological Assessment was completed by Paterson and dated March 15, 2108. The result of the Stage 1 assessment is that a Stage 2 assessment is required as the report concludes:

1. There is archaeological potential for pre-contact and historic period sites in the study area. As such, a Stage 2 archaeological assessment will be required.

A Stage 2 report dated June 20, 2018 was completed by Paterson. The conclusions of Stage 2 include:

1. No archaeological remains, artifacts, or culturally significant soil profiles were encountered during the Stage 2 investigations.
2. No further archaeological study is required for the study property.

2.3 Zoning By-law 2008-250

Section 1.2.2 of this Rationale speaks to the current and proposed zoning. This section speaks to the regulatory framework of the City of Ottawa's *Zoning By-law 2008-250*.

The Subject Site is currently largely zoned Development Reserve (DR) under *City of Ottawa Zoning By-Law 2008-250*. The purpose of the DR Zone is to recognize lands intended for future urban development in areas designated as General Urban Area and Developing Community in the Official Plan. The DR zone is essentially a placeholder to prevent development before studies have been completed to inform a design, and the studies and design are approved by authorities. The studies listed in Subsection 1.2.3 of this report are being completed with this application.

A good practice for developing areas in the City of Ottawa is to rezone residential lands to the Residential Third Density Zone, Subzone Z (R3Z). This zone provides the flexibility needed to achieve the type of neighbourhood design expected in new developments. A variety of building forms and building designs are permitted, such as a mixture of detached, semi-detached, and townhouses as discussed in Section 1.2.2 Proposed Zoning By-law Amendment.

3.0 CONCLUSION

The proposed applications are consistent with the Provincial Policy Statement, conform to the Official Plan, and comply with the proposed zoning.

It is Novatech's professional opinion that the proposed development is an appropriate addition to Orléans-Notting Hill community.

Sincerely,

NOVATECH

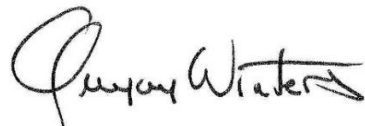
Prepared by:



Robert Tran, M.PL.

Planner, Planning & Development

Reviewed by:



