4. POLICY CONTEXT AND ANALYSIS

4.1 CITY OF WATERLOO OFFICIAL PLAN

As of the date of this Brief, the current City of Waterloo Official Plan was approved in 2012 and most recently updated in February 2024. The City of Waterloo is also undertaking a review of its Official Plan, whereby Phase 1 was adopted on December 2, 2024, at City Council through OPA 58. Currently, OPA 58 is awaiting approval from the Ministry of Municipal Affairs and Housing.

Based on the existing consolidation of the Official Plan in effect as of February 2024, the Subject Site is designated Mixed-Use Medium High Density Residential in accordance with Schedule A (Land Use Plan). Additionally, the Subject Site is located within a Minor Corridor, within the Columbia District (Schedule B and Schedule C) and is designated as part of the Northdale Neighbourhood and as Medium High Density, with a maximum building height of 40 meters/12 storeys (Schedule B1).

Section 10.1.5 establishes policies for the Mixed-Use Medium Density Residential Designation. Predominantly, this designation is intended to permit higher density residential uses in the form of multiple unit residential buildings. Earlier in Section 10.1.2, policies recognize the need to incorporate a range of housing types in the City, including supporting a mix of housing unit types and a range of

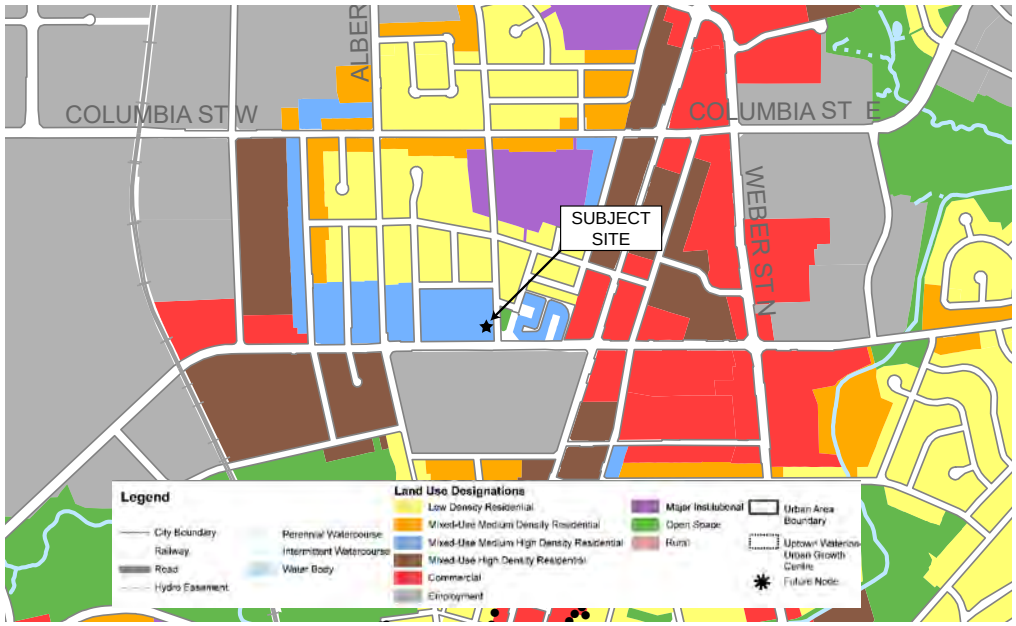


FIGURE 13: LAND USE PLAN (CITY OF WATERLOO OFFICIAL PLAN, 2024)



FIGURE 14: CITY STRUCTURE (CITY OF WATERLOO OFFICIAL PLAN, 2024)

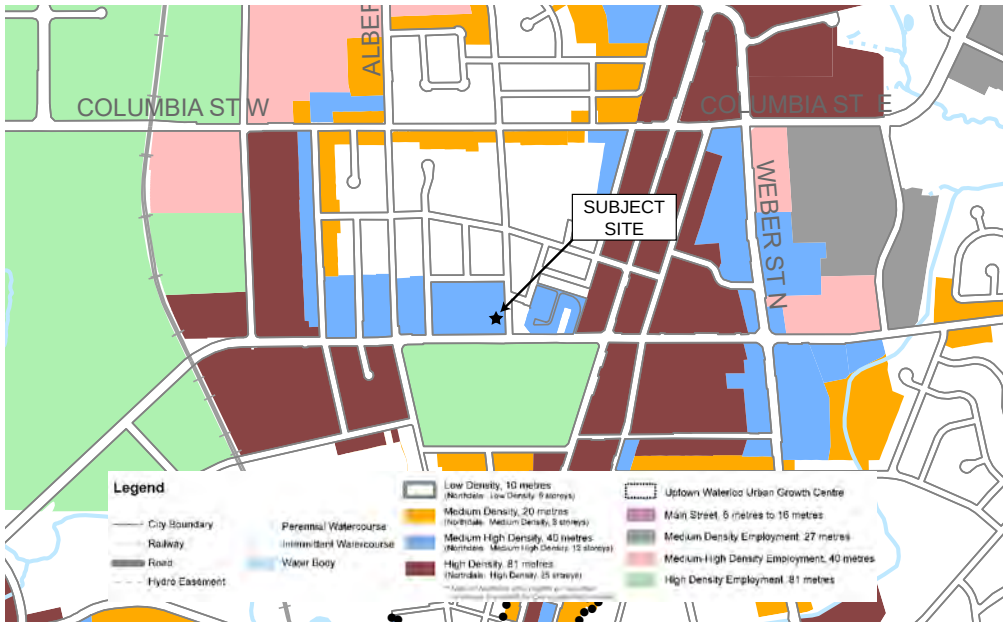


FIGURE 15: HEIGHT AND DENSITY (CITY OF WATERLOO OFFICIAL PLAN, 2024)

