

143 Columbia Street West, Waterloo

PLANNING JUSTIFICATION BRIEF

APPLICANT: 143 COLUMBIA INC.

DECEMBER 2022



FIGURE 1: PROPOSED OUTDOOR AMENITY AREA

Table of Contents

1. INTRODUCTION	2
2. PROPOSAL	5
2.1 AREA AND SUBJECT SITE	5
2.2 SUMMARY OF PROPOSAL	7
2.3 DESCRIPTION OF PROPOSED REFINEMENTS	9
2.4 REQUIRED APPROVALS	11
3. PLANNING FRAMEWORK	13
3.1 REGION OF WATERLOO OFFICIAL PLAN	14
3.2 CITY OF WATERLOO OFFICIAL PLAN	19
3.3 NORTHDALÉ URBAN DESIGN GUIDELINES	23
3.4 CITY OF WATERLOO ZONING BY-LAW 2018-080	25
4. PLANNING ANALYSIS	28
4.1 MINIMUM PODIUM HEIGHT	29
4.2 MINIMUM STEPBACK ABOVE PODIUM	32
4.3 MINIMUM TOWER SEPARATION DISTANCE	34
4.4 BICYCLE PARKING DIMENSIONS	37
4.5 GEOTHERMAL WELLS	37
4.6 REMOVAL OF HOLDING SYMBOL	38
5. SUPPLEMENTARY TECHNICAL STUDIES	41
5.1 TRANSPORTATION IMPACT STUDY	41
5.2 NOISE STUDY	42
6. SUMMARY AND CONCLUSIONS	44

1. INTRODUCTION

1. INTRODUCTION

This Planning Justification Brief has been prepared by The Planning Partnership ("TPP") on behalf of 143 Columbia Inc. (the "Applicant"), in support of the Minor Zoning By-law Amendment ("Minor ZBA") application for a mixed-use development which consists of three 25-storey residential towers with ground floor commercial space and a total of 591 residential units ("the Proposed Development"). The Proposed Development will be located on the property known municipally as 143 Columbia Street West, in the City of Waterloo ("the Subject Site").

A Site Plan Approval application for the Proposed Development was previously submitted to the City on November 3, 2021 (SP-21-23). The application included a Planning and Urban Design Study, prepared by TPP.

The Study and 2021 Site Plan Approval Application as a whole demonstrated alignment of the Proposed Development with the City's planning policy and design framework on the basis of its pedestrian-oriented focus, abundance of indoor and outdoor amenity spaces, mixed-use nature, and thoughtfully conceived and articulated high-density built form and design.

The Study also evaluated Regional and City planning policies that pertain to efficient growth and intensification. In this regard, the Proposed Development represents intensification in an area that is planned and anticipated for high density redevelopment, given the proximity to public transit services, the University of Waterloo, and neighbouring commercial and employment uses.

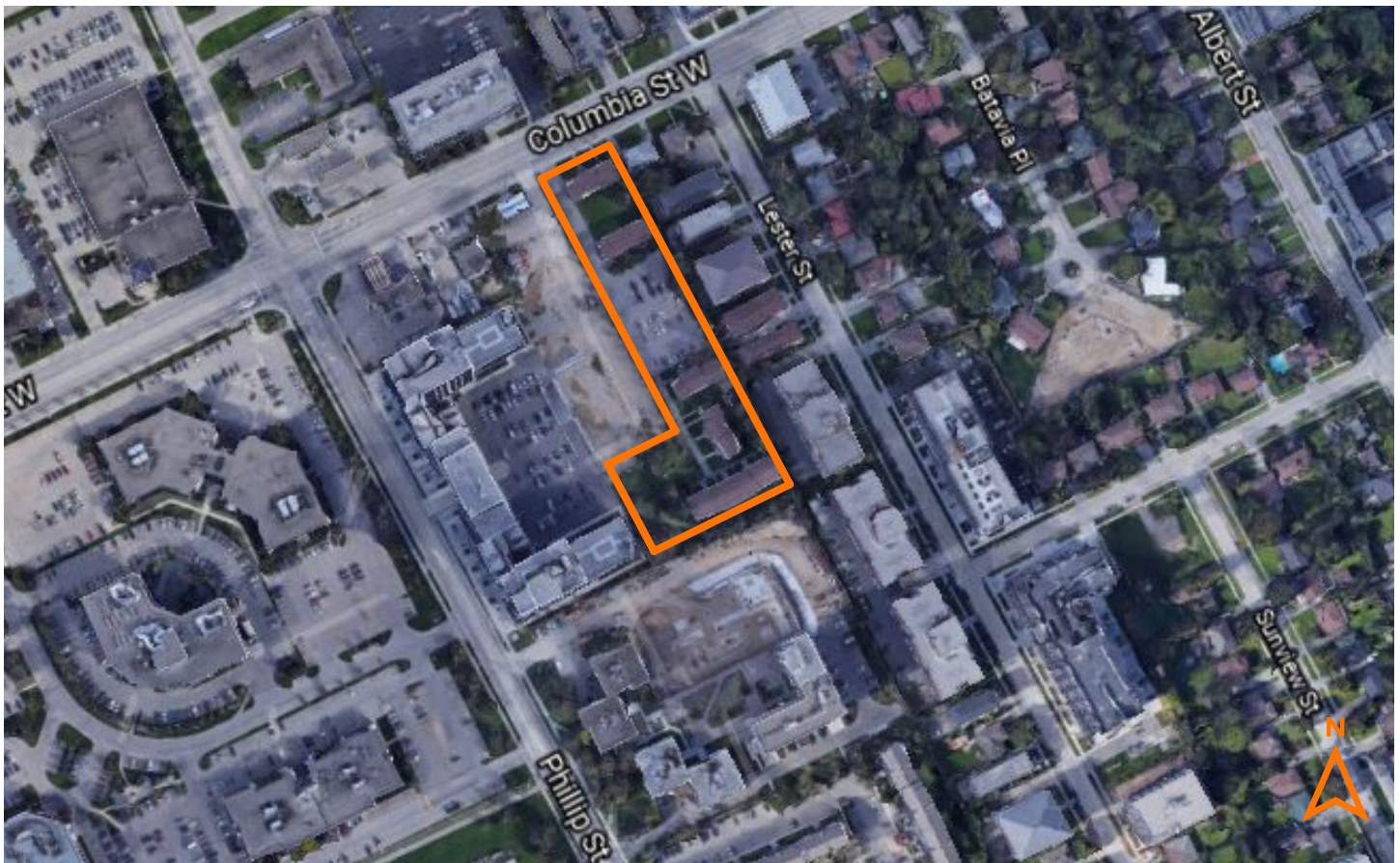


FIGURE 2: SUBJECT SITE - 143 COLUMBIA STREET WEST

Considering the Site Plan Approval application as a whole, the Study concluded that:

“Overall, the proposed development represents good planning and reflects good and thoughtful urban design that appropriately responds to the unique context of the Subject Site and surrounding area. It represents an appropriate and desirable evolution for the Site and a positive change to support the evolution of the Northdale neighbourhood.”

Following extensive consultation with City staff on the first Site Plan Approval application submission and their preferred application process for the Proposed Development, City staff advised that a Minor ZBA application would be required and should be submitted, in lieu of separate applications for Minor Variance and to remove the holding symbol. This would allow proposed Zoning By-law changes, as well as the lifting of the Holding Symbol to be addressed together in a comprehensive process. It was also determined that the Site Plan Approval application could continue to be processed in parallel with the Minor ZBA application, in collaboration with the City.

Building on the earlier Planning and Urban Design Study, this Brief has been prepared in order to specifically evaluate the application for a Minor ZBA. As the Applicant has continued to work collaboratively with Planning Staff, this Brief is intended to summarize the refinements that have been made to the Proposed Development since the Site Plan Approval application was submitted, and outline and analyze the zoning changes that are proposed through the Minor ZBA application in the context of good planning and urban design.

This Brief forms part of a larger, comprehensive Minor ZBA Application package which includes the following submission materials:

- Architectural Drawing Set (updated)
- Noise Study
- Transportation Impact Study
- Draft Zoning By-law Amendment
- Minor Zoning By-law Amendment Application Form
- Zoning Matrix
- Block Plan (updated)

Additional submission materials were included in the original Site Plan Approval application submission and will be updated through subsequent application re-submissions, including detailed landscape and civil engineering plans.

Based on a comprehensive review of all applicable planning policies and urban design guidelines, and a detailed evaluation of the Proposed Development against these policies and guidelines, this Study concludes that the Proposed Development reflects an appropriate and desirable urban design response to the unique conditions of the Subject Site and surrounding neighbourhood, and will intensify the Subject Site in conformity with the City's Official Plan and the even further enhanced focus on intensification required by adopted Regional Official Plan Amendment (“ROPA”) 6, thereby supporting a more vibrant and active community and assisting the City and Region in achieving their growth and intensification requirements.

2. PROPOSAL

2. PROPOSAL

2.1 AREA AND SUBJECT SITE

The Subject Site is municipally known as 143 Columbia Street West and is located on the south side of Columbia between Lester and Phillip Streets. Columbia Street West is a City Arterial road that provides a key east-west link in the City of Waterloo transportation network and is served by multiple public transit bus routes, including an iXpress route and connections to the ION light rail system. The Subject Site is located within the Northdale Neighbourhood, which is bounded by King Street North, University Avenue West, Phillip Street and Columbia Street West.

The Subject Site is surrounded by a diverse mix of commercial, employment and institutional uses, newer mid-rise and high-rise residential developments, and a few remaining remnants of the former low-rise residential neighbourhoods. Uses and amenities immediately surrounding the Subject Site include:

North: Across from the Subject Site on the north side of Columbia Street West lands that

are currently designated Medium-High Density Employment by the Official Plan. Existing uses include office and commercial uses, a recent high-density mixed-use development known as The Hub, and a gas station.

East: On the west side of Lester Street, directly east of the Subject Site, lands are designated Medium-Density by the Official Plan. Existing uses primarily include off-campus student housing in the form of low-rise apartment buildings.

South: Immediately south of the Site, lands are designated High Density by the Official Plan. Existing uses include rental housing in the form of mid-rise apartment buildings.

West: Within the same block immediately west of the Site are lands designated High Density by the Official Plan. This includes both phases of the ICON mixed-use development, which includes four residential towers with heights between 20 and 25-storeys. Further to the west of Phillip Street is the main University of Waterloo Campus.

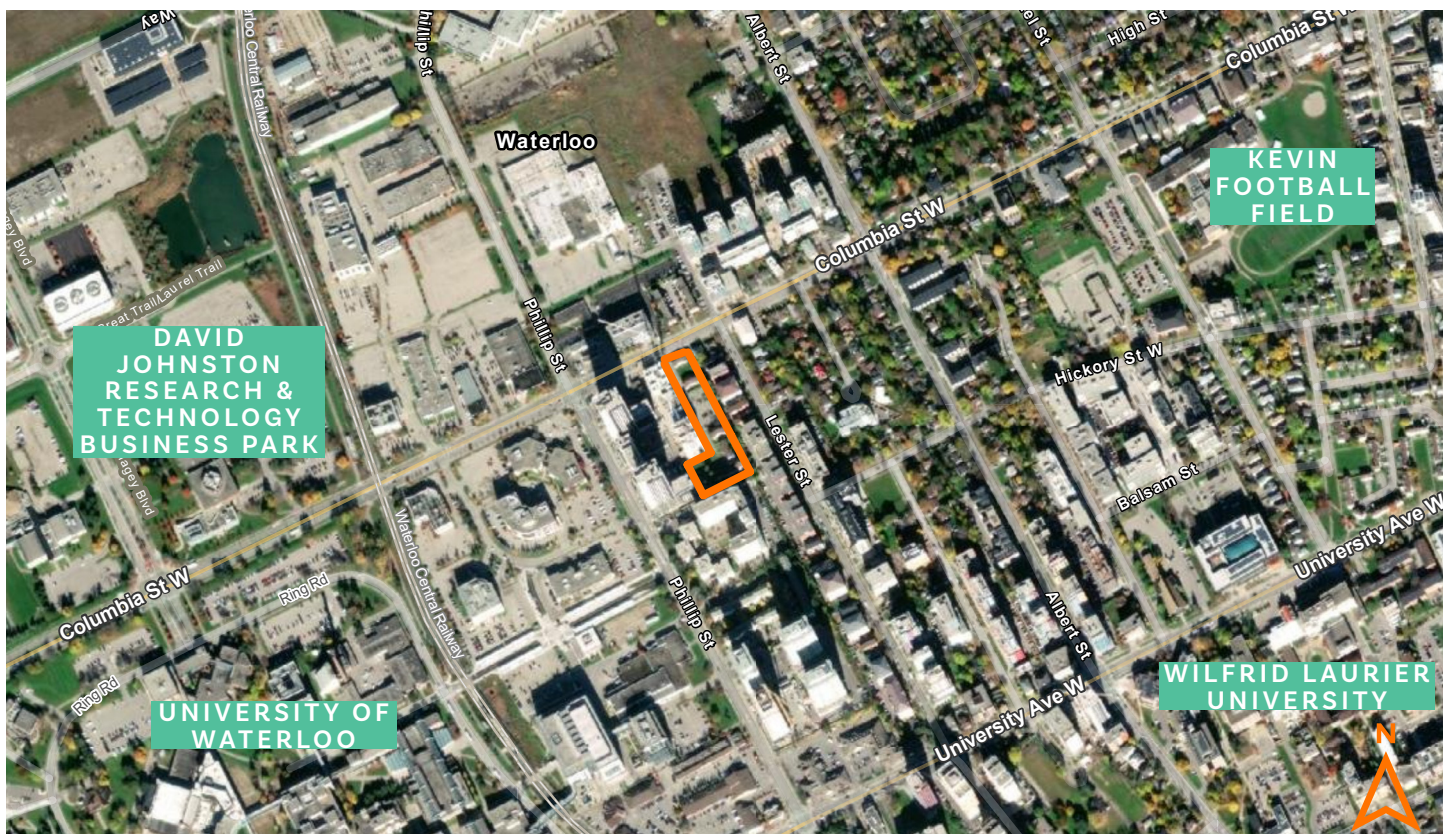


FIGURE 3: NEIGHBOURHOOD CONTEXT

As shown on Figure 2, the Subject Site is a large, deep backwards 'L' shaped parcel and has a total area of 8,000 square metres, 35 metres of frontage on the south side of Columbia Street West and a depth of 124 metres.

The Subject Site is currently occupied by 32 townhouse dwelling units situated in five two- and three-storey older townhouse blocks, with surface parking located in the middle and one vehicular access from Columbia Street. The existing Site is sparsely vegetated and the streetscape is fairly uninviting and suburban in context. The Subject Site is served with water, sanitary and stormwater services coming from Columbia Street.

The Subject Site is ideally located with transit access near the University of Waterloo. The redevelopment of the Subject Site will contribute to the ongoing and planned evolution of the Northdale Neighbourhood into a dynamic, high-density, and mixed-use community in alignment with local and regional policy frameworks. Overall, the Subject Site represents an important redevelopment opportunity for mixed-use intensification, but its unique context and parcel shape warrants a site-specific design response.