Greg Winters, MCIP RPP

Senior Project Manager, Planning & Development

4.0 APPENDIX A: DRAFT PLAN OF SUBDIVISION

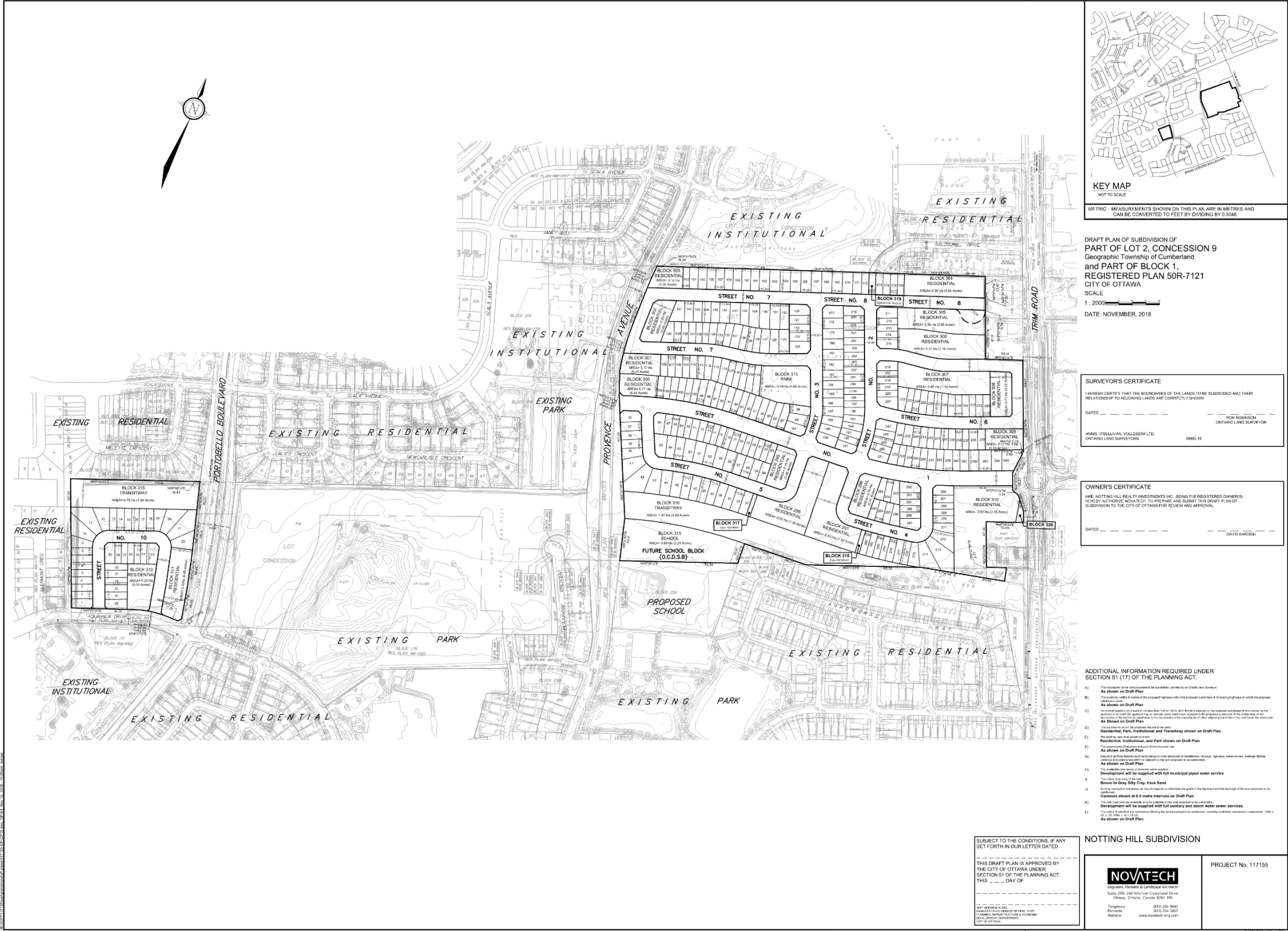


Figure 7: Draft Plan of Subdivision

5.0 APPENDIX B: URBAN DESIGN STRATEGIC DIRECTIONS AND GUIDELINES

5.1 BBSS Strategic Directions

.1 street network and land use

1. Design the street network as an integral part and extension of the municipal grid, taking into consideration its future adjustments and evolution.
2. Design the street network based on a modified or offset grid to maximize choices of travel routes and opportunities for utility connections.
3. Design the street network in conjunction with the land use and open space system to ensure direct pedestrian and cycling connectivity to key destinations in the community (schools, shops, bus stops and stations, etc).
4. Examine opportunities to design the street network with more closely spaced arterial roads in order to minimize the need for very wide ROWs that can be perceived as community dividers and barriers to active transportation.
5. Ensure that a range of appropriate sized roadways complements the character and functional needs of each community area.
6. Implement traffic calming measures at the outset of road design for local and collector streets.
7. Use roundabouts that prioritize pedestrian and cyclist safety in appropriate functional locations.
8. Implement prescribed facilities from the 2013 Ottawa Pedestrian Plan (Section 4.1) and 2013 Ottawa Cycling Plan with development.
9. Avoid reverse frontage lots (rear yards abutting public streets) within a community.
10. Encourage representation from OC Transpo at pre-consultation meetings for plans of subdivision in order to incorporate transit planning into initial subdivision design.
11. Provide flexibility in zoning to accommodate a mix of land uses within a community, such as areas that allow live-work units or local commercial land uses.
12. To support housing affordability, encourage developers to “rough-in” utilities in basements in order to facilitate their future conversion to second dwelling units in single, semi-detached, and townhouse units.

.2 Parks and Open Space

1. Investigate the conditions and criteria around adding new smaller park typologies to the Park and Pathway Development Manual.
2. Review existing metrics for accessibility/walking distance to all parks and open spaces that take into consideration health and age of residents.
3. Create street and lot patterns and building orientations that frame and enhance the presence of all parks, regardless of size.
4. Identify opportunities to connect separate features of the open space network (e.g. a park to a nearby woodlot) with streets that support canopy trees.

