





PLANNING + DESIGN RATIONALE

MAPLE LEAF CUSTOM HOMES 1055 KLONDIKE ROAD OTTAWA, ONTARIO

Report Date:

Report Prepared for:

JULY 12, 2021

Maple Leaf Custom Homes







1055 KLONDIKE RO

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PLANNING RATIONALE

JULY 12 2021

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This Planning + Design Rationale is prepared in support of a Site Plan Control Application for the proposed low-rise apartment building to be located at 1055 Klondike Road.

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1.0 INTRODUCTION

This Planning Rationale report has been conducted in support of a Site Plan Control application for Block 10 of the 1055 Klondike Road site on behalf of Maple Leaf Custom Homes. This application follows a previously submitted application for a Plan of Subdivision and a Zoning By-law Amendment that sought to rezone the entire 1055 Klondike Road site as a combination of R3 – Residential 3rd Density, R4 – Residential 4th Density, and O1 – Parks and Open Space.

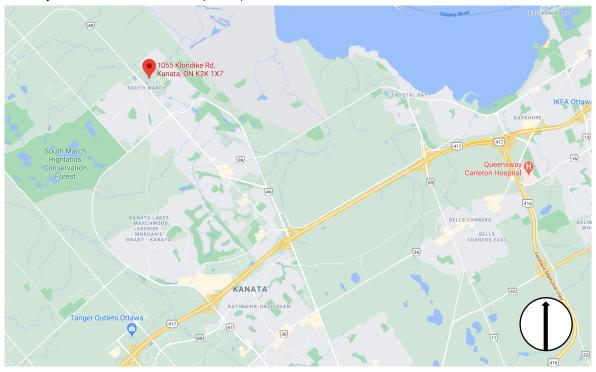


Figure 1: Location Plan

The block is located on the north side of Klondike Road between March Road and Marconi Avenue. It is situated within the South March neighbourhood in Kanata. The site is currently vacant, though it previously contained a residential building that was later demolished. The proposal for the block seeks to add a low-rise apartment building that would be composed of 53 rental residential units.

2.0 SITE & CONTEXT

2.1 SITE

The site is located on the north side of Klondike Road in the South March neighbourhood of Ward 4 – Kanata North. It is located roughly on the southwest portion of the overall 1055 Klondike Road site. The site will have access from Klondike Road via a proposed private driveway.



Figure 2: Subject Site, also identifying the Plan of Subdivision boundaries.

The following presents the site statistics.

Site Area: 5,249 m2

Site Frontage: 27.34 m (Klondike Road)

Site Depth: ~ 130 m

Part of Lot 11, Concession 4, PIN 04527-0091







Figure 3: Images of the site from Klondike Road



Figure 4: Aerial image of site.



Figure 5: Bird's Eye View of Site

2.2 CONTEXT

The site is surrounded by low-density residential subdivisions to the north, an arterial commercial plaza to the west, institutional uses to the south, including a daycare and a place of worship, and South March Public School to the southeast. There is a public park nearby to the east of the site and a stormwater management pond to the west. The site is bounded by a natural feature that includes Shirley's Brook to its southwestern side. The planned semi-detached and townhouse dwelling units for the 1055 Klondike Road site would eventually border the block to the northeast.

The area is principally characterized by low-rise residential development accompanied by low-rise arterial commercial as well as institutional uses. A residential subdivision abuts Shirley's Brook directly north and east of the subject site. There are other residential developments nearby the site on all sides. The site and some of the surrounding area are characterized by grassy fields with some trees along the north, west, and east property lines. A single detached dwelling on a large lot is located directly southwest of the site.



Figure 4: Area Context



Figure 6: Commercial Plaza to the north-west on March Road

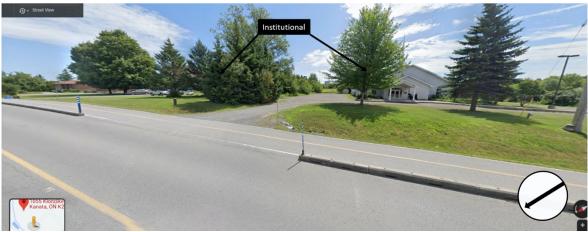


Figure 6: Institutional use across from subject site on south side of Klondike Road



Figure 7: View of all directions for the closest major intersection of March Road and Klondike Road

Lot and Road Pattern

This area is unique in its current separation from the nearby closer-knit residential subdivisions. The site is located within an area compiled of larger lot patterns, representing older residential development and some commercial and institutional lots.