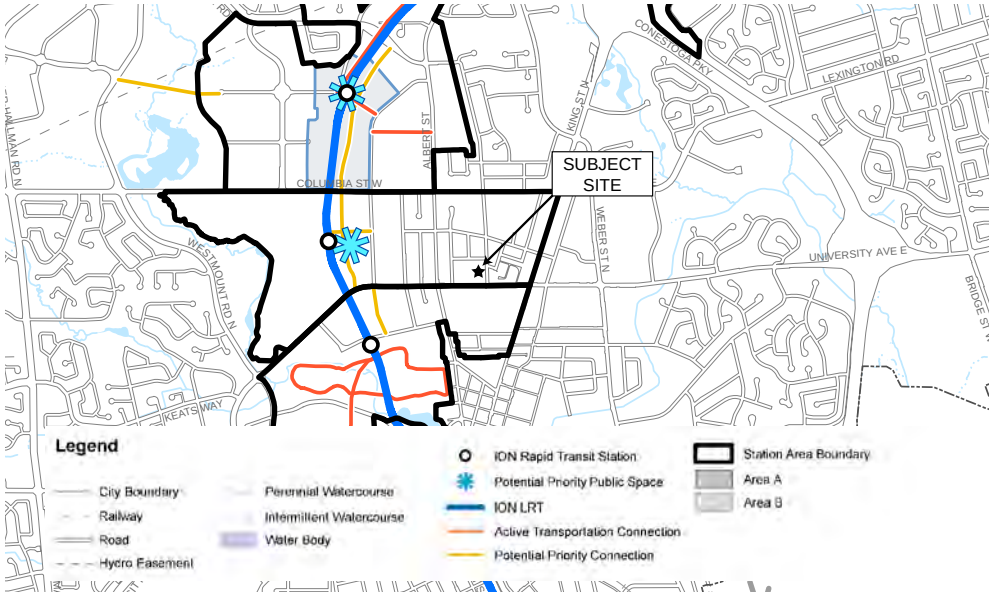


FIGURE 16: STATION AREAS (CITY OF WATERLOO OFFICIAL PLAN, 2024)

unit sizes. Likewise, a range of commercial uses are permitted, subject to specific performance standards and regulations to be determined through the applicable zoning. As reviewed in Section 4.3 of this Brief, the Proposed Development complies with the permitted uses under the City's Zoning By-law.

As noted, the Subject Site is designated Medium High Density on Schedule B1, with a maximum permitted height of 40 metres/12 storeys. The associated net residential density requirements include a minimum requirement of 150 to a maximum limit of 600 bedrooms per hectare. The Proposed Development conforms with these requirements, providing an overall height of 12 storeys, and a total of 94 beds, for a residential density of 598 bedrooms per hectare.

Section 3.11 provides urban design policies and strategies for all development in the City, and more detailed policies for specific areas, such as Nodes and Corridors, the Uptown Waterloo Urban Growth Centre, and MTSAs. Based on Schedules J and J4, both the General Urban Design Policies and Urban Design policies for Nodes and Corridors apply to the Subject Site.

Within Nodes and Corridors, the urban design policies are particularly focused on design that emphasizes pedestrian connectivity and safety, building and site design that creates visual interest, infill development that is appropriately

proportioned to the property size and shape, building design that positions the principal building entrances towards the public realm, and built form that appropriately frames the street and minimizes potential impacts related to shadowing and wind.

As discussed in Section 5.0 of this Brief, the Proposed Development directly implements this design guidance by intensifying the currently underutilized Subject Site with a compatible, well integrated building, which suits and respects the surrounding neighbourhood area and evolving context. The positioning of the built form towards the street, integration of commercial uses at-grade, and pedestrian oriented site circulation as well as other design considerations, create a design that contributes to the vibrant character of the street and neighbourhood at large. Moreover, the visually interesting and well-sculpted built form successfully minimizes potential wind and shadow impacts, and complies with detailed zoning regulations that dictate a podium/tower typology that is appropriately separated from surrounding properties.