.3 Stormwater Management

1. Investigate ways of minimizing space attributed to SWM facilities.
2. Provide street frontage for sites that contain stormwater management ponds.

3. Ensure that land attributed to large SWM facilities can serve additional functions, such as recreation trails or multi-use paths as part of the open space system and support the connection of trails in SWM facilities to parks and open spaces, and to pedestrian and cycling facilities.
4. Examine opportunities to reduce 'end of pipe' water volume discharge.
5. Examine opportunities for innovative stormwater management in new road ROW cross-sections, such as bioswales and integrated systems that support tree hydration.
6. Review best practices from former municipalities to determine improved stormwater management practices, and examine opportunities for emergency stormwater management in public open spaces and parks, where available.

.4 School Sites

1. Encourage the planning and design of school and park blocks as one comprehensive site and part of a neighbourhood's grid of streets and blocks.
2. Examine opportunities and best practices for incorporating existing trees or woodlots into functional spaces (e.g. natural play areas or outdoor classrooms) on school sites.
3. Work with school boards to minimize land requirements for school sites, including: Promote adjoining school and park sites where possible.
4. Proactively seek out partners for facility partnerships and combined use agreements between the City and school boards (e.g. playgrounds, libraries, sports fields).
5. Consider the requirement for multi-storey school buildings (minimum 2 storeys).
6. Investigate options for more efficient bus lay-bys and student pick up / drop off areas.
7. Prioritize pedestrian and cycling safety by including traffic calming measures on streets abutting school sites at the outset of school and street design.
8. Review best practices for bicycle parking on school sites.
9. Consider ways to make temporary use of optioned school sites that will benefit the community while these sites are vacant.

.5 Parking

1. Develop criteria to determine where street-accessed parking and rear-accessed parking are appropriate.
2. Where street-accessed parking is appropriate, establish set-backs that will allow a vehicle to be parked in front of the garage or carport, while preventing the visual prominence of garages on the streetscape.
3. Determine appropriate driveway width based on lot width; provide range of options.
4. Consider minimum parking space dimensions inside garages to ensure they can function as intended, to park vehicles.
5. Consider options for multi-car households through the on-street residential parking permit program, and seek to provide adequate curbside parking supply by ensuring sufficient space between driveways (single or paired), or the use of rear lanes or buildings with parking at rear, where appropriate.
6. Encourage on-street parking on all local and collector streets, including 24 hour on-street parking with permits.

7. Consider alternating on-street parking on each side of the street during winter, to assist in snow removal.

.6 Road ROW

1. Add a series of new ROW cross-sections that respond to built form context, better accommodate street trees, and address items 2 to 9 below.
2. Consider adding an extra narrow ROW for a one-way street design.
3. ROW cross-sections, roadway widths, and design speeds should respond to built form and land use context.
4. Ensure new cross-sections consider offset geometry and differences between ROW width versus paved road width.
5. Reduce width of vehicle travel lanes in new ROW cross-sections.
6. Accommodate public transit and related amenities in the design of streets with existing or anticipated transit service.
7. Implement traffic calming measures (such as those in the Canadian Guide to Neighbourhood Traffic Calming) at the outset of road design for local and collector streets.
8. Allow for increased storage of stormwater volumes within the ROW, taking into consideration opportunities to use bio-swales for tree hydration.
9. Determine preferred sizes and locations for combined mail boxes in the right-of-way that support active transportation and safety and reduce the creation of short vehicular trips.
10. Ensure components of a 'complete street' are provided in the ROW, such as: Pedestrian facilities; Cycling facilities; On-street parking; Traffic calming features; Trees on both sides of the street, including canopy trees; Utility placement and operational considerations that do not interfere with the attributes of complete streets.

.7 Rear Lanes

1. Determine locations where rear lanes or development with rear-access parking (e.g. townhouse or stacked townhouse blocks with limited curb-cuts and driveway access, and parking at the rear of each dwelling unit) are appropriate. For example, locations may include lots facing schools, parks, community centres, and on major collector and arterial roads.
2. Analyze budgetary implications and community design benefits of City ownership of lanes; evaluate model of private lane ownership with public pedestrian easement.
3. Determine which utilities can and should be located in rear lanes.
4. Revisit design for rear lane blocks in order to improve snow and stormwater storage and conveyance issues.