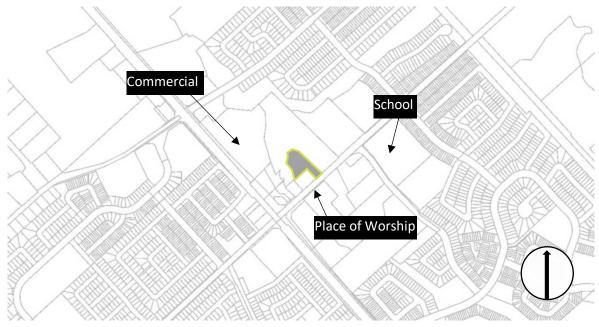


Figure 8: Map showing existing lot pattern

2.3 PEDESTRIAN AND TRANSIT NETWORK

The pedestrian and transit network is representative of the area being outside of the urban context and in a more suburban location. The following transit routes are available nearby: 165, 660, 674, 63, 226.

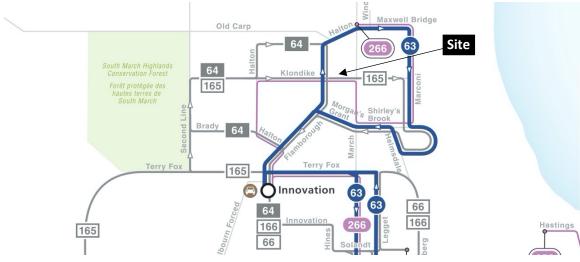


Figure 10: Extract of OC Transpo Transit Map

The following depicts the pedestrian network, planned or existing, in the surrounding context of the site. We also note that a sidewalk will connect the proposed low-rise development to Klondike Road and the identified pathway that is being provided to the City as part of the subdivision process is planned to continue both east and south pending the other adjacent lots being developed.



3.0 PROPOSAL

3.1 OVERVIEW

The proposed development for the site is to create a low-rise residential apartment building comprised of rental dwelling units. A driveway off Klondike Road will provide access to the proposed apartment building.

The apartment building will provide 53 rental units spread over four storeys. The building will also feature 64 underground parking spaces. The development is designed with the Shirley's Brook natural feature in mind, with the building being adequately set back from the feature to minimize impact. The proposed development will consist of the residential apartment, parking, pathway linkages, and amenity area.

The table below provides information on the proposal:

PROJECT STATISTICS		
Lot area	5249 m2	
Lot coverage	30.8%	
Gross floor area	5755 m2	
Total parking spaces (vehicular)	68	

3.2 ZONING REVIEW:

The chart below reviews the zoning compliance of the low-rise apartment development proposal for the proposed zoning (R4S), which is being sought under a previously submitted combined Zoning By-law Amendment and Draft Plan of Subdivision Applications for the site.

	REQUIRED	PROVIDED	ZONING BY-LAW
	(R4S)		SECTION
Minimum lot width (m)	15 m	27.34 m	S. 162
Minimum lot area (m2)	450 m2	5249 m2	S. 162
Minimum front yard setback	3 m	49.6 m	S. 162
(m)			
Minimum rear yard setback (m)	7.5 m	7.6 m	S. 162
Minimum interior side yard	2.5 m	3.9 m	S. 162
setback (m)			
Maximum height (m)	14.5 m	13.36 m	S. 162
Minimum landscaped area (%)	30%	57%	S. 161
Minimum Amenity Area	318 m2	490 m2	S. 137
Minimum Required Parking	1.2/unit +	1.1/unit +	S. 110