Considering transportation policies and objectives, Hazel Street abutting the Subject Site is considered a Minor Collector road, with an ultimate road allowance of 23 metres (Schedule G), and part of the City-Wide Cycling and Multi-Use Routes (Schedule F). Hazel Street provides

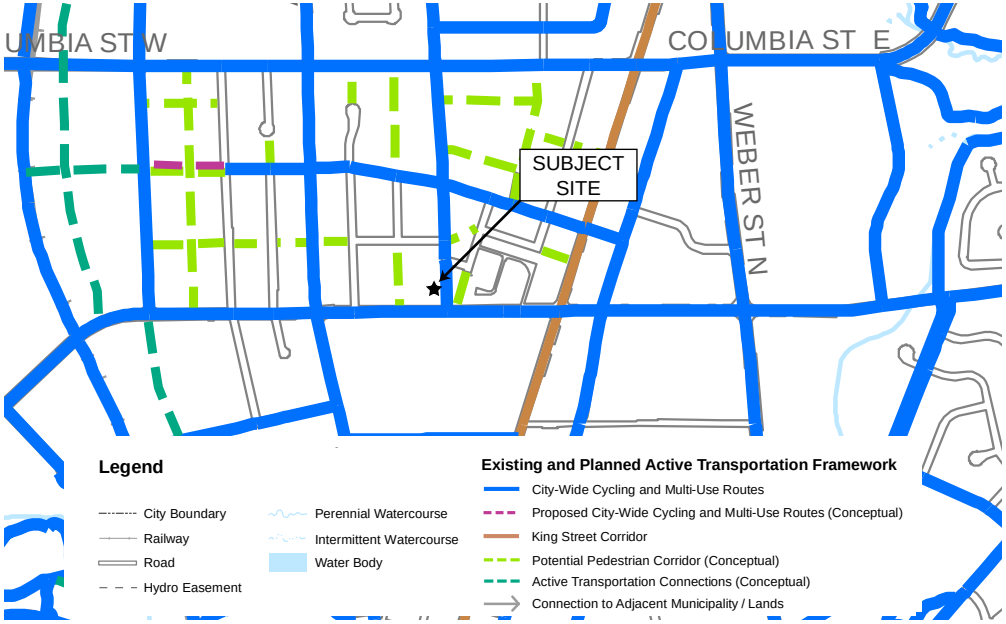


FIGURE 17: ACTIVE TRANSPORTATION FRAMEWORK (CITY OF WATERLOO OFFICIAL PLAN, 2024)

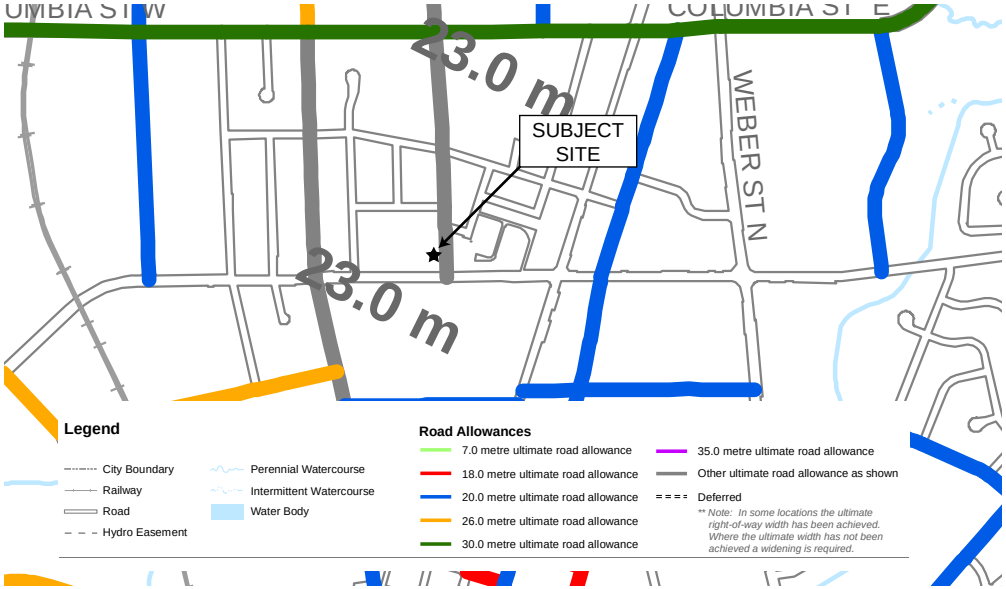


FIGURE 18: ROAD ALLOWANCES (CITY OF WATERLOO OFFICIAL PLAN, 2024)

connection to the greater road network including University Avenue, a major corridor, and the Wilfrid Laurier University Waterloo Campus, among other major nodes. In addition, University Avenue is considered a Regional Arterial, Primary Road, and is improved by physically separated cycle lanes in each direction. University Avenue is an important transportation artery through the City, and gateway into the City, providing convenient access from Highway 85, and connecting a number of important nodes and corridors, including both main university campuses.

A proposed 1.4-metre road widening is proposed in order to support the 23-metre right-of-way width identified for Hazel Street. In addition, the Proposed Development will support the function of Hazel Street and University Avenue by consolidating vehicular access to one driveway, located as far as possible from University Avenue, and prioritizing active transportation connections that will leverage the cycle lanes along University Avenue and sidewalks along both streets, supporting the intended pedestrian focus of the area.

The Subject Site is also located within the University of Waterloo Station MTSA (Schedule J). Section 3.8 (1) of the Official Plan dictates policies for development in MTSAs, which include achieving a minimum density of 160 residents and jobs combined per hectare in MTSAs. MTSAs are one of the City's strategic growth areas that are intended to accommodate a significant proportion of new development in the City. Moreover, these areas are intended to provide for a mix of transit supportive uses to provide for places to work, learn, live, and support place-making through enhancements to public and private amenities and open spaces.

