FOTENN



2829 Dumaurier Avenue

Planning Rationale + Design Brief Zoning By-law Amendment + Site Plan Control July 28, 2021

FOTENN

Prepared for Brigil

Prepared by Fotenn Planning + Design 396 Cooper Street, Suite 300 Ottawa, ON K2P 2H7

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1.0	Introd	luctio	n	1
	1.1	Арј	olication Summary	1
2.0	Site C	onte	xt & Surrounding Area	3
	2	Sur Tra 2.3.1 2.3.2	oject Property rounding Area nsportation Network Road Network Rapid Transit Cycling	3 4 6 6 8
3.0	Propo Brief	sed I	Development and Design	10
	3.1 3.2 3.3 3.4 3.5	Rel Cor Gro Aco	sign and Massing ationship to Surrounding Planne ntext ound Floor cess and Parking enities	11 ed 12 15 15
4.0	Policy	/ & R	egulatory Context	17
	4.3 4.4 4.5 4.6 4.7	City .2.1 .2.2 .2.3 .2.4 .2.5 Nev Pin Sec Urb .5.5.1 .5.5.1 .5.5.3 Tra Gui	vincial Policy Statement (2020) y of Ottawa Official Plan Managing Intensification Within th Urban Area (Section 2.2.2) General Urban Area Designation (Section 3.6.1) Designing Ottawa (Section 2.5.1) Urban Design and Compatibility (Section 4.11) Heritage Buildings and Areas (Section 4.6.1) w City of Ottawa Official Plan ecrest and Queensview Stations condary Plan Study van Design Guidelines for High- e Buildings Context Built Form Pedestrian Realm nsit-Oriented Development idelines y of Ottawa Comprehensive Zoni law (2008-250) Proposed Zoning By-law Amendment	20 21 23 24 30 31 32 32 32 33 33
5.0	Public	Con	sultation Strategy	41
6.0	Suppo	orting	Studies	42
7.0	Concl	usior	1	52

1.0

Introduction

Fotenn Planning + Design ("Fotenn"), acting as agents for Brigil, is pleased to submit the enclosed Site Plan Control and Major Zoning By-law Amendment Applications for the lands municipally known as 2829 Dumaurier Avenue ("the subject property") in the City of Ottawa. The intent of this Planning Rationale and Design Brief is to assess the proposed development against the applicable policy and regulatory framework, and determine if the proposed development is appropriate for the site and compatible with adjacent development and the surrounding community.

1.1 Application Summary

Brigil is proposing to demolish the existing one (1) storey commercial building and redevelop the subject property with a 30-storey high-rise, mixed use building consisting of apartment dwelling units and ground floor commercial space. The proposed development will contain a total of 330 dwelling units. Parking for the proposed development will largely be located underground, with some surface parking at the rear of the subject property for visitors and commercial space users.

The following plans and studies have been prepared in support of the Site Plan Control and Major Zoning Bylaw Amendment applications for the proposed development:

- / This **Planning Rationale and Design Brief**, prepared by Fotenn Planning + Design, dated July 28, 2021;
- / Site Plan, prepared by Roderick Lahey Architect Inc., Project No. 1922, dated June 8, 2021;
- / Elevations, prepared by Roderick Lahey Architect Inc., Project No. 1922, dated June 8, 2021;
- / Floor Plans, prepared by Roderick Lahey Architect Inc., Project No. 1922, dated June 8, 2021;
- Sections, prepared by Roderick Lahey Architect Inc., Project No. 1922, dated June 8, 2021;
- Perspectives, prepared by Roderick Lahey Architect Inc., Project No. 1922, dated June 8, 2021;
- Overall Site Elevations, prepared by Roderick Lahey Architect Inc., Project No. 1922, dated June 8, 2021:
- Sunshade Study, prepared by Roderick Lahey Architect Inc., Project No. 1922, dated June 8, 2021;
- / Landscape Plan, prepared by Levstek Consultants Inc., Project No. 1183, dated June 15, 2021;
- Phase One Environmental Site Assessment, prepared by Lopers & Associates, Project No. LOP20-004A, dated January 8, 2021;
- / Phase Two Environmental Site Assessment, prepared by Lopers & Associates, Project No. LOP21-004C, dated June 11, 2021;
- / **Geotechnical Investigation**, prepared by Paterson Group, Report No. PG4928-1, dated December 18, 2019;
- / Impact Assessment of Adjacent Waste Disposal Site/Former Landfill Site, prepared by Lopers & Associates, Project No. LOP20-004B, dated April 6, 2021;

- / Roadway Traffic Noise Assessment, prepared by Gradient Wind Engineering Inc., Report No. 20-150 Detailed Traffic Noise, dated July 8, 2021;
- / **Pedestrian Level Wind Study,** prepared by Gradient Wind Engineering Inc., Report No. 20-150-PLW, dated January 22, 2021;
- / Plan 4R-16235, prepared by Annis, O'Sullivan, Vollebekk Ltd., Job No. 1355-00, dated November 20, 2020:
- / TIA Final Report, prepared by Parsons, Project No. 477580-01000, dated July 23, 2021;
- Servicing and Stormwater Management Report, prepared by Stantec, Project No. 160401596, dated February 18, 2021;
- / Notes and Legends Plan, prepared by Stantec, Project No. 160501596, dated February 17, 2021;
- / **Existing Conditions and Removals Plan,** prepared by Stantec, Project No. 160501596, dated February 17, 2021;
- / Site Servicing Plan, prepared by Stantec, Project No. 160501596, dated February 17, 2021;
- / Grading Plan, prepared by Stantec, Project No. 160501596, dated February 17, 2021;
- / Plan and Profile Dumaurier Avenue Sanitary Sewer Extension STA. 0+000 to STA. 0+120, prepared by Stantec, Project No. 160501596, dated February 17, 2021;
- / **Erosion Control Plan and Detail Sheet,** prepared by Stantec, Project No. 160501596, dated February 17, 2021;
- / Storm Drainage Plan, prepared by Stantec, Project No. 160501596, dated February 17, 2021;
- / Sanitary Drainage Plan, prepared by Stantec, Project No. 160501596, dated February 17, 2021.

2.0 3

Site Context & Surrounding Area

2.1 Subject Property

The subject property, known municipally as 2829 Dumaurier Avenue, is located in the Foster Farm neighbourhood in the City of Ottawa, to the west of the downtown. The subject property fronts onto Dumaurier Avenue to the east for 70.35 metres and has a lot area of 4,195.2 square metres. The subject property is currently occupied by a portion of a commercial shopping centre, which extends further south of the subject property.

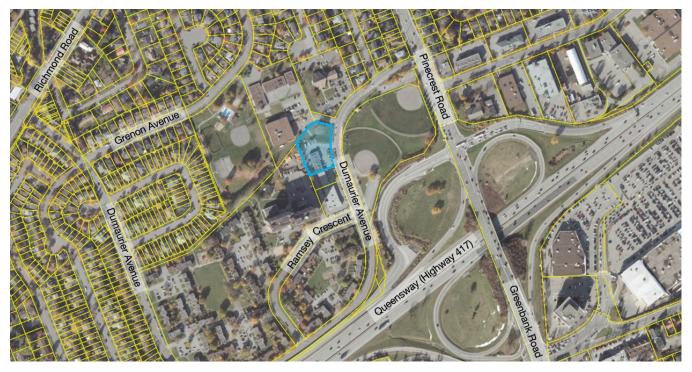


Figure 1: Aerial View of the Subject Property (Outlined in Blue) and Surrounding Area

There are existing circulation easements on the subject property in favour of the abutting properties to the south at 2829 Dumaurier Avenue. These easements will be addressed prior to final development approval.

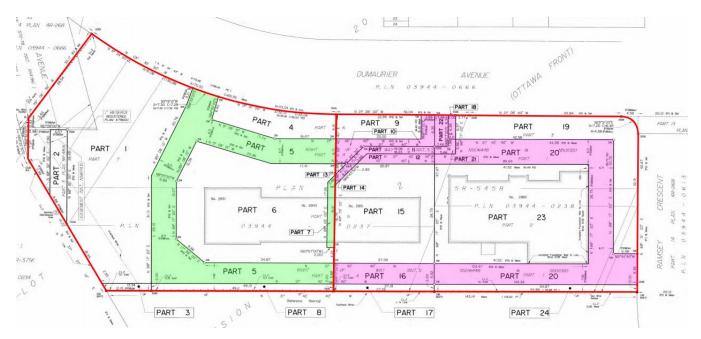


Figure 2: Survey Plan of the Subject Property and Abutting Properties to the South, Showing Existing Circulation Easements (Shaded in Green and Purple)









Figure 3: Photographs of the Subject Property

2.2 Surrounding Area

The following provides a brief description of the uses adjacent to the subject property:

North: Immediately to the north of the subject property is a two (2) storey building housing office space and the Boys & Girls Clubs of Ottawa. Further north are the Abraar Secondary School, Saint-Rémi Catholic Parish, and a predominantly residential neighbourhood consisting primarily of detached dwellings and a high-rise apartment building. Several high-rise apartment buildings are located adjacent to Richmond Road.

South: Immediately to the south of the subject property is the continuation of the one (1) storey commercial shopping centre and related surface parking. Further south is a low-rise Planned Unit Development consisting of townhouses, beyond which are Dumaurier Avenue, the existing Transitway providing access between the Pinecrest and Bayshore stations, and the Queensway.

East: To the east of the subject property is Dumaurier Avenue, east of which is a park consisting of (2) baseball diamonds known as Dumaurier Park. The existing Pinecrest Bus Rapid Transit (BRT) Transitway Station is located less than 150 metres to the east of the subject property and is easily accessible by foot. The future Pinecrest Light Rail Transit (LRT) Station will be located further to the south, approximately 220 metres to the southeast of the subject property.

West: To the west of the subject property is a 14-storey high-rise apartment building and associated surface parking. The high-rise apartment building, which also houses the Foster Farm Community Centre, is part of a large Planned Unit Development that continues westward. Aside from the high-rise apartment building, the Planned Unit Development also consists of townhouses, walkways, common and private amenity spaces, and common surface parking areas. Ruth Wildgren Park, a public park providing a variety of amenities including a playground, tennis and basketball courts, a baseball diamond, and a pool, is located slightly to the northwest of the subject property. Further west is a low-rise residential neighbourhood consisting of a mix of detached and semi-detached dwellings.









Figure 4: Photographs of the Surrounding Area

2.3 Transportation Network

2.3.1 Road Network

As per Schedule E – Urban Road Network of the City of Ottawa Official Plan (Figure 5), the subject property fronts onto Dumaurier Avenue, a Collector road.

Collector roads are roads that serve neighbourhood travel to and from major collector or arterial roads and usually provides direct access to adjacent lands. Dumaurier Avenue is a two (2) lane roadway with on-street parking along some portions of the right-of-way. Dumaurier Avenue provides a direct connection to two (2) Arterial roads: Pinecrest Road to the east of the subject property, and Richmond Road to the northwest of the subject property.



Figure 5: Excerpt from Schedule E - Urban Road Network of the City of Ottawa Official Plan

The subject property is located less than 250 metres from the Queensway, and is also located in proximity to several Arterial Roads including Pinecrest Road, Greenbank Road, Baseline Road, Richmond Road, and Carling Avenue. Arterial roads serve through travel between points not directly served by the road itself and limited direct access is provided to only major parcels of adjacent lands.

2.3.2 Rapid Transit

As per Schedule D – Rapid Transit and Transit Priority Network of the City of Ottawa Official Plan (Figure 6), the subject property is located in close proximity to the Transitway, a BRT corridor that will be converted to Light Rail Transit as part of the Stage 2 LRT project, which includes the Confederation Line West Extension.

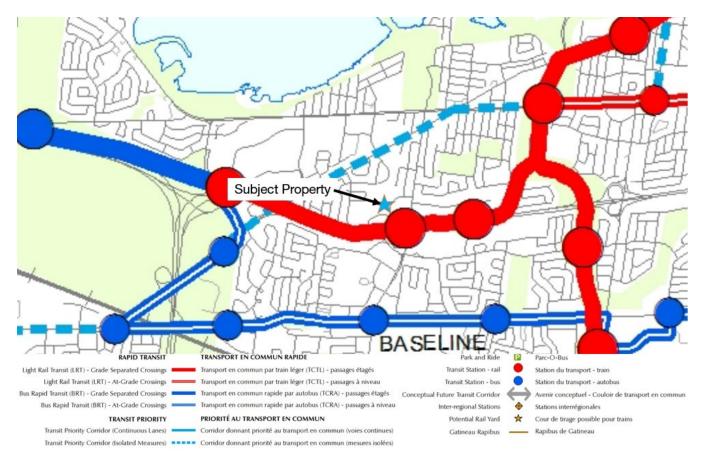


Figure 6: Excerpt from Schedule D - Rapid Transit and Transit Priority Network of the City of Ottawa Official Plan

The Confederation Line West extension project will add 15 kilometres of rail and 11 new or converted rapid transit stations to the City's overall LRT network. Revenue service for this extension is planned for 2025.

The existing Pinecrest BRT Station is located less than 150 metres to the east of the subject property. The future Pinecrest LRT Station will be located further to the south, approximately 220 metres to the southeast of the subject property.

Stage 2 LRT Station Connectivity Enhancement Study

Ensuring that key local pedestrian and cyclist networks are integrated with Stage 2 LRT stations is a critical element of the project. Building on the Stage 2 LRT Connectivity Study completed in 2017, the City of Ottawa and Alta Planning and Design are leading a review of Stage 2 station connectivity. This team will be proposing additional measures to enhance connectivity for all modes of transportation.

Off-street bus facilities will be constructed to support the transfer of customers from bus stops located adjacent to Pinecrest station. There will be a bi-directional route from Pinecrest Road to the station's bus stop location and a bus turnaround after the bus stop to return buses to Pinecrest Road. The station will be connected to Pinecrest Road and Dumaurier Avenue by multi-use pathways, with passenger pick up and drop off spaces located on Dumaurier Avenue with convenient access to the station plaza and bicycle parking in the station plaza area.