0.2/unit	0.2/unit	
visitor = 75	visitor = 68	
spaces	spaces	

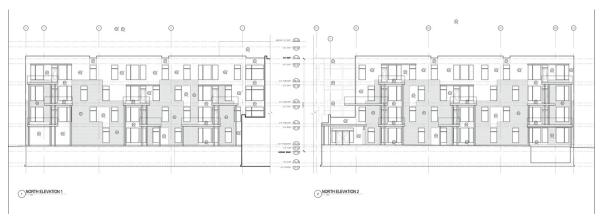


Figure 11: East and west view of proposed low-rise apartment



Figure 12: View of main entry

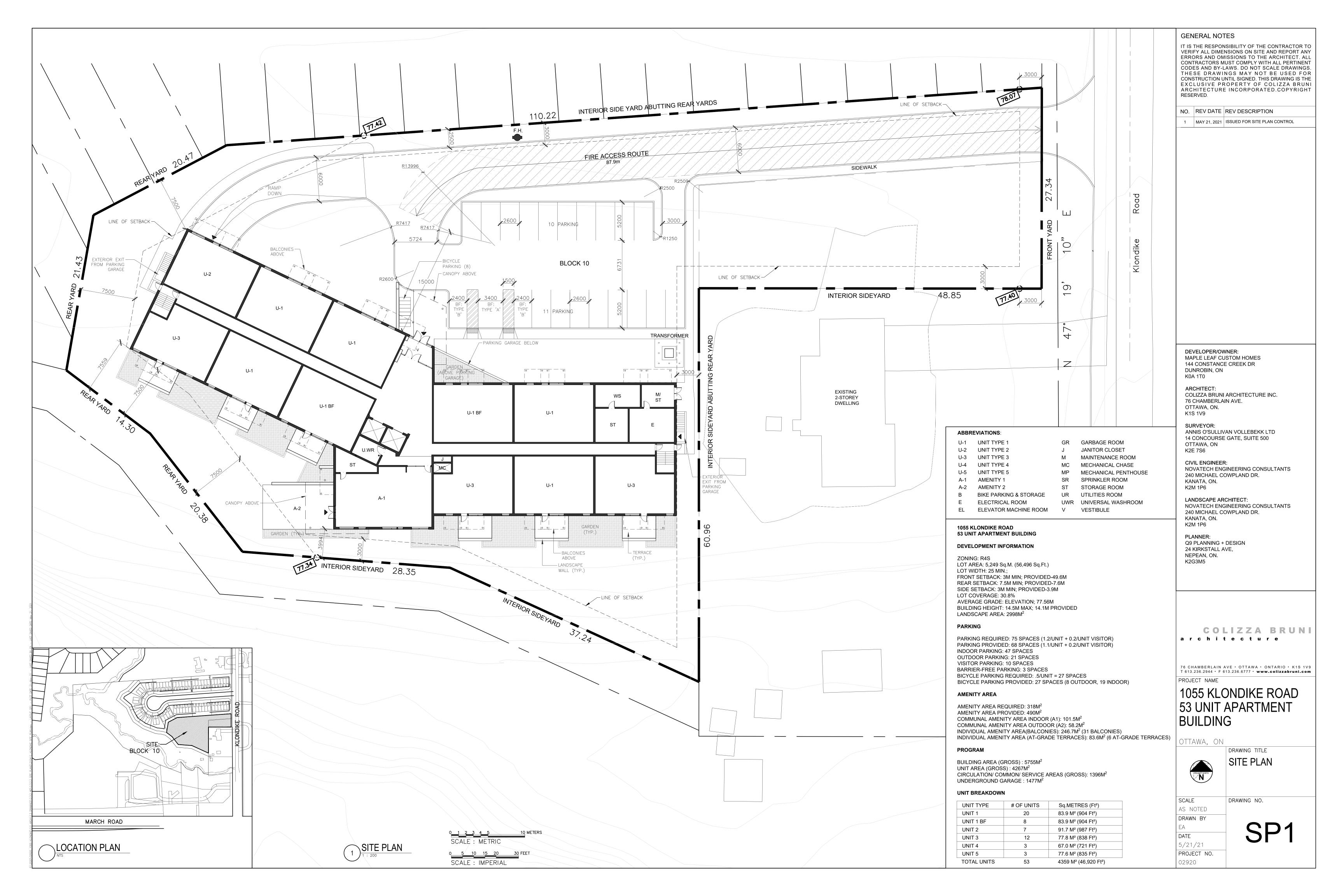




2 EAST ELEVATION

Figure 13: Extract of Architectural Elevations

SOUTH ELEVATION 2



4.0 POLICY AND REGULATORY CONTEXT

As part of the site plan control application for this proposal, a policy review must be conducted. This review will consider all relevant and applicable policies required by the Provincial Policy Statement, the City of Ottawa Official Plan, and the City of Ottawa Zoning By-law

4.1 PROVINCIAL POLICY STATEMENT

The Provincial Policy Statement (PPS) is intended to preserve and promote provincial interest in land use planning and development matters. All planning decisions must be consistent with the policies prescribed by the PPS. The PPS guides the development and use of land in order to enhance quality of life for Ontario residents. Municipalities must adhere to the PPS in their Official Plans and zoning bylaws and decisions on planning matters "shall be consistent" with the PPS.

Section 1.1.1 of the PPS states that "healthy, liveable and safe communities are sustained by:"

- ["promoting efficient development and land use patterns which sustain the financial well-being of the Province and municipalities over the long term;
- [accommodating an appropriate affordable and market-based range and mix of residential types (...), employment (...), institutional (...), recreation, park and open space, and other uses to meet long-term needs;
- avoiding development and land use patterns which may cause environmental or public health and safety concerns;
- promoting development and land use patterns that conserve biodiversity;"
- Section 1.1.3 of the PPS states that "it is in the interest of all communities to use land and resources wisely, to promote efficient development patterns, protect resources, promote green spaces, ensure effective use of infrastructure and public service facilities and minimize unnecessary public expenditures."
- Section 1.1.3.2 states that "land use patterns within settlement areas shall be based on densities and a mix of land uses which":
- "efficiently use land and resources;
- 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 1.1.3.4 states that "appropriate development standards should be promoted which facilitate *intensification*, *redevelopment* and compact form, while avoiding or mitigating risks to public health and safety."