The Proposed Development meets and exceeds this minimum density target by providing a residential density of 598 bedrooms per hectare, in compliance with the maximum density limit of 600 bedrooms per hectare. 26 bicycle parking spaces are also provided, aligning with the requirement under the Zoning By-law, while a total of only 10 vehicular parking spaces are proposed. The lesser vehicular parking supply and the Proposed Development's internal site circulation approach prioritizes pedestrian access to Hazel Street, with vehicular parking relegated to the rear of the building. Overall, the proposed density, parking approach, site circulation, and mix of uses are supportive of public transit usage and active transportation within the MTSA, and facilitate a transit-oriented approach to development.

Specific Provision Area 45

Specific Provision Area 45 provides a detailed, area-specific policy framework for the Northdale Neighbourhood. Under this framework, the Subject Site is located within Area 20K (Schedule A6 and A6a), which adds university residential uses as an additional permitted use, up to a maximum net density of 600 bedrooms per hectare. This additional direction is provided in recognition of the area's proximity to the main Wilfrid Laurier University campus, and the resulting demand for student-focused residential uses. Clearly, the Subject Site and surrounding lands are recognized as an ideal location to support new housing opportunities, and especially those that can cater to students.

This is further reinforced by policy 11.1.45(9), which specifically recognizes the need for "post-secondary educational related housing", and encourages such housing to be flexible and able to adapt to changing housing needs and demographics. Though not directly affiliated with Wilfrid Laurier University, the Proposed Development has been designed to address current demands for student housing. Based on the applicant's sizable housing portfolio, they have determined that there is currently a strong demand for one-bedroom, student focused units, whereas larger unit types are proving difficult to rent in current market conditions. As such, the

Proposed Development has been designed to provide 94 one-bedroom units that are well-suited to student tenants as well as young professionals and other individuals. However, the building floor plan has also been designed with flexibility in mind, and can be retrofitted in the future to introduce larger unit sizes that may better appeal to demographics in the future.

The Subject Site is also located along a Mixed-Use Street and an Active Frontage Area; whereby additional policy guidance is provided pertaining to land use and built form at the ground floor frontage (Schedule A45a).

Section 11.1.45 provides policies for the Northdale Neighbourhood Specific Provision Area. This area is planned to evolve, change and experience intensification through infill development, to reurbanize into a vibrant, more intensive, sustainable, and complete mixed-use community. The area-specific policy framework was informed by a study that was completed in 2012 for this area, resulting in area specific urban design and built form guidelines, as well as a streetscape master plan and environmental assessment, as further discussed in Section 5 of this Brief.

Policies for the Northdale Neighbourhood pertaining to land use refer to and continue to reflect Official Plan schedules and designations with some more detailed guidance pertaining to specific land use designations. Policy 11.1.45(16) outlines policies specifically for lands designated Mixed-Use Medium High Density Residential. The permitted net residential density shall be a minimum of 250 bedrooms per hectare and maximum of 600 bedrooms per hectare. Likewise, building heights are permitted to range between 3 to 12 storeys. As previously mentioned, the Proposed Development provides for a 12 storey building with a residential density of 598 bedrooms per hectare, reflective of the evolving context of this area and within the permitted range for residential density and height.

Section 11.1.45(16) (b) as well as Section 12.3.1 of the Official Plan provide policies for a bonusing framework for height/ density increases to the permissions of the Zoning By-law in exchange for facilities, services or matters. As noted above and in Section 4.3 below, the Proposed Development complies with the maximum height and density limits under the Official Plan and Zoning By-law. As such, while the Proposed Development does require a Minor Variance application to address two minor zoning deficiencies, the requested variances do not request increases to the existing height or density requirements. The Proposed Development is in conformity with the policies and regulations of the Official Plan and Zoning By-law as it relates to height and density, seeking to implement a building that is transit-supportive and appropriate for this emerging mixed-use community.

The Northdale Neighbourhood policies related to neighbourhood structure emphasize the focus on “mixed-use, mixed-density, transit and pedestrian supportive principles”, acknowledging that single-detached residential housing forms are no longer being built, as historically favoured. Likewise, new buildings and development will be sustainable, compatible with the surrounding context, positively contribute to the public realm, and support a public pedestrian realm. The Proposed Development creates a pedestrian-oriented frontage, which screens the vehicular parking partially underneath and behind the podium of the building, with the front of the building used entirely for active commercial and lobby uses. A more detailed urban design analysis of the Proposed Development is provided in Section 5.0 of this Brief.

For the Active Frontage Area classification that applies to the Subject Site, such areas are intended to contribute to streetscape animation and activity, with restaurants, cafes and stores specifically encouraged on the ground floor. Buildings are to be appropriately set back from the street and include a taller ground floor height to accommodate commercial uses, as per Zoning regulations. The ground floor frontage of the Proposed Development is dominated by active uses, with three commercial units occupying 75% of the

frontage, and the remaining 25% being occupied by the residential lobby. The Proposed Development also complies with zoning setback and ground floor height requirements.

Overall, the Proposed Development conforms with the City's Official Plan and implements the urban design policies that apply City-wide, to the nodes and corridors, to transit station areas, and to the Northdale Neighbourhood in particular.