The following connectivity improvements are proposed (and as shown on Figure 7 below):

Planned (currently included in scope of the Stage 2 LRT project):

- A. Pedestrian crossover at Woodridge Crescent at the station entrance
- B. Station plaza with three (3) passenger pick up and drop off spaces and bike parking for 40 bikes with space allocated to double in future when required

C. Multi-use pathway from Woodridge Crescent to Holly Acres Road on the north side of the station

Proposed Enhancements (proposed to be added to the scope of the Stage 2 LRT project):

- D. Multi-use pathway from Bayshore Station to Richmond Road and Bayshore Drive on the north side of the alignment
- E. Add multi-use pathway from Pinecrest bridge directly to station

Feasibility Assessment (to be further considered for inclusion in the City's Active Transportation Plan):

F. Bi-directional cycle track along west side of Pinecrest Highway 417 Bridge from station to Morrison Drive subject to MTO Approval

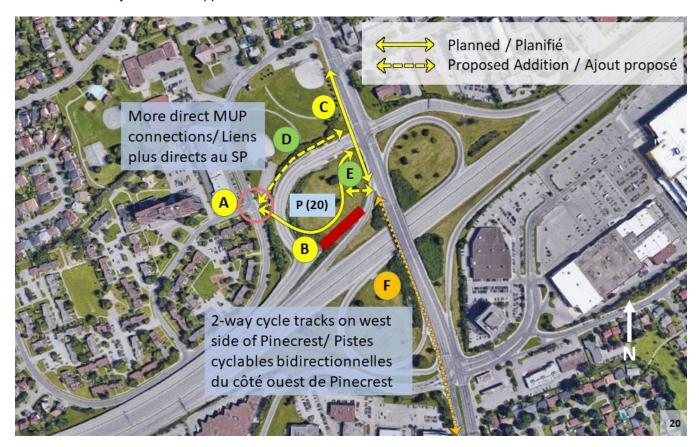


Figure 7: City of Ottawa Graphic Showing Planned Connectivity Improvements

2.3.3 Cycling

As per Schedule C – Primary Urban Cycling Network of the City of Ottawa Official Plan (Figure 8), the subject property is located in proximity to existing or planned cycling routes, including a north-south Spine Route along Pinecrest Road to the east and an east-west Cross-Town Bikeway along Richmond Road to the north.



Figure 8: Excerpt from Schedule C – Primary Urban Cycling Network of the City of Ottawa Official Plan

Spine routes follow major roadways (typically arterials) and may provide a reserved space for cyclists, ideally either a cycle track or a buffered bike lane. Spine routes will provide access along major corridors, connecting the Cross-Town Bikeways and major off-road bike paths to local neighbourhood local routes and Neighbourhood Bikeways.

Cross-Town Bikeways provide continuous connectivity over long distances for cycling across the city. Cross-Town Bikeways will include both on-road and off-road facilities that will provide a consistently high level of comfort for their entire length and be the main priority of the cycling network for maintenance.

3.0

Proposed Development and Design Brief

Brigil is proposing to demolish the existing one (1) storey commercial building and redevelop the subject property with a 30-storey high-rise, mixed use building consisting of apartment dwelling units and ground floor commercial space. The proposed development will contain a total of 330 dwelling units, 194 of which will be one (1) bedroom units, and 136 of which will be two (2) bedroom units. Three (3) ground floor commercial spaces will contribute to a mix of uses on the subject property. Parking for the proposed development is proposed to be located almost exclusively in an underground garage, with the exception of ten (10) surface parking spaces for visitors and commercial users at the rear of the building.

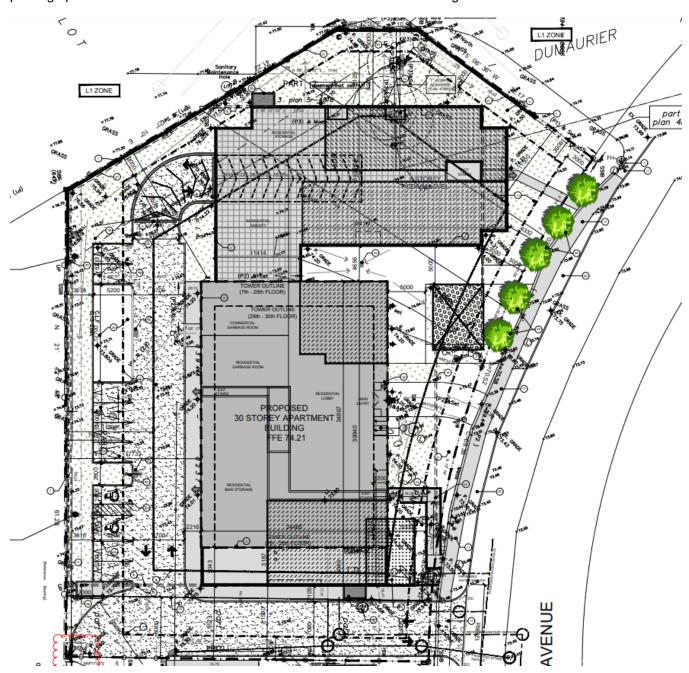


Figure 9: Excerpt from the Site Plan of the Proposed Development

3.1 Design and Massing

The proposed development will be designed with a podium, tower and top. The design will incorporate a six (6) storey, mid-rise podium as its base, which will serve as the primary interface at the street level. The podium's materiality (which consists of a mix of brick and glazing) and larger floorplate (which extends 18.4 metres north of the tower portion's northern edge), will help establish it as a strong visual base and distinguish it from the rest of the building.





VIEW LOOKING NORTH-WEST STREETSCAPE ALONG DUMAURIER AVE.



VIEW LOOKING SOUTH-EAST STREETSCAPE ALONG DUMAURIER AVE.

Figure 10: Renderings of the Proposed Development

The middle portion of the tower, which will extend from the seventh storey to the 28th storey, will be oriented in a north-south manner, generally flush with the podium's east and west extents. The seventh storey's east and west façades will be slightly recessed on all sides from the tower above it to provide a clearer transition between the podium and tower portions of the building, with the north and south facing balconies beginning on the 8th storey also providing a transition from the seventh storey's footprint. From the eighth storey up to the 28th storey, the tower will be stepped back approximately 18.4 metres from the podium's north wall and approximately five (5) metres from the podium's south wall. The middle portion of the tower's floorplate of 853 square metres will minimize shadow and wind impacts on adjacent properties. The tower's floorplate and materiality, which consists of aluminum, lightly coloured metal panels, and especially glass, will also make for a less imposing presence on the skyline.

The top portion of the tower, which consists of the 29th and 30th storeys, will be stepped back further from the towers north, east, and west walls. With a smaller floorplate and materiality consisting almost exclusively of glass (with some aluminum), the tower's top will provide a lighter feature that acts as a continuation of the

middle portion of the building. A small mechanical penthouse on top of the building's 30th storey will also contribute to the top's tapering design.



Figure 11: Renderings of the Proposed Development

20 dwelling units per storey will be provided in levels two (2) through six (6) of the building's podium. The seventh storey will provide six (6) dwelling units, while the tower portion of the building (levels eight (8) through 28) will provide ten (10) dwelling units per floor. Five (5) dwelling units will be located on each of the final two (2) storeys (levels 29 and 30) of the proposed development.

3.2 Relationship to Surrounding Planned Context

The subject property is in an area that is anticipated to evolve over the near future, particularly as a result of the planned Pinecrest LRT Station. This is reflected in the City's ongoing Pinecrest and Queensview Stations Secondary Plan Study, which will undertake a review of the lands surrounding the future Pinecrest and Queensview LRT stations to guide future development that supports transit and integrates with the surrounding residential neighbourhoods.

As per Figure 12 below, the subject property is one of the closest developable lots to the future Pinecrest LRT Station and as such has a high redevelopment potential. The subject property is also separated from nearby low-rise residential areas by other uses, including open space to the east and northwest and institutional uses to the north. To the immediate west, the subject property is separated from low-rise residential areas by a high-rise apartment building and associated surface parking. These uses and built forms are not expected to change in the near future.

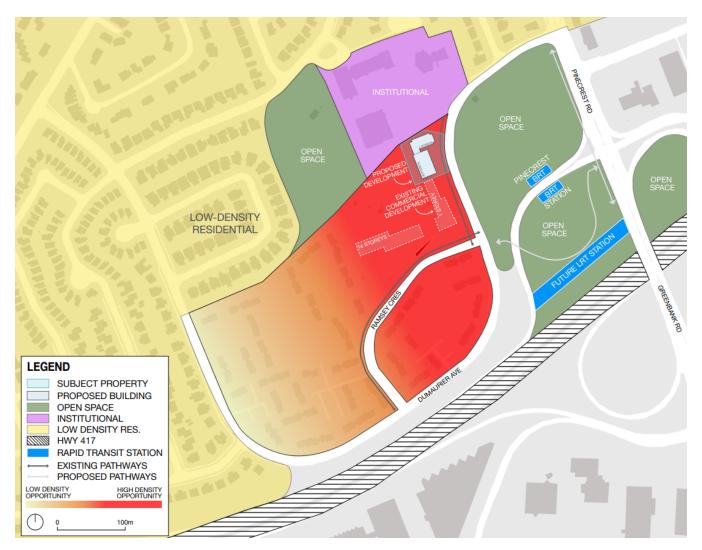
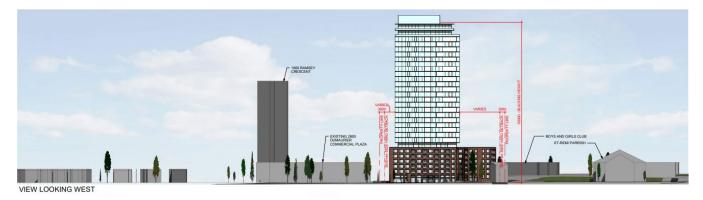


Figure 12: Planned Context of the Subject Property and Surrounding Area

Given the subject property's immediate surrounding context, the proposed high-rise tower will not have any undue adverse impacts on adjacent properties, including their development potential, and existing adjacent uses that are unlikely to be redeveloped in the near future will help provide transition between the proposed development and stable, low-lying residential areas in the neighbourhood to the north and west.

Although the abutting commercial lands to the south and some low-rise residential areas to the south and west will possibly be redeveloped with higher density residential uses, the proposed tower features generous separation distances from lot lines to the south (approximately 14.6 metres) and west (approximately 17.7 metres). Further, the tower's stepped back floorplate will minimize shadowing and microclimate impacts on abutting properties. The proposed tower location and floorplate will permit the redevelopment of adjacent properties with high-rise buildings that are appropriately distanced from the subject property and proposed development.



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Figure 13: Views Looking West of the Existing and Future Context of the Subject Property and Surrounding Area

FUTURE VIEW LOOKING WEST











Figure 14: Renderings of the Planned Context of the Subject Property and Surrounding Area

3.3 Ground Floor

The proposed development's ground floor will serve several purposes, with space allocated for a lobby, a mail and parcel room, residential and commercial garbage rooms, bicycle parking, residential storage lockers, communal amenity space, three (3) dwelling units at the building's northeast corner, and three (3) commercial units facing the yard along Dumaurier Avenue.

The proposed development's ground floor will feature significant glazing and will be taller in height in order to enhance the at-grade experience along the subject property's Dumaurier Avenue frontage to the east. The ground floor's three (3) commercial units, occupying a total Gross Floor Area of 440 square metres, will also help provide additional street-level animation along Dumaurier Avenue.

The subject property's yard facing Dumaurier Avenue will incorporate a mix of soft and hard landscaping, including sod, trees along the right-of-way, sidewalks accessing entrances, and hardscaped areas for outdoor commercial patio space.

3.4 Access and Parking

Vehicular access to, and egress from, the proposed development will be provided in the form of a driveway at the subject property's south lot line, off Dumaurier Avenue to the east. The driveway will loop around the building's south and west sides to connect to an entrance to an underground parking garage, near the northwest corner of the subject property.

Ten (10) surface parking spaces for visitors and commercial space users will be provided to the west of the driveway, along with a garbage pickup pad and a soft landscaped buffer between the parking and the subject property's west lot line.

The driveway will also provide access to the rear of the commercial plaza to the south.

The proposed development's three (3) storey underground parking garage will provide access to 240 vehicle parking spaces, 220 of which will be for residents, and the remaining 20 of which will be for visitors or commercial space users.

The underground parking garage will also accommodate approximately 160 bicycle parking spaces (most of which will be provided via a stacked bicycle parking system), storage lockers, and mechanical and electrical equipment.

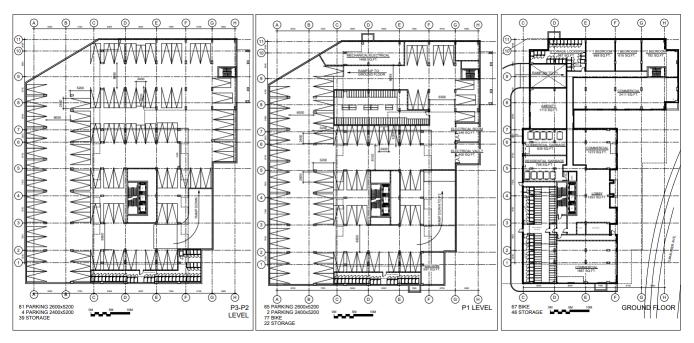


Figure 15: Parking Garage (Left and Centre) and Ground Floor (Right) Plans of the Proposed Development

3.5 Amenities

The proposed development will provide a variety of communal and private amenities for the building's residents. Communal amenity spaces will include the following:

- An amenity room on the building's ground floor;
- An amenity room on the building's seventh floor; and,
- / An outdoor amenity terrace on the 7th floor (on the roof of the north portion of the podium).

Private amenity spaces are proposed to be provided in the form of balconies for all dwelling units located between the second and sixth stories, inclusively, in the podium portion of the building; all north- and south-facing units in the middle portion of the tower (between the eighth and 28th stories, inclusively); and all units on the 29th and 30th storeys of the building.

4.0

Policy & Regulatory Context

4.1 Provincial Policy Statement (2020)

The Provincial Policy Statement (PPS), issued under the authority of Section 3 of the Planning Act and in effect since May 1, 2020, provides policy direction on matters of provincial interest related to land use planning and development. The Planning Act requires that decisions affecting planning matters "shall be consistent with" such policy statements issued under the Act.

The PPS encourages planning authorities to permit and facilitate a range of housing options, including new development as well as residential intensification, to respond to current and future needs. The PPS also encourages efficient development patterns which optimize the use of land, resources and public investment in infrastructure and public service facilities.