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

Comment

The proposed development is an efficient use of the site and provides contextually sensitive intensification while respecting the nearby natural feature. The proposed low-rise building on the subject site will add new rental units to the area. Combined with the semi-detached and townhouse dwellings proposed for the rest of the 1055 Klondike Road site, the overall project will add a good variety of dwelling types to the community.

In Section 1.4, Housing, municipalities must maintain at all times the ability to accommodate growth for a minimum of 10 years through intensification and redevelopment primarily. Section 1.4.1 provides for "an appropriate range and mix of housing options and densities required to meet projected requirements of current and future residents of the regional market area."

Comment

The proposed development provides an appropriate level of additional density and housing options to the immediate area while remaining contextual with the surrounding neighbourhood.

Section 1.5.1 states that "healthy, active communities should be promoted by:"

"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;"

Comment

The proposed development will allow access to the proposed trail along the Shirley's Brook natural feature.

Section 2.1.1 states that "natural features and areas shall be protected for the long term."

Section 2.1.2 states that "the diversity and connectivity of natural features in an area, and the long-term ecological function and biodiversity of natural heritage systems, should be maintained, restored or, where possible, improved, recognizing linkages between and among natural heritage features and areas, surface water features and ground water features."

Comment

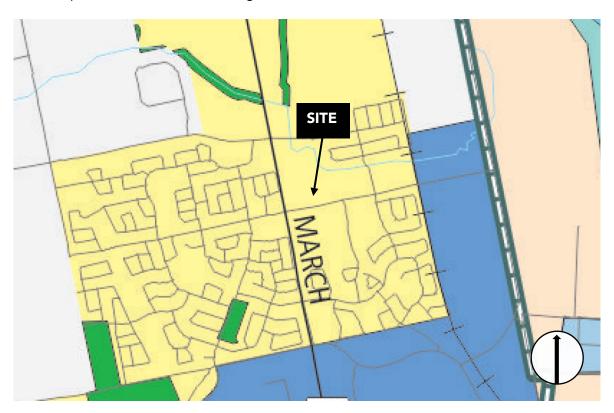
The proposed development is well setback from the Shirley's Brook natural feature with a planted treeline along the rear and side lot lines providing a buffer from the natural area. The development will not have any adverse impacts on the natural feature and will not impact linkages between other natural areas. The environmental component was thoroughly reviewed and addressed as part of the on-going Plan of Subdivision Approval and Zoning Amendment applications. The trail and Shirley's Brook area are being rezoned and will be provided to the City.

Summary of the PPS policies

Taken together, the PPS policies identified above emphasize the need for efficient land use patterns that provide a variety of housing types, promote healthy communities, and conserve environmental areas and biodiversity. The proposed low-rise apartment aligns with these policies, providing much-needed new rental housing to the area while efficiently using the land and minimizing impact on the Shirley's Brook natural heritage resource. The land use pattern is contextual with the surrounding context while providing more efficient use of the existing site in an appropriate manner. This supports policy guidance in the PPS for adding intensification where appropriate and providing mixed housing types. Additionally, the development respects the Shirley's Brook natural heritage resource by providing adequate setbacks to protect the resource and a level of intensification that is compatible with the resource. Overall, the proposed development aligns with the provincial policy objectives of the PPS.

4.2 CITY OF OTTAWA OFFICIAL PLAN

The subject site is designated as a General Urban Area in the City of Ottawa Official Plan, Schedule B (Urban Policy Plan). This designation supports a variety of different non-residential and residential uses, including the housing types proposed as part of this application. The designation supports principally low-rise development that is contextual and compatible with the surrounding built form context.



The applicable policies from the City's Official Plan are summarized below:

Section 2.2.2 - Managing Intensification within the Urban Area

"Residential intensification means the development of a property, building or area that results in a net increase in residential units or accommodation and includes:

The development of vacant or underutilized lots within previously developed areas, being defined as adjacent areas that were developed four or more years prior to new intensification"

Comment

The proposed development will add new residential intensification to the area by utilizing a vacant and underutilized lot, more efficiently using the available land.

Section 2.5.1 – Designing Ottawa:

Section 2.5.1 provides policy direction for "encouraging good urban design" and provides guidance on measures that will "help achieve compatibility of form and function." It provides Design Objectives which are "statements of how the City wants to influence the built environment as the city matures and evolves. These Design Objectives are broadly applicable, to plans and development in all land use designations, and from a city-wide to a site-specific basis."