.8 Trees

1. In new ROW cross-sections, ensure conditions to support healthy street trees, including canopy trees, in the ROW.
2. Implement tree planting strategies identified in the Street Tree Manual for Greenfield Neighbourhoods (to be approved in early 2015).
3. Where appropriate, incorporate retained tree stands or wood-lots in parks and open spaces.
4. Improve retention of healthy trees and treed areas in new neighbourhoods.

.9 Utility Placement

1. Favour design solutions that make all utilities and infrastructure (except traffic signals and fire hydrants) as invisible as possible.
2. Find design solutions that accommodate all utilities using less space in the ROW (e.g. joint utility trench) while ensuring sufficient space for street trees.
3. Minimize the numbers of utilities crossing soil trenches for trees.
4. Ensure utility placement and network design can accommodate increasing densities without compromising service quality and safety standards.
5. Combine above-ground utilities to reduce their visual impact on the streetscape.
6. Continue to support the burial of overhead wires on new roads.

5.2 Urban Design Guidelines for Greenfield Development

When structuring the layout of the neighbourhood...

Guideline 1:

Plan and build new communities based on the inherent capacity of the natural landscape to sustain the community over time. Consider soils, landforms, natural and cultural features, habitats, watercourses and climate.

Guideline 2:

Create a connected network of parks, greenspaces and public lands that is structured by existing natural features and connected by pathways and sidewalks. Make this network easily accessible on foot or bike from homes throughout the neighbourhood.

Guideline 3:

Conserve natural features such as woodlots, wetlands and creeks, and the natural connections between them, to sustain healthy habitats for plants and animals. When they are connected to other greenspaces, ensure that public use does not detract from the ecological functions and characteristics.

Guideline 4:

Preserve existing green corridors such as along watercourses, as connections for wildlife and for pedestrians and cyclists. Maintain the natural character of these features and limit the number of encroachments. Ensure that public use does not detract from the environmental quality.

Guideline 5:

Incorporate existing healthy trees within development blocks or lots when establishing block patterns. Provide enough space for healthy growth and protect trees and their roots during construction and grading.

Guideline 6:

Incorporate landform features and topography in the design of road and block patterns to maximize vistas and visual interest and reduce extensive earth movement requirements.

Guideline 7:

Locate stormwater management areas to be an integral part of the overall greenspace and pedestrian network within the neighbourhood.

Guideline 8:

Incorporate existing cultural heritage features, such as hedgerows, bridges, stone walls, ruins, archaeological sites and buildings when establishing the location of roads, parks, and public and institutional lands.

Guideline 9:

Concentrate higher density residential units around neighbourhood focal points that include transit stops, commercial areas, schools, community facilities, parks and multi-use pathways.

Guideline 10:

Create a walkable neighbourhood with pathways, trails and sidewalks that are accessible year round and that connect destinations such as transit stops, commercial areas, schools, community facilities and parks.

Guideline 11:

Connect new streets to existing streets in adjacent developments and plan for future connections to land that has yet to be developed.

Guideline 12:

Layout collector streets to be direct and continuous through the neighbourhood so homes are within 400 metres of transit and other destinations along them.

Guideline 13:

Layout local street patterns so that development blocks are easily walkable – between 150 and 250 metres in length.

Guideline 14:

Maximize opportunities for passive energy conservation and south facing exposure through street orientation, block pattern, building location and heights. Use vegetation and architectural detailing for shading and wind protection.

Guideline 15:

Create a transition in height from taller buildings to adjacent lower buildings, particularly when connecting to an adjacent development or neighbourhood.

Guideline 16:

Locate elementary school sites on sites of approximately 2.5 hectares that have at least two road frontages, one of which faces a collector street, and are near a neighbourhood park or greenspace. Consult with school boards.

Guideline 17:

Locate intermediate and secondary school sites on sites of approximately 5.0 to 8.0 hectares that have at least two road frontages, one of which faces a collector street, and are near parks or greenspaces. Consult with school boards.

Guideline 18:

Locate community parks along arterial or collector streets; connect to other greenspaces, and ensure that they are approximately 3.25 hectares in size and that the shape accommodates fields and facilities.