The proposed development meets the following policies of the PPS, among others:

1.1 Managing and Directing Land Use to Achieve Efficient and Resilient Development and Land Use Patterns

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

- a) 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 (including single-detached, additional residential units, multi-unit housing, affordable housing and housing for older persons), employment (including industrial and commercial), institutional (including places of worship, cemeteries and long-term care homes), recreation, park and open space, and other uses to meet long-term needs;
- c) avoiding development and land use patterns which may cause environmental or public health and safety concerns;
- d) avoiding development and land use patterns that would prevent the efficient expansion of settlement areas in those areas which are adjacent or close to settlement areas;
- e) promoting the integration of land use planning, growth management, transit-supportive development, intensification and infrastructure planning to achieve cost-effective development patterns, optimization of transit investments, and standards to minimize land consumption and servicing costs;
- f) improving accessibility for persons with disabilities and older persons addressing land use barriers which restrict their full participation in society;
- g) ensuring that necessary infrastructure and public service facilities are or will be available to meet current and projected needs;
- h) promoting development and land use patterns that conserve biodiversity; and
- i) preparing for the regional and local impacts of a changing climate.

The proposed development is consistent with Policy 1.1.1 of the PPS, as it is an intensification of the subject property, which is located in a built-up area of the city where services are readily available, with convenient access to planned public transit and nearby amenities and employment opportunities.

1.1.3 Settlement Areas

Policy 1.1.3 of the PPS states that the vitality and regeneration of settlement areas is critical to the long-term economic prosperity of our communities, and 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. According to Policy 1.1.3.1 of the PPS, settlement areas shall be the focus of growth and development.

Policy 1.1.3.2 of the PPS states that land use patterns within settlement areas shall be based on densities and a mix of land uses which:

- a) efficiently use land and resources;
- b) are appropriate for, and efficiently use, the infrastructure and public service facilities which are planned or available, and avoid the need for their unjustified and/or uneconomical expansion;
- c) minimize negative impacts to air quality and climate change, and promote energy efficiency;
- d) prepare for the impacts of a changing climate;
- e) support active transportation;
- f) are transit-supportive, where transit is planned, exists or may be developed; and
- g) are freight-supportive.

Land use patterns within settlement areas shall also be based on a range of uses and opportunities for intensification and redevelopment in accordance with the criteria in policy 1.1.3.3, where this can be accommodated.

Policy 1.1.3.3 states that planning authorities shall identify appropriate locations and promote opportunities for transit-supportive development, accommodating a significant supply and range of housing options through intensification and redevelopment where this can be accommodated taking into account existing building stock or areas, including brownfield sites, and the availability of suitable existing or planned infrastructure and public service facilities required to accommodate projected needs.

According to Policy 1.1.3.4 of the PPS, 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 development is consistent with Policy 1.1.3 of the PPS, as the subject property is located in a built-up settlement area with sufficient servicing and infrastructure. The proposed transit-oriented development will intensify the subject property with a compact, mixed-use building form. The subject property is in an ideal location with convenient access to existing public transit and a variety of nearby amenities and uses, thus helping to promote air quality, energy efficiency, and public health.

1.3 Employment

Policy 1.3.1(d) of the PPS states that planning authorities shall promote economic development and competitiveness by encouraging compact, mixed-use development that incorporates compatible employment uses to support liveable and resilient communities, with consideration of housing policy 1.4.

The proposed development is consistent with Policy 1.3 of the PPS, as it is a compact, mixed-use development that will provide employment opportunities in the form of ground floor commercial uses.

1.4 Housing

According to Policy 1.4.3 of the PPS, planning authorities shall provide for an appropriate range and mix of housing options and densities to meet projected market-based and affordable housing needs of current and future residents of the regional market area by:

- a) establishing and implementing minimum targets for the provision of housing which is affordable to low and moderate income households and which aligns with applicable housing and homelessness plans. However, where planning is conducted by an upper-tier municipality, the upper-tier municipality in consultation with the lower-tier municipalities may identify a higher target(s) which shall represent the minimum target(s) for these lower-tier municipalities;
- b) permitting and facilitating:
 - all housing options required to meet the social, health, economic and well-being requirements
 of current and future residents, including special needs requirements and needs arising from
 demographic changes and employment opportunities; and
 - 2. all types of residential intensification, including additional residential units, and redevelopment in accordance with policy 1.1.3.3;

- c) directing the development of new housing towards locations where appropriate levels of infrastructure and public service facilities are or will be available to support current and projected needs;
- d) promoting densities for new housing which efficiently use land, resources, infrastructure and public service facilities, and support the use of active transportation and transit in areas where it exists or is to be developed;
- e) requiring transit-supportive development and prioritizing intensification, including potential air rights development, in proximity to transit, including corridors and stations; and
- f) establishing development standards for residential intensification, redevelopment and new residential development which minimize the cost of housing and facilitate compact form, while maintaining appropriate levels of public health and safety.

The proposed development is consistent with Policy 1.4.3 of the PPS, as it directs development of new housing in a location where appropriate levels of infrastructure and public service facilities are readily available. The proposed development is compact in form, and its density will make efficient use of the subject property and support nearby rapid transit.

1.6 Infrastructure and Public Service Facilities

Policy 1.6.3(a) of the PPS states that before consideration is given to developing new infrastructure and public service facilities, the use of existing infrastructure and public service facilities should be optimized.

Policy 1.6.6.2 of the PPS states that municipal sewage services and municipal water services are the preferred form of servicing for settlement areas to support protection of the environment and minimize potential risks to human health and safety. Within settlement areas with existing municipal sewage services and municipal water services, intensification and redevelopment shall be promoted wherever feasible to optimize the use of the services.

Policy 1.6.7.4 states that 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.

The proposal is consistent with Section 1.6 (Infrastructure and Public Service Facilities) of the PPS, as the subject property is located in a built-up area with existing infrastructure and public service facilities. The proposed intensification of the subject property will help optimize the existing infrastructure, public service facilities, and public transit.

1.7 Long-Term Economic Prosperity

Policy 1.7.1 of the PPS outlines a variety of strategies that should support long-term economic prosperity. Relevant strategies for the purposes of the above-noted application include the following:

- / encouraging residential uses to respond to dynamic market-based needs and provide necessary housing supply and range of housing options for a diverse workforce;
- / optimizing the long-term availability and use of land, resources, infrastructure, and public service facilities:
- encouraging a sense of place, by promoting well-designed built form and cultural planning, and by conserving features that help define character, including built heritage resources and cultural heritage landscapes; and
- / promoting the redevelopment of brownfield sites.

The proposed development is consistent with Policy 1.7 (Long Term Economic Prosperity) of the PPS, as the application will intensify lands in a built-up area and thus optimize the long-term availability and use of land and resources. The proposed development also contributes to a more diverse supply of housing options in the surrounding area.

1.8 Energy Conservation, Air Quality and Climate Change

Policy 1.8.1 of the PPS states that planning authorities shall support energy conservation and efficiency, improved air quality, reduced greenhouse gas emissions, and preparing for the impacts of a changing climate through land use and development patterns which:

- a) promote compact form and a structure of nodes and corridors;
- b) promote the use of active transportation and transit in and between residential, employment (including commercial and industrial) and institutional uses and other areas;
- c) focus major employment, commercial and other travel-intensive land uses on sites which are well served by transit where this exists or is to be developed, or designing these to facilitate the establishment of transit in the future;
- d) focus freight-intensive land uses to areas well served by major highways, airports, rail facilities and marine facilities:
- e) encourage transit-supportive development and intensification to improve the mix of employment and housing uses to shorten commute journeys and decrease transportation congestion;
- f) promote design and orientation which maximizes energy efficiency and conservation, and considers the mitigating effects of vegetation and green infrastructure; and
- g) maximize vegetation within settlement areas, where feasible.

The proposal is consistent with Policy 1.8 (Energy Conservation, Air Quality and Climate Change) of the PPS, as it represents an intensification of the subject property with a compact, dense, mixed-use, and transit-supportive built form.

4.2 City of Ottawa Official Plan

4.2.1 Managing Intensification Within the Urban Area (Section 2.2.2)

The City of Ottawa Official Plan supports intensification throughout the urban area where there are opportunities to accommodate more jobs and housing and increase transit use. Intensification is directed to Target Areas for Intensification which have the potential to develop at moderate to high densities in a compact form.

Policy 3 of Section 2.2.2 of the Official Plan states that target areas for intensification are the Central Area, Mixed Use Centres, Mainstreets, and Town Centres defined on Schedule B, and the Community Core in Riverside South.

Policy 10 of Section 2.2.2 of the Official Plan states that intensification may occur in a variety of built forms from low-rise to high-rise provided urban design and compatibility objectives are met. Denser development, that often means taller buildings, should be located in areas that support the Rapid Transit and Transit Priority networks and in areas with a mix of uses. Building heights and densities for different areas may be established through this plan or a secondary plan and will be implemented through zoning. A secondary planning process, identified in Section 2.5.6 and undertaken for a specific area may recommend a new or changes to an existing secondary plan to establish different building heights. Low-rise intensification will be the predominant form of intensification in the General Urban Area.

Policy 11 of Section 2.2.2 of the Official Plan notes that the distribution of appropriate building heights will be determined by:

- / The location in a Target Area for Intensification identified by policy 4 above or by proximity to a Rapid Transit station or Transit Priority corridor, with the greatest density and tallest building heights being located closest to the station or corridor; and
- The Design and Compatibility of the development with the surrounding existing context and planned function, as detailed in Section 4.11, with buildings clustered with other buildings of similar height.

According to Policy 16 of the Official Plan, the location of High-Rise and High-Rise 31+ buildings is influenced by the need to provide an adequate separation distance from other existing and potential future High-Rise

buildings. Separation distances between buildings are to be considered when considering sites for development of High-Rise buildings and High-Rise 31+ buildings. The City may implement separation distances through the Zoning By-law. In areas with a small or narrow lot fabric, consolidation of two or more lots may be in order to address separation distance requirements.

Policy 22 of Section 2.2.2 of the Official Plan notes that the City also supports compatible intensification within the urban boundary, including areas designated General Urban Area. The City will promote opportunities for intensification in areas determined by the policies in Section 3.6.1. Intensification that is compatible with the surrounding context will also be supported on: brownfield sites that have been remediated; on underdeveloped sites such as current or former parking lots; in extensive areas previously used for outside storage; sites that are no longer viable for the purpose for which they were originally used or intended; and on sites of exhausted pits and quarries in the urban area where the urban design.

Although not located in a target area for intensification as identified in Policy 3 of Section 2.2.2 of the Official Plan, the subject property is located in close proximity to rapid transit; as such, the proposed development conforms with Policies 10 and 11 of Section 2.2.2 of the Official Plan by providing a dense built form that will support the City's Rapid Transit and Transit Priority Network and contributing to a mix of uses in the area.

The proposed development has been designed in a way that will provide appropriate separation distances from abutting or nearby parcels that may be redeveloped with future high-rise buildings, thus satisfying Policy 16 of Section 2.2.2 of the Official Plan.

The proposed development also conforms with Policy 22 of Section 2.2.2 of the Official Plan. The proposed development represents an intensification of a currently underutilized property within the General Urban Area, which consists of a one (1) storey shopping centre and an associated surface parking lot on land that will require soil and groundwater remediation/removal or a risk assessment.

4.2.2 General Urban Area Designation (Section 3.6.1)

The subject property is designated "General Urban Area" in Schedule B – Urban Policy Plan of the City of Ottawa Official Plan (Figure 16).

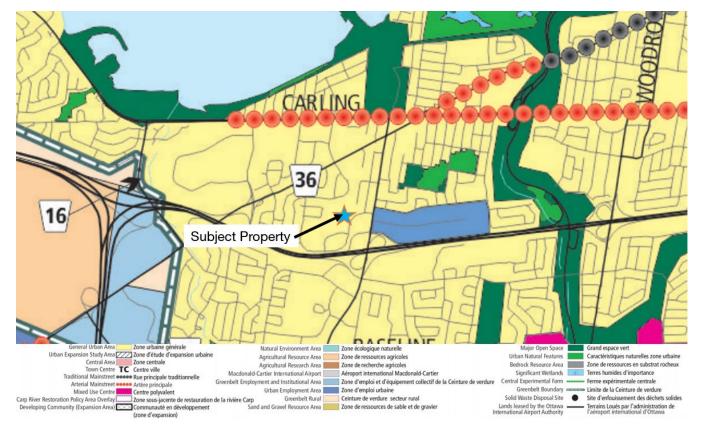


Figure 16: Excerpt from Schedule B - Urban Policy Plan of the City of Ottawa Official Plan

The General Urban Area designation 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. This will facilitate the development of complete and sustainable communities. The building height in the General Urban Area is intended to be predominantly low-rise (under four (4) storeys).

Policy 2 of Section 3.6.1 states that development applications will be evaluated in accordance with Sections 2.5.1 and 4.11. These sections are discussed in greater detail below.

Policy 3 of Section 3.6.1 states the building height in the General Urban Area will continue to be predominantly low-rise.

Notwithstanding Policy 3, Policy 4 of Section 3.6.1 states that new taller buildings may be considered for sites that:

- a. front an Arterial Road on Schedules E or F of this Plan and which are:
 - i. within 800 metres walking distance of a Rapid Transit Station on Schedule D of this Plan, or
 - ii. on a Transit Priority Corridor on Schedule D of this Plan. For the purposes of this policy only, the "Transit Street" defined in the Riverside South Community Design Plan is considered an Arterial Road:
- b. are in an area already characterized by taller buildings or sites zoned to permit taller buildings.

The proposed development conforms with Policy 4 of Section 3.6.1 of the Official Plan as the subject property abuts a property with an existing high-rise building (at 2891 Dumaurier Avenue, to the west). As such, a high-rise building height is appropriate for the subject property. Further, although the subject property does not front an Arterial Road on Schedule E or F of the Official Plan, it is located in

very close proximity (approximately 220 metres) to a Rapid Transit Station on Schedule D of the Official Plan.

Policy 5 of Section 3.6.1 of the Official Plan states that 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. The predominant form of development and intensification will be semi-detached and other ground-oriented multiple unit housing. When considering a proposal for residential intensification through infill or redevelopment in the General Urban Area, the City will:

- a. Assess the compatibility of new development as it relates to existing community character so that it enhances and builds upon desirable established patterns of built form and open spaces;
- b. Consider its contribution to the maintenance and achievement of a balance of housing types and tenures to provide a full range of housing for a variety of demographic profiles throughout the General Urban Area

The proposed development's podium design and tower stepbacks and setbacks will help maintain a human scale of development along Dumaurier Avenue, while providing desirable at-grade animation along the public realm.

The subject property's significant separation from the nearest low-rise residential buildings (approximately 75 metres to the northeast, approximately 100 metres to the south, and approximately 125 metres to the west) and location at the edge of the Foster Farm neighbourhood, will help minimize disruptions to the community's existing character.

The proposed development will also contribute to the provision of a mix of housing types in the surrounding area.

For the above reasons, the proposed development conforms with Policy 5 of Section 3.6.1 of the Official Plan.