4.2 CITY OF WATERLOO OFFICIAL PLAN AMENDMENT 58

The City of Waterloo is undertaking a review of its Official Plan as previously mentioned. Most recently, at the time that this Brief has been prepared, Official Plan Amendment No. 58 ("OPA 58") implements Phase 1 of the ongoing Official Plan Review process. While council has adopted OPA 58, due to recent legislative changes, the planning approval authority of the OPA is no longer the Region of Waterloo; it is now the Minister of Municipal Affairs and Housing. OPA 58 is currently undergoing review by the Ministry, with approval expected in the coming months. Although OPA 58 is not yet in force, it reflects City Council's most recent expression of planning and urban design policy direction, and so has been reviewed as an informative future policy document.

OPA 58 will make minor updates to Chapters 1-2, and 6 of the Official Plan, and changes of greater magnitude in Chapter 3 - City Form, Chapter 10 – Land Use Designations, Chapter 11 – Area Specific Policies, Chapter 12 - Implementation, and the glossary. Likewise, some of the Official Plan schedules have also been revised as they relate to the Subject Site:

TABLE 4: SCHEDULE CHANGES TO THE OFFICIAL PLAN

Waterloo OP (Consolidation February 2024)	OPA 58	Schedule Change
Schedule A: Mixed-Use Medium High Density Residential	Schedule A: Medium High Rise Residential	Yes
Schedule A6a: Special Provision Area 45 and 20K	Area Specific Policies Schedule A6a: 45, 20k	No
Schedule B: Minor Corridor	City Structure Schedule B: Minor Corridor	No
Schedule B1: Medium High Density, 40 metres, 12 Storeys	Built Form Schedule B1: Medium High Rise, 12 storeys	Yes
Schedule E: Along Minor Collector	Road Classification System Schedule E: Minor Collector	No
Schedule J: Within University of Waterloo Station Area Boundary	Deleted	Yes
Schedule C: Columbia Schedule F: Along City-Wide Cycling and Multi-Use Routes Schedule G: Along 23.0 metre ultimate road allowance	Not addressed in this OPA	Not applicable at this time.

Chapter 1 – Introduction and Chapter 2 – Vision, Principles and Basis of the Plan

Other than minor wording and administrative revisions, Chapter 1 has been updated to include a Land Acknowledgment. Additionally, references to provincial legislation have been updated in accordance with recent changes. The timeframe for the Official Plan has been revised from 2031 to 2051.

Chapter 2 has also updated the principals of the OP to include a sustainability framework. Likewise, updates pertaining to the Growth and City Form subsection better reflect the priority growth areas changes.

The Proposed Development continues to support the Vision, Principles and Basis of the Official Plan.

Chapter 3 – City Form

Changes to Chapter 3 revise the City Form policies as well as applicable Schedules to reflect Provincial policies and direction pertaining to growth, including population, growth, density and housing targets. OPA 58 updates the City's growth forecasts, and plans to accommodate approximately 185,000 residents and 114,900 jobs by 2051. Based on the City's 2021 population, this represents a significant population growth of over 63,000 new residents over the 30-year period from 2021 to 2051. The vast majority of this growth will be accommodated through intensification of the existing urban area and particularly within priority areas for growth, including the Nodes, Corridors and Major Transit Station Areas, and the Northdale Neighbourhood in particular. By way of intensification, the City plans to support a greater range of housing options, implement transit supportive development focus and framework, and provide for a mix of uses that advance the creation of complete communities.

As noted in the table above, Schedule B continues to designate the Subject Site as being within a Minor Corridor, and Schedule B1 has been revised to slightly alter the Built Form categories, changing the applicable built form category to Medium High Rise, 12 storeys. The new built form category omits the measurement of height by metres and continues to permit a maximum height of 12 storeys and notably no longer sets out a maximum density limit, though a maximum density limit continues to apply in the Zoning By-law. The Proposed Development continues to conform to the existing and updated 12-storey height limit, as well as the density limit in the Zoning By-law.

In alignment with the previously discussed policies pertaining to development surrounding transit, the revised Official Plan policies continue to build upon and implement Provincial direction pertaining to MTSAs. Policy 2.3(3) builds on the notion that intensification should primarily occur within growth areas, such as MTSAs, to support public transit investments. Likewise, the addition of Section 3.5.3 Major Transit Station Areas, establishes a basis for how MTSAs will accommodate higher population and employment densities. The Proposed Development continues to implement the directives under the revised sections of the OPA 58, intensifying an underutilized property in a manner that supports transit and contributes to the creation of a complete community.

Section 3.9 Urban Design entirely replaces the existing urban design policies under Section 3.11 of the Official Plan. The new urban design section encompasses many of the policies of the current Official Plan, while reorganizing and further expanding upon urban design objectives as well as direction for certain city forms and design elements. The Proposed Development continues to support the City's design vision and achieve the City's Urban Design Objectives. The Proposed Development seeks to provide a well-proportioned and highly sculpted building massing that uses high quality materials and relates well to the surrounding context, facilitating a sense of place through architectural rhythm and facilitating an active and engaging streetscape. A more detailed analysis of the urban design policies and guidelines applicable to the Subject Site is provided in Section 5.0 of this Brief.