Guideline 19:

Locate neighbourhood parks along collector or local streets, and ensure that they are generally square or rectangular, depending on features within the park, and are approximately 0.8 hectares in size.

Guideline 20:

Locate parks so that they front onto at least two streets, or have the longest edge front onto the street. Locate parks at 'T'-intersections to terminate streetscape views.

When designing streets and streetscapes...

Guideline 21:

Select the most suitable zoning setback and road right-of-way width for the land use context and the road function. Provide sufficient space for the various elements in the front yard, the boulevard, and the road including: trees, sidewalks, utilities, cycling facilities, parking and travel lanes.

Guideline 22:

Orient rear yard amenity areas away from arterial and collector roads to avoid the requirement for sound attenuation walls. Use single loaded streets, crescents, or rear access streets to access these residential properties.

Guideline 23:

Include a landscaped buffer between the arterial right-of-way and the local right-of-way for single-loaded streets fronting onto arterial roads.

Guideline 24:

Plan development based on rear lanes or rear parking areas at important neighbourhood focal points such as mixed-use activity areas, surrounding parks, greenspaces and entrances to the community.

Guideline 25:

Design roads at the entrances to neighbourhoods to create a sense of arrival with such elements as enhanced landscape treatment in the boulevard and the median.

Guideline 26:

Construct sidewalks on both sides of streets that serve key destinations, such as transit stops, greenspaces, or to community facilities like schools. Select the correct road right-of-way standard to allow for sufficient space for sidewalks and all streetscape elements.

Guideline 27:

Plant trees along all streets in a consistent pattern and coordinate with the location of street amenities and utilities. Base selection and location of trees on soil conditions, bearing capacity, and urban forestry principles.

Guideline 28:

Design crosswalks in areas with higher pedestrian and vehicular traffic volumes to be visually different from the street surface. Ensure that they are universally accessible.

Guideline 29:

When sound attenuation walls cannot be avoided, diminish their visual impact on the streetscape by using quality materials and design elements in walls and by including landscaping. Refer to City of Ottawa policies for sound attenuation.

Guideline 30:

Connect major greenspace elements, like community parks, stormwater management ponds, and natural features with 'green streets' to create enhanced walking and cycling environments, and to improve ground water recharge.

Guideline 31:

Create a cycling-supportive neighbourhood with bicycle routes that serve local destinations, and that are linked to the citywide network of bicycle routes. Routes include wide shared-use curb lanes, designated on-road bicycle lanes or multi-use pathways,

Guideline 32:

Design pathways, trails and walkways that are connected to the road right-of-way so that they link to a sidewalk and cross at an intersection.

Guideline 33:

Construct streets, sidewalks, crosswalks and access to buildings that are universally accessible to a wide range of residents and abilities. Refer to accessibility standards such as the CSA (B651-04) "Accessible design for the built environment".

When designing residential buildings and sites...**Guideline 34:**

Locate residential buildings close to the property line with their primary face addressing the street, while making room for trees and utilities. Provide visual interest along the streetscape with a variety in setbacks and projections.

Guideline 35:

Mix various types of housing on each street while considering the relationship (height, size, bulk) between each other, and to existing houses.

Guideline 36:

Design buildings at key intersections as "landmark buildings", with enhanced height, massing, building projections, architectural elements, and public space.

Guideline 37:

Design building façades so that windows and doors are prominent features that address the streets they front.

Guideline 38:

Site and design residential buildings on corner lots so that both the front and the side of the building are oriented to the public street and are detailed with similar quality and style.

Guideline 39:

Incorporate porches, which are big enough to accommodate sitting areas, into the overall architecture of the building. Wrap porches around the building façade on corner units.

Guideline 40:

Design the lower floors of taller residential buildings to be in scale with the pedestrian environment and include individual at-grade doors for ground floor units.

Guideline 41:

Screen at-grade structured parking or service areas located within a residential building from the public street through such treatments as tinted windows and soft and hard landscaping.

Guideline 42:

Locate surface parking areas of multi-unit residential buildings away from public view and not between the public street and the building. Design and landscape parking areas so they do not detract from any rear yard amenity space.