4.2.3 Designing Ottawa (Section 2.5.1)

Section 2.5.1 of the Official Plan contains design objectives which are qualitative statements of how the City wishes to influence the built environment. The proposed development meets these objectives as follows:

- 1. To enhance the sense of community by creating and maintaining places with their own distinct identity The proposed development will greatly enhance a portion of the community that is currently underdeveloped. Together with the future Pinecrest LRT station, the proposed development will contribute to the distinct identity of the Foster Farm neighbourhood.
- To define quality public and private spaces through development The proposed development will incorporate a mix of quality communal and private amenity spaces, including balconies, an outdoor terrace on the seventh storey, and indoor amenity areas. The proposed development's ground floor commercial spaces will also provide services to the nearby community.
- 3. To create places that are safe, accessible and are easy to get to, and move through The proposed development will help increase the security of the surrounding area by providing more "eyes on the street". The proposed ground floor will also help provide animation at the street level. The proposed development's main entrance will be easily identifiable from the street.
- 4. To ensure that new development respects the character of existing areas

 The proposed development will incorporate significant setbacks from the existing residential neighbourhood to the west, with the tower portion of the building will also incorporating stepbacks from the podium. The tower's small floorplate will reduce shadowing impacts.

- 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 development will contribute to a greater mix of dwelling units and uses in the neighbourhood.
- 6. To understand and respect natural processes and features in development design The proposed development will have no adverse impact on natural areas.
- 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 development's proximity to the future Pinecrest LRT Station will help encourage public transit use. The proposed development's compact, dense form represents an efficient use of land, and its mix of uses will provide some services in close proximity to nearby residents.

4.2.4 Urban Design and Compatibility (Section 4.11)

Policy 2 of Section 4.11 contains criteria for evaluating the compatibility of development applications. The proposed development meets the applicable criteria, including:

Compatibility Criteria	Proposed Development
Views	Policy 3 of Section 4.11 of the Official Plan notes that the City will protect the view of the Parliament Buildings from two (2) locations in Beechwood Cemetery.
	According to Policy 4 of Section 4.11 of the Official Plan, policies to protect views of the Parliament Buildings and other national symbols that apply to development applications in the Central Area are contained in Section 3.6.6 Central Area
	The proposed development will have no impact on protected views outlined in Policies 3 and 4 of Section 4.11 of the City's Official Plan.
Building Design	Section 5 of Section 4.11 of the Official Plan notes that compatibility of new buildings with their surroundings will be achieved in part through the design of the portions of the structure adjacent to existing buildings and/or facing the public realm. Proponents of new development will demonstrate, at the time of application, how the design of their development fits with the existing desirable character and planned function of the surrounding area in the context of: / Setbacks, heights and transition; / Façade and roofline articulation; / Colours and materials; / Architectural elements, including windows, doors and projections; / Pre- and post-construction grades on site; and / Incorporating elements and details of common characteristics of the area. The proposed development builds upon the high-rise building context on the abutting property to the west, at 2891 Dumaurier Avenue. The proposed design incorporates a podium that will help provide a human-scaled base more in keeping with the predominant built form in the neighbourhood. Concurrently, the mid-rise podium's mix of uses and materiality will help animate the ground level along the subject property's frontage along Dumaurier Avenue.
	The proposed development will also feature generous setbacks from sensitive residential uses to the west and south of the subject property.

Compatibility Criteria	Proposed Development
	According to Policy 6 of Section 4.11 of the Official Plan, The City will require that all applications for new development: / Orient the principal façade and entrance(s) of main building(s) to the street.
	 / Include windows on the building elevations that are adjacent to public spaces; / Use architectural elements, massing, and landscaping to accentuate main building entrances.
	The proposed development's principal façade, main entrance, and ground floor commercial units are oriented toward the subject property's frontage along Dumaurier Avenue.
	Generous glazing will be incorporated in all of the building's façades, particularly in its tower portion.
	The proposed ground floor height will be taller than the typical floor height, which will help accentuate uses and entrances facing Dumaurier Avenue.
	Policy 8 of Section 4.11 of the Official Plan states that, to maintain a high quality, obstacle free pedestrian environment, all servicing, loading areas, and other required mechanical equipment and utilities should be internalized and integrated into the design of the base of the building where possible. If they cannot be internalized these services are to be screened from public view (i.e. trees, landscaping, decorative walls and fences etc.) and are to be acoustically dampened where possible. The location and operation these areas and equipment should be designed to maintain a pedestrian friendly environment and not impede public use of the sidewalk.
	The proposed development will internalize, where possible, mechanical equipment in its underground parking garage and in a rooftop mechanical penthouse.
	Garbage pickup, limited surface parking, and vehicular access to the parking garage are all located at the rear of the proposed building, thus minimizing impacts on the pedestrian experience along Dumaurier Avenue.
	Further, Policy 9 of Section 4.11 of the Official Plan states that rooftop mechanical or telecommunications equipment, signage, and amenity spaces should be incorporated into the design and massing of the upper floors of the building.
	Where possible, the proposed development will locate mechanical equipment in its underground parking garage and in a rooftop mechanical penthouse.
Massing and Scale	Policy 10 of Section 4.11 of the Official Plan states that, where a secondary planning process establishes criteria for compatibility of new development or redevelopment in terms of the character of the surrounding area, the City will assess the appropriateness of the development using the criteria for massing and scale established in that Plan. Where there are no established criteria provided in an approved Plan, the City will assess the appropriateness of the proposal relying upon its approved Design Guidelines, as applicable, and the following criteria:

Compatibility Criteria Proposed Development Building height, massing and scale permitted by the planned function of adjacent properties as well as the character established by the prevailing pattern of abutting development and development that is across the street: Prevailing patterns of rear and side yard setbacks, building separation and landscaped open spaces and outdoor amenity areas as established by existing zoning where that pattern is different from the existing pattern of development; The need to provide a transition between areas of different development intensity and scale as set out in policy 12 of this section. The proposed development builds upon the high-rise building height on the abutting property to the west, at 2891 Dumaurier Avenue. The proposed development will incorporate generous setbacks from the abutting residential property to the west, as well as from the abutting commercial property to the south (which will permit the potential redevelopment of the abutting property to the south with appropriate separation distances). The proposed development's provision of amenity space will be in compliance with the Zoning By-law requirements. The proposed podium and tower design will allow for a more human scale at the street level and provide transition between the tower and nearby lowrise residential neighbourhoods. Policy 11 of Section 4.11 of the Official Plan states that the City may require a Shadow Analysis and/or Wind Analysis as part of a complete application, except where identified in the Wind/Shadow Terms of Reference. The study(s) will evaluate the potential impacts of the development on the adjacent properties and pedestrian amenity areas. The intent of each Analysis is to demonstrate how these impacts have been minimized or avoided. A Shadow Analysis prepared by Roderick Lahey Architect Inc. is being submitted under separate cover in support of the development applications. The study demonstrates that shadowing impacts are largely limited to less sensitive uses such as Ruth Wildgren Park and the Boys & Girls Clubs of Ottawa Building, Further, the tower's small floorplate, which is much smaller than that of the building podium, will ensure that shadows move quickly through the subject property and other surrounding properties. A Pedestrian Level Wind Study prepared by Gradient Wind Engineering Inc. is also being submitted under separate cover in support of the applications. The study provides the following conclusions: All areas at grade will be suitable for their intended uses throughout the year. This includes all building access points, nearby sidewalks, walkways, surface parking areas, and landscaped areas. Wind conditions over the north amenity terrace at Level 7, atop the podium, are predicted to be suitable for a mix of sitting and standing during the summer season, becoming suitable for a mix of standing

and strolling during the spring and autumn seasons. During the

Compatibility Criteria	Proposed Development
	winter season, conditions are predicted to be suitable for a mix of standing, strolling, and walking. a. The noted wind comfort predictions correspond to an extensive mitigation strategy that has been developed by the design team, including the landscape architect. With the noted mitigation strategy, the areas predicted to be suitable for standing during the summer season are also predicted to be suitable for sitting at least 65% of the time, as illustrated in Figure 5B. Since a reasonable level of mitigation has been considered in the landscape plan on account of the suburban exposures for the prominent wind directions, the noted conditions are considered satisfactory for the intended uses of the areas.
	 Wind conditions over most of the east and west amenity terraces, on either side of the tower, are predicted to be suitable for sitting during the typical use period of late spring to early autumn. While conditions at the south end of the terraces are predicted to be windier, it may be possible to locate seating within the calmer areas of the amenity spaces. a. The programming of the terraces could be designed to provide seating in areas that are predicted to be calm during the typical use period. Alternatively, if calmer conditions are required over the full area of the terraces, a detailed mitigation strategy could be developed and would be expected to include raised perimeter guards and a canopy attached to the tower. The work could be performed together with the mitigation testing for the north amenity area, as presented in item (2) above.
	Within the context of typical weather patterns, which exclude anomalous localized storm events such as tornadoes and downbursts, no pedestrian areas surrounding the subject site at grade level or on the elevated amenity terraces were found to experience conditions that could be considered dangerous.
	Policy 12 of Section 4.11 of the Official Plan notes that transition refers to the integration of buildings that have greater height or massing than their surroundings. Transition is an important building design element to minimize conflicts when development that is higher or has greater massing is proposed abutting established or planned areas of Low-Rise development. Proponents for developments that are taller in height than the existing or planned context or are adjacent to a public open space or street shall demonstrate that an effective transition in height and massing, that respects the surrounding planned context, such as a stepping down or variation in building form has been incorporated into the design.
	The proposed development incorporates a podium and tower design that provides for a transition between the high-rise tower and adjacent low-rise building forms.
	Generous setbacks between the tower and the subject property's lot lines are also proposed.

Compatibility Criteria	Proposed Development
	Policy 13 of Section 4.11 of the Official Plan requires that building height and massing transitions will be accomplished through a variety of means, including: / Incremental changes in building height (e.g. angular planes or stepping building profile up or down); / Massing (e.g. inserting ground-oriented housing adjacent to the street as part of a high-profile development or incorporating podiums along a Mainstreet); / Building setbacks and step-backs. The proposed development uses a variety of means to accomplish appropriate building height and massing transitions, including: / Incorporating a podium as the base of the building and
	concentrating the high-rise massing in a tower with a smaller floorplate; / Significant step backs from the podium to the tower; and, / Generous building and tower setbacks from surrounding property lines.
High-Rise Buildings	Policy 14 of Section 4.11 of the Official Plan states that high-rise buildings should be designed to achieve the objectives of this Plan and avoid or reduce impacts or disruptions associated with: / pedestrian comfort, safety and usability resulting from changes to wind and shadow patterns in outdoor amenities and adjacent public and private spaces surrounding the building; / public views, including view planes and view-sheds referred to in Policy 3 above; / proximity to heritage districts or buildings, / reduced privacy for existing building occupants on the same lot or on adjacent lots.
	A wind study prepared and submitted under separate cover as part of the development applications notes that all areas at grade will be suitable for their intended uses throughout the area; further, the proposed development's tower design, with a limited floorplate, will help minimize shadowing impacts on adjacent properties. As previously noted, the proposed development will have no impact on
	protected views referred to in Policy 3 of Section 4.11 of the Official Plan. The proposed development and subject property are sited in a way that the proposed high-rise building will have no impact on views of Saint-Rémi Catholic Parish to the north. Further, the proposed development's tower and podium design will provide a transition in building height to the low-rise church.
	The proposed tower's generous setbacks from the subject property's lot lines will help reduce concerns relating to privacy and overlook. Policy 15 of Section 4.11 of the Official Plan states that, generally, high-rise buildings, which consist of three integrated parts, a base, a middle and a top, can achieve many of the urban design objectives and address the impacts described above in the following ways:

Compatibility Criteria Proposed Development	
	/ The base of a high-rise building should respect the scale, proportion, and character of the surrounding buildings, adjacent streets, parks, and public or private open spaces and animate such spaces. / The tower, which typically includes a middle and a top, should step back from the base where possible. The tower design can reduce the building impacts identified above by incorporating an appropriate separation from existing or future adjacent towers located on the same lot or on an adjacent lot. The responsibility for providing an appropriate tower separation shall generally be shared between owners of abutting properties where high-rise buildings are permitted. A separation distance of 23m has been the City's general guidance but actual separation requirements may vary in different parts of the City depending on the context. / Floor plates may also vary depending on the uses and the context. Generally, towers with a larger floor plates may require a greater separation from adjacent towers. The proposed development incorporates a clear base, middle, and top design. The base podium's mid-rise height will help create a more human scale at grade and will provide a transition between the proposed
	development's tower and nearby low-rise building heights. The proposed tower incorporates step backs from the base and generous setbacks from surrounding lot lines. The tower will be set back over 60 metres from the nearest high-rise building. The tower's floorplate will limit the proposed development's impact on nearby properties.
	Policy 17 of the Official Plan states that the Zoning By-law will establish performance measures such as minimum tower separation distances and yard setbacks and may require minimum lot sizes for High-Rise buildings. Proposals for a high-rise building that include performance measures that deviate from the Zoning By-law shall demonstrate that the impacts identified in policy 14 can be satisfactorily avoided or reduced.
	A more detailed discussion of zoning performance measures relating to high-rise buildings is provided below.
	Policy 18 of the Official Plan states that the Urban Design Guidelines for High-Rise Buildings may establish general principles for the design of high-rise buildings, including the design of the base and guidance for tower separation distances.
	A more detailed discussion of the Urban Design Guidelines for High-Rise Buildings is provided below.
Outdoor Amenity Areas	Policy 19 of Section 4.11 of the Official Plan states that applicants will demonstrate that the development minimizes undesirable impacts on the existing private amenity spaces of adjacent residential units through the siting and design of the new building(s). Design measures include the use of transitions or terracing and the use of screening, lighting, landscaping, or other design measures that achieve the same objective.
	The subject property is not located in close proximity to existing private amenity spaces, as it is located approximately 50 metres from the nearest

Compatibility Criteria	Proposed Development	
	residential building to the southwest. As such, the proposed development's distance from existing residential buildings will minimize undesirable impacts on existing private amenity spaces. The proposed tower's limited floorplate area will also help limit shadowing impacts on the surrounding area.	
	According to Policy 20 of Section 4.11 of the Official Plan, applications to develop residential or mixed-use buildings incorporating residences will include well-designed, usable amenity areas for the residents that meet the requirements of the Zoning By-law, and are appropriate to the size, location and type of development. These areas may include private amenity areas and communal amenity spaces such as: balconies or terraces, rooftop patios, and communal outdoor at-grade spaces (e.g. plazas, courtyards, squares, yards). The specific requirements for the private amenity areas and the communal amenity spaces shall be determined by the City and implemented through the Zoning By-law and site plan agreement.	
	The proposed development incorporates a variety of communal amenity areas, including indoor and outdoor spaces. Private amenity spaces in the form of balconies are also proposed for a large portion of dwelling units. The proposed amenity space provisions are in compliance with the zoning requirements.	
Design Priority Areas	The subject property is not located within a Design Priority Area; as such, the proposed development is not subject to review by the Urban Design Review Panel.	