Overall, the Proposed Development continues to conform with the revised Chapter 3 as outlined in OPA 58, as it optimizes the Subject Site and the existing infrastructure to accommodate an appropriate level of growth, as determined by the Official Plan and Zoning By-law. The Proposed Development is in keeping with the applicable built form policies as it does not exceed the maximum permitted height and aligns with the minimum density requirements for Major Transit Station Areas, as well as numerous other built form regulations provided by the Zoning By-law. The Proposed Development also aligns with the urban design objectives of the plan, as the proposed intensification provides a high quality of architectural design, creates a sense of place, contributes to the enhancement of the pedestrian experience, is transit supportive, and provides a mix of uses that support the creation of an overall vibrant and complete community.

Chapter 10 – Land Use Designations

The revisions to Chapter 10 of the Official Plan through OPA 58 include policy revisions for the Residential designations and most other land use designations. Likewise, policies have been updated to permit Additional Residential Units (ARU) and remove limitations on house conversions, in accordance with the Planning Act.

As noted, the Subject Site's land use designation has been re-worded from "Mixed-Use Medium High Density Residential" to "Medium High Rise Residential". This re-wording works in tandem with the other previously noted change, which removes maximum density limits from the Official Plan and instead focuses primarily on building height to direct built form intensity. General policies for residential land uses continue to support the creation of a full range of housing forms and densities, permitting ancillary uses to facilitate mixed-use development where appropriate. The residential designations are intended to provide a range of housing options and transitions neighbourhoods to become complete communities. In addition to the removal of the maximum density limit, other performance standards for this designation have also been removed, including those regarding the location of ancillary uses, limitations for the size of retail commercial uses, and other standards, referring instead to the implementing Zoning By-law for such details.

The Proposed Development continues to align with the vision and planned function of the applicable land use designation, despite the revised designation title. The Proposed Development will provide for a mix of uses and a built form which better implements the policies of the Official Plan by providing a mixed-use building featuring residential and commercial uses, at appropriate scales that respect and align with the revised land use policies, as well as the policies that are currently in effect.

Chapter 11

OPA 58 will also make minor revisions to Chapter 11, such as renaming of the site specific policies from "Specific Provision Area" to "Area Specific Policy", and refinement of wording to reflect the updated land use designation titles, in alignment with Chapter 10.

The Subject Site continues to be within the boundary for the Northdale Neighbourhood lands Area Specific Policy 45 (ASP 45). This ASP will undergo some policy changes including removal of certain bonusing provisions. Other minor revisions to this Section include updated references to policies for housing that supports post-secondary educational institutions, references to MTSA policies, height and density reference revisions, updated transportation policies, references to Urban Design Guidelines, refences to affordable housing policies, and other revisions.

As discussed in greater detail in Section 5.0, the Proposed Development conforms to and aligns with the policies for the Northdale Neighbourhood. The existing vision and principles, as well as the majority of the land use policies continue to apply, providing guidance for the area

as it undergoes change and accommodates intensification to grow into a vibrant, complete community that features a range of uses and housing types, and supportive of active transportation.

ASP 45 has been updated to include addition development policy direction, requiring that development applications should be compliant with the following criteria:

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

- *Site and building design that complement and enhance the surrounding neighbourhood 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.

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

While Section 5.0 of this Brief provides a more detailed design assessment of the Proposed Development, the design of the Proposed Development establishes a built form that relates well to the surrounding streetscape, is designed to respect distances between adjacent properties, implements a landscape strategy that works well with the proposed built form and surrounding public realm, and provides for enhanced pedestrian access and active ground floor uses along the Hazel Street frontage. The design considerations of the Proposed Development provide for massing that relates well to the surrounding context, considering the planned function of the area. The proposed uses will support active transportation facilities, provide commercial uses at-grade that are publicly accessible, and reflect the scale of development envisioned and permitted by the land use policies of ASP 45.

Based on a detailed review and analysis of all applicable policies, it is our opinion that the Proposed Development effectively implements and conforms to the policy directives of both the City of Waterloo's Official Plan and Council adopted revisions to the Official Plan through OPA 58.

4.3 CITY OF WATERLOO ZONING BY-LAW 2018-050

The Subject Site is zoned (Holding) Residential Northdale – 12 (RN-12) and Site Specific Zoning Exception C182 under Zoning By-law 2018-050. The Subject Site is also classified as an Active Frontage Area within the Northdale Neighbourhood, as per Section 3.S.7. As established by Bill 185, minimum vehicular parking requirements are no longer enforceable within MTSAs, such as the University of Waterloo Station Area.

The RN-12 Zone permits a range of primary uses including multi-unit residential buildings (including apartment buildings), mixed use buildings with dwelling units above the first storey, assisted living facility, and long-term care facility. Likewise, other permitted complementary and ancillary uses include a range of institutional uses and commercial type uses. The Proposed Development provides for a mixed-use building with permitted commercial uses on the ground floor and residential units above, and thus is permitted by the Zoning By-law.