These Objectives are laid out below:

- [To enhance the sense of community by creating and maintaining places with their own distinct identity.
- To define quality public and private spaces through development
- To create places that are safe, accessible, and are easy to get to, and move through.
- To ensure that new development respects the character of existing areas.
- [To consider adaptability and diversity by creating places that can adapt and evolve easily over time and that are characterized by variety and choice.
- To understand and respect natural processes and features in development design.
- [To maximize energy-efficiency and promote sustainable design to reduce resource consumption, energy use, and carbon footprint of the built environment.

Comment

The proposed low-rise apartment development is good urban design and allows for more efficient utilization of the lot while achieving compatibility with the rest of the overall development proposed for the 1055 Klondike Road site. The proposed development keeps with the low-rise character of the surrounding built form.

Section 3.6.1 - General Urban Area:

Section 3.6.1 provides policy and design direction for the General Urban Area designation of the Official Plan. The designation permits "the development of a full range and choice of housing types" in order to "facilitate the development of complete and sustainable communities." The designation also provides for "intensification within the General Urban Area in a manner that enhances and complements the desirable characteristics and

ensures the long-term vitality of the many existing communities that make up the city." The designation also provides the following relevant policies:

"Building height in the General Urban Area will continue to be predominantly low-rise. Within this range, changes in built form, height, and density will be evaluated based upon compatibility with the existing context and the planned function of the area."

"The City supports intensification in the General Urban Area where it will complement the existing pattern and scale of development and planned function of the area."

Comment

The proposed development maintains the predominantly low-rise character of the General Urban Area designation by limiting building height to four storeys. The additional residential intensification provided by the proposed low-rise building will help facilitate a more sustainable and complete community while adding housing choice to the area. The building will consist of rental residential units, which is compatible with the existing land uses and planned function of the area.

Section 4.11 – Urban Design and Compatibility:

Section 4.11 provides policy direction to ensure that compatibility is achieved amongst proximate uses and built form, emphasizing the need for high quality urban design. It states that "at the city-wide scale, issues of compatibility are addressed in the Official Plan through the appropriate designation of land and associated policies that direct where and how certain categories of land use should be permitted to develop. (...) At the scale of neighbourhoods or individual properties, issues such as noise, spillover of light, accommodation of parking and access, shadowing, and micro-climatic conditions are prominent considerations when assessing the relationships between new and existing development. Often, to arrive at compatibility of scale and use will demand a careful design response, one that appropriately addresses the impact generated by infill or intensification. Consequently, the issue of 'context' is a dominant theme of this Plan where it speaks to compatibility and design."

Comment

The proposed development aligns with the principally low-rise character set out by the policies for General Urban Areas in the Official Plan. The development also fits within the context of the surrounding uses and built form. The surrounding context is composed of residential and commercial land uses which are compatible with the residential use and

intensification proposed for the subject site. Additionally, the low-rise apartment building adds much-needed rental dwelling units to the area while providing an appropriate height and built form that aligns with the neighbourhood context.

Summary of Official Plan Policies

The Official Plan policies identified above emphasize the need for compatible built forms and good urban design that allows underutilized lots to add intensification in a sensitive and appropriate manner. Additionally, the policies in the Official Plan ensure that environmental protection is provided by protecting and maintaining natural features on the development site. The proposed development aligns with these policy directions of the Official Plan. The proposed built form is compatible with policy direction and the surrounding context, while adding intensification to the site. The specific part of the proposed development considered in this application adds much needed density to the area in a contextually sensitive manner, allowing for population growth to be accommodated while the principally low-rise character of the neighbourhood is maintained.

The development is adequately setback from Shirley's Brook, which runs through the site and is designed a manner that ensures that the highest traffic areas of the site are kept away from this natural feature. Primary entrances are located on the east side of the property, with no vehicular circulation on the west (rear) part of the site.. The proposed development also limits the amount of impervious surface in its design, with the vast majority of the parking being provided as underground parking, minimizing the paved area.

4.3 CITY OF OTTAWA ZONING BY-LAW

The current zoning is DR – Development Reserve. This zoning is being amended as part of a larger Zoning By-law Amendment process being undertaken for the entire 1055 Klondike parcel.

Proposed Zoning:

As mentioned, a zoning by-law amendment application is currently under review for the entire site, including Block 10 which is the subject of this site plan control application. This zoning amendment proposes rezoning the site as R4S – Residential Fourth Density, Subzone S.

R4S - Residential Fourth Density, Subzone S:

Under a previously submitted zoning by-law amendment application, this site (currently

identified as Block 10), is proposed to be designated as R4S – Residential Fourth Density.