Given the above, the proposed development conforms with the urban design and compatibility criteria outlined in Section 4.11 of the City's Official Plan.

4.2.5 Heritage Buildings and Areas (Section 4.6.1)

Policy 11 of Section 4.6.1 of the Official Plan states that where development is proposed adjacent to or across the street from a building on the Heritage Reference List (but not designated under the *Ontario Heritage Act*) the applicant shall demonstrate the proposal's compatibility with that heritage resource and its streetscape.

As previously noted, the subject property is located across the street from Saint-Rémi Catholic Parish, a building on the City's Heritage Register at the property municipally known as 2821 Dumaurier Avenue. The church is located just over 50 metres to the northeast of the subject property.

The subject property's location relative to the church is such that its proposed redevelopment will have little to no impact on views of the church, particularly from nearby public rights-of-way including Dumaurier Avenue to the south and east, Pinecrest Road to the east, and the Queensway to the south. Views of the building are also already limited due to the church's low-rise profile.

The proposed development will locate its tower in the south portion of the subject property, further away from the church. The mid-rise podium will thus provide a transition between the low-rise church to the north and the high-rise tower to the south.

The church is set well back from its frontage along Dumaurier Avenue, with parking located at the front of the building, which will contrast with the proposed development's relatively short setback from Dumaurier Avenue and the street to the north separating it from the church property, as well as its podium design, which will contribute to a more active frontage. However, the proposed development's design will provide for an animated, pedestrian-friendly streetscape that is in keeping with municipal

urban design and transit-oriented development objectives as expressed in Council-approved Urban Design Guidelines for High-Rise Buildings and Transit-Oriented developments.

4.3 New City of Ottawa Official Plan

The City of Ottawa is currently in the process of developing a new Official Plan that will replace the existing Official Plan from 2003 (as amended). The new Official Plan will have a 25-year time horizon which spans from 2021 to 2046. In December 2019, a detailed set of Preliminary Policy Directions for the new Official Plan was approved by City Council. The Preliminary Policy Directions are intended to address the challenges that Ottawa is expected to face over the next 25 years as the population expands from approximately 1 million to just over 1.4 million people.

The proposed development meets the following Preliminary Policy Directions:

Growth Management

- By 2046, achieve a majority of new residential units by intensification in the urban area and serviced villages.
- / Grow the city around its rapid transit system.
- / An increased intensification target should be gradual in the short-term, and gradually increase over the long-term horizon of the Plan.
- / Ensure city infrastructure is considered as part of any intensification strategy.
- / Ensure intensification strategy will consider housing and transportation affordability.
- / Incent intensification in targeted areas through a variety of mechanisms.

The proposed development represents an intensification of the subject property in the City's urban area, in proximity to rapid transit.

Housing

- / Encourage denser, walkable 15-minute neighbourhoods to help reduce or eliminate car dependency and promote social and physical health and sustainable neighbourhoods.
- / Strengthen the current policy direction which focuses new growth around existing higher-order transit.
- Continue to monitor and adjust City policies to ensure there is a range and mix of housing types and housing availability for all income groups.

The proposed development will intensify the subject property with a high-rise mixed-use building in proximity to rapid transit.

Transit

New or significantly updated OP policies that are proposed to help achieve the goal of the majority of trips by sustainable transportation by 2046.

The proposed development will increase the number of people living within walking distance of the future Pinecrest LRT Station, which is expected to help generate additional transit users.

4.4 Pinecrest and Queensview Stations Secondary Plan Study

The purpose of the Pinecrest and Queensview Stations Secondary Plan Study is to undertake a review of the lands surrounding the future Pinecrest and Queensview Light Rail Transit (LRT) stations to guide future development that supports transit and integrates with the surrounding residential neighbourhoods. This project aims to produce new area-specific policies in the Official Plan and corresponding zoning amendments.

The Study aims to engage the community to help identify appropriate change for the area over a 20-year planning horizon. This change will be compatible with the adjacent neighbourhoods. The Study also aims to provide greater clarity for the community, developers and city staff in reviewing future development proposals for the area.

The following timeline for the preparation and adoption of the Secondary Plan Study is expected:

- Fall 2020: Discussions with community associations, landowners and Councillor and resolution of policy overlap with draft Official Plan;
- / Winter 2021: Discussions with public and technical advisory committees and develop early draft recommendations;
- / Spring 2021: Public Open House #2 to engage stakeholders and the public on draft recommendations;
- Fall 2021: Update and finalize draft recommendations and potentially a third public open house event;
- Winter 2022: Staff report to Planning Committee and City Council.

4.5 Urban Design Guidelines for High-Rise Buildings

Approved by City Council in 2018, the City of Ottawa's Urban Design Guidelines for High-Rise Buildings are to be used during the review of development proposals to promote and achieve appropriate high-rise development. The design guidelines will be applied wherever high-rise residential and mixed-use buildings are proposed.

The proposed development meets the intent and purpose of several of the City's Urban Design Guidelines for High-Rise Buildings, including the following:

4.5.1 Context

- When a proposed high-rise building abuts properties where a high-rise building is permitted, the lot should be of sufficient size to achieve tower separation, setback, and step back. (1.16)
- Respect the overall historic setting, including protecting and enhancing views of the adjacent heritage buildings through placement, scale, and design of the high-rise building. (1.23)

4.5.2 Built Form

- / Enhance and create the overall pedestrian experience in the immediate surrounding public spaces (including POPS) through the design of the lower portion, typically the base, of the building, which (a) fits into the existing urban fabric, animates existing public spaces, and frames existing views. (2.1)
- Enhance and create the image of a community and a city through the design of the upper portion of the building, which is often comprised of a middle and a top that (b) respects and/or enriches urban fabric and skylines. (2.2)
- / Depending on the function and context, high-rise buildings can take many different forms to serve both the experience and expression functions:
 - a high-rise building that includes three distinctive and integrated parts base, middle, and top is generally accepted as a good approach to built form design in order to effectively achieve many urban design objectives.
 - a high-rise building that has a tower (middle + top) with a small floor plate can effectively achieve many design objectives in the urban environment. (2.3)
- Place the base of a high-rise building to form continuous building edges along streets, parks, and public spaces or Privately Owned Public Space (POPS):
 - in the absence of an existing context of street wall buildings, create a new street wall condition to allow for phased development and evolution. (2.13)
- Additional setbacks beyond the zoning requirements and existing prevalent patterns may be necessary and appropriate at street corners, transit stops, building entrances, and other locations to accommodate heavy pedestrian traffic and public and private amenities. (2.14)
- The maximum height of the base of a proposed high-rise building should be equal to the width of the ROW to provide sufficient enclosure for the street without overwhelming the street. (2.15)
- / The minimum height of the base should be 2 storeys. (2.17)
- Respect the character and vertical rhythm of the adjacent properties and create a comfortable pedestrian scale by (a) breaking up a long façade vertically through massing and architectural articulation to fit into the existing finer grain built form context. (2.20)

- The ground floor of the base should be animated and highly transparent. Avoid blank walls, but if necessary, articulate them with the same materials, rhythm, and high-quality design as more active and animated frontages. (2.23)
- / Encourage small tower floor plates to minimize shadow and wind impacts, loss of skyviews, and allow for the passage of natural light into interior spaces:
 - the maximum tower floor plate for a high-rise residential building should be 750m².
 - Larger tower floor plates may be considered in suburban locations with design features to mitigate shadow and wind impacts, maintain skyviews, and allow for access to natural lights. (2.24)
- Provide proper separation distances between towers to minimize shadow and wind impacts, and loss of skyviews, and allow for natural light into interior spaces:
 - a tower must provide a minimum 11.5m setback from the side and/or rear property lines when abutting another high-rise building. (2.25)
- Step back the tower, including the balconies, from the base to allow the base to be the primary defining element for the site and the adjacent public realm, reducing the wind impacts, and opening skyviews. (2.29)
- Orient and shape the tower to minimize shadow and wind impacts on the public and private spaces. (2.31)
- The top should be integral to the overall architecture of a high-rise building, either as a distinct or lighter feature of the building or a termination of the continuous middle portion of the tower. (2.35)
- Integrate roof-top mechanical or telecommunications equipment, signage, and amenity spaces into the design and massing of the upper floors. (2.36)

4.5.3 Pedestrian Realm

- Provide a minimum 6m space between the curb and the building face along the primary frontages of a high-rise building, including the City-owned portion within the right-of-way (ROW) and the building setback area. (3.1)
- / Locate the main pedestrian entrance at the street with a seamless connection to the sidewalk. (3.10)
- Animate the streets, pathways, parks, open spaces, and POPS by (c) providing greater floor to ceiling height at the ground floor to allow for flexibility in use over time. (3.12)
- Locate parking underground or at the rear of the building. (3.14)
- / Internalize and integrate servicing, loading, and other required utilities into the design of the base of the building, where possible. (3.16)
- When they are not internalized, screen servicing, loading, and required utilities from public view and ensure they are acoustically dampened where possible. (3.17)
- / Locate and co-locate access to servicing and parking appropriately, ideally from the rear of the building, a public lane, or a shared driveway, to minimize the visual impacts and interference with the pedestrian realm. (3.18)
- / Recess, screen, and minimize the size of the garage doors and service openings visible from streets and other public spaces. (3.19)
- Conduct a wind analysis for all high-rise developments in accordance with the Wind Analysis Terms of Reference and indicate:
 - how the building is placed and built form is designed to minimize the potential impacts; and
 - how measures have been introduced to mitigate any potential wind impacts. (3.26)
- Conduct a shadow analysis for all high-rise developments in accordance with the Shadow Analysis Terms of Reference and indicate how the placement and the built form is designed and shaped to minimize shadow impacts on the surrounding public and private realms. (3.27)

4.6 Transit-Oriented Development Guidelines

Approved by City Council on September 26, 2007, the City of Ottawa's Transit-Oriented Development Guidelines seek to provide guidance to assess, promote and achieve appropriate Transit-Oriented Development within the City of Ottawa. The guidelines address six (6) components including: Land use; Layout; Built Form; Pedestrians and Cyclists; Vehicles and Parking; and, Streetscape and Environment.

These guidelines are to be applied to all development throughout the City within a 600 metre walking distance of a rapid transit stop or station to provide guidance to the proper development of these strategically located properties. Enhanced cycling facilities and cycling infrastructure should be considered within a 1,500 metre cycling distance. Areas served by high-quality transit (frequent service, numerous routes, extended hours of service) rather than rapid transit will also benefit from applying these guidelines.

The proposed development meets the following applicable design guidelines, among others:

- / Provide transit supportive land uses within a 600 metre walking distance of a rapid transit stop or station (Guideline 1).
- Create a multi-purpose destination for both transit users and local residents through providing a mix of different land uses that support a vibrant area community and enable people to meet many of their daily needs locally, thereby reducing the need to travel. Elements include a variety of different housing types, employment, local services and amenities that are consistent with the policy framework of the Official Plan and the City's Zoning By-Law. The mix of different uses can all be within one building and/or within different buildings within close proximity of one another. (Guideline 3)
- Set large buildings back between 3.0 and 6.0 metres from the front property line, and from the side property line for corner sites, in order to define the street edge and to provide space for pedestrian activities and landscaping. (Guideline 13)
- Provide architectural variety (windows, variety of building materials, projections) on the lower storeys of buildings to provide visual interest to pedestrians. (Guideline 14)
- Use clear windows and doors to make the pedestrian level façade of walls facing the street highly transparent in order provide ease of entrance, visual interest and increased security through informal viewing. (Guideline 15)
- / Design ground floors to be appealing to pedestrians, with such uses as retail, personal service, restaurants, outdoor cafes, and residences. (Guideline 28)
- / Locate parking lots to the rear of buildings and not between the public right-of-way and the functional front of the building. For buildings on corner sites, avoid locating parking lots on an exterior side. (Guideline 35)
- / Design access driveways to be shared between facilities. This helps to improve the pedestrian environment by limiting the number of depressed curbs across public sidewalks and reduces potential points of conflict between pedestrians and vehicles. (Guideline 36)
- / Encourage underground parking or parking structures over surface parking lots. Locate parking structures so that they do not impede pedestrian flows and design them with active street-level facades, including commercial uses and/or building articulation, non-transparent windows or soft and hard landscaping. (Guideline 39)
- / Enclose air conditioner compressors, garbage and recycling containers and other similar equipment within buildings or screen them from public view. (Guideline 54)

4.7 City of Ottawa Comprehensive Zoning By-law (2008-250)

The subject property is largely zoned "General Mixed Use, Urban Exception 62, Floor Space Index of 0.25" (GM[62] F(0.25)), with a small portion in its northeast corner zoned "Community Leisure Facility" (L1) (Figure 17).



Figure 17: Zoning Map of the Subject Property (Outlined and Shaded in Blue) and Surrounding Area

The purpose of the GM Zone is to:

- / allow residential, commercial and institutional uses, or mixed use development in the General Urban Area and in the Upper Town, Lowertown and Sandy Hill West Character Areas of the Central Area designations of the Official Plan;
- / limit commercial uses to individual occupancies or in groupings in well defined areas such that they do not affect the development of the designated Traditional and Arterial Mainstreets as viable mixed-use areas:
- permit uses that are often large and serve or draw from broader areas than the surrounding community and which may generate traffic, noise or other impacts provided the anticipated impacts are adequately mitigated or otherwise addressed; and,
- / impose development standards that will ensure that the uses are compatible and complement surrounding land uses.

The GM zone permits the following residential uses:

bed and breakfast (with a maximum of ten (10) guest bedrooms);
apartment dwelling, low-rise
apartment dwelling, mid-rise;
dwelling unit;
group home;
planned unit development;
retirement home, converted;
rooming house;
stacked dwelling; and,
townhouse dwelling.