The zoning matrix provided in Appendix A of this Brief provides a fulsome review of the applicable regulations and performance standards that apply to the Subject Site. As noted in the zoning matrix, the Proposed Development complies with all applicable zoning regulations, except for the following:

- Table 7S: Regulations – RESIDENTIAL NORTHDALE TWELVE ZONE (RN-12)
  - Requires a minimum BUILDING STEPBACK above a PODIUM of 3 metres. The Proposed Development complies with this requirement in virtually all areas, except for a 9 metre wide central portion above the principal residential entrance, and a corresponding 9 metre wide central portion on the rear building facade.
- Section 7.13.10.2: Street Frontages – BUILDING FLOOR AREA on the FIRST STOREYS
  - Requirement for certain uses such as circulation spaces, indoor amenity area, entrance and foyers for dwelling units, lobby area, or hydro transformer room, to not exceed 30% of the BUILDING FLOOR AREA of the FIRST STOREY. The Proposed Development provides for approximately 38% of the ground floor area for these specified uses, but has been designed to minimize the extent of such uses, while maximizing active uses along the Hazel Street building frontage in particular.

As reviewed with City staff, a Minor Variance application will be submitted following staff endorsement of the Site Plan application, in order to seek relief for these two minor zoning deficiencies.

The Subject Site is also subject to a holding symbol, as noted above. The Subject Site addresses the conditions to remove the holding symbol as follows:

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

A Functional Servicing and Stormwater Management Report prepared by GRIT Engineering Inc., is enclosed as part of the Site Plan Application submission. The report concludes that the Proposed Development can be "serviced by the existing and proposed onsite infrastructure".

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

A Transportation Impact Study and TDM Plan prepared by Paradigm Transportation Solutions Limited, is provided as part of this submission. The Transportation Impact Study confirms that there is sufficient transportation capacity and infrastructure, and finds that the Proposed Development will have a "negligible impact on traffic operations at the intersection of University Avenue and Hazel Street".

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.

The Subject Site is not identified as a known or suspected contaminated site by the Region, and has historically been used for residential purposes. As such a Record of Site Condition is not required.

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 is not pursuing an increase in building density. Therefore, an agreement under Section 37 of the Planning Act is not required or applicable.

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.

We feel that a block plan is not warranted or useful in this case given that the relatively compact size and shallow depth of the Subject Site which, coupled with prescriptive built form zoning regulations, dictates the built form proposed through the Proposed Development. The Proposed Development complies with the existing zoning requirements related to tower separation and building setbacks, among other provisions which thoroughly regulate the built form.

The compact size and shallow size of the Site, and adjacent properties to the north and south, likewise negates the need for or benefit of additional connections with adjacent properties. Instead, pedestrian activity should be directed to the sidewalk along Hazel Street, which provides direct and convenient connectivity to University Avenue and adjacent properties.

f) Verification through an urban design brief 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.

This Brief summarizes our detailed analysis, which concludes that the Proposed Development is compliant with and conforms to the urban design direction from the City of Waterloo's Official Plan, the Region's Official Plan, and the City's Urban Design Manual. Section 5.0 of this Brief provides a more detailed review of how the Proposed Development will implement the applicable urban design policies and guidelines.

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.

A Noise Study was prepared by Rowan Williams Davies & Irwin Inc., enclosed as part of this application. The Noise Study identifies only one noise matter that requires further mitigation, associated with the Lazaridis School of Business and Economics. In addition, based on our own contextual analysis of the area, we have not identified any Class 1, 2, or 3 industrial facilities within the potential influence area identified by the D-6 Guidelines.

As previously noted, an application to remove the holding symbol will be submitted following staff endorsement of the Site Plan application.

The Proposed Development is compliant with nearly all applicable zoning provisions under the City of Waterloo's Zoning By-law 2018-050. A Minor Variance application will be required to adjust the two Zoning provisions noted above. An application will also be required to remove the currently applicable holding symbol.

5. DESIGN VISION

5.1 DESIGN VISION STATEMENT

The Proposed Development has been designed to activate the Hazel Street frontage, capitalizing on this prominent frontage and proximity to University Avenue by providing a compatible, urban built form that is consistent with the evolving context of the Northdale Neighbourhood. Overall, the Proposed Development is intended not only to support the ongoing creation and evolution of a complete community, but also to support connection to the surrounding transportation and active transportation networks, create a pedestrian friendly and active streetscape, facilitate a built form that takes cues from the existing lot fabric and built form context and largely reflects the detailed built form performance standards outlined in the City's Zoning By-law, and support an engaging and vibrant public realm.

This section of the Brief will provide a more detailed review of how the Proposed Development intends to implement this design vision, and how applicable Urban Design policies and guidelines have been considered and implemented within the context of the Subject Site.

5.2 URBAN DESIGN POLICIES & GUIDELINES

City of Waterloo Official Plan

The City of Waterloo's currently in force Official Plan (Office Consolidation February 2024) establishes urban design direction under Chapter 3 City Form, and specifically within Section 3.11 Urban Design. As further discussed in section 4.0 of this Brief, the Subject Site is located within a Minor Corridor, part of the Columbia District, as depicted in Schedule C and D of the Official Plan, and within the boundary of the University of Waterloo MTSA (Schedule J and J4 of the Official Plan). As such, Urban Design policies under Section 3.11.1 General Urban Design Policies, 3.11.2 Urban Design within Nodes and Corridors, and 3.11.4 Urban Design within Station Areas are all applicable.

The broad categories and themes discussed within the General Urban Design Policies that are relevant to the Subject Site and Proposed Development generally include intensification, views and vistas, streetscapes, gateways, landmarks, safety and security, site circulation, transit-oriented design, universal design, parking/site servicing, compatible development, human-scale development, building design, landscape design, site amenities, and sustainable design.

Similarly, policies for Nodes and Corridors are generally sorted into eight main groups: connectivity, visual interest, public art, infill development, building design, built form and massing, skyline, and site amenities. Urban design policies within Station Areas are more focused on transit-oriented design and associated considerations, highlighting placemaking, transfer areas, streets, pedestrian oriented places, building orientation, built form, sustainable design, community character, parking, and master plans.

Official Plan Amendment 58

As part of the City of Waterloo's ongoing Official Plan Review, the City adopted OPA 58, which will update the current Official Plan policies in alignment with updated provincial planning requirements and new legislation. The adopted OPA 58 modifies Chapter 3 City Form and refines and updates the Urban Design policies, to incorporate additional policy direction pertaining to human scale design and a high standard/quality of built form, urban design, and architecture.

The main urban design objectives include design excellence, creating a sense of place, connectivity, streetscaping and street activity, and enhancing the pedestrian experience. The general urban design policies replace the currently existing ones, classifying policies based on the primary design elements such as the public realm and streetscapes, built form and building typologies, major transit station areas, large sites, and the priority and emphasis

on urban design as opposed to density.

Urban Design Manual

The City of Waterloo utilizes the Urban Design Manual (city-wide) to review specific types of development applications such as Official Plan Amendments, Zoning By-law Amendments, and Site Plan Applications. This manual applies to the city as a whole and is intended to guide development. The urban design objectives established by the manual are as follows: to promote a high standard of urban design, to respect context and promote a sense of place, to enhance connectivity and interaction, to promote creativity and innovation, and to encourage sustainable design.

The supplementary guidelines provide specific additional guidelines for specific types of developments and land uses such as streetscape (public realm), master planned development, site services, tall buildings, mid-rise housing geared to student accommodations, parking structures, drive through facilities, signage, and area-specific guidelines for nodes and corridors. Part 4 of the guidelines provides direction for site plan review, providing general direction regarding the process and administration of the application and site plan standards. The City is also in the process of updating or "refreshing" the Urban Design Manual, but this process is still in the early stages.

Northdale Urban Design Guidelines

The Northdale Land Use and Community Improvement Plan Study Urban Design and Built Form Guidelines (June 2012) ("Northdale Urban Design Guidelines"), provide area-specific guidelines for the Northdale neighbourhood. While the Official Plan and Urban Design Manual provide more general direction for urban design, built form, and landscaping, the Northdale Urban Design Guidelines specifically apply to the area outlined under Special Provision Area 45 on Schedule A6, A6a, and A45a of the Official Plan, including the Subject Site.

The Northdale Urban Design Guidelines establish a vision statement for the Northdale neighbourhood as a neighbourhood that is transitioning and evolving to grow and accommodate a great portion of the City's projected population growth. These area-specific guidelines classify urban design direction based on the neighbourhood structure, public realm, building and development, and the implementation strategy. Of particular emphasis and applicability to the Subject Site, the Proposed Development considers the Mixed-Use Street streetscape design guidelines, the Mixed-Use Medium-High Density Residential guidelines, direction for active frontages, as well as a number of other public realm and built form guidelines.

5.3 URBAN DESIGN ANALYSIS

A number of Urban Design policies and guidelines apply to the Proposed Development, as generally summarized above. The City's Official Plan outlines a robust Urban Design policy framework, the City's Urban Design Manual provides more detailed urban design guidelines for developments throughout the City, and the Northdale Neighbourhood Urban Design Guidelines provide more tailored, area-specific guidelines for the Northdale Neighbourhood. While these are distinct planning and design documents, they are largely consistent with one another in terms of the general urban design objectives that are targeted, and there is significant overlap in the urban design direction provided for key topics and themes, as reviewed below. As such, rather than review each document and guideline independently, this Brief will instead undertake an urban design analysis of the key topics and themes that are addressed in the documents, as summarized below.

As mentioned, the City of Waterloo is undergoing a review of its Official Plan; having adopted OPA 58 in December 2024 though still awaiting Ministerial approval, which deletes and replaces the entire Urban Design section of the Official Plan. Likewise, the City's Urban Design Manual (city-wide) is undergoing a "refresh" to bring the guidelines into conformity with the City's Strategic Plan and other

relevant document updates, and improve the legibility of the document overall. This Brief considers direction from the currently in-force Official Plan and Design Guidelines, as well as updated direction that will be provided through OPA 58, once approved by the Province, and the City's refresh of the Urban Design Manual.

Built Form, Massing, and Building Design

The various design guidelines and policies intend to support the design of new development that is well articulated and has incorporated massing and design elements that fit into the surrounding context. The Proposed Development is well suited for the evolving planning context and existing surrounding context, as reviewed below.

As reviewed in detail in Section 3 of this Brief, the Subject Site is located along a Minor Corridor which is also considered a Mixed Use Street, and should support an Active Frontage, per Schedules B and A45a of the Official Plan, as well as the Northdale Urban Design Guidelines. The Proposed Development seeks to fit within the existing and planned context and align to applicable and preferred neighbourhood elements, public realm elements for mixed-use streets, and preferred elements for buildings and developments, particularly for those that are situated along active frontages, as established by the Northdale Urban Design Guidelines, as well as other applicable urban design policies and