Guideline 43:

Provide a landscape buffer along the edges of multi-unit residential parking areas, in situations where they are along a public street. Provide breaks in the buffers to connect the sidewalk to walkways on the site. Buffers may include low shrubs, trees, and decorative fences.

Guideline 44:

Design residential buildings so that garages do not dominate the width of the front façade and do not project past the front wall. Design driveways so that they are not wider than the garage.

Guideline 45:

Provide shared driveways for ground-oriented attached dwellings to maximize area for trees, utilities, on-street parking, and snow storage, and to minimize the physical disruption of sidewalks along the street.

Guideline 46:

Incorporate mid-block walkways to make walking more direct and convenient where long blocks cannot be avoided. Ensure that landscaping, fencing, and facing windows support a safe and attractive environment.

When designing non-residential buildings and sites...**Guideline 47:**

Locate community buildings and other non-residential buildings close to the street edge, with their primary face oriented to the street, and the front door directly accessible from the public sidewalk. Vary setbacks and projections, to provide visual interest along the streetscape.

Guideline 48:

Locate on-site surface parking areas to the side or rear and not between the public right-of-way and the front of the building. Landscape these parking areas to screen views of cars while maintaining view for natural surveillance.

Guideline 49:

Locate garbage and loading areas so that they are not visible from the public street. Screen or enclose them with similar materials as the main building.

Guideline 50:

Provide a landscaped buffer between residential areas and the service areas or rear lot areas of abutting non-residential development. Plant buffer to create a dense year-round screen.

Guideline 51:

Reduce and delay stormwater runoff from a property by using techniques such as stormwater retention gardens, green roofs, permeable paving and surfaces, and stormwater re-use.

Guideline 52:

Provide a landscape buffer along the edge of parking areas in situations where they are along the public street. Provide breaks in the buffers to connect the sidewalk to walkways on the site. Buffers may include low shrubs, trees, and decorative fences.

Guideline 53:

Provide pathways between residential areas and non-residential sites that directly and clearly connect these areas.

When designing greenspaces...**Guideline 54:**

Design stormwater management areas, and other greenspaces with majority of their frontage onto public roads to make a visible contribution to the neighbourhood.

Guideline 55:

Naturalize the edges of stormwater management areas to deter public access and to create wildlife habitats. Use decorative fencing that complements the natural character of the area when fencing is needed for safety.

Guideline 56:

Design streetscapes with open accessible frontages along greenspaces, such as woodlots and stormwater management ponds. Provide fencing along greenspaces only to prevent direct access to sensitive environmental areas or unsafe conditions.

Guideline 57:

Provide landscape buffer areas around natural features, such as woodlots or watercourses, to protect the ecological functions. Plant these buffers with native tree and shrub species to prevent invasive plant species from becoming established.

Guideline 58:

Provide trees and sidewalks along the edge of parks and greenspaces to complement the treatment across the street.

Guideline 59:

Design pathways to enhance the function and character of the type of open space they occupy, keeping in mind user safety, lighting and intended operational hours.

When designing and locating utilities and amenities....**Guideline 60:**

Select street furniture and related streetscape amenities with a consistent character and style. Ensure they do not obstruct pedestrians on sidewalks, vehicular access to properties, or maintenance of the street.

Guideline 61:

Identify locations for transit stops and shelters early in the planning of the development. Integrate them with surrounding land uses such as parks, walkways, community facilities, but away from residential front doors.

Guideline 62:

Concentrate streetscape amenities at locations with higher levels of activity, such as adjacent to parks, walkways, commercial areas, and transit stops. Ensure that amenities do not impede pedestrian and transit vehicle movements, and are linked to near-by parking.

Guideline 63:

Place mailboxes at locations with higher levels of activity, such as adjacent to parks, walkways, commercial areas, and transit stops, and link to near-by parking.

Guideline 64:

Locate above-grade utilities away from key public view lines such as intersections, day lighting triangles and parking lot entrances. Screen the utilities through design or landscaping. For taller buildings, incorporate rooftop mechanical equipment as an integral part of the building design and screen using materials complementary to the building.

Guidelines 65:

Cluster or group utilities to minimize the visual impact on the streetscape. Coordinate utility trenching, street lighting and tree locations as per City servicing guidelines to ensure sufficient room for all elements in the road corridor.