The GM zone also permits the following non-residential uses:

/ animal care establishment; / artist studio; / bank;

/	bank machine;	/	payday loan establishment;
/	catering establishment;	/	personal brewing facility;
/	click and collect facility;	/	personal service business;
/	community centre;	/	place of assembly;
/	community health and resource centre;	/	place of worship;
/	convenience store;	/	post office;
/	day care;	/	recreational and athletic facility;
/	diplomatic mission;	/	research and development centre;
/	drive-through facility;	/	residential care facility;
/	emergency service;	/	restaurant;
/	funeral home;	/	retail food store;
/	home-based business;	/	retail store;
/	home-based day care;	/	service and repair shop;
/	instructional facility;	/	shelter;
/	library;	/	storefront industry;
/	medical facility;	/	technology industry;
/	municipal service centre;	/	training centre; and,
/	office;	/	urban agriculture.

Urban Exception 62 permits a maximum Gross Floor Area of 325 square metres for each retail store.

The proposed dwelling unit use is permitted, while the GM zone permits a wide range of non-residential uses for the proposed development's ground floor commercial uses, which have not yet been confirmed. Although a high-rise apartment building is not currently permitted, the proposed zoning amendment intends to modify the height provisions to permit a high-rise building.

As part of the proposed Zoning By-law Amendment Application, the portion of the subject property currently zoned L1 will be rezoned to the site-specific zone that applies to the rest of the subject property.

The following table summarizes the proposed development's compliance with the GM[62] F(0.25) zoning. Areas of non-compliance are noted with an "X".

Zoning Mechanism	Required	Provided	Compliance
Minimum Lot Area	No minimum	4,195.2 m ²	✓
Minimum Lot Width	No minimum	Approximately 70 m	✓
Minimum Front Yard Setback	3 m	4.3 m	✓
Minimum Rear Yard Setback	Abutting a residential zone: 7.5 m	17.7 m	✓
Minimum Interior Side Yard Setback	For a mixed-use building not abutting a residential zone: no minimum	North: 3 m South: 9.5 m	√
Maximum Building Height	18 m	95 m	X
Maximum Floor Space Index	0.25	> 0.25	X

Zoning Mechanism	Required	Provided	Compliance
Maximum Gross Floor Area for Each Retail Store (Urban Exception 62)	Maximum of 325 m ² for each retail store	Commercial unit GFAs: / 118 m² / 175 m² / 224 m²	✓
Minimum Width of Landscaped Area	/ Abutting a street: 3 m / Abutting a residential or institutional zone: 3 m / Other cases: no minimum	/ Abutting a street: 3 m / Abutting a residential zone: 0.85 m	X
Amenity Area Provisions	Total Area (6 m² per dwelling unit): 1,980 m²	Total Area: 4,898 m ²	✓
	Communal Area (half of required total): 990 m ²	Communal Area: 2,144 m ²	
	Layout of Communal Area: Aggregated into areas up to 54 m2, and where more than one aggregated area is provided, at least one must be a minimum of 54 m ²	At least one communal amenity area is a minimum of 54 m ²	
Outdoor Commercial Patio Separation Distance	Where an outdoor commercial patio is not physically separated by a building from another lot in a residential zone, it must be located at least 75 m from a lot in a residential zone	Outdoor commercial patios are separated by proposed building from residential lot to the west Outdoor commercial patios are located more than 75 m from residentially zoned lots to the south and northeast.	✓

The following table summarizes the proposed development's compliance with zoning relating to parking requirements. Areas of non-compliance are noted with an "X".

Zoning Mechanism	Required	Provided	Compliance
Minimum Required Vehicle Parking Spaces	Residential (0.5 per unit, minus first 12 units): 159	Residential: 220	✓
(Area C, with mixed-use building active entrance less than 300m from Pinecrest LRT Station = Area X for resident and commercial	Commercial (for commercial units greater in area than 200 m²) (highest possible rate: 5 per 100 m² of GFA for a restaurant): 11	Commercial & Visitor: 30	X
parking)	Visitor (Area C – 0.2 per unit): 66		
	Total: 236	Total: 250	✓

Zoning Mechanism	Required	Provided	Compliance
Maximum Permitted Vehicle Parking Spaces	/ Residential (1.75 per unit): 578 / Commercial	Combined residential and visitor/commercial parking: 250	√
Minimum Driveway Width	/ Parking Lot: 6.7 m / Parking Garage: 6.0 m	/ Parking Lot: 6.0 m / Parking Garage: 6.0 m	√
Minimum Aisle Width	/ Parking Lot: 6.7 m / Parking Garage: 6.0 m	/ Parking Lot: 6.7 m / Parking Garage: 6.0 m	√
Minimum Parking Space Dimensions	/ Length: 5.2 m / Width: 2.6 m Up to 40% of required parking spaces may be 4.6 m by 2.4 m	/ Length: 5.2 m / Width: 2.6 m Less than 40% of required parking spaces are 4.6 m by 2.4 m	√
Minimum Required Bicycle Parking Spaces	Residential (0.5 per dwelling unit): 165 Commercial (1 per 250 m² of GFA): 2 Total: 167	Total: 314	√
Minimum Bicycle Parking Space Dimensions	/ Horizontal: 1.8 m by 0.6 m / Vertical: 1.5 m by 0.5 m	/ Horizontal: 1.8 m by 0.49 m / Vertical: 1.5 m by 0.49 m	X
Minimum Bicycle Parking Space Aisle Width	1.5 m	1.5 m	✓
Maximum Provision of Vertical Bicycle Parking Spaces	A maximum of 50% of the required bicycle parking spaces may be vertical spaces:	Less than 50%	√
Minimum Width of Landscape Area around a Parking Lot	For a parking lot containing 10 or fewer spaces: / Abutting a street: 3 m / Not abutting a street: none	/ Abutting a street: 3 m / Not abutting a street: 0 m	√
Minimum Required Landscaped Area within a Parking Lot	15%	41.3%	√
Loading Space Rates	No loading spaces required for commercial uses with a GFA under 1,000 m ² No loading spaces required for	No loading spaces are proposed	√
	residential uses		

The following table summarizes the proposed development's compliance with zoning provisions from By-law 2019-353, which aims to amend the City's Zoning By-law by adding new provisions for high-rise buildings. By-law 2019-353 is under appeal and as such is not yet in full force and effect.

High-rise building zoning provisions (Area A, Schedule XXX)

Zoning Mechanism	Required	Provided	Compliance
Minimum Lot Area (Interior Lot)	1,800 m ²	4,195.2 m ²	✓
Minimum Rear Yard Setback for a Tower	11.5 m	17.7 m	✓
Minimum Interior Side Yard Setback for a Tower	11.5 m	14.7 m (south) 19.5 m (north)	√
Minimum Separation Distance Between Towers on the Same Lot	23 m	N/A (only one (1) tower on the subject property)	√

4.7.1 Proposed Zoning By-law Amendment

The subject property is proposed to be rezoned to "General Mixed Use Zone with a Site-Specific Exception and a Height Limit of 95 metres" (GM[XXXX] H(95)). The following amendments are required:

Rezone Northeast Portion of Subject Property from L1 to GM[XXXX] H(95)

The subject property's current split zone situation is proposed to be rectified with the rezoning of the northeast portion of the subject property from L1 to the site-specific General Mixed Use (GM[XXXX] H(95)) zone that will apply to the subject property as a result of the proposed development.

The portion of the subject property currently zoned L1 appears to have been zoned as such given the abutting L1 zone that applies to the park and Boys and Girls Club property to the north. will reflect the subject property's use moving forward. The proposed rezoning of this portion of the subject property will allow it to more accurately reflect the proposed uses.

/ Increase Height Limit from 18 Metres to 95 Metres

Whereas the subject property's maximum permitted building height is currently 18 metres, the proposed development would increase the building height to 95 metres in order to permit the proposed 30-storey high-rise building.

The proposed height increase is appropriate for the subject property, given its proximity to rapid transit; its proximity to an existing high-rise development to the west; the building's design, which will minimize shadowing and privacy impacts on neighbouring areas; and its separation from low-lying residential areas.

Section 187(6)(c) states that despite the list of permitted residential uses, where the zoning on a lot is accompanied by an H suffix, schedule or exception that permits a building height of 10 or more storeys or greater than 30 metres, the use "apartment dwelling, high rise" is a permitted use on that lot. As such, the proposed rezoning would also permit the high-rise apartment building use on the subject property.

/ Elimination of Floor Space Index Requirement

Whereas the subject property's current zoning includes a maximum Floor Space Index (FSI) of 0.25, the proposed development will be in excess of this figure. The elimination of the FSI requirement will

permit the proposed redevelopment of the subject property with a level of intensification that is appropriate for its location and circumstances.

Reduction of Minimum Horizontal and Vertical Bicycle Parking Space Width

The proposed development will include a stacked bicycle parking system, which will help provide a total of 314 bicycle parking spaces, which is well in excess of the requirement of 167 spaces.

Despite the above, the specific system that is proposed to be used incorporates a slightly narrower space width of 0.49 metres. As such, an amendment is required to reduce the required horizontal space width of 0.6 metres and the vertical space width of 0.5 metres. The slight bicycle parking space width reduction will permit the use of an innovative system that will help provide an overabundance of bicycle parking spaces for the proposed development, while maintaining functionality.

Reduction of Minimum Width of Landscaped Area Abutting a Residential Zone

Whereas the GM zone requires a three (3) metre landscaped buffer where the subject property abuts a residential zone, the proposed development will incorporate a reduced landscaped buffer (of a minimum of 0.85 metres at its narrowest point) from the abutting property to the west, which is a residentially zoned lot. The reduced landscaped buffer largely maintains or improves upon the existing condition, which includes vehicular loading access to the rear of the existing shopping centre's businesses. The reduced landscape buffer will thus ensure continued onsite vehicle circulation.

Minimum Required Visitor and Commercial Parking Spaces

The subject property is located in Area C – Suburban on Schedule 1A – Areas for Minimum Parking Space Requirements of the Zoning By-law. However, for certain vehicle parking space rates, the proposed development may benefit from Area X: Inner Urban parking rates given its proximity to a planned rapid transit station.

The combined required commercial and visitor parking for the proposed development is 77 (11 commercial use parking spaces and 66 visitor parking spaces), whereas 30 parking spaces are proposed to be provided for visitor and commercial uses combined. The proposed visitor and commercial parking space provisions are similar to those of similar developments in closer proximity to the urban core and in similar proximity to rapid transit stations. The commercial units also have limited Gross Floor Areas and as such are not expected to cause significant vehicle traffic. Further, it is expected that commercial and visitor parking space use will peak at different times of day, thus allowing for some overlap between the two.

5.0 41

Public Consultation Strategy

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

- Notification of Ward Councillor, Councillor Theresa Kavanagh
 - The Ward Councillor will be notified by the City of Ottawa's "Heads Up" e-mail once the application is received.
- / Notification to residents and local registered Community Associations
 - Will be completed by the City of Ottawa pursuant to the Planning Act and the City of Ottawa's Public Notification Policy.
- / Planning Committee Meeting Advertisement and Report Mail out to Public
 - Notification for the statutory public meeting will be undertaken by the City of Ottawa.

6.0

Supporting Studies

The following studies have been prepared and submitted under separate cover in support of the applications:

Geotechnical Investigation, prepared by Paterson Group Inc., Report No. PG4928-1, dated December 18, 2019

Paterson Group was commissioned to conduct a geotechnical for the proposed development. The objectives of the current investigation were to:

- / Determine the subsurface and groundwater conditions by means of boreholes and existing soils information.
- / Provide geotechnical recommendations pertaining to design of the proposed development including construction considerations which may affect the design.

The report notes that the subject property is considered satisfactory from a geotechnical perspective. The proposed high-rise building is anticipated to be founded on spread footings placed directly or indirectly by the use of a lean concrete in-filled trench on a clean, surface sounded bedrock bearing surface.

Bedrock removal may be required to complete the underground level. Hoe ramming is an option where only small quantities of bedrock need to be removed. Line drilling and controlled blasting where large quantities of bedrock need to be removed is recommended. The blasting operations should be planned and completed under the guidance of a professional engineer with experience in blasting operations.

The above and other considerations are further discussed in the report.

TIA Final Report, prepared by Parsons, Project No. 477580-01000, dated July 23, 2021 Parsons has been retained by Brigil to prepare a Transportation Impact Assessment (TIA) in support of the development applications for the subject property. This document follows the new TIA process, as outlined in the City Transportation Impact Assessment (TIA) Guidelines (2017).

Based on the results summarized herein the following findings and recommendations are provided:

Existing Conditions:

- / Pinecrest BRT Station will be realigned further south as part of the Confederation LRT Line Extension with the addition of Pinecrest LRT Station to be build less than 300m walking distance from the proposed site.
- The site is currently vacant on the north half and occupied by a strip mall on the south. Approximately 1/3 of the strip mall will be replaced by the proposed residential building.
- An existing driveway within the proposed site parcel servicing the strip mall will be relocated further south to the edge of the proposed site parcel and northernmost part of the remaining strip mall to the south.
- Overall, there are no existing safety concerns along the proposed development frontage and study area intersections. Therefore, no mitigation measures were considered.
- / Existing intersections operate at good overall LoS 'C' or better with critical movements of 'D' or better during the weekday peak hours with the exception of Iris/Greenbank which operates at capacity for the AM peak and critical movements at capacity for AM and PM peaks.

Proposed Development

- / The proposed development will comprise of approximately 330 apartment units and 4,735 ft² of commercial space in a 30-storey building.
- The proposed development is projected to generate 'new' vehicle volumes of approximately 35 veh/h two-way total during the weekday morning and afternoon peak hours.

- The proposed development is projected to generate approximately 140 to 145 'new' transit trips during the AM and PM peak hour periods respectively, which can be accommodated by the future nearby high capacity Confederation LRT Line. Additional capacity is available on local bus routes departing Pinecrest Station. Transit demand was also modeled as pedestrians as well to reflect travel between the LRT station and proposed development.
- The minimum residential vehicle parking By-law requirements have been met, and various TDM measures have been proposed to leverage the site's proximity to rapid transit.
- The proposed bike parking supply greatly exceeds the City's minimum requirement, nearly double or 1 stall per unit.
- A combined 30 visitor and commercial parking have been proposed. Visitor parking requirements did not meet the By-law minimum, but was considered sufficient considering the proximity of the Pinecrest LRT Station for transit use. In the unlikely event that parking spillover occurs, onstreet parking is available along Dumaurier directly adjacent to the subject site.
- The access to the site proposes a new full movement driveway off Dumaurier Avenue with free-flow operations on Dumaurier Avenue and stop-control on the minor.