This zone would permit the development of a low-rise apartment building on the site, and allow for appropriate lot requirements and setbacks. The zoning designation permits a wide variety of residential dwelling types and building forms, while preserving a principally low-rise character, limiting height to four-storeys.

The proposed development is consistent with the identified required setbacks for the existing R4S zone in the Zoning By-law. Only two exceptions are proposed for Block 10.

The following are the proposed exceptions to the R4 zone in order to address the proposal-specific designs.

Exception Provisions:

- Where an interior side yard on the south abuts the adjacent rear yard, the requirement for a 3.0 m landscaped setback is amended to permit an egress and walkway in addition to proposed landscaping.
- Resident Parking rate to be 1.1 spaces per unit.

R4S	REQUIRED (R4S)	PROVIDED	ZONING BY-LAW
			SECTION
Minimum lot width (m)	15 m	27.34 m	S. 162
Minimum lot area (m2)	450 m2	5249 m2	S. 162
Minimum front yard setback (m)	3 m	49.6 m	S. 162
Minimum rear yard setback (m)	7.5 m	7.6 m	S. 162
Minimum interior side yard setback (m)	2.5 m	3.9 m	S. 162
Maximum height (m)	14.5 m	13.36 m	S. 162
Minimum landscaped area (%)	30%	57%	S. 161
Minimum Amenity Area	318 m2	490 m2	S. 137
Minimum Required Parking	1.2/unit +	1.1/unit + 0.2/unit	S. 110
	0.2/unit	visitor = 68 spaces	
	visitor = 75		
	spaces		
Minimum Interior Yard Setback For Low-	3.0 m	(3.0 m landscaped	
rise Apartment Abutting Residential that	(landscaped)	except where	
does not Permit a Low-rise Apartment		there is an egress	
		and walkway, all	
		other areas must	
		be landscaped)	

5.0 DESIGN BRIEF

5.1 Design Brief (Architectural)

Every architectural endeavour has an urbanistic implication. To have a positive effect on its environs, the proposed apartment building considered and responded to the following specific characteristics of its physical context:

- [the site lacks a street presence
- it is approached by a long lane
- [It is bordered on two sides by 2 storey townhomes
- It overlooks a forest and creek to the south

In a contextual sense, the design challenge to a large extent, had to do with the matters of scale and arrival.

The design response to the 'scale challenge' focuses on a design strategy that reduces the perceived scale of a typical 4 storey apartment building so that it comfortably coexists in a 2 storey neighbourhood of single family residences and townhomes.

To begin with, the shape of the lot suggested that the 53 unit apartment building be 'fragmented' into three pieces...a middle and two ends of different orientations. This, in of itself, resulted in a reduced scale and mass of building.

A further reduction in scale, together with a consideration for visual delight, was achieved by the thoughtful and layered composition of balconies, windows, canopies and cladding materials. The result of which is a syncopated rhythm of façade elements akin to a musical collage.

Since the building does not have a street presence and is approached by a rather long lane, the notion of arrival was an important design consideration. In this regard, the design intention is that the laneway's interface with the neighboring townhomes be thoughtfully landscaped and the proposed privacy fence be attentively designed.

The arrival experience to the building is envisioned as a pleasant, if not, surprising discovery.

5.2 Design Brief (Planning)

The proposed low-rise apartment building will be situated on Block 10 of the overall 1055 Klondike Road site, north of the Shirley's Brook natural area. The development will be four

storeys in height and will feature 53 total units, all of which will be rental units. The building will be designed as an L-shaped structure at a roughly obtuse angle. The total building area of the structure is 5755 m2, with 4273 m2 provided as apartment space, and the remainder provided as common areas, circulation, and servicing. The development also features 68 vehicular parking spaces, with 21 spaces provided on a surface parking area to the north side of the structure. The remaining parking spaces will be provided as underground parking, the entrance for which will be accessed from the northern end of the structure.

The main driveway to the apartment building will allow access from Klondike Road to the surface parking lot and the underground parking garage. The driveway will be 6.0 metres wide and will also be the fire access route onto the site. The underground garage will be accessed from the driveway via a downward sloping ramp, which is well integrated into the building's design and has minimal impact on the aesthetics of the building's front façade. The driveway will be surrounded by soft-scaping and will be tree-lined. In total, there will be five access points into the building. There will be a pedestrian entrance from the surface parking lot, as well as two access points on the westernmost and easternmost sides of the property. There will also be a rear access point that will lead into a covered patio area. The fifth entry point is the parking garage.