FIGURE 4: COLUMBIA STREET WEST - LOOKING WEST AT SUBJECT SITE

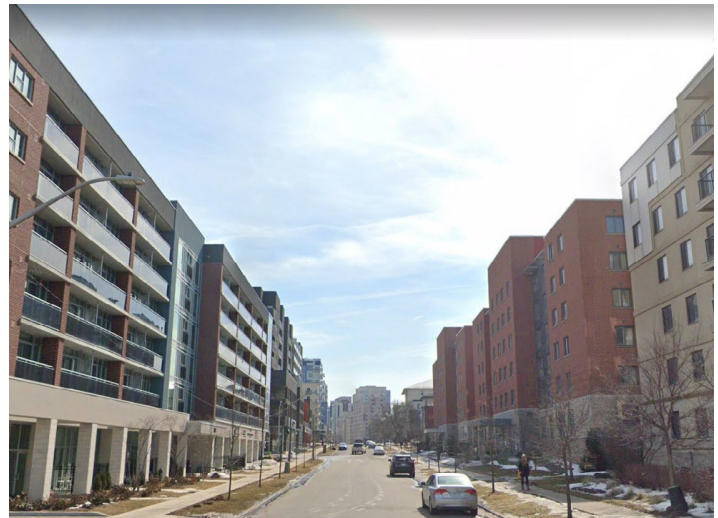


FIGURE 5: LESTER STREET LOOKING SOUTH

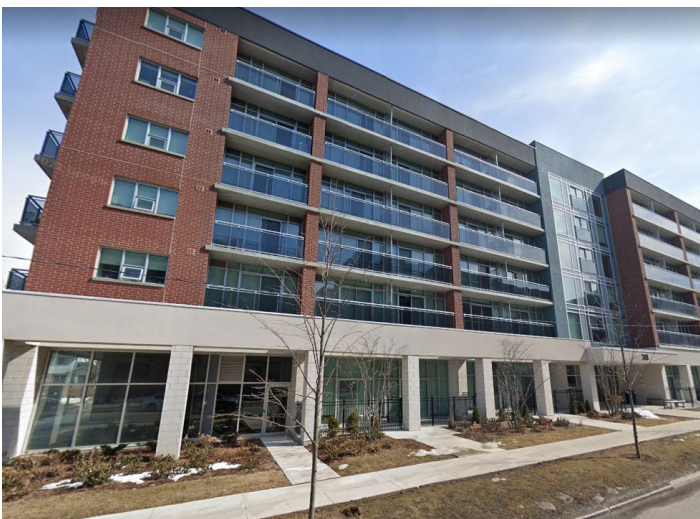


FIGURE 7: SAGE 9 CONDOS - 116-118 HICKORY STREET & 308-314 LESTER STREET

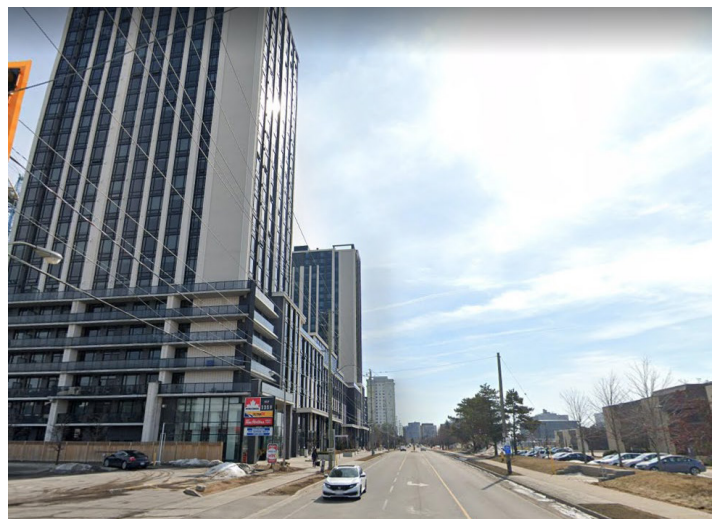


FIGURE 6: ICON 2230 DEVELOPMENT - PHILLIP STREET LOOKING SOUTH

2.2 SUMMARY OF PROPOSAL

The Subject Site is proposed to be redeveloped as a pedestrian-oriented, mixed-use, high-density community, replacing the existing dated and underutilized townhouse blocks and surface parking areas. The Proposed Development will include three slender residential and mixed-use towers, each at the height of 25-storeys, oriented north to south on the Site.

In total, 591 dwelling units (591 bedrooms) are proposed for the Subject Site, with 162 parking spaces provided at the surface and in sheltered and below-grade parking (one level of underground parking). The Subject Site and parking areas are accessed via one driveway access to Columbia Street West, with vehicular traffic directed to the eastern part of the Site, purposefully away from the pedestrian zone to the west. Additionally, 172 bicycle parking spaces are proposed within secure bicycle parking rooms.

Ground floor commercial space is proposed in Building A, fronting Columbia Street West. The commercial space occupies approximately two thirds of the frontage of Building A, providing 120 square metres of active and engaging space along Columbia Street West. The remaining third of the frontage is reserved for building service or office functions, also providing for active uses. The interior commercial space is supplemented by a large patio to the west, which will further enhance the desirability



FIGURE 9: PEDESTRIAN PROMENADE AT COLUMBIA STREET WEST

and viability of the commercial space and the streetscape as a whole, and act as a gateway and draw into the larger pedestrian zone.

Establishing a safe and highly inviting pedestrian environment is a top priority for the Proposed Development. This will be achieved through the separation of vehicular (east) and pedestrian (west) traffic, and by providing an exciting and engaging pedestrian promenade. The promenade provides direct access between Columbia Street and all three buildings, pedestrian access to neighbouring properties, and an abundance of outdoor amenity areas, such as a basketball court and the end of the mews. These amenities and enhanced pedestrian connections will provide convenient opportunities for active transportation and will likewise encourage pedestrian activity and engagement.

The three towers present a well-articulated and desirable podium/tower typology and reflect a contemporary and sleek design approach with the use of glazing, metal panels and spandrel, reflective of much of the recent development in the area. This design approach fits the context of the evolving neighbourhood with many new buildings using higher proportions of glazing, other contemporary materials and vibrant colour patterns to distinguish from existing building types.



FIGURE 8: PEDESTRIAN PROMENADE AT BUILDING B

Responding to the unique deep L-shaped lot configuration of the Subject Site, Towers A and B are oriented in a north/ south direction towards Columbia Avenue East, while Tower C is oriented in the opposite east/west direction.

This careful arrangement and orientation of buildings and towers optimizes the space available on the Site and provides for generous separations of between about 29 and 32 metres between each building, ensuring that high density development can be successfully accommodated, as planned by the City's Official Plan and Zoning By-law, in a manner that successfully responds to the Site's unique context while maximizing zoning compliance to the greatest extent possible.

Also responding to the Site's context, the three towers all feature more compact than normal floorplates of approximately 600 square metres, which accentuate their sleek design, minimize shadowing, maximize sky view and allow for the tower separation to be expanded in all directions.

Towers A and B will consist of a 6-storey podium with a 19-storey tower above. The towers are set well back from the front (north) façade of

the podium at approximately 8.5 metres, which strongly articulates the podium/tower typology noted above. In addition, the tower setbacks have been collectively maximized to the east and west by situating the towers within the centre of the Site and providing for narrower and more site responsive tower floorplates as noted above. This approach results in tower setbacks of about 8.5 metres to the west and east for each tower.

Tower C likewise features a slender floorplate, but contrastingly provides reduced podium height of two storeys, providing for a scaled down built form towards the end of the pedestrian promenade.

Collectively, the configuration and orientation of the three towers on the Site has been developed to optimize the size and shape of the Site, providing for the best living conditions on site, forming an appropriate and compatible relationship to adjacent properties and buildings, and achieving greater compliance with the wide range of zoning performance standards and urban design guidelines.



FIGURE 10: PEDESTRIAN PROMENADE AT BUILDING C

2.3 DESCRIPTION OF PROPOSED REFINEMENTS

As noted above, after submission of the Site Plan Approval application, the applicant continued to be engaged in significant consultation with City staff regarding site and building design of the Proposed Development, identified zoning deficiencies and the specific application process and requirements in general. Detailed comments on the initial submission were also provided by the City and other commenting agencies.

On August 24, 2022, a Pre-Submission Consultation Meeting was held with City Staff to review refinements that had been made to the Proposed Development and confirm other materials required as part of a complete application for the request to move to the Minor ZBA process.

Based on consideration of the City and agency comments provided through the Site Plan

Approval application, and other meetings and discussions with City Staff, a number of design refinements have been discussed, considered and thoughtfully incorporated into the Proposed Development in an attempt to address comments raised by City Staff, reduce the number of zoning deficiencies and maximize zoning compliance, while still fulfilling the original vision and intent for the Proposed Development. More specifically, the proposed refinements related to zoning compliance include:

- Section 3.M.2B – Mezzanine Regulations: Originally proposed mezzanines have been removed from all three buildings to comply with Zoning By-law.
- Table 7T – Minimum Number of First Storey Entrances to the Building: An additional door has been added to the street facing building façade of Building C (located at the rear of the Subject Site), which will achieve compliance with the Zoning provision.

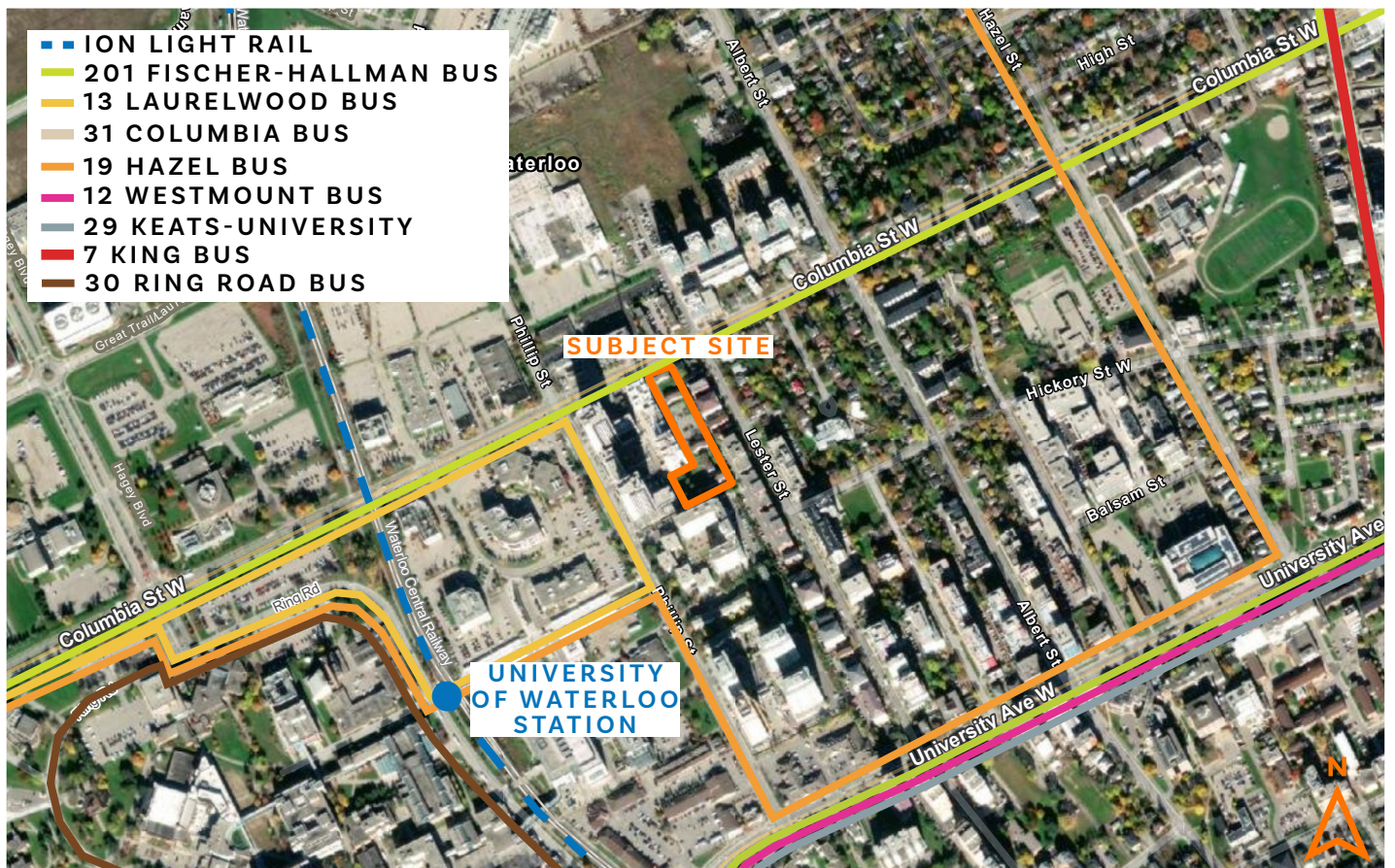


FIGURE 11: TRANSIT MAP

- Table 7T – Maximum Building Height: The originally proposed mezzanines have been removed, which confirms compliance with the maximum number of storeys permitted by the Official Plan.
- Table 7T – Minimum Height of First Storey: The grading of the lower parking level in Tower C has been adjusted such that it is now considered as a basement under the Zoning By-law and not a storey. As such, the first storey height now complies with the minimum height requirement.

More detailed descriptions of the refinements made to the Proposed Development, as well as the remaining zoning deficiencies to be addressed through this Minor ZBA application, are found in Appendix A.



FIGURE 12: ICON 330 - 145 COLUMBIA STREET WEST



FIGURE 13: PROPOSED CONTEXT - LOOKING SOUTH

2.4 REQUIRED APPROVALS

The Subject Site is zoned '(Holding) Residential Northdale Twenty Five' ("(H)RN-25") under Zoning By-law 2018-050. The Proposed Development complies with the majority of the applicable zoning provisions, with just a few exceptions as follows:

- Table 7T – Minimum Podium Height – Tower C Only
- Table 7T – Minimum Tower Separation Distance to Interior Lot Line
- Table 7T – Minimum Building Stepback Above Podium – Side Façades Only
- Table 6F – Bicycle Parking Space Dimensions (variance to introduce Stacked Bicycle Parking)
- Provision 3.W.1 – Restriction on Geothermal Wells

The Zoning By-law is reviewed in more detail in Section 4 of this Brief, and a detailed analysis of all applicable zoning provisions is provided within the Zoning Matrix, found in Appendix A of this Brief.

Given that the Proposed Development complies with nearly all applicable zoning provisions, and that the extent of the identified zoning deficiencies are generally minor, City staff have confirmed that the application will be classified as a Minor ZBA application and that they support the proposal proceeding in this way through the approval process.

TABLE 1: KEY STATISTICS

Details	Total
Site Area	7,882.611m ² (8,009 m ² including road widening)
Ground Floor Area	3,203 m ² (40% lot coverage)
Amenity Area	Promenade: 1,412.64m ² Indoor Amenity: 68.7m ² Balconies: 1,796.91m ² TOTAL: 3,278.25m ²
Non-Res GFA	119 m ²
Landscaped Open Space	2,970.85 m ² (37.7% lot coverage)
Height	Building A: 79m (25 storeys) Building B: 79m (25 storeys) Building C: 78.3m (25 storeys)
Number of Units	591
Parking	Bicycle: 172 spaces Loading: 1 space Vehicle: 162

3. PLANNING FRAMEWORK

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The Subject Site is directed and influenced by a local and regional planning framework that is highly focused on intensification, efficient growth, transit-oriented development and multi-modal transportation connectivity. At both levels, the planning jurisdictions have established ambitious minimum intensification and density targets and look toward mixed-use development, vertical growth, and public realm design as key pillars to achieve their focus and desired growth levels and for evaluating future development proposals.

Overall, the Proposed Development is representative of the type, scale and form of development that is planned and desired for the Subject Site and in other strategic growth areas throughout the City and Region. In particular, the Proposed Development's built form, including building heights and density that are permitted by the Official Plan and Zoning By-law, as well as the proposed pedestrian focus, efficient and well-organized

site layout, and connectivity promote these key pillars and appeal to the broader intent of the applicable planning framework.

This section concentrates on the planning framework as it specifically relates to the proposed Minor ZBA application. Given the decision to proceed with a Minor Zoning By-law Amendment and the earlier work, this Brief is intended to function as an addendum to the Planning and Urban Design Study that was submitted to the City on November 3, 2021 as part of the Site Plan Approval application.

The forgoing section evaluates the applicable policies that relate specifically to the Minor ZBA application and describes how the proposed ZBA is necessary in order to respond to the unique attributes of the Subject Site and Proposed Development, which exemplify the planning ideals set forth in local and regional policy frameworks.

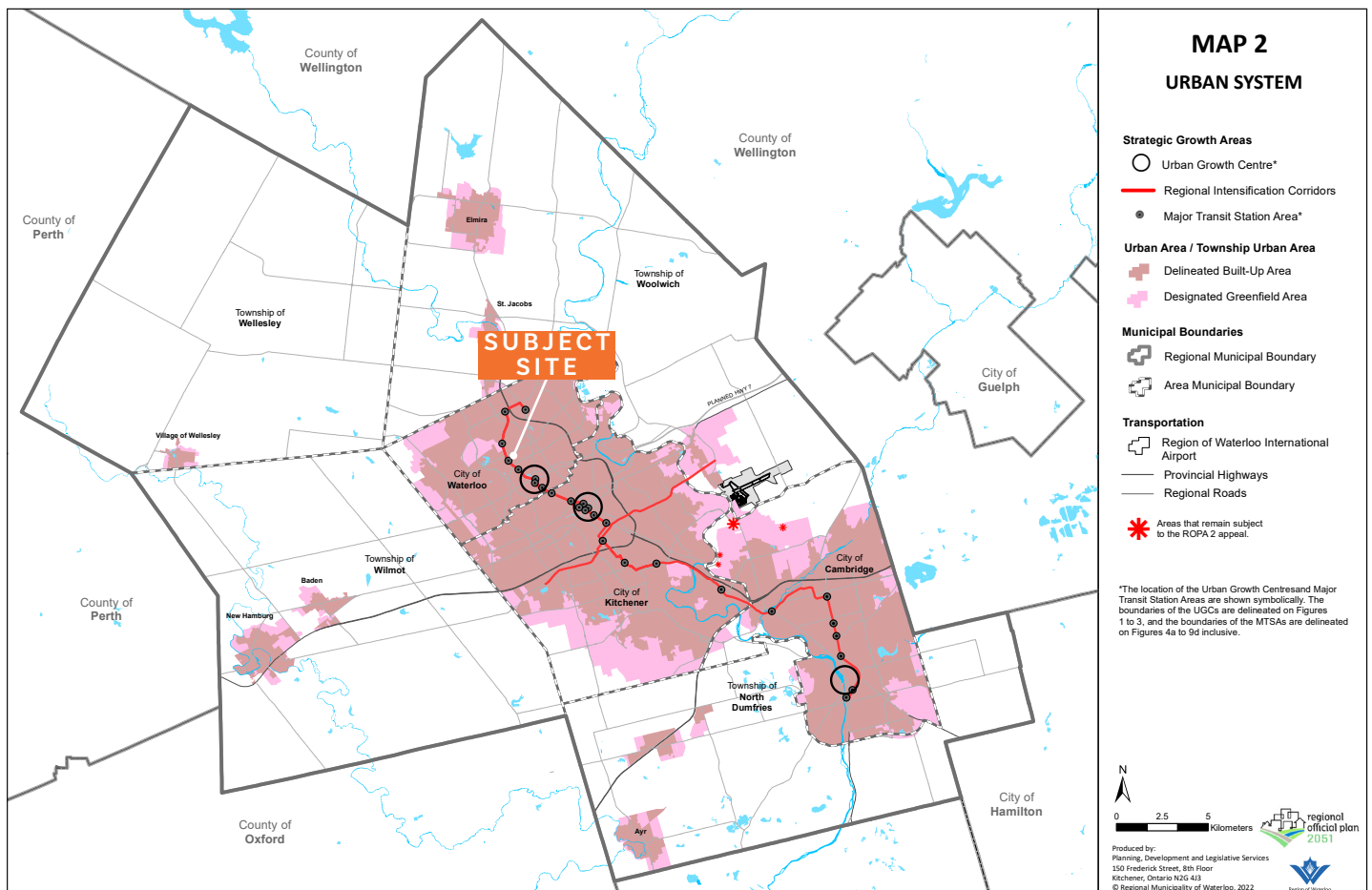


FIGURE 14: ROPA 6 MAP 2 - URBAN SYSTEM

3.1 REGION OF WATERLOO OFFICIAL PLAN

Under the existing Region of Waterloo Official Plan, the Subject Site is located within the Region's Urban Area, and is designated as 'Built-Up Area' as shown on Map 3a. Existing lands within the Urban Area are intended to accommodate nearly all of the Region's population and employment growth for the existing Official Plan's planning period to 2031. More specifically, lands within the Built-Up Area will accommodate a minimum of 45% of all new residential development through intensification.

The Region of Waterloo Official Plan is currently being updated in order to implement changes made to the Provincial Growth Plan for the Greater Golden Horseshoe, which placed an increased focus on intensification within strategic growth areas and extended the planning horizon to 2051, with updated growth forecasts for all single and upper-tier municipalities. Regional Official Plan Amendment No. 6 ("ROPA 6") was adopted by Regional Council on August 18, 2022 with the

purpose of establishing an updated planning framework to accommodate the Region's forecast population and employment growth to 2051, in conformity with the Provincial Growth Plan. ROPA 6 is currently being reviewed by the Province, which will ultimately be decided to approve it as submitted, approve it with modifications or to refer all or part of it to the Ontario Land Tribunal.

While ROPA 6 has yet to take effect, and while the role the Region of Waterloo plays in the approvals process may effectively be changed in the future, as a result of Bill 23, ROPA 6 nonetheless provides an updated growth management framework to the 2051 planning horizon, and likewise includes instructive policies for future planning and development within strategic growth areas, such as Major Transit Station Areas ("MTSAs").

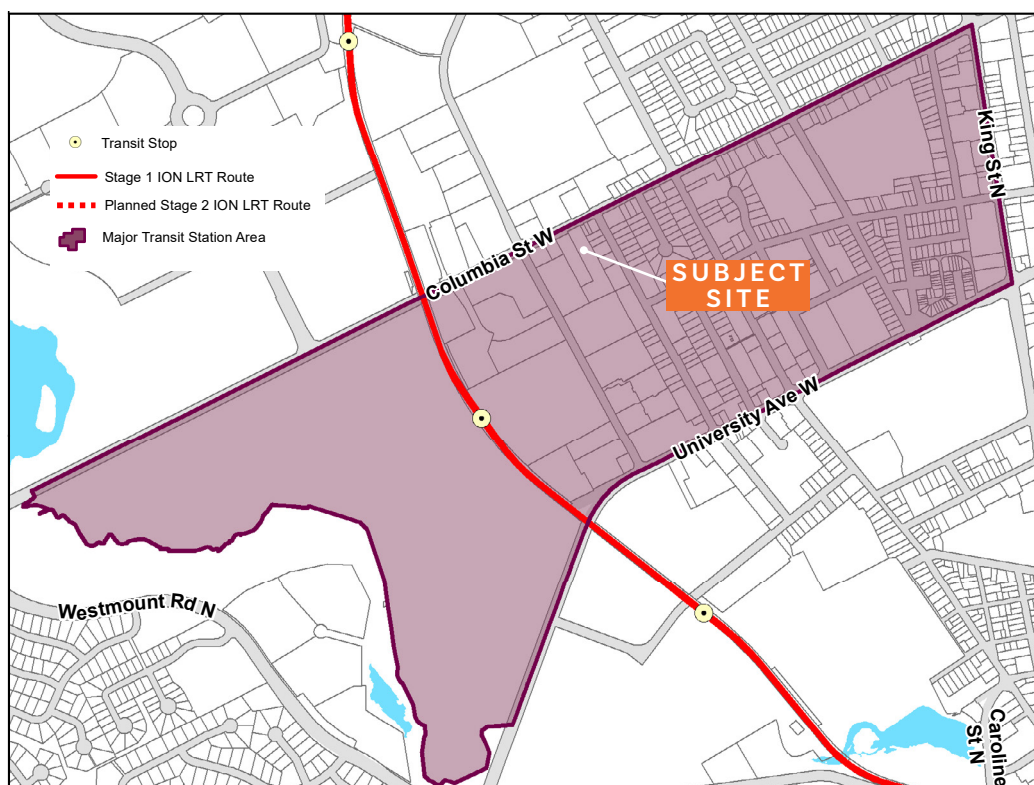


FIGURE 15: ROPA 6 FIGURE 4D - UNIVERSITY OF WATERLOO MTSA

In addition to remaining within the Urban Area and Built-up Area, ROPA 6 also designates the Subject Site within the University of Waterloo MTSA as shown on Figure 4d. In addition, ROPA 6 requires that 83% (19,740 residential units) of all new residential development within the City of Waterloo occur within the Delineated Built-Up Area through intensification. This represents a near-doubling of the minimum intensification target for the City under the existing Regional and City Official Plans. It is important to note that this is also a minimum target, and an objective of Section 2.F of ROPA 6 is to “meet or exceed the minimum intensification targets of this Plan to make better use of land and infrastructure, and transition Waterloo Region into an energy-efficient, low-carbon community”. This objective highlights the focus and the many benefits of planning to accommodate growth primarily through intensification, and of not only meeting but exceeding the minimum intensification target in particular.

In order to achieve this ambitious minimum intensification target, ROPA 6 promotes and plans for significant intensification within strategic growth areas. This includes the MTSA, which apply to lands located within a roughly 10-minute walk of an ION LRT station (where the Subject Site is located). Most of the MTSA identified by ROPA 6, including the University of Waterloo MTSA, are subject to a minimum density target of 160 persons and jobs per hectare, which will require extensive redevelopment and intensification to achieve.

The increased intensification target for the City as a whole, combined with the minimum density target for the MTSA, places an even greater emphasis and need to ensure that all development lands within MTSA are optimized. This is especially true for the Subject Site, which is significantly under-utilized in its current form and, at nearly 2 acres in size, represents one of the largest remaining residential redevelopment sites within the University of Waterloo MTSA. Though it will need to be updated to reflect the increased minimum

intensification target established by ROPA 6, the City's existing Official Plan already identifies the Subject Site as being able to accommodate high density redevelopment by designating it as High Density, with a maximum height of 25 storeys and maximum density of 750 bedrooms per hectare.

The Proposed Development provides for a careful and intelligent balance between the need for intensification more broadly and specifically on the Subject Site with the emerging context of the surrounding area and with the unique characteristics of the Site itself. The result is a thoughtfully deployed, high density built form that conforms with the applicable height and density limits while promoting other objectives related to pedestrian connectivity and outdoor amenity, and yet, only requires minor deviations from applicable zoning provisions. As reviewed in further detail in Section 4 of this Brief, the proposed adjustment to the minimum tower separation requirement in particular is necessary in order to ensure that high density development is optimized and can be implemented on the Subject Site. This adjustment is made with other modifications which offset the minor deviation and without it, the Proposed Development will not be as efficiently optimized and not as effective in helping the City achieve its minimum intensification and density targets.

In addition to establishing the minimum density targets for MTSA, Section 2.D.6 of ROPA 6 outlines policies that promote transit-supportive development, including criteria for the area municipalities to consider when reviewing and evaluating development applications within strategic growth areas and other intensification areas, including MTSA. The Proposed Development directly and effectively responds to these policies and criteria, as noted:

(a) creates an interconnected, multimodal street pattern that prioritizes walking, cycling, and rolling, and taking transit over automobile trips, and supports vibrant mixed-use developments;

- The creation of a large pedestrian mews that provides direct connections to Columbia Street and adjacent properties as well as the establishment of a significant supply of stacked bicycle parking demonstrates a concerted effort to prioritize walking, cycling, and rolling, and encourages residents to take 'first and last mile' trips to and from transit stations over automobile trips. The Minor ZBA application will permit more efficient and plentiful stacked bicycle parking and is required to ensure that the pedestrian mews can be provided as intended, as reviewed in further detail in Section 4 of this Brief.

(b) supports a more compact built form that locates the majority of transit-supportive uses within a comfortable walking distance of a transit stop or Major Transit Station Area;

- The Subject Site is located within a MTSA and is specifically planned and anticipated for high density development by the City's Official Plan and Zoning By-law. The Proposed Development provides for a well-composed, compact form that will provide for the high density redevelopment of the Subject Site, thus supporting existing nearby transit investments and services, and encouraging greater utilization of multi-modal transportation activity. As noted above, this high density form of development can more effectively occur through the Minor ZBA application, and a slight reduction to the minimum tower separation requirement.

(d) promotes medium and higher-density development as close as possible to the transit stop to support higher frequency transit service and optimize transit rider convenience;

- The Subject Site is within 400 metres of the University of Waterloo ION Light Transit Station and is within the associated MTSA.

Furthermore, there are also two bus stops conveniently located within 100 metres of the Subject Site along Columbia Street West and Phillip Street providing additional choice in terms of transit modes and options. The Proposed Development represents an important opportunity for the City to demonstrate its commitment to addressing climate change, intensification and promoting the achievement of 15-minute neighbourhoods.

(e) supports a high quality public realm to enhance the identity of the area and create gathering points for social interaction, community events and other activities;

- The Proposed Development provides for a much enhanced pedestrian realm along Columbia Street with an activated frontage. Furthermore, the proposed pedestrian mews has been designed to provide even greater opportunities within the Site for a quality public realm and increased social interaction, through spaces for both passive and active amenity and direct connections to all three buildings as well as adjacent properties.

A more general objective of ROPA 6 for all urban areas is supporting the concept of 15-minute neighbourhoods, which are defined as:

Compact, well-connected places such as mixed-use neighbourhoods or other areas within the Urban Area and Township Urban Areas. They are places that offer support and opportunities for people of all ages and abilities and at all times of year to conveniently access the necessities for daily living with a 15-minute trip by walking, cycling and rolling, and where other needs can be met by taking direct, frequent, and convenient transit, wherever possible. 15-minute neighbourhoods include an appropriate mix of jobs, local stores and services, a full range of housing, transportation options and public service facilities. They are also age-friendly places and may take different shapes and forms appropriate to their contexts.

One of the two objectives outlined in Section 2.F of ROPA 6 around these 15-minute neighbourhoods is to:

Support the gradual transition of existing neighbourhoods into 15-minute neighbourhoods that are denser, have a broad mix of land uses where people can meet their daily needs for goods, services, and employment within a 15-minute trip by walking, cycling, and rolling, and where other needs can be accessed using direct, frequent, and convenient transit.

- Achieving the 15-minute neighbourhood concept requires an intensification-first approach to development with significant density in the form of mixed-use development to provide a mix of housing, employment and services. It also requires establishing a greater modal shift to encourage most trips being made by walking, cycling, and rolling. The Minor ZBA application is inherently supportive of the 15-minute neighbourhood concept by providing for a more intense urban form

which will be more effectively optimized and is in proximity to public transit services, the University of Waterloo, and other commercial and employment uses. Other aspects of the Minor ZBA, such as stacked bicycle parking will allow for the inclusion of additional bicycle parking and thus will encourage active transportation.

Based on the forgoing review and analysis of all applicable policies, the Proposed Development conforms to the Region of Waterloo Official Plan, and the proposed Minor ZBA application will directly support achievement of the minimum intensification and density targets, and support or promote numerous other policy goals and objectives such as transit-supportive development and achieving the 15-minute neighbourhoods concept.

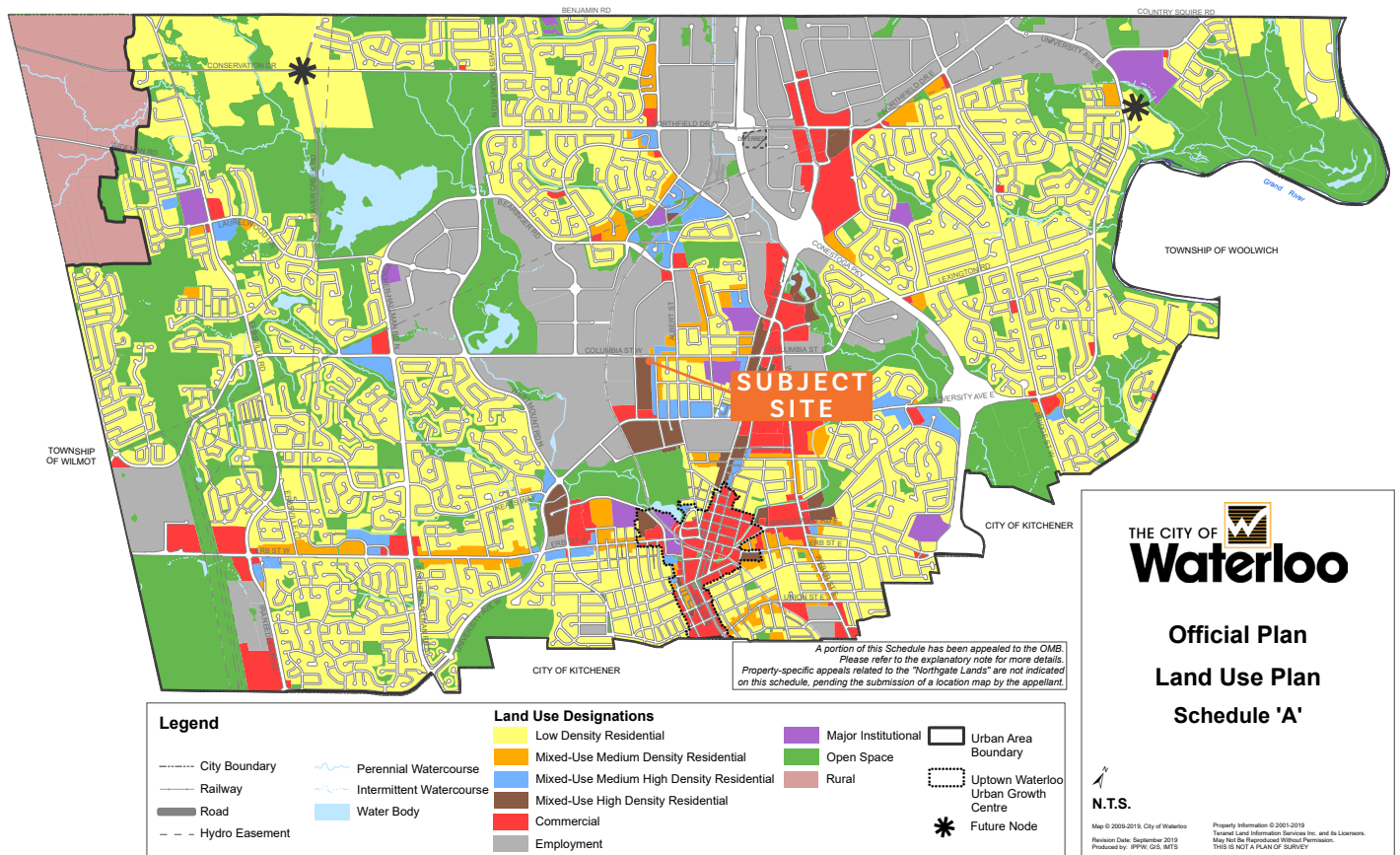


FIGURE 17: CITY OF WATERLOO OFFICIAL PLAN SCHEDULE 'A' - LAND USE

3.2 CITY OF WATERLOO OFFICIAL PLAN

The Subject Site is designated Mixed-Use High Density Residential under the City of Waterloo Official Plan as shown on Schedule 'A1' – Land Use Plan. Schedule 'B1' – Height and Density, identifies the Subject Site as 'High Density', which permits a maximum height of 25-storeys within the Northdale Neighbourhood. The Subject Site is also located within a Major Node under Schedule 'B' – City Structure. Lastly, the Subject Site is located within Special Provision Area "45C" under Schedule 'A6a' – Special Provision Policy Areas and within the University of Waterloo Station Area under Schedule 'J4' – University of Waterloo Station Area.

Section 10.1.6 of the Official Plan defines the Mixed-Use High Density Residential designation as being:

"Intended to provide opportunities for substantial levels of intensification" with properties to be developed "primarily for residential purposes,

although complementary and ancillary non-residential use are also permitted."

The Proposed Development conforms with the intent of the Mixed-Use High Density Residential designation as it provides a dense built form with a primary residential use and ancillary commercial use at-grade. This mix of uses supports the emergence of a complete community further enhanced by an abundance of indoor and outdoor amenity spaces situated throughout the Proposed Development, which will enhance the quality of life of the residents and visitors.

The policies of the designation identify a maximum density limit of 750 bedrooms per hectare, and a maximum height limit of 81 metres (25 storeys in Northdale Neighbourhood – see below). This represents both the highest density of development and tallest height permitted by the Official Plan throughout Waterloo, which reinforces the focus for intensification on the Subject Site.

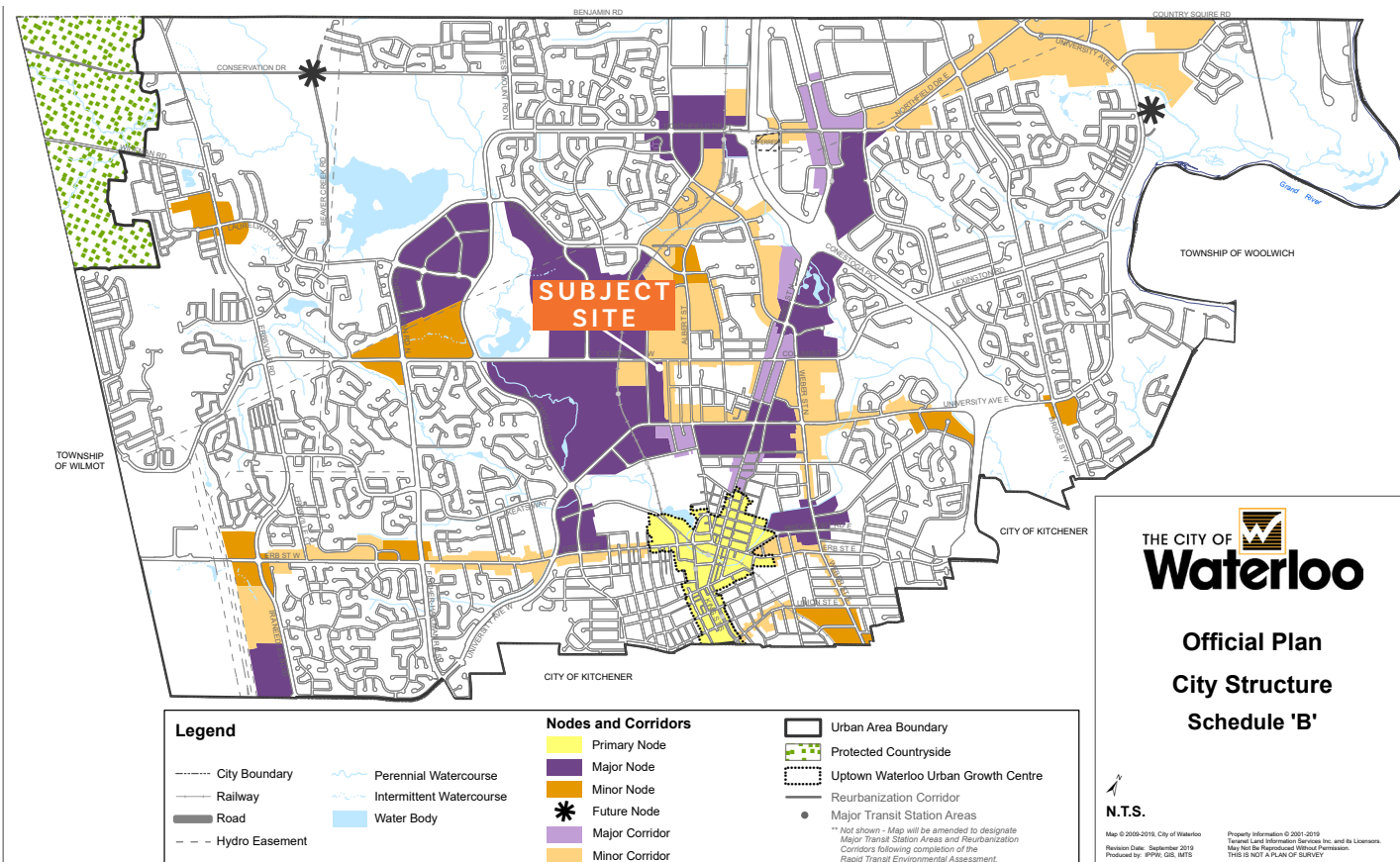


FIGURE 18: CITY OF WATERLOO OFFICIAL PLAN SCHEDULE 'B' - CITY STRUCTURE

It should be noted that the City’s Official Plan is based on a minimum intensification target of 45 %. ROPA 6 would increase the minimum intensification target to 83% for the City. As such, it is anticipated that the next, updated version of the City’s Official Plan will need to place an even greater emphasis on intensification as the means to accommodate nearly all new growth in the City. Again, this underscores the importance of optimizing the development potential of redevelopment sites within MTSAs and other strategic growth areas, such as the Subject Site.

Northdale Neighbourhood

In addition to being designated Mixed-Use High-Density Residential, the Subject Site is also within Special Provision Area 45, which applies to the Northdale Neighbourhood. Special Provision Area 45 functions like a Secondary Plan by providing a more detailed layer of policy framework to guide development. Official Plan policies recognize Northdale as a

neighbourhood in transition that is anticipated to accommodate a significant portion of the City’s infill and intensification over the next twenty years. Through this continuing growth and redevelopment, the Official Plan envisions that the Northdale Neighbourhood area will become a more dense, but complete neighbourhood accommodating a diverse demographic, with a range of housing types and other uses.

The Proposed Development will support this continued evolution, and directly responds to numerous community, planning and design oriented goals, objectives and policies identified for the Northdale Neighbourhood, including:

Integrated: Northdale is ideally situated within proximity to the Universities, Uptown, and major employers and will be integrated within the urban fabric of the City and surrounding community through improved transportation, cycling and pedestrian networks.

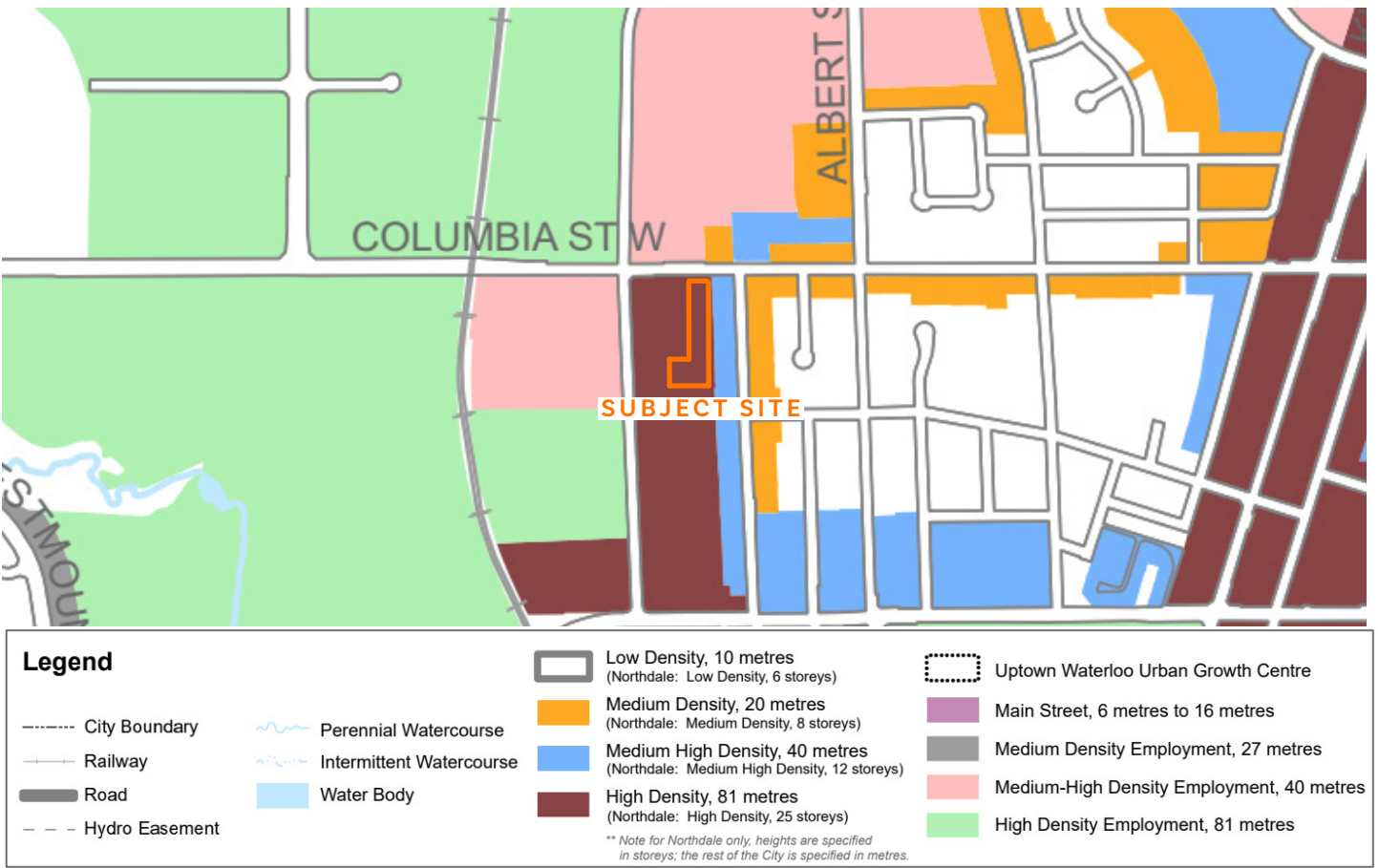


FIGURE 19: CITY OF WATERLOO OFFICIAL PLAN SCHEDULE ‘B1’ - HEIGHT AND DENSITY

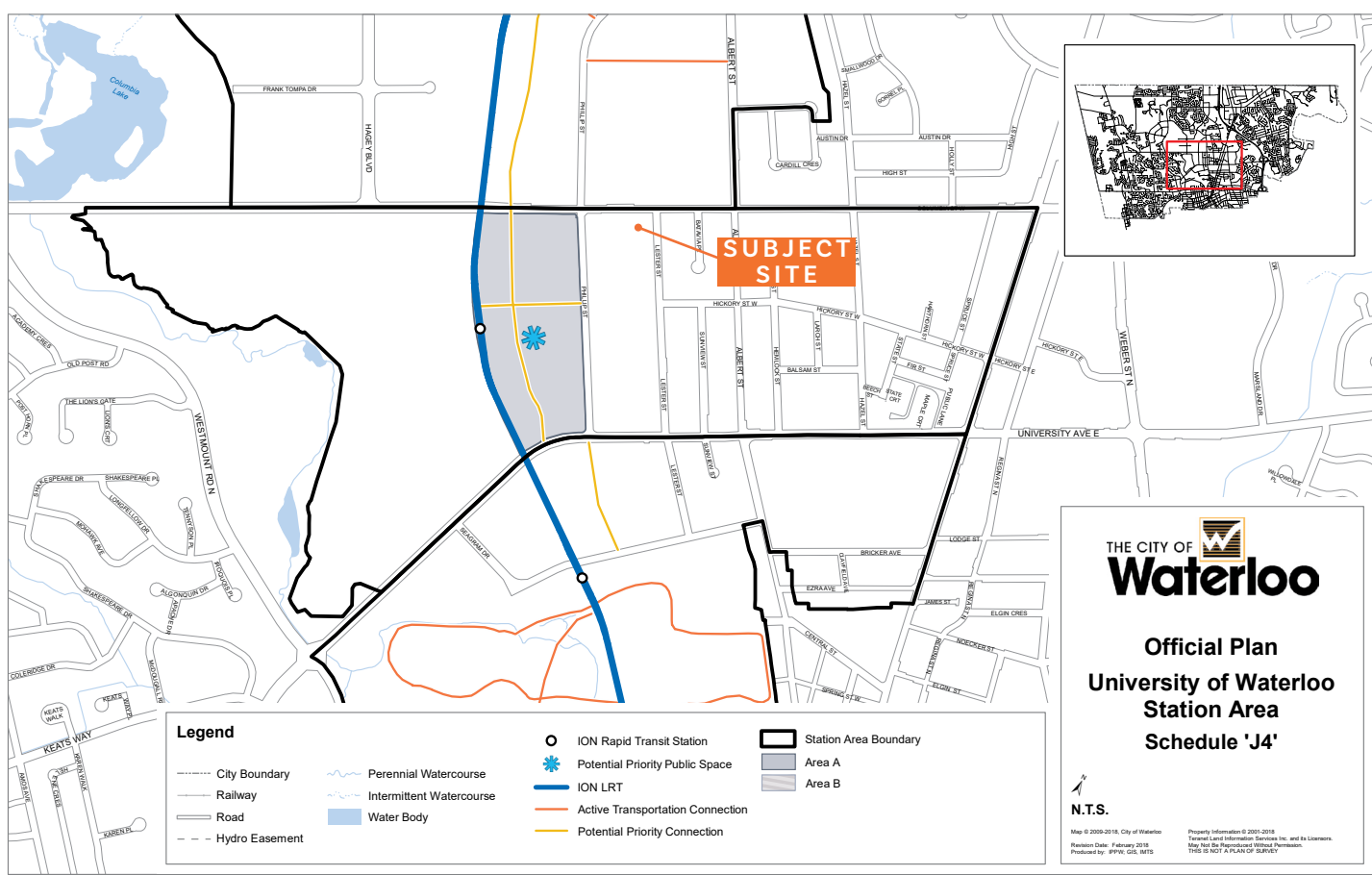


FIGURE 20: CITY OF WATERLOO OFFICIAL PLAN SCHEDULE 'J4' - UNIVERSITY OF WATERLOO STATION

Interactive: Northdale will be enhanced through a network of additional parks, open spaces, walkways and improved streetscaping which provides for recreational, passive and community gathering spaces, which complement the Veteran's Green Park.

NS.3 Clear land use, urban design and built form policies, regulations and guidelines will guide future development. Building height and density will generally be greater on the periphery of the neighbourhood, and transition towards medium density forms in the interior of the neighbourhood.

BD.3 Appropriate and compatible building design techniques will be used, including transition in building heights, step-backs and angular planes, and building articulation.

PR.1 On active street frontage areas, retail, commercial and community uses will be required at the street-edge to animate and activate the public pedestrian realm. On convertible street frontage areas, intermediate streets, frontages will be designed to be convertible from residential

to an animated retail, commercial or community use at some point in the future.

(17)(e) In review of development applications, the proposal shall comply with the following criteria to the satisfaction of the City:

(i) The proposal will achieve a high standard of urban design, with emphasis on:

- Site and building design that complement and enhance the surrounding neighborhood character.
- Landscape design that creates visual interest; and,
- Prominent entrances that emphasize the streetscape.

(ii) The proposal shall be consistent with the urban design, land use and compatibility policies of this Plan and shall demonstrate that the proposal implements the City's Urban Design Manual (Northdale Urban Design Guidelines) to the satisfaction of Council;

(iii) Sufficient infrastructure exists to service the site;

(iv) The development capacity of the site is not exceeded, and the proposal does not require significant relief from standard regulations;

(v) Minimum requirements for the provision of outdoor amenity space will be stipulated in the implementing Zoning By-law; and

(vi) The proposal complies with other criteria that may be deemed appropriate by the City based on the context of the site.

The Proposed Development, and its sleek built form, directly respond to the unique conditions that apply to the Subject Site and allow for a high density redevelopment that dedicates a significant area to pedestrian activity, connectivity and interaction through the pedestrian mews, as well as encouraging multi-modal transportation activity. In doing so, the Proposed Development meets these policies and criteria for the Northdale Neighbourhood, which are intended to guide future redevelopment.

The Northdale Neighbourhood policies clearly establish a hierarchy of development form and density, with higher density directed to the periphery of the neighbourhood, such as the Subject Site, and lower density directed to the interior. The ability to provide this hierarchy and transitional approach to development form and density, while still achieving the City's minimum intensification and density targets, requires that the development potential of planned high density sites be fully optimized. In particular, it is critical that the nearly 0.8 hectare Subject Site be planned to optimize its development potential, in accordance with the maximum height and density limits identified by the City's Official Plan and Zoning By-law.

Recognizing the unique narrow, but deep shape of the Subject Site, and in order to maximize the tower separation in all directions, the Proposed Development has been carefully designed to strategically position the towers in

the horizontal centre of the Site, and to narrow the width of the towers to the greatest extent possible, which results in roughly 8.5 metre tower setbacks to the east and west and sleek tower floorplates of approximately 600 square meters. These smaller than usual floorplates help to further mitigate any potential impacts associated with shadowing or loss of sky-view.

Looking specifically at the development criteria outlined in policy 17(e), the planning framework for the Northdale Neighbourhood clearly contemplates and anticipates unique situations where flexible, alternative solutions may require modest relief from standard regulations, and where other criteria may need to be considered based on the unique context of a specific site.

The design and layout of the Proposed Development was formulated through this type of flexible approach, which carefully considered the unique context of the Subject Site and conceived a thoughtful but still appropriate and meaningful urban design response. This approach seeks to maximize zoning compliance to the greatest extent possible with minor adjustments to optimize the Subject Site and achieve and support other objectives and policies related to the pedestrian environment, connectivity and complete communities.

Based on a comprehensive review and analysis of all applicable policies, it is our view that the Proposed Development conforms to the City of Waterloo Official Plan, and that the Minor ZBA application will enable a responsive, but appropriate redevelopment of the Subject Site, in accordance with the maximum height and density limits established by the Official Plan, and in support of the various objectives and policies that apply to the Northdale Neighbourhood, University of Waterloo MTSA, and the City as a whole.

3.3 NORTHDALE URBAN DESIGN GUIDELINES

The Northdale Urban Design Guidelines supplement the City's Official Plan and the vision for the Northdale Neighbourhood, which is to establish it as the one of the City's primary intensification areas and guide its evolution into a true mixed-use and multi-modal complete community.

A key structural element of the Northdale Preferred Structure Plan is an interconnected transportation network. The Preferred Structure Plan identifies a desire for connections with the Neighbourhood, including mid-block walkway connections between Columbia Street West and University Avenue West. At this stage, although nearly all of the neighbouring and nearby properties have been or are currently being redeveloped, some with little regard for an interconnected transportation network, the Proposed Development has been thoughtfully designed to include an inviting and engaging pedestrian mews, that will also provide the opportunity for direct access between Columbia Street and all three buildings, with additional

connections provided to neighbouring properties.

In addition to the Structure Plan, the Proposed Development and Minor ZBA application also specifically responds to and addresses a number of other design guidelines, including:

5.11 Towers should be designed in conjunction with the podium of the building and the interplay of masses setback at different heights will improve the articulation and overall visual impression of the street.

5.11.1 Design and mass buildings to minimize adverse impacts on adjacent properties, outdoor amenity spaces and public spaces with respect to sunlight access, wind tunnelling effect, noise attenuation and snow disposition.

5.11.2 Towers should have slender massing and elegant proportions. Reducing the bulk of the top of a tower ("sculpting" the tower) can make it more attractive. If a project has more than one tower, they should be complementary to each other and employ the same architectural design approach.



FIGURE 21: NORTHDALE URBAN DESIGN GUIDELINES - PREFERRED STRUCTURE PLAN

5.11.4 Design tall residential buildings above any podium with a maximum floorplate of 800 square metres (excluding balconies) to minimize shadow impacts on surrounding streets, sidewalks, neighbouring building and private amenities.

5.11.5 Towers must be set back a minimum of 12.5m from the side and rear property lines measured from the external wall or exterior face of balconies. If more than one tower is included within one site the towers must be spaced apart so as to permit a minimum separation distance of 25m, measures from the external wall excluding balconies. The maximum horizontal tower dimension must be no greater than 35m, measures from the external wall excluding balconies.

Due to the compact, but deep proportions of the Subject Site, any towers on the Subject Site have to be strategically located and positioned to allow for the optimum development of the overall property in accordance with the local and regional planning frameworks and direction. In doing so, the Proposed Development requires some minor relief from the minimum tower setback guideline and associated zoning requirement. As previously noted, the site layout and tower built form have been carefully designed in order to maximize the tower setbacks in all directions, and provide correspondingly smaller than usual tower floorplates of approximately 600 square metres. In addition and in order to off-set this minor reduction, the spatial separation between towers on the Site in other directions has been increased 29 and 32 metres (compared to the minimum guideline of 25 metres and minimum zoning requirement of 22 metres). These reduced floorplates and increased on-site separation help mitigate any potential impacts associated with shadowing and sky view, as reviewed in detail in the Planning and Urban Design Study.

The Proposed Development provides for significant tower stepbacks above the podium to the north, facing Columbia, beyond what is required by the Zoning By-law. Guideline 5.11 clearly recognizes the street as the primary lens for the visual impression of a tower's built form. As such, the large stepback provided on the most prominent building façade, facing Columbia Street, is in the most meaningful location and very effectively reinforces and articulates the podium/tower typology. In addition, the use of materiality and other design features helps to further reinforce the podium/tower relationship on the side building façades, and clearly differentiates between the podium and tower components.

A more detailed analysis of the Northdale Neighbourhood Urban Design Guidelines, as well as the City's general Urban Design Manual, has previously been prepared for the Proposed Development and was provided in the previously submitted Planning and Urban Design Study.

3.4 CITY OF WATERLOO ZONING BY-LAW 2018-080

The Subject Site is regulated by City of Waterloo Zoning By-law 2018-080. The Subject Site is zoned '(Holding) Residential Northdale Twenty Five' ("(H)RN-25") under the By-law.

The (H)RN-25 Zone permits a range of primary uses, including multi-unit residential buildings, mixed-use buildings with dwelling units above the first storey, as well as a variety of other complementary and ancillary commercial and institutional uses. More specifically, permitted commercial uses include a bake shop, café (including outdoor patio), commercial services, office, restaurant (including outdoor patio) and retail store, among many others.

In response, the Proposed Development includes mixed-use and multi-unit residential buildings with ground floor commercial uses. As such, the proposed uses are permitted as-of-right by the existing Zoning By-law.

As outlined in Appendix A, the Proposed Development complies with all provisions of the RN-25 Zone, except for the following:

Table 7T: Regulations – RESIDENTIAL NORTHDALÉ TWENTY FIVE ZONE (RN-25)

- Requires a minimum podium height of 10.5 metres. A minimum podium height of 8.0 metres is proposed for Tower C, while Towers A and B comply with this requirement.
- Requires a minimum tower separation distance of 11.0 metres from an interior lot line. Minimum tower separation distances of 8.2 metres and 8.5 metres are generally proposed.

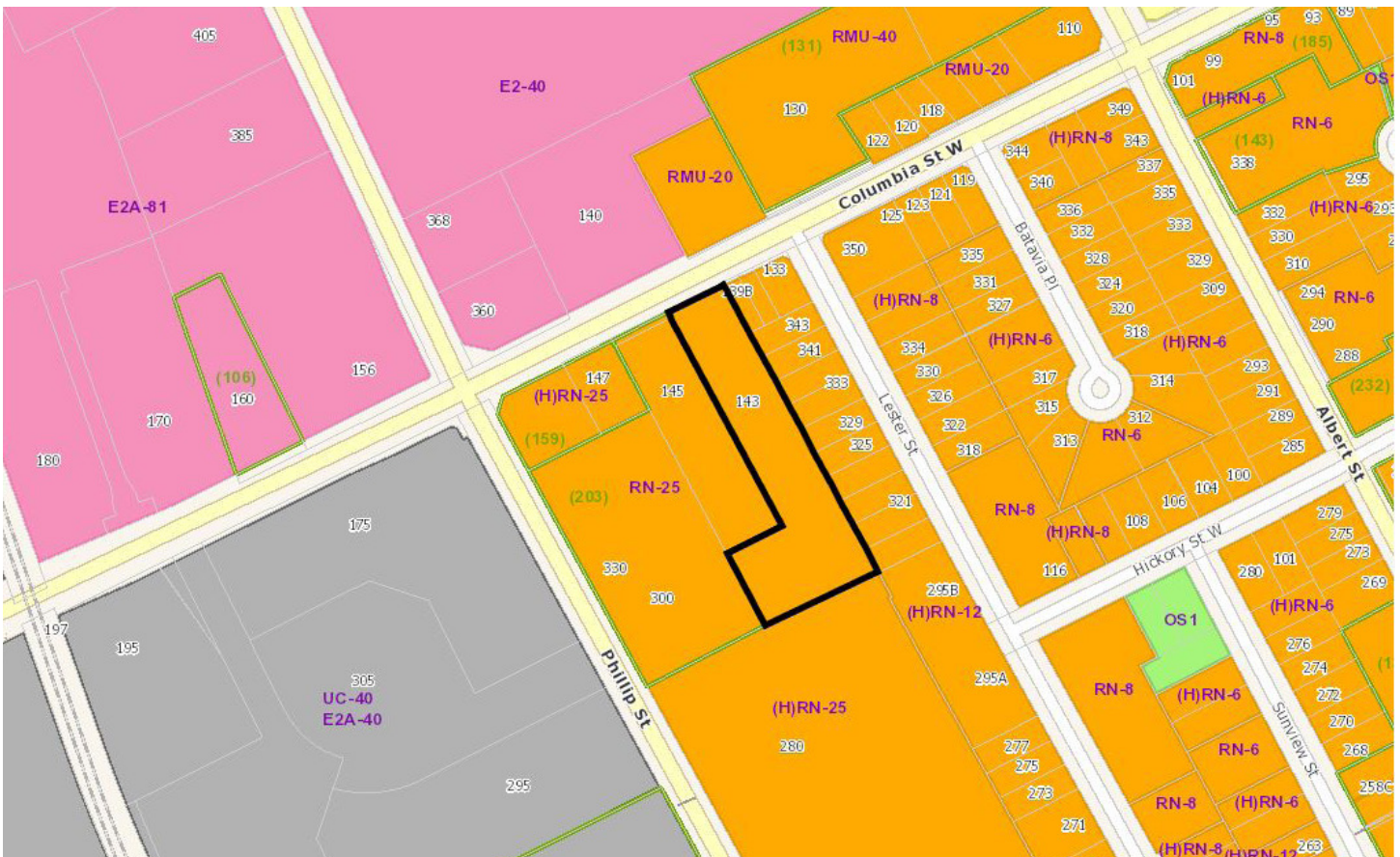


FIGURE 22: ZONING MAP

- Requires a minimum setback above the podium of 3.0 metres in all directions. While the setback is provided to the north along Columbia Street where it is most meaningful, a minimum setback above the podium of 0 metres is proposed to the east and west for Buildings A and B.

Table 6F: BICYCLE PARKING SPACE DIMENSIONS

- The By-law does not specifically address stacked bicycle parking spaces. In order to increase the bicycle parking supply, it is proposed to provide some spaces in a stacked form.

Provision 3.W.1

- The By-law does not currently permit geothermal wells on lands west of Weber Street. Similar to the geothermal system permitted and installed in the development on the opposite side of Columbia Street, the Proposed Development may include the provision of geothermal wells, which will enhance the sustainability of the project.

For a more detailed analysis of the requested zoning changes, see Section 4 of this Brief and the Zoning Matrix as contained in Appendix A.

The Proposed Development complies with all provisions of the City's Zoning By-law except as noted above. Although the submitted Minor ZBA application seeks limited refinements to some of the minimum standards, the Proposed Development establishes an overall approach and specific measures to off-set or mitigate against these changes while also meeting the intent of the Official Plan and Zoning By-law.

4. PLANNING ANALYSIS

4. PLANNING ANALYSIS

This section provides a detailed planning analysis of the Proposed Development against the limited number of zoning provisions that are proposed to be amended, as well as consideration of the revisions against applicable planning policies and urban design guidelines and direction. This section also assesses how the conditions related to the lifting of the Holding Symbol have been or will be addressed.

City of Waterloo Zoning By-law 2018-050 zones the Subject Site as “Residential Northdale Twenty Five (H)RN-25”.

Implementing the policies of the Official Plan for the High Density designation and Special Provision Area 45C for the Northdale Neighbourhood, the (H)RN-25 Zone requires a minimum density of 250 bedrooms per hectare and permits a maximum density of 750 bedrooms per hectare. As the Subject Site has a net site area of 0.79 hectares, the maximum number of bedrooms permitted is 591.

The Proposed Development includes 591 bedrooms and as such complies with this standard. The Proposed Development likewise complies with the maximum height limit of 25 storeys. As such, the scale of the Proposed Development exactly reflects of what is planned and permitted for the Subject Site through the City’s Official Plan and Zoning By-law.

In addition to the density and height provisions, the RN-25 Zone also establishes other detailed zone provisions. There are also other general provisions of the Zoning By-law that apply to the Subject Site.

As outlined in Appendix A to this Brief, the Proposed Development complies with all those general provisions and all provisions of the RN-25 Zone, except those related to minimum podium height, minimum tower stepback above a podium, minimum tower separation distance, the permitted types of bicycle parking, and the prohibition on geothermal wells. The Minor ZBA application seeks to amend these provisions in order to permit the Proposed Development. The following sections discuss these proposed amendments.

4.1 MINIMUM PODIUM HEIGHT

The Zoning By-law requires a minimum podium height of 10.5 metres and permits a maximum podium height of 20 metres for buildings in the RN-25 zone. Based on the City's Official Plan, Urban Design Manual and Northdale Neighbourhood Urban Design Guidelines, we understand that this provision was developed with the general intention of establishing a specific built form massing and streetwall range in order to provide an urban feel and scale of massing conducive to a pedestrian-friendly environment.

Buildings A and B of the Proposed Development, which are located towards the front portion of the Subject Site, facing Columbia Street, each provide podium heights of 20 metres and so comply with the Zoning By-law requirements. As reviewed in Section 3 of this Report, the Northdale Neighbourhood Urban Design Guidelines recognize the street as the primary

lens for the visual impression of a building's massing. We agree with this and, in this case, believe that the Tower A podium height along Columbia Street represents the most important or influential podium condition when it comes to achieving the design intention noted above. In this case, Building A complies with minimum and maximum podium height requirements and thus provides for the desired urban and pedestrian-scaled street wall along Columbia Street.



FIGURE 23: BUILDING A - EAST ELEVATION

Building C, located towards the rear of the Subject Site, provides for a reduced podium height of 6.1 metres, which is 3.9 metres less than the minimum requirement. Overall, the Proposed Development meets the maximum density limit for the Subject Site and so does not require and cannot make use of additional podium height in Building C for additional residential units. This reduced scale will also provide for a functional layout for the structured parking that is intentionally provided at the rear of the Subject Site, and will also provide for more diversity of built forms on the Subject Site.

It should be noted that Building C is located at the very rear of the Subject Site and is oriented in an east/west direction, opposite to Buildings A and B. It is also located at the end of the pedestrian mews, next to the proposed basketball court and future pedestrian connection to the neighbouring property to the South.

In our opinion, a reduced scale of podium in this case is appropriate considering the building's close relationship with these adjacent amenity and pedestrian connection features. The reduced scale will likewise improve visibility around Building C from resident windows and balconies, which is especially important from a safety perspective given the intention to promote pedestrian connectivity with the neighbouring property.

Most importantly, as noted above, the reduction in the scale of the podium at the rear maintains the priority of required scale at the front of the Subject Site in order to create a well-defined urban streetwall in the higher traffic areas along Columbia Street West and towards the northern end of the pedestrian mews.

It is our opinion that the proposed reduction to the Building C podium height is minor, appropriate and conforms with or meets the intent of the Official Plan policies and other guidelines as it relates to the height or scale of building podiums and the broader podium/tower typology.

4.2 MINIMUM STEPBACK ABOVE PODIUM

The Zoning By-law requires a minimum tower setback of 3.0 metres above a podium. Based on our review of the City's urban design policies and guidelines, this provision is intended to ensure that the podium and tower components with the City's preferred podium/tower typology are clearly differentiated from each other through articulation of the building massing. The City recently confirmed that this requirement applies to the front and sides of a building.

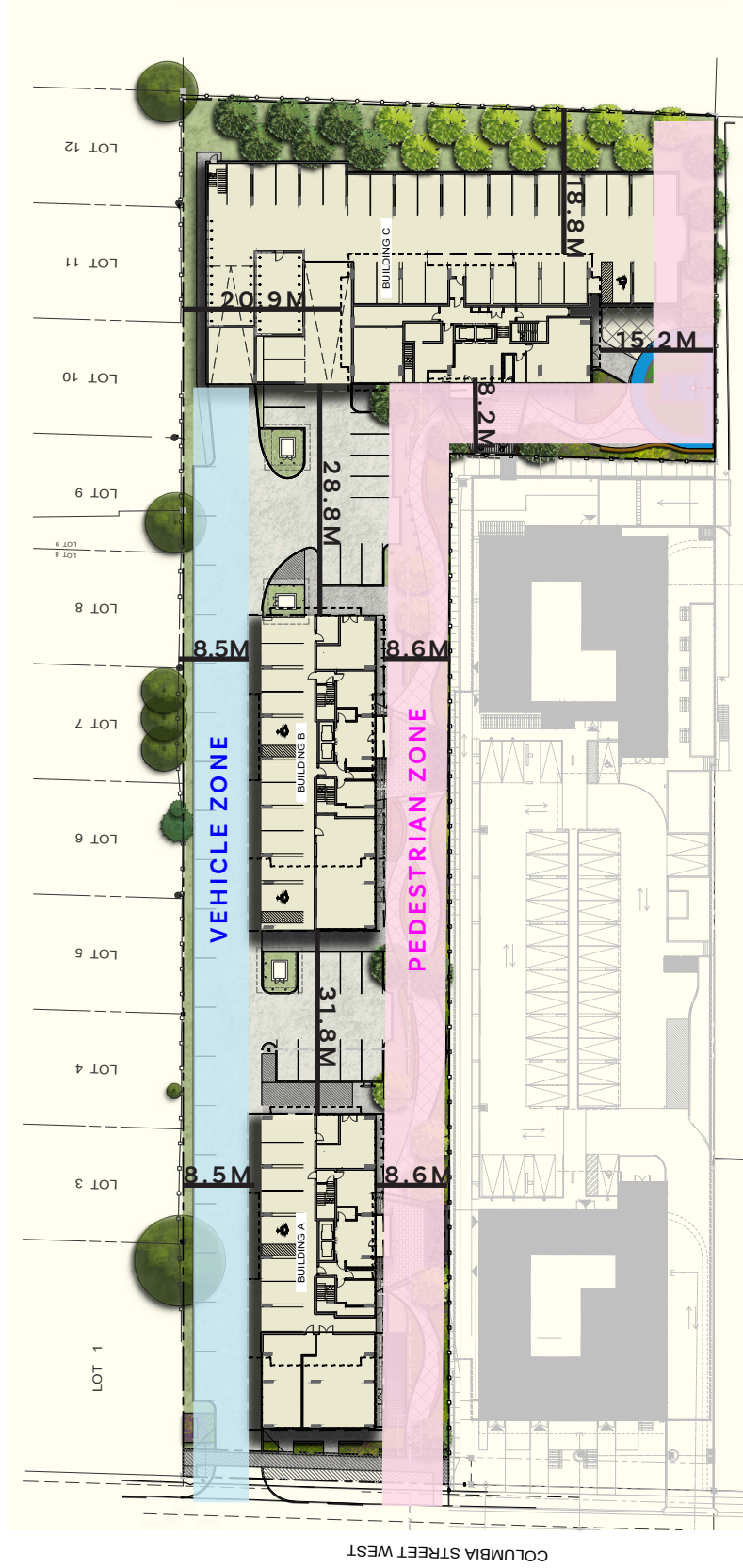
As noted in Section 5.11 of the Northdale Neighbourhood Urban Design Guidelines:

Towers should be designed in conjunction with the podium of the building and the interplay of masses setback at different heights will improve the articulation and overall visual impression of the street.



FIGURE 24: TOWER VIEW - LOOKING WEST

Similar to the minimum podium height requirement, the primary focus with the podium setback requirement is to achieve a specific visual impression from the street, notwithstanding that it applies to both the front and sides.



COLUMBIA STREET WEST



143 COLUMBIA INC.

PROPOSED DEVELOPMENT
143 Columbia St. W
City of Waterloo

Conceptual Landscape



FIGURE 25: PROPOSED LANDSCAPE PLAN - PEDESTRIAN VEHICLE ZONES & TOWER SETBACKS

The Proposed Development complies with the minimum podium stepback requirement for the Columbia-street (front) facing façades of Buildings A and B, as well as the side facing façades of Building C, which achieves the primary intent of the visual impression and the podium and tower relationship from the street. However, due to the unique site configuration the side facing façades of Buildings A and B and front facing façade of Building C do not provide a tower stepback in accordance with the Zoning By-law. Instead, they provide for a slight overhang/cantilever, which preserves more space at the ground level.

Building A and B

Buildings A and B exceed the minimum podium stepback along their front façades, facing Columbia Street. While the Zoning By-law requires a minimum stepback of 3 metres, the front façades of Buildings A and B provide even greater stepbacks of 8.5 metres each, which far exceed the minimum requirement and provide for a very well-articulated built form that accentuates the podium/tower typology in the most important location. As noted above, the Urban Design Guidelines recognize the street as the primary lens for the visual impression of a building. As such, the increased tower stepback in Building A in particular will strongly reinforce the pedestrian-scaled podium of the building along the street, and clearly differentiate between the podium and tower components.

The Zoning By-law also requires tower stepbacks to the sides, to again, reinforce the pedestrian scale as well as to provide a clear distinction between podium and tower. In this case, the podium-tower relationship is further reinforced by the way in which the tower components of Buildings A and B slightly overhang/cantilever the podium components, providing increased space at ground level. The site and building layout has been thoughtfully designed to separate pedestrian and vehicular traffic, in order to provide for a much safer and more inviting pedestrian environment. Vehicular traffic is directed to the eastern



FIGURE 26: TOWER VIEW - LOOKING EAST

side of the Subject Site, with one consolidated access to Columbia Street and a straight driveway leading to surface, structured and underground parking. This takes advantage of the deep orientation of the Subject Site and spreads the parking out, moving it away from Columbia Street and thereby enhancing the urban environment and achieving the intent of the required stepback at the sides of the buildings.

The western side of the Subject Site is almost entirely dedicated to the pedestrian. The backbone of the pedestrian environment is the pedestrian mews which runs along the entirety of the western property lines and measures approximately 10 metres wide for its entire length. The Buildings were very carefully and deliberately located in the centre of the Subject Site in order to preserve space for these separate vehicular and pedestrian areas, and to maximize the tower separation in all directions (see Section 4.3 below). The buildings were also designed with very slender tower floorplates to optimize development and setbacks, while achieving the minimum width feasible for development.

With the tower floorplates being sized to secure the greatest setback while achieving the minimum feasible width, there is no ability to further reduce the tower width, which would have the effect of creating tower stepbacks to the east and west above current the podium. If the Proposed Development were designed to achieve the minimum tower stepbacks to the east and west, it would simply expand the width of the podium, which could not be done to the east as the vehicular access and parking area must comply with other Zoning requirements related to driveway width and parking space size. As such, the podium would need to be expanded solely to the west, and the towers shifted further to the west as well in order to provide a stepback to both the east and west. This would have the effect of eliminating or significantly reducing the pedestrian mews, which would be a negative outcome. Another effect would be the reduced tower separation to the west, next to another high-density development. This would be another negative outcome, as the current tower placement has been deliberately selected in order to maximize the separation in both directions.

In response, it was determined that an appropriate design response would be to remove the tower stepback requirements to the east and west in order to maintain the towers in the centre of the Site and to preserve the separate pedestrian and vehicle areas. This is greatly preferred over expanding the width of the podium and reducing or eliminating the pedestrian mews. Buildings A and B also provide for an articulated design element running between the podium and tower to differentiate these two components, which is further accentuated by a change in the overall colour/material design of the buildings, with the pattern shifting between the different components.

Building C

As noted above, the north façade of Building C is also proposed to have the tower slightly overhang/cantilever the podium component, and thus to remove the podium stepback requirement. The effect of this approach is to preserve more of the ground area for the pedestrian mews, and to position the building lobby (and tower above) directly next to the mews, thereby ensuring enhanced pedestrian connectivity.

Overall, elimination of the tower stepback requirement for certain building façades responds to the unique site conditions and allows the Proposed Development to help with the broader City vision for enhanced pedestrian activity and interaction. This approach improves the Proposed Development and Subject Site as a whole by allowing and increasing space for the pedestrian mews and maximizing the tower separation in all directions. In addition, we have sought to mitigate any potential impacts from this by providing a much larger than required stepback to the north for Buildings A and B that clearly accentuates the pedestrian focus and scale along Columbia, as well as the podium/tower typology. The most recent addition of the articulated design element running between the podium and tower further differentiates the two components.

4.3 MINIMUM TOWER SEPARATION DISTANCE

Zoning By-law 2018-050 requires a minimum tower separation distance of 11.0 metres, measured from the exterior face of the building, including balconies, to a side or rear property line, as well as a minimum separation distance of 22 metres between two towers on the same site.

Policies, guidelines and zoning provisions related to tower separation have the general intent of improving or mitigating resultant wind, shadow, and sky view impacts by ensuring appropriate separation. These often also have the intent of ensuring that adequate relationships and distances are created so that “over-development” does not occur on a given development site.

As previously noted in this brief, the Subject Site represents one of the largest remaining residential redevelopment sites within the University of Waterloo MTSA, measuring nearly 2 acres in size. However, it also has a compact width, but deep configuration, which presents a unique context and some challenges in exactly complying with typical tower separation requirements.

The Subject Site is designated and planned to accommodate high density development under both the Official Plan and Zoning By-law. Optimizing the development density of the Subject Site will be crucial in helping to



FIGURE 27: PROPOSED TOWER CONTEXT - LOOKING SOUTHWEST

TABLE 2: TOWER SETBACKS

Building	Tower Setbacks to Property Lines
A	West: 8.58m East: 8.55m
B	West: 8.64m East: 8.55m
C	North: 8.23m West: 15.18m South: 18.78m East: 20.9m

ensure that the City achieves its minimum intensification and density targets. As such, the unique context of the Subject Site warrants a careful and thoughtful urban design response to ensure that high density development can be accommodated in a manner that best suits the Subject Site and surrounding area, and best mitigates potential impacts.

Taking advantage of the deep configuration of the Site, the Proposed Development includes larger on-site tower separations of 31.8 metres between Buildings A and B and 28.8 metres between buildings B and C, both substantially more than the 22 metre minimum required by the Zoning By-law and that help to off-set the somewhat narrower site and reduced east to west setbacks. In addition, the Proposed Development also complies with the maximum density limit for the Subject Site (750 bedrooms per hectare), as well as the minimum lot area and frontage requirements. As such, it is our opinion that the Subject Site represents an appropriate and viable high density development site, and that the density of the Proposed Development reflects what is planned for the Site and does not represent over-development.

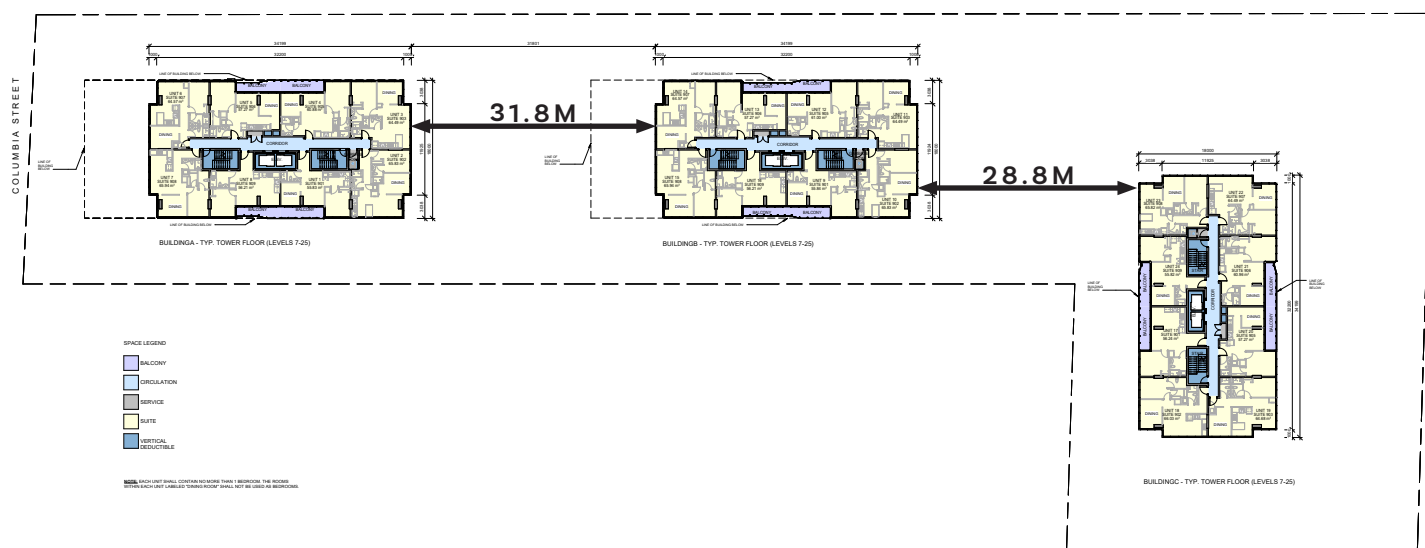


FIGURE 28: TYPICAL TOWER FLOOR PLAN - LEVEL 7-25 - ON-SITE TOWER SEPARATION

Recognizing the narrower configuration of the Site, all three towers in the Proposed Development were designed with slender floor plates that are only 18 metres wide by roughly 34 metres long. This complies with the maximum tower dimension limit of 35 metres and represents the smallest feasible width for development. The result is a much smaller tower floor plate of approximately 600 square metres, which is 25% less than the zoning limit of 800 square metres. The reduced floorplates and increased on-site separation work together to reduce shadow impacts and improves sun access and sky-view, which are primary objectives of the tower separation requirement. In order to maximize the tower setback to adjacent property lines in all directions, the towers have been intentionally situated in the centre (horizontally) of the Site. This has the added benefit of allowing for the separate pedestrian and vehicular areas, as discussed in Section 4.2 of this Report. With this approach to the tower location, and the significantly reduced tower floorplate and width noted above, the resulting tower setbacks to adjacent property lines are shown in Table 2.

As shown in Table 2, five of the tower setback measurements are slightly less than the Zoning By-law requirement of 11 metres, and so require an amended requirement through the Minor ZBA application.

These reductions are warranted and appropriate given the unique context of the Subject Site and efforts to mitigate impacts with the reduced tower floorplates. It should be noted that the towers have also been designed with inset central sections with projecting balconies so that the tower floor plate is in an "I" configuration, as well as inset corners. These design approaches provide further mitigation and help improve the tower setback condition, providing increased separation from the main building walls to the adjacent property lines and in doing so improving privacy and views for these units.

More generally, the proposed development reinforces the built form, architectural, visual and thematic integrity of the Northdale Neighbourhood as it is re-urbanized into a diverse, vibrant and sustainable neighbourhood. The buildings will feature a diverse range of contemporary building materials which together create a more diverse and more interesting building façade that is complementary to other building design motifs that exist in the neighbourhood.

In summary, the Proposed Development has been thoughtfully designed to minimize the amendments to the Tower Separation requirement to the extent possible and to mitigate potential impacts through other measures such as a more sleek and slender built form as well as a significantly reduced floorplate, while ensuring that the redevelopment of the Site can be optimized in order to assist the City in reaching its minimum intensification and density targets. The proposed variance will allow the Subject Site to maximize its permitted density and assist the Region in achieving its intensification goals within the Urban Area and Built-Up Area.

We are of the opinion that the proposed amendments to decrease the minimum tower separation distance are off-set by other measures and enable the Proposed Development to employ a unique yet practical urban design response to the relatively compact width, but deep shape of the Subject Site. Moreover, the proposed amendments enable the Proposed Development to better address the mandate for intensification on the Subject Site established by the Official Plan and Zoning By-law.

4.4 BICYCLE PARKING DIMENSIONS

Another alternative, practical and efficient design feature of the Proposed Development is the proposed use of stacked bicycle parking spaces for interior bicycle parking. The use of stacked versus individual horizontal bicycle parking spaces is rapidly becoming more common because it allows the overall supply of bicycle parking spaces to increase over the minimum zoning requirement, while allotting additional space to be used for outdoor and indoor amenity space (i.e. space that otherwise would have been used for less efficient bike parking). This is consistent with overall Provincial planning policy and best practice around optimizing and making the most efficient use of land and resources.

The proposed stacked bicycle parking spaces have been designed to reflect typical dimensions of stacked bicycle parking spaces that are permitted and commonly used in a number of other urban Ontario municipalities. The minimum dimensions required for bicycle parking spaces are fairly consistent, as shown in Table 3.

TABLE 3: HORIZONTAL AND STACKED BICYCLE PARKING DIMENSIONS SURVEY INFO

Municipality	Current/Proposed Horizontal Bike Park Dimensions	Current/Proposed Stacked Bicycle Parking Dimensions
Vaughan	Length: 1.8m Width: 0.6m Vertical Clearance: 1.9m	Length: 1.8m Width: 0.6m Vertical Clearance: 1.2m
Ottawa	Length: 1.8m Width: 0.6m Vertical Clearance: 1.8m	Length: 1.8m Width: 0.37m Vertical Clearance: 1.8m
Mississauga	Length: 1.8m Width: 0.6m Vertical Clearance: 1.9m	Length: 1.8m Width: 0.6m Vertical Clearance: 1.2m
Toronto	Length: 1.8m Width: 0.6m Vertical Clearance: 1.9m	Length: 1.8m Width: 0.6m Vertical Clearance: 1.2m
Waterloo	Length: 2.0m Width: 0.6m Vertical Clearance: 2.0m	N/A

In the case of the Proposed Development, the use of stacked bicycle parking will allow the number of spaces to increase over the minimum zoning requirement, by providing an extra 20 spaces, while at the same time decreasing the amount of space required for outdoor bicycle parking. This reduced space can instead be used for additional landscaping and pedestrian circulation space, thereby further enhancing the pedestrian mews and outdoor environment.

In our opinion, the use of stacked bicycle parking spaces in this instance represents a growing trend amongst other jurisdictions to take advantage of new approaches to increase the supply of bicycle parking in less space, which preserves additional space for other important building and site functions, such as outdoor amenity space.

4.5 GEOTHERMAL WELLS

Section 3.W.1 of the Zoning By-law does not permit the installation of geothermal wells west of Weber Street, which includes the Subject Site.

The applicant previously installed and operates one of the largest open loop geothermal systems in North America at The Hub development, located just across Columbia Street from the Subject Site. They are currently exploring the feasibility of constructing another geothermal system on the Subject Site. As such, the Minor ZBA application seeks to permit the opportunity to also have geothermal wells on the Subject Site.

In our opinion, allowing the permission for geothermal wells on the Subject Site is desirable as it will address a number of City policies and guidelines related to sustainability and climate change initiatives. Details associated with a geothermal system would be reviewed with the City through the Site Plan Approval application.

4.6 REMOVAL OF HOLDING SYMBOL

Aside from the zone and general provisions, the Subject Site is also subject to an existing Holding Symbol that must be removed prior to final Site Plan Approval. The required conditions for removal of the Holding Symbol, as described in Section 7.14.17 of the Zoning By-law, have been or will be satisfied prior to final Site Plan Approval as follows:

7.14.17 Notwithstanding anything to the contrary, where the Holding Symbol (H) is applied, only those uses which lawfully and actually existed on the date of passing of this BY-LAW shall be permitted to continue until such time as the Holding Symbol (H) is removed. The Holding Symbol (H) shall not be removed until the following criteria are satisfied:

a.) Verification of sufficient servicing capacity (water, sanitary, and stormwater) to fully service the LOT and development thereon.

- The Functional Servicing Report submitted as part of the Site Plan Approval application demonstrates how the Proposed Development can be fully serviced with City water, sanitary and stormwater services.

b.) Verification of sufficient transportation capacity and transportation infrastructure within the surrounding road network affected by the development and or use of the LOT.

- The Transportation Impact Study submitted as part of this Minor ZBA application demonstrates that the Proposed Development can be accommodated with total traffic conditions forecast to operate similarly to background conditions.

c.) For known or suspected contaminated sites as identified by the REGION, verification from the REGION and or the Province of Ontario that the owner has completed a Record of Site Condition.

- A Record of Site Condition has been submitted to the Province and is pending confirmation of filing. Confirmation of filing will be provided prior to approval of the Minor ZBA application and final Site Plan Approval.

d.) Where an increase in BUILDING density is proposed pursuant to Section 37 of the PLANNING ACT, the completion and registration of an agreement pursuant to subsections 37.3 and 37.4 of the PLANNING ACT between the owner and the CITY.

- The Proposed Development complies with the maximum height and density permitted by the Zoning By-law.

e.) A Block Plan has been prepared in accordance with the Block Plan policies of the OFFICIAL PLAN for the Northdale Neighbourhood Specific Provision Area, where applicable.

- A Block Plan was prepared in accordance with the Block Plan policies of the Official Plan and was submitted to the City on November 3, 2021 as part of the Site Plan Approval application submission. The previously submitted Block Plan has been updated, as shown in Appendix B, to identify the proposed pedestrian connections to neighbouring properties required by the City.

f.) Verification through Site Plan Control endorsement that the LOT and development thereon will conform to:

(i.) the OFFICIAL PLAN;

(ii.) the REGION'S Official Plan; and

(iii.) the CITY'S Urban Design Manual in effect, including the Northdale Urban Design Guidelines.

- The Site Plan Approval application is active and we anticipate Site Plan Control endorsement in due course in the near future.

g.) Demonstrate compliance with the Provincial D-6 Guideline "Compatibility Between Industrial Facilities and Sensitive Land Uses" where there are potential land use compatibility issues associated with existing and or planned industrial uses operating in proximity to residential or other sensitive land uses.

- The Provincial D-6 Guideline "Compatibility Between Industrial Facilities and Sensitive Land Uses" is intended to ensure appropriate separation and potential impact mitigation between industrial and more sensitive land uses. The D-6 Guidelines define industrial uses as those "which have the potential to produce point source and/or fugitive air emissions such as noise, vibration, odour, dust and others, either from normal operations, procedures, maintenance or storage activities, and/or from associated traffic/transportation".
- Based on a review of the surrounding area, there does not appear to be any industrial land uses within proximity to the Subject Site. The area around the Subject Site is made up of primarily residential with some commercial and general employment land uses, but no specific industrial uses which would create or present conflicts. As such, it is our opinion that the Proposed Development complies with the D-6 Guidelines.

5. SUPPLEMENTAL TECHNICAL STUDIES

5. SUPPLEMENTARY TECHNICAL STUDIES

A number of technical studies and other plans/drawings for the Proposed Development were previously submitted as part of the earlier Site Plan Approval application. The following supplemental technical studies are included within the enclosed Minor ZBA application and a summary of those studies is provided as follows:

5.1 TRANSPORTATION IMPACT STUDY

A Transportation Impact Study (TIS) was prepared by Paradigm Transportation Solutions Limited for this Minor ZBA application to provide an analysis of the existing traffic conditions, assess the impact of the Proposed Development, and provide recommendations to improve future traffic conditions.

The TIS concluded the following:

- **Existing Traffic Conditions:** All study area intersections are currently operating within acceptable levels of service except for critical movements at the intersection of Lester Street and Columbia Street West, and Albert Street and Columbia Street West;
- **Proposed Development:** The full build-out of the Proposed Development is forecast to generate 124 and 148 trips during weekday AM and PM peak hours, respectively;
- **2027 Background Traffic Conditions:** All study area intersections are forecast to operate at acceptable levels of service under the 2027 Background conditions with the exception of the northbound movements on Lester Street and Columbia Street West; and,
- **2027 Total Traffic Conditions:** The 2027 total traffic conditions are forecast to operate similarly to the 2027 background conditions with the same critical movements intersections with the addition of northbound movements of Site Driveway and Columbia Street West.