Future Conditions

- The proposed development is expected to be a single-phase development with a 2025 buildout year. We also reviewed the 2030 (buildout year +5), as noted in the by City guidelines.
- / Peak hour traffic volumes from nearby adjacent developments were incorporated into the future traffic volume projections. A background growth rate was not applied given that historical growth within the study area did not support this assumption.
- Future road network conditions performed at an overall LoS 'C' or better and with critical movement of 'D' or better.
- / If the TOD mode shares assumptions are not met, all study area intersections were still shown to operate within City standards.
- / Pedestrian and cycling facilities are proposed between Dumaurier Avenue and the new Pinecrest LRT Station as part of the Stage 2 LRT project, which is located approximately 300 meters from the subject site
- The MMLOS road segment analysis confirmed boundary streets conditions did not meet MMLOS area targets for pedestrians due to lack of sidewalk on the southeast side and lack of wider boulevard separation on the northwest side of Dumaurier. All other MMLOS targets including bike BLoS, transit TLoS and truck TkLoS were met or were not applicable.
- The MMLOS intersection analysis showed that only truck target goals were met at all intersections. Transit TLoS was met in some intersections but not all due to vehicle delays on some movements.
- The number of lanes to cross on Pinecrest/Greenbank (6 or more for east west), it was not possible to meet pedestrian and cyclist target goals without grade a separated crossing or lane reductions that would greatly impact traffic operations on Pinecrest.
- Overall, all study area intersections were expected to operate within City standards in all future conditions. The Iris/Greenbank intersection will require signal timing modifications to ensure green time is allocated to the movements that are most critical and improve overall intersection operations.

Based on the foregoing findings, the proposed development located at 2829 Dumaurier Avenue is recommended from a transportation perspective.

Impact Assessment of Adjacent Waste Disposal Site/Former Landfill Site, prepared by Lopers & Associates, dated April 6, 2021

Lopers & Associates (Lopers) was retained by 3223701 Canada Inc. (BRIGIL) to complete an Impact Assessment of Adjacent Waste Disposal/Former Landfill Site (IAWDS) of the commercial property with Civic address No. 2829 Dumaurier Avenue, Ottawa, Ontario ("Property" or "Site"). Lopers understands that the Site is currently owned by 1248816 Ontario Inc., with a vendor take back agreement signed in 2018 for ownership to transfer to 3223701 Canada Inc. (Brigil) by July 2023. It is understood that the intended future use is for residential purposes, with possible commercial use on the ground floor. It is also understood that several subgrade levels of underground parking have been proposed as part of the current concept for Site redevelopment.

Based on environmental research the Site was formerly partially occupied by a former waste disposal site (former Pinecrest Landfill Site) on the northeast portion of the Property. The aforementioned former waste disposal site at the Property is a Potentially Contaminating Activity (PCA) which could be interpreted as an Area of Potential Environmental Concern (APEC) for the Property.

Additional concerns have been identified by The Corporation of the City of Ottawa ("City" or "City of Ottawa") with respect to potential on-going environmental issues associated with the former waste disposal site. The City has requested that an IAWDS be completed and submitted to the City as part of a Preliminary Assessment of the Site for proposed redevelopment. It is expected that the predominant concerns are from the potential exposure of future occupants of the Site to methane gas, originating from the former waste disposal site.

An evaluation and interpretation of the following were completed as part of this IAWDS:

- Review of historical environmental reports; Approximate Footprint and Extents of a former landfill site at the Property;
- Subsurface vapour monitoring and data trends of on-Site methane gas concentrations; Methane gas migration pathways;
- / Excavation and blasting procedures and safety considerations; and,
- / Environmental remediation approach.

Based on the evaluation and interpretation of the available information and the proposed redevelopment concept, several environmental considerations and/or mitigation actions are required prior to, during and following redevelopment of the Site. The mitigation actions are required as a result of the presence of a former waste disposal site on a portion of the Site and at neighbouring properties to the north and east. These environmental considerations and/or mitigation actions include, but are not limited to:

- Evaluation of the implication of methane gas concentrations at the Site and neighbouring properties will be required on behalf of the excavation and blasting contractors to ensure safe construction procedures and to safeguard against an increase for the potential of off-Site subsurface methane gas migration.
- Remediation and off-Site disposal of the on-Site waste materials is recommended to be completed as part of preliminary environmental remediation to support redevelopment activities.
- / Monitoring of methane gas concentrations at the Site during excavation and construction activities is recommended to ensure worker safety. Monitoring following construction is recommended to ensure suitability for occupancy.
- / The installation of a vapour collection/extraction system within the foundation perimeter backfill, which could be vented to the atmosphere or connected to a City of Ottawa owned methane extraction system on adjacent land, provides a simple construction solution which would offer a mitigation solution in the event of potential future methane gas migration into the proposed building.

Evaluation of monitoring data, to be collected at various stages of redevelopment as noted above, is required to confirm the effectiveness of the aforementioned mitigation measures. The approach to assessment, review and implementation of the aforementioned environmental considerations and/or mitigation actions for methane gas are expected to permit safe construction practices and an indoor environment which is suitable for the proposed use.

Phase One Environmental Site Assessment

Lopers & Associates (Lopers) was retained by 3223701 Canada Inc. (Brigil) to complete a Phase One Environmental Site Assessment (Phase One ESA) of the commercial property with Civic address No. 2829 Dumaurier Avenue, Ottawa, Ontario ("Phase One Property", "Property" or "Site").

This Phase One ESA is being completed as part of due diligence requirements associated with the submission of a Development Application to the City of Ottawa Municipal Planning Department. This Phase One ESA can also be used to support the filing of a record of site condition for the Property.

The Phase One Property was unoccupied prior to the mid 1950's when it was reported that the City of Ottawa operated a waste disposal site on the north portion of the Phase One Property and adjacent lands to the north and east from approximately 1953 to 1957. The south portion of the Property was developed circa 1980, in conjunction with adjacent land to the south, with the present day commercial Dumaurier Plaza. The north portion of the Property, which is elevated approximately 1 to 2 meters above the south portion of the Property, is landscaped. The southern portion is level and has the commercial plaza plus an asphalted area used for access or parking.

The Property is currently used for commercial purposes and is zoned for mixed use. 1248816 Ontario Inc. is the current registered owner of the Property, with a vendor take back agreement signed in 2018 for ownership to transfer to 3223701 Canada Inc. (Brigil) by July 2023 and it is understood that the intended future use is for residential purposes, with possible commercial use on the ground floor. The Phase One Property is immediately surrounded by the adjoining south portion of Dumaurier Plaza to the south, a municipal Right-of-Way followed by Dumaurier Park to the east, by institutional properties to the north, and by residential properties to the west.

The presence of a former waste disposal site on the north portion of the Phase One Property is a significant PCA (PCA #1) which represents an APEC for the Property. Given that previous environmental reports and investigations have documented petroleum hydrocarbon (PHC) groundwater contamination and that waste fill material has been observed in boreholes on the north portion of the Property, the Property is not in compliance with the Soil, Groundwater and Sediment Standards for use under Part XV.1 of the Environmental Protection Act, which are also for consideration of O.Reg. 153/04.

The contaminants of potential concern (CPCs) associated with the former waste disposal site are volatile organic compounds (VOCs) (for groundwater only), metals, polycyclic aromatic hydrocarbons (PAHs) and PHCs/BTEXs. An investigation of the soil and groundwater quality with respect to these CPCs at the Property was completed by others in 2019.

One active automotive service garage and a historical retail fuel outlet are located at properties in the Phase One Study Area and constitute PCA#2 and PCA#3, respectively. The PCAs at properties in the Phase One Study Area are located significant distances and/or at cross-gradient orientations with respect to the Phase One Property and are not considered to represent APECs for the Phase One Property.

The PCAs identified at the Phase One Property and properties in the Phase One Study Area and APECs at the Phase One Property are included in the report.

Based on the identification of an APEC at the Phase One Property, a Phase Two Environmental Site Assessment is required to assess the soil and/or groundwater quality in the vicinity of the APEC.O.Reg. 153/04 stipulates that reports being used to support the filing of a RSC must be done no earlier than 18 months before the submission of a RSC. Given that a recent (2019) Phase Two ESA report has been prepared for the Phase One Property, and because it is not anticipated that remediation of the Phase One ESA property will be completed and an RSC submission will not be completed in the next 18 months, it is recommended that an additional Phase Two ESA study, which is anticipated to include documentation of remediation and be used to support a RSC submission, take place in conjunction with redevelopment of the Phase One Property.

Phase Two Environmental Site Assessment, prepared by Lopers & Associates, dated June 11, 2021

Lopers & Associates (Lopers) was retained by Brigil to complete a Phase Two Environmental Site Assessment (Phase Two ESA) of the subject property.

This Phase Two ESA is being completed as part of due diligence requirements associated with the submission of a Development Application to the City of Ottawa Municipal Planning Department.

Lopers has previously completed a Phase One Environmental Site Assessment (Phase One ESA) (Reference No. LOP20-004A, dated January 8, 2021) for Brigil at the Property. The Phase One ESA identified the

presence of one potentially contaminating activity (PCA) at the Property (and adjacent land to the north and east) which was interpreted to represent an area of potential environmental concern (APEC). The presence of a former waste disposal site on the north portion of the Phase One Property (PCA #1) is a significant PCA which represents APEC #1 for the Property. The contaminants of potential concern (CPCs) associated with the former waste disposal site are VOCs (for groundwater only), metals, PAHs and PHCs/BTEXs.

A recent (2019) GHD Phase Two ESA was completed by others (as supervised by Mr. Luke Lopers, author of this report) for Brigil; the subject of which was a larger parcel of land which includes the Phase Two Property as well as the adjacent commercial property to the south, including the entire Dumaurier Plaza. Lopers understands that because of information contained in this report that is not specific to only the Property a revised Phase Two ESA report, which is Site specific is required. This Phase Two ESA report includes reference to all available investigations completed at the Property.

As part of historical investigations, at least seven boreholes were drilled at the Phase Two Property. All seven of these boreholes were instrumented with groundwater monitoring wells with screens installed in either the overburden or bedrock.

As part of historical investigations, at least one soil sample was submitted for laboratory analysis for Polycyclic Aromatic Hydrocarbons (PAHs), metals and inorganics. One sample was also submitted for toxicity leaching characteristic procedure (TCLP) for waste characterization purposes.

Groundwater sampling was completed at the time of the 2019 GHD Phase Two ESA. An additional round of groundwater monitoring and sampling was completed of the viable monitoring wells at the Phase Two Property as part of this investigation in May of 2021. A total of nine groundwater samples, including two duplicate samples and two trip blanks, were submitted for laboratory analysis for a combination of PHCs, BTEXs, VOCs, PAHs, metals and inorganics.

The applicable site condition standard was determined to be the full depth generic site condition standard, in a non-potable groundwater condition, with course textured soil, for residential property use, as specified in Table 3 of the MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011.

The groundwater sample BH3S, collected in October of 2018 from a screen depth of approximately 2.2-3.7 m BGS, had reported concentrations of PHC F2 range (170 μ g/g vs. 150 μ g/g) and PHC F3 range (860 μ g/g vs. 500 μ g/g). All of the other soil and groundwater results for the Phase Two Property are in compliance with the applicable site condition standards. It should be noted that the monitoring well BH3D was installed for vertical delineation purposes for BH3S; BH3D had no detectable PHC concentrations in a sample collected the same date as the aforementioned sample from BH3S. The Phase Two Property is not in compliance with the site condition standards as of the certification date of May 17, 2021.

Historical environmental reports referenced the presence of a layer of buried refuse/waste at the Phase Two Property, however, the specific investigations (including associated borehole logs and laboratory analytical results) referenced were not available as part of this Phase Two ESA. Although there were no observations of refuse/waste or evidence of deleterious fill material identified in any of the boreholes drilled as part of the 2019 GHD Phase Two ESA or the 2019 Paterson Geotechnical Investigation, it is suspected that waste and/or poor environmental quality fill material may have been placed at the Property in locations not assessed as part of the aforementioned investigations.

There is suspected soil and/or groundwater contamination at the Phase Two Property. Additional investigation and confirmation of soil and groundwater quality in this area of the Property is recommended at the time of excavation for site redevelopment. It should be noted that the proposed redevelopment includes excavation for at least two to three levels of underground parking, which is expected to be sufficient for remediation of the aforementioned environmental contamination at the Phase Two Property.

An environmental remediation program, including the bulk removal and off-site disposal of soil and groundwater in excess of the site condition standards is required for the Phase Two Property. Further delineation and

confirmation of remediation sampling will be required prior to confirmation of compliance with the site condition standards and prior to the submission of a Record of Site Condition (RSC); however, these tasks can be completed at the time decommissioning and demolition of existing structures at the Phase Two Property in conjunction with the proposed redevelopment. The submission and acknowledgment of an RSC would be required prior to occupancy of the Phase Two Property for residential purposes following redevelopment, however, these tasks can be completed following decommissioning and demolition of existing structure at the Phase Two Property. The Phase Two ESA could be then updated at that time to show compliance with site condition standards.

Preparation of a soil management plan in accordance with O.Reg. 406/19 will be required as part of management of excess soil generated as part of construction activities. It is recommended that a remedial action plan be prepared to develop a strategy for remediation, including soil and groundwater management, during redevelopment.

Pedestrian Level Wind Study, prepared by Gradient Wind Engineering, dated January 22, 2021

This report describes a pedestrian level wind (PLW) study to satisfy Zoning By-law Amendment (ZBA) and Site Plan Control Application (SPA) requirements for a proposed mixed-use development located at 2829 Dumaurier Avenue in Ottawa, Ontario (hereinafter referred to as "subject site"). Our mandate within this study is to investigate pedestrian wind comfort and safety within and surrounding the subject site, and to identify any areas where wind conditions may interfere with certain pedestrian activities so that mitigation measures may be considered, as required.

The study involves simulation of wind speeds for selected wind directions in a three-dimensional (3D) computer model using the computational fluid dynamics (CFD) technique, combined with meteorological data integration, to assess pedestrian wind comfort and safety within and surrounding the subject site according to City of Ottawa wind comfort and safety criteria. The results and recommendations derived from these considerations are detailed in the main body of the report, illustrated in Figures 3A-5D, and summarized as follows:

- / All areas at grade will be suitable for their intended uses throughout the year. This includes all building access points, nearby sidewalks, walkways, surface parking areas, and landscaped areas.
- / Wind conditions over the north amenity terrace at Level 7, atop the podium, are predicted to be suitable for a mix of sitting and standing during the summer season, becoming suitable for a mix of standing and strolling during the spring and autumn seasons. During the winter season, conditions are predicted to be suitable for a mix of standing, strolling, and walking.
 - The noted wind comfort predictions correspond to an extensive mitigation strategy that has been developed by the design team, including the landscape architect. With the noted mitigation strategy, the areas predicted to be suitable for standing during the summer season are also predicted to be suitable for sitting at least 65% of the time, as illustrated in Figure 5B. Since a reasonable level of mitigation has been considered in the landscape plan on account of the suburban exposures for the prominent wind directions, the noted conditions are considered satisfactory for the intended uses of the areas.
- Within the context of typical weather patterns, which exclude anomalous localized storm events such as tornadoes and downbursts, no pedestrian areas surrounding the subject site at grade level or on the elevated amenity terraces were found to experience conditions that could be considered dangerous, as defined in Section 4.4.
- Regarding primary and secondary building access points, wind conditions predicted in this study are only applicable to pedestrian comfort and safety. As such, the results should not be construed to indicate wind loading on doors and associated hardware.