The building will be sandwiched between the proposed residential subdivision (for which a zoning by-law amendment application and plan of subdivision have already been submitted) and the Shirley's Brook watercourse, which is a valuable natural feature that runs through part of the site. There will be a pathway connection that will allow for low impact appreciation of the natural feature as well. The apartment block will feature fencing around most of its perimeter, with specifically a wooden fence separating the rear yards of the adjacent subdivision from the front setback of the apartment block.

Overall, the building is well-designed and integrates with the natural landscape well.

6.0 PUBLIC CONSULTATION STRATEGY

The combined applications for Site Plan Control, Zoning By-law Amendment, and Plan of Subdivision that create Block 10 and also request the identified R4S zone are public applications submitted under the Planning Act, 1990.

As part of that public consultation process, the City of Ottawa will install a notification sign at the property and will circulate notice to nearby neighbours and relevant community groups regarding the proposal. There will also be a public open house where residents are invited to provide comments. The public is also encouraged to send comments to the City's planner responsible for reviewing the file, or the Councillor of Ward 4 – Kanata North, Jenna Sudds.

There was a public meeting held on January 28, 2020 to discuss the proposed Plan of Subdivision and the Zoning Amendment being sought. There will also be a public meeting portion of Planning Committee when the Zoning Amendment is ready to be approved.

For the Site Plan Control application for Block 10, there will be a second public open house prior to responding to the first round of comments and recommendations provided by City and technical staff in order to allow a comprehensive response approach.

The proposed public meeting will demonstrate the proposed concept of the development to the community and request their input on components they feel reflect a desirable development and components they have concerns about.

Tools proposed for quality and engaged public consultation

- Open door policy with development team, staff, and Councillor
- Open House
- Public Meeting portion of Planning Committee for the Zoning By-Law Amendment application where residents can comment on the proposed Zoning for the site.

7.0 SUPPORTING PLANS AND STUDIES

7.1 PHASE I/II ESA

A Phase I Environmental Site Assessment (ESAs) was prepared by Gemtec dated June 10, 2021. This report is considered an update to the previously prepared Phase I ESA dated October 2 2018.

The conclusions are the same and are provided below:

"GEMTEC Consulting Engineers and Scientists Limited (GEMTEC) was retained to carry out a Phase One Environmental Site Assessment (ESA) Update for the subject property located at 1055 Klondike Road in Ottawa, Ontario.

Based on GEMTEC's review of available historical information pertaining to the subject site and adjacent properties, the interviews completed and site reconnaissance undertaken, two APECs were identified to be present on the subject property. As such, completion of a Phase Two ESA is recommended to investigate soil and groundwater quality within the APECs on the subject property.

Moreover, based on the results of the Phase Two ESA investigation completed by GEMTEC in 2019, it is expected that contaminated soil as defined by current MECP regulations will be encountered during the proposed construction in the area of GS-N within the former building footprint. Based on the nature of the contaminants identified (Zinc) and debris identified in the former building footprint, it is recommended that soil and debris be disposed of at an approved facility subject to a toxicity characteristic leaching procedure (TCLP) analysis and confirmatory sampling be carried out by a Qualified Person, as defined by O.Reg. 153/04."

7.2 GEOTECHNICAL REPORT

A Geotechnical Investigation was prepared by Gemtec dated April 4, 2018. The purpose of the investigation was to identify the subsurface conditions at the site by means of boreholes and provide engineering guidelines and recommendations on the geotechnical design aspects of the project, as well as construction considerations. The report sets out various geotechnical guidelines and recommendations related to grade raise restrictions, residential buildings development, site services, roadway construction, as well as the sensitive marine clay soils and effects of trees.

Supplemental information was provided by Gemtec throughout the course of the Plan of Subdivision process and Zoning Amendment processs. The findings conludes that the

development can proceed in accordance with the recommendations of the reports and supplementary information, and in accordance with the clay soil recommendations.

7.3 NOISE IMPACT ASSESSMENT

A Noise Impact Assessment was prepared by Novatech, dated May 17, 2021. The objective of the report was to assess the environmental impact of noise on the proposed development and outline potentially required mitigation measures. The report concludes that the noise level in the shared amenity space is acceptable but that the units facing Klondike and all units facing Shirleys Brook up to received point R4 will required forced air heating with provision for central air and associated warning clause Type C.

7.4 TRAFFIC MEMO

At the pre-application consultation meeting it was identified that only an update memo to the Transportation and Traffic Study be needed. A memo to that affect has been prepared by Novatech, dated June 17 2021. While the report notes a minor variance for the reduced parking rate is required, this aspect will be addressed through the current Zoning Amendment application being sought for the entirety of the site.

The proposed development will not present any notable impacts to the existing transportation network.