Based on the assessment carried out, it is recommended that the City of Waterloo consider if the warranted westbound left-turn lane should be constructed on Columbia Street West at the Site Driveway. Otherwise, it is recommended that the proposed development be constructed without the requirement for any further intersection improvements.

5.2 NOISE STUDY

The Road Traffic and Stationary Noise Impact Study by JJ Acoustic Engineering Ltd. was prepared in alignment with the Ontario Ministry of the Environment, Conservation and Park NPC 300, "Environmental Noise Guideline, Stationary and Transportation Sources-Approval and Planning" dated August 2013.

Road traffic noise control requirements for the Site were determined based on road traffic volumes provided by the Region of Waterloo (Region) and forecast to 10 years from the date of this study. The Noise Study determined that the Proposed Development will need to incorporate the following mitigation measures:

- Warning Clause Type C for all façades;
- Requirement for Air Conditioning for the entire building; and,
- A minimum of STC (sound transmission class) 28 is required for all exterior glazing for all façades.

6. SUMMARY AND CONCLUSIONS

6. SUMMARY AND CONCLUSIONS

In summary, the Proposed Development allows for a more efficient built form, optimizes the use of the Site and meets the large majority of the numerous zoning provisions that apply, only requiring a slight deviation from some of the requirements. The Proposed Development represents a desirable form of intensification that will contribute to the ongoing growth and evolution of the University of Waterloo MTSA and Northdale Neighbourhood. The Subject Site is currently occupied by two-storey townhouses that do not make efficient use of the Subject Site itself, nor do they fully utilize existing public transit services and other public services in proximity.

Through the Proposed Development, the Subject Site will be re-invented as an intensified pedestrian-focused, dynamic and engaging mixed-use development that will introduce hundreds of new residents to the area, as well as new, local commercial and employment opportunities to supplement and support the evolving mixed-use area. The Proposed Development incorporates a sleek podium/tower configuration that responds to the existing and emerging context on the Subject Site and surrounding area, and provides for a harmonious fit with adjacent properties. The new residents and commercial opportunities will leverage existing services in the area, supporting and being supported by a range of public services and amenities including multiple bus routes and the ION light rail network. This intensification will also assist the City in achieving its intensification, density and growth targets.

Based on a review of all applicable Regional and local planning policies, it is our opinion that the Proposed Development conforms with both the Regional and City Official Plans, and also complies with most of the applicable zoning regulations and meets the intent of those being varied. The amendments proposed through the Minor ZBA process allow for an overall better design approach and for the optimal development of the Subject Site in line with existing maximum height and density limits.

The proposed amendments align with the combined regional and City vision for a sustainable Waterloo by promoting less car-dependency and prioritizing pedestrians in an area well-served by the public transit system. It is through the proposed Minor ZBA application that the Proposed Development is able to be designed in its unique, pedestrian-friendly and urban form, and to offer the appropriate level of density while also providing expansive amenities.

It is our overall opinion that the Proposed Development supports the vision and intent of the existing and evolving planning framework. The proposed Minor ZBA application will uphold the intent of both the Regional and City planning policies as well as the Zoning By-law requirements as it will permit an efficient and compact growth opportunity that upholds the standards of good planning through its positive streetscape design, limited impact on adjacent lands, and its unique massing and materiality. Overall, the Minor ZBA represents good planning and a thoughtful urban design approach that is in the public interest.

7. APPENDICES

APPENDIX A: ZONING MATRIX

CURRENT SUBMISSION COMPLIES WITH ZONING PROVISION (PREVIOUS SUBMISSION DID NOT)

ZONING PROVISION TO BE AMENDED

Bolded text indicates the original site plan submission proposed an amendment to the zoning provision

Bolded and italicized text indicates the current Minor ZBA submission proposes an amendment to the zoning provision

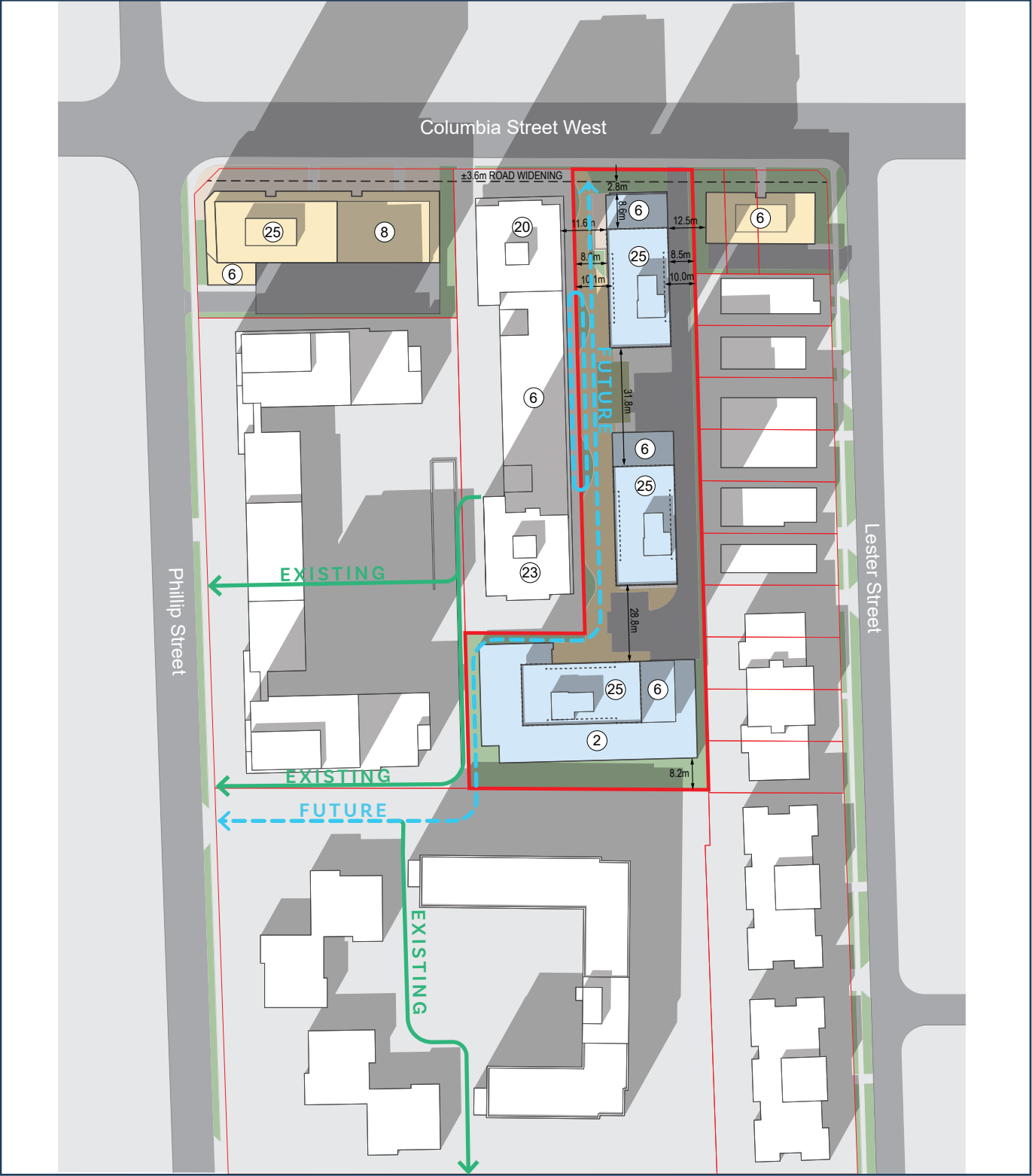
Zoning Provision	Requirements	Original Site Plan Submission	Current Minor ZBA Submission	Compliance
Lot Area (minimum)	1,000 m ²	7,882.6 m ² (after road widening)	No Change	✓
Lot Frontage (minimum)	20 m	35 m	No Change	✓
Street Line Setback - Convertible Frontage (minimum)	1 metre	2.8 m	No Change	✓
Street Line Setback - Convertible Frontage (maximum)	75% within 5 m of Street Line	100% of Street Line Building Façade within 3.5 m of Street Line	No Change	✓
Side Yard Setback (minimum)	3 m	West: 3.3 m East: 3 m	No Change	✓
Rear Yard setback (minimum)	7.5 m	South: 7.5 m	No Change	✓
Height of First Storey (minimum)	4 m	Building A: 5.6 m Building B: 5.6 m Building C: 4.8 m or 2.9 m	No Change Building C: 4.8 m	✓
Building Height (minimum)	10.5 m	Building A: 81.4 m Building B: 81.4 m Building C: 81.5 m	Building A: 79 m Building B: 79 m Building C: 78.3 m	✓
Building Height (maximum)	82.5 m	Building A: 81.4 m Building B: 81.4 m Building C: 81.5 m	Building A: 79 m Building B: 79 m Building C: 78.3 m	✓
Podium Height (minimum)	10.5 m	Building A: 20 m Building B: 20 m Building C: 6.1 m	No Change <i>Building C: 6.1 m</i>	No
Podium Height (maximum)	20 m	Building A: 20 m Building B: 20 m Building C: 6.1 m	No Change	✓
Building Stepbacks above Podium (minimum)	3 m	Building A (north/front): 8.55 m Building A (east & west/side): 0 m Building B (north/front): 8.55 m Building B (east & west/side): 0 m Building C (north/front): 0 m Building C (east/flankage): 19.15 m Building C (west/flankage): 12.8 m	No Change <i>Building A (east & west/side): 0 m</i> <i>Building B (east & west/side): 0 m</i> <i>Building C (north/front): 0 m</i>	No

Zoning Provision	Requirements	Original Site Plan Submission	Current Minor ZBA Submission	Compliance
Tower Footprint above the Eighth (8th) Storey (maximum)	800 m ²	Building A: 604 m ² Building B: 604 m ² Building C: 599 m ²	No Change	✓
Tower Separation measured from the exterior face of the building, including balconies (minimum)	a) 22 m from a tower on the same lot b) 11 m from an interior lot line	Building A to B: 31.8 m Building B to C: 28.8 m Building A to West Lot Line: 8.583 m Building A to East Lot Line: 8.549 m Building B to West Lot Line: 8.636 m Building B to East Lot Line: 8.549 m Building C to North Lot Line: 8.234 m Building C to West Lot Line: 15.178 m Building C to East Lot Line: 20.9 m	No Change Building A to West Lot Line: 8.583 m Building A to East Lot Line: 8.549 m Building B to West Lot Line: 8.636 m Building B to East Lot Line: 8.549 m Building C to North Lot Line: 8.234 m	No
Horizontal Tower Dimension (maximum)	35 m	Building A: 34.2 m Building B: 34.2 m Building C: 34.2 m	No Change	✓
Density (minimum)	250 Bedrooms per hectare = 197 Bedrooms minimum	591 Bedrooms	No Change	✓
Density (maximum)	750 Bedrooms per hectare = 591 Bedrooms maximum	591 Bedrooms	No Change	✓
Number of First Storey entrances to the building (minimum)	1 per 15 m of Street Line Building Façade	Building A: 1 entrance per 7.5 m Building B: 1 entrance per 8 m Building C (site rear): 1 entrance per 17 m	No Change Building C: 1 entrance per 10 m	✓
Amenity Area (minimum)	3 m ² for the first Bedroom and 2 m ² for each additional Bedroom in the dwelling unit = 591 units x 3 m ² = 1,773 m ² minimum	Promenade: 616.8 m ² Indoor Amenity: 68.7 m ² Balconies: 3,500 m ² TOTAL: 4,185.5 m ²	Promenade: 1,416.4 m ² Indoor Amenity: No Change Balconies: 1,797.9 m ² TOTAL: 3,278.25 m ²	✓
Proportion of Required Amenity Area as Common Amenity Area (minimum) - 3.A.4.2	30% = 532 m ² minimum	685.5 m ²	1,481 m ²	✓
Proportion of Amenity Area as Rooftop Amenity Area > 22 metres Above Grade (maximum) - 3.A.4.4	20% maximum	0%	No Change	✓
Landscape Open Space (minimum)	30% = 2,365 m ² minimum	37.4% (2,945.8 m ²)	37.69% (2,970.8 m ²)	✓

Zoning Provision	Requirements	Original Site Plan Submission	Current Minor ZBA Submission	Compliance
Residential Parking Spaces (minimum)	0.20 spaces per Bedroom = 119 spaces minimum	128 spaces	No Change	✓
Visitor Parking Spaces (minimum)	0.05 spaces per Bedroom = 30 spaces minimum	30 spaces	No Change	✓
Parking Spaces for Non-Residential Uses (minimum)	3.0 spaces per 100 m ² of Building Floor Area = 4 spaces minimum	4 spaces	No Change	✓
Accessible Parking Spaces (minimum)	Table 6D: Minimum parking spaces required by zoning category (134-166) 3 Type A spaces, 3 Type B spaces	Type A: 3 spaces Type B: 3 spaces	No Change	✓
Parking Space Location	Prohibited in Front or Flankage Yards	No parking in Front or Flankage Yards	No Change	✓
Bicycle Parking Spaces - Residential (minimum)	Residential: 0.25 spaces per Bedroom = 148 spaces Non-Residential: 1 spaces per 100 m ² = 2 spaces TOTAL: 150 spaces minimum	172 spaces	No Change	No *Stacked Bicycle Parking Spaces not currently recognized
Number of Driveways per Lot (maximum)	1	1	No Change	✓
Floor Area for Ancillary Uses (maximum)	5,000 m ²	118.6 m ²	No Change	✓
Floor Area for Retail, Cafe, Bake Shop, Restaurant (maximum)	465 m ²	118.6 m ²	No Change	✓
Ancillary Use Location in Building	First Floor	First Floor	No Change	✓
Ancillary Use Location Along Building Façade	Shall abut the Front or Flankage Building Façade	Abuts Front Building Façade	No Change	✓

Zoning Provision	Requirements	Original Site Plan Submission	Current Minor ZBA Submission	Compliance
Mezzanine Regulations	If the Mezzanine floor area exceeds 40% of the open floor area of the room in which it is located, the Mezzanine shall be considered a storey. The Mezzanine shall be open and unobstructed except for safety guards required by the building code and any enclosed space permitted. The floor area of the Mezzanine is permitted to contain enclosed spaces that collectively shall not exceed 10% of the floor area of the room in which the Mezzanine is located, provided the enclosed spaces do not obstruct the visual connection between the open floor area of the Mezzanine and the room below.	Mezzanine space included in all three buildings may not have complied with the Mezzanine Regulations in Zoning By-law	Mezzanine removed from all three buildings	✓
Patio Location on Lot - 3.P.2.1	Shall not extend beyond lot	~3.5 metre setback from lot line	No Change	✓
Patio Location in Yard - 3.P.2.2	Prohibited in yard abutting Low Rise Residential Area	Subject Site does not abut Low Rise Residential Area	No Change	✓
Patio in Parking Area - 3.P.2.3	Patios shall not obstruct or eliminate a parking space or loading space	Patio does not obstruct or eliminate a parking space or loading space	No Change	✓
Geothermal Wells	Geothermal wells are not permitted on lands west of Weber Street	The possibility of including a geothermal system is being explored	No Change	No

APPENDIX B: BLOCK PLAN



- LEGEND
- Subject Site
 - Subject Site Proposed Development
 - Tower Setback
 - Existing Buildings
 - Potential Massing
 - Future Pedestrian Connection
 - Existing Pedestrian Connection