Roadway Traffic Noise Assessment, prepared by Gradient Wind Engineering, dated July 8, 2021

This report describes a detailed roadway traffic noise assessment performed in support of a Zoning By-Law Amendment (ZBA) and Site Plan Control (SPA) applications for the proposed mixed-use development located at 2829 Dumaurier Avenue in Ottawa, Ontario. The building is located to the west of Dumaurier Avenue at the northwest corner of Dumaurier Avenue and Ramsey Crescent intersection. The proposed development comprises a 30-storey rectangular tower rising on a 6-storey podium. The podium forms an L-shape going clockwise from south to east. This study is based on drawings prepared by RLA Architecture, dated November 30, 2020.

The major source of roadway traffic noise is Highway 417 which is located to the south of the study site. Future LRT was not included in the assessment as it is located more than 100 metres away from the study site. The site is surrounded by low to high-rise residential and commercial buildings from south to north clockwise. Dumaurier Park is located to the west of the study site just across Dumaurier Avenue. Figure 1 illustrates the site plan with the surrounding context.

The assessment is based on (i) theoretical noise prediction methods that conform to the Ministry of the Environment, Conservation and Parks (MECP) and City of Ottawa requirements; (ii) noise level criteria as specified by the City of Ottawa's Environmental Noise Control Guidelines (ENCG); (iii) future vehicular traffic volumes based on the City of Ottawa's Official Plan roadway classifications; and (iv) drawings prepared by RLA Architecture, dated November 30, 2020.

The results of the current analysis indicate that noise levels will range between 53 and 70 dBA at Plane of Window (POW) receptors during the daytime period (07:00-23:00) and 45 and 63 dBA during the nighttime period (23:00-07:00). The highest noise levels occur along the south façade, which is most exposed to Highway 417.

The results of the calculations indicate that the south and east facades of the building will require upgraded building components. Building components compliant with the Ontario Building Code (OBC 2012) will be sufficient for north and west facades.

The results of the calculations also indicate that the building will require central air conditioning, or a similar ventilation system for the residential units, which will allow occupants to keep windows closed and maintain a comfortable working environment. In addition to ventilation requirements, warning clauses will also be required in all Lease, Purchase and Sale Agreements, as summarized in Section 6.

Noise levels at the podium rooftop receptors (Receptors 5 and 6) are expected to exceed the 55 dBA criterion during the daytime period. If these areas are to be used as outdoor living areas, noise control measures are required to reduce the Leq to 55 dBA, where technically and administratively feasible. Further analysis investigated the noise mitigating impact of raising the north and west perimeter guards from a standard height of 1.1 m (base case) to 3.0 m above the walking surface. Results of the investigation proved that noise levels can only be reduced to 59 and 60 dBA at Receptors 5 and 6, respectively. This marginal improvement would not justify the cost of installing such a high rail guard/noise barrier and reducing noise levels to 55 dBA would require excessive barrier heights that would not be feasible.

With regards to stationary noise impacts, a stationary noise study is required to be performed once mechanical plans for the proposed building become available. This study should assess the stationary noise impacts from rooftop mechanical units serving the proposed building on surrounding noise-sensitive areas. This study would include recommendations for any noise control measures that may be necessary to ensure noise levels fall below ENCG limits. As the proposed building is much taller than the surroundings, locating larger pieces of outdoor mechanical equipment, such as cooling towers, and emergency generators on the roof will help attenuate noise emissions from these and similar pieces of equipment.

Servicing and Stormwater Management Report, prepared by Stantec, dated February 18, 2021

Stantec Consulting Ltd. has been commissioned by Brigil to prepare a site servicing and stormwater management (SWM) report in support of rezoning and Site Plan Control approval applications for the proposed development of the subject property.

This Site Servicing and Stormwater Management Brief has been prepared to present a servicing scheme that is free of conflicts and presents the most suitable servicing approach that complies with the relevant City design guidelines. The use of the existing infrastructure as obtained from available as-built drawings has been determined in consultation with RLA Architecture, Brigil Homes, City of Ottawa staff, and the adjoining property owners. Infrastructure requirements for water supply, sanitary sewer, and storm sewer services are presented in this report.

Criteria and constraints provided by the City of Ottawa have been used as a basis for the servicing design of the proposed development. Specific elements and potential development constraints to be addressed are as follows:

/ Potable Water Servicing

- Estimate water demands to characterize the feed for the proposed development which will be serviced by an existing 305mm diameter ductile iron watermain fronting the site along Dumaurier Avenue.
- Watermain servicing for the development is to be able to provide average day and maximum day and peak hour demands (i.e., non-emergency conditions) at pressures within the allowable range of 40 to 80 psi (276 to 552 kPa).
- Under fire flow (emergency) conditions with maximum day demands, the water distribution system is to maintain a minimum pressure greater than 20 psi (140 kPa).
- Relocation of the existing 150 mm private watermain running through the north end of the site, servicing 1085 Grenon Ave as well as Ruth Wildgen Park (1099 Grenon Ave) is required as part of the site development.
- / Prepare a grading plan in accordance with the proposed site plan and existing grades.
- Stormwater Management and Servicing o Define major and minor conveyance systems in conjunction with the proposed grading plan.
 - Post development peak 100-year flows controlled to the predevelopment peak 5-year release rate
 with a runoff coefficient of C=0.5 and a time of concentration of 10 minutes as estimated based on
 the existing storm sewer infrastructure servicing the existing site.
 - Excess stormwater to be detained on-site to meet the 5-year pre-development target release rate.
 - Coordinate with the Mechanical Engineer to convey drainage from roof tops, parking areas, amenity areas, private terrace areas, and the canopy to the internal stormwater cistern and discharge to the proposed storm service lateral at the allowable release rate. Connect to the existing 375mm diameter concrete storm sewer within the Dumaurier Ave right-of-way.
 - Provide an oil/grit separator unit to intercept and treat storm run-off from the site to meet RVCA water quality control requirements (80% TSS removal).
 - Define and size the proposed storm sewer system that will be connected to the existing 375 mm diameter storm sewer on Dumaurier Avenue.

/ Wastewater Servicing

- Estimate wastewater flows generated by the development and size sanitary sewers which will outlet to the existing 250mm diameter sanitary sewer located on Dumaurier Avenue.
- Design the sanitary sewer extension within the Dumaurier Avenue right-of-way.

The accompanying Drawing SSP-1 included in Appendix F illustrates the proposed internal servicing scheme for the site.

Conclusions

Potable Water Servicing

The proposed 30-storey residential high-rise building will be serviced by the existing 300mm diameter watermain on Dumaurier Avenue. To create a suitable water service connection for the property a section of the existing 300mm dia. watermain was modified to include: replacement of about 19m pipe length with new deflected 19m 300mm dia. pipe length, new valves, tees, bends and two 150mm watermain stubs to provide potable water and fire flow water supply to the development. Water demand calculation was based on a demand rate of 350 L/cap/day for residential units and 28,000 L/ha/day for commercial and amenity space.

The building contains 330 residential units with and estimated population of 557 persons. The commercial and amenity areas account for a total area of 1430m². The calculated average day flow, maximum day flow and peak hour demand are 2.30L/s, 5.72L/s and 12.56L/s. The fire flow requirement was calculated in accordance with Fire Underwriters Survey (FUS) and determined to be approximately 7,000 L/min (116.7 L/s), it is anticipated that the building will be sprinklered, with final sprinkler design to conform to the NFPA 13 standard.

Based on the boundary conditions available, the 300 mm diameter watermain on Dumaurier Avenue provides adequate fire flow capacity as per the requirements of the Fire Underwriters Survey while respecting City of Ottawa design guidelines. Two 150 mm diameter service laterals connected to the 300 mm diameter watermain on Dumaurier Avenue will be capable of providing the anticipated water demands to the lower storeys. A booster pump, to be designed by the building's mechanical engineer, will be required to maintain minimum required pressures for the upper storeys.

The existing 150 mm private watermain running through the north end of the site, currently servicing Ottawa Boys & Girls club (1085 Grenon Avenue) as well as Ruth Wildgen Park (1099 Grenon Avenue) will be relocated outside the boundary of the site to allow for the development of structures and services within the subject site and to ensure an adequate level of service is provided to the adjoining properties.

Wastewater Servicing

The proposed 30-storey residential high-rise building is to contain 330 units in total consisting of 194 one-bedroom units, 136 two-bedroom units, 440m² commercial area and 990m² communal amenity areas with a total estimated population of 557 people using the City of Ottawa's recommended population densities.

The calculated peak flow for the site is 6.28 L/s, this site will be serviced by a sanitary servicing for the proposed development will be provided through a single proposed 200 mm diameter service lateral connecting to a new 250mm Sanitary sewer flowing into an extension of the existing 250 mm diameter concrete sanitary sewer flowing southwards on Dumaurier Avenue. An extension of the Sanitary sewer network northwards towards the site was required to conveniently collect wastewater from the site. Consultation with the MECP Ottawa District Office confirmed that this sanitary sewer extension within the Dumaurier Avenue right-of-way is eligible for the standard Transfer of Review program with the City of Ottawa.

The proposed sanitary service lateral is sufficiently sized to provide gravity drainage for the site. The floor drains in the underground parking will be connected to the building plumbing system and discharged to the sanitary service lateral through a sump pump. A backflow preventer will be required for the proposed building in accordance with the Ottawa sewer design guide and will be coordinated with the building's mechanical engineer.

The existing 225mm sanitary sewer running through the north end of the site, currently servicing Ottawa Boys & Girls club (1085 Grenon Ave) as well as Ruth Wildgen Park (1099 Grenon Ave) will be relocated outside site to allow for the development of new building structures and services within the subject and to ensure an adequate level of service is provided to the adjoining properties.

Stormwater Management and Servicing

The proposed 0.42 ha re-development area will be serviced by the existing 375mm diameter concrete storm sewer running north to south on Dumaurier Avenue. A stormwater cistern will attenuate peak flows from the building's roof, outdoor amenity areas, surface parking lot, and landscaped areas west of the building. In order

to meet the site target release rate for stormwater of 60.8 L/s, an on-site storm detention facility will need to be provided. The proposed stormwater cistern will be serviced by the internal plumbing of the building.

The use of a 110 m³ stormwater cistern within the underground parking level is proposed to achieve this end. The stormwater cistern will be pumped at a controlled rate of no more than 14.40 L/s. The stormwater cistern's controlled release rate will be set by a pump to be designed by a mechanical engineer.

A proposed oil/grit separator unit will treat storm runoff from the site to achieve 80% TSS removal. A Stormceptor 300 or approved equivalent is recommended for this purpose.

Site Grading and Drainage

Grading for the site is designed as per City of Ottawa requirements and provides for outlet of emergency overland flow under extreme flood conditions. Erosion and sediment control measures will be implemented during construction to reduce the impact on existing facilities.

A concrete retaining wall is proposed on the north end of the site to allow for a grade change of about 1.50m between the adjoining site (Boys & Girls Club of Ottawa) and the proposed development. The structural design of the retaining wall will be provided in a subsequent submission

Utilities

Hydro Ottawa, Bell, Rogers, and Enbridge all have existing utility plants in the area, which will be used to service the site. The exact size, location, and routing of utilities will be finalized after design circulation.

Existing overhead wires and utility plants may need to be moved/reconfigured to allow sufficient clearance to the proposed building. The relocation of existing utilities will be coordinated with the individual utility providers as part of the site plan approval process by the civil engineer.

Approvals/Permits

A Ministry of the Environment, Conservation and Parks (MECP) Environmental Compliance Approval (ECA) will be required for the extension of the sanitary sewer on Dumaurier Avenue needed to service the proposed development. Consultation with the Ottawa District Office of the MECP confirmed that the extension of this sanitary sewer is eligible for the Transfer of Review Program for standard works with the City of Ottawa. An ECA is not expected to be required for the remainder of the subject site as the site is under singular, private ownership, is not within industrial lands, and does not discharge to a combined sewer.

A Permit to Take Water (PTTW) may be required if the dewatering during the construction of the underground parking level is expected to exceed 400,000 L/day. No other approval requirements from other regulatory agencies are anticipated. For dewatering activities between 50,000 and 400,000 L/day, registration on the Environmental Activity and Sector Registry (EASR) will be required. If blasting is used to remove the bedrock as part of the excavation for the building foundation, prior approval is required from the owners/operators of any water storage reservoir, pumping station, and water works transformer station within 200 m of the site.

Conclusion

It is our professional opinion that the proposed Major Zoning By-law Amendment and Site Plan Control applications represent good planning and are in the public interest, due to the following:

- The proposed development is consistent with the Provincial Policy Statement (2020). More specifically, the proposed development consists of a compact, mixed-use development in a built-up area of the city in proximity to rapid transit.
- / The proposed high-rise, mixed-use development conforms with the General Urban Area policies in Section 3.6.1 of the City of Ottawa Official Plan. More specifically, the proposed uses are permitted, and the proposed building height is appropriate given the subject property abuts a property with an existing high-rise building.
- The proposed development conforms with the City's urban design and compatibility criteria established in Sections 2.5.1 and 4.11 of the Official Plan.
- / The proposed development meets the intent and purpose of some of the Preliminary Policy Directions for the new Official Plan, in particular relating to growth management, housing, and transit.
- The proposed development meets the intent and purpose of several of the City's Urban Design Guidelines for High-rise Buildings.
- The proposed development meets the intent and purpose of several of the City's Transit-Oriented Development Guidelines (2007).
- The proposed development complies with most of the provisions of the City of Ottawa Zoning By-law, and the requested amendments are reasonable and maintain the intent and purpose of the Zoning By-law. The proposed development also meets the high-rise zoning provisions that have been approved by Council but are currently under appeal.
- The proposed development and requested amendments are supported by a range of technical studies.

Section 37 benefits will be determined through discussion with the Ward Councillor and City staff.

Sincerely,

Nico Church, MCIP RPP

Planner

Kersten Nitsche, MCIP RPP

Senior Planner