7.5 SITE SERVICING AND STORMWATER MANAGEMENT REPORT

A Site Servicing and Stormwater Management Report was prepared by Novatech Engineering, dated May 17, 2021, which assessed the servicing infrastructure capacity for stormwater, watermains, sewers, and fire-fighting capacities and pressures. "The report conclusions are as follows:

Sanitary Servicing

The analysis of the proposed sanitary servicing confirms the following:

- It is proposed that the development will outlet directly to the 200mm sanitary sewer along Klondike Road. The proposed outlet is consistent with the approved Brookside Subdivision Infrastructure Servicing Study (Novatech).
- The proposed development can be serviced with a 200mm sanitary sewer system.
- [The total proposed sanitary flow from the subject lands is 1.5 L/s, which equals the
- calculated flows in the 1055 Klondike Road Orr Ridge Servicing Study (1.5 L/s).
- The proposed and existing sanitary sewers have adequate capacity to

accommodate the peak sanitary flow.

Watermain

The analysis of the proposed watermain network confirms the following:

- It is proposed to service the site with 150mm and 250mm pipe with a connection to the future 250mm diameter stub to be located at the site entrance.
- The analysis confirms the proposed watermain provides adequate fire protection and domestic service under all operating conditions.
- Distribution mains have been looped as part of the subdivision works by connecting to the existing 300mm and 400mm diameter watermains at Klondike Road and Sandhill Road providing redundant supply and improved circulation and water quality.

Stormwater Management

The following provides a summary of the storm servicing and stormwater management system:

Proposed storm sewer system will convey stormwater to MH9 on Klondike Road.

- Storm sewers (minor system) have been designed to convey the uncontrolled 2year peak flow using the Rational Method.
- [Inflowstotheminorsystemwillbecontrolledusinginletcontroldevices(ICDs)to an overall allowable release rate of 51.0 L/s.
- Aminimum clearance of 0.30 misprovided between the 100-year hydraulic grade line (HGL) or storm sewer obvert and the designed underside of footing elevation.

Surface and underground storage has been maximized to provide stormwater storage during storm events that exceed the allowable minor system inlet rate.

- The major overland flow outlet for the site is the north side ditch along Klondike Road. No overland flow occurs up to and including the 100-year + 20% storm event, the major overland flow route is provided for emergency purposes only.
- Ponding depths do not exceed 0.35m for all storms up to and including the 100-year event.
- Underground storage will be provided using Stormtech SC-740 (or approved

equivalent) arch-type storage chambers.

Erosion and Sediment control

- Erosion and sediment control measures (i.e. filter fabric, silt fences, etc.) will be implemented prior to construction and are to remain in place until vegetation is established.
- The Erosion and Sediment Control Plan will ensure erosion and sediment control is controlled in an acceptable manner and there is no negative impact to adjacent lands, water bodies or water treatment/conveyance facilities."

8.0 CONCLUSION

The subject site is Block 10 of the overall 1055 Klondike Road site, for which on-going Plan of Subdivision and a Zoning By-law Amendment applications are being processed, which seek to rezone the site as R4S – Residential Fourth Density, Subzone S with exceptions, and O1 – Parks and Open Space, as well as R3 – Residential Third Density with a subzone.

The Block 10 site is situated on the southwestern portion of the overall site and is located in a suburban area north of Kanata in the South March neighbourhood. The surrounding uses are principally residential and commercial. The built form is generally low-rise, with mostly single-detached and semi-detached dwellings.

The site is designated as General Urban Area in the Official Plan, which plans for a generally suburban, low-rise character with new developments to be designed in a manner that efficiently uses land and promotes housing choice and affordability.

The proposed development will provide a low-rise apartment building consisting of 53 rental units spread over four floors on the site. The development will add much-needed rental accommodation to the area. The proposed building design allows for an efficient development of the land that integrates and respects the existing natural feature of Shirleys Brook.

In addition to providing a contextually appropriate land use and built form, the proposed development complies with the overall policy context for the site. The site complies with PPS direction to provide a variety of housing types and promote healthy communities while respecting the natural environment. It also complies with the General Urban Area designation under the Official Plan by providing housing choice in the area while maintaining the principally residential, low-rise character of the neighbourhood. The development is also compliant with the proposed zoning for the site (R4S) by limiting the structure's height to four-storeys and complying with the building setbacks for the zone. Exceptions to permit a break in the 3.0 m landscaped buffer is only for the purpose of an egress and walkway, as well as an exception to reduce the parking rate from 1.2 to 1.1 spaces per unit.

Overall, the proposed development is well-designed and provides much-needed rental units to the area, with 53 rental dwellings. The project does so in a manner that respects the Shirley's Brook natural feature abutting the site. It is compliant with applicable policies and guidelines and is contextual as well. Taken together, the proposal is considered good land use planning and can be supported from a planning perspective.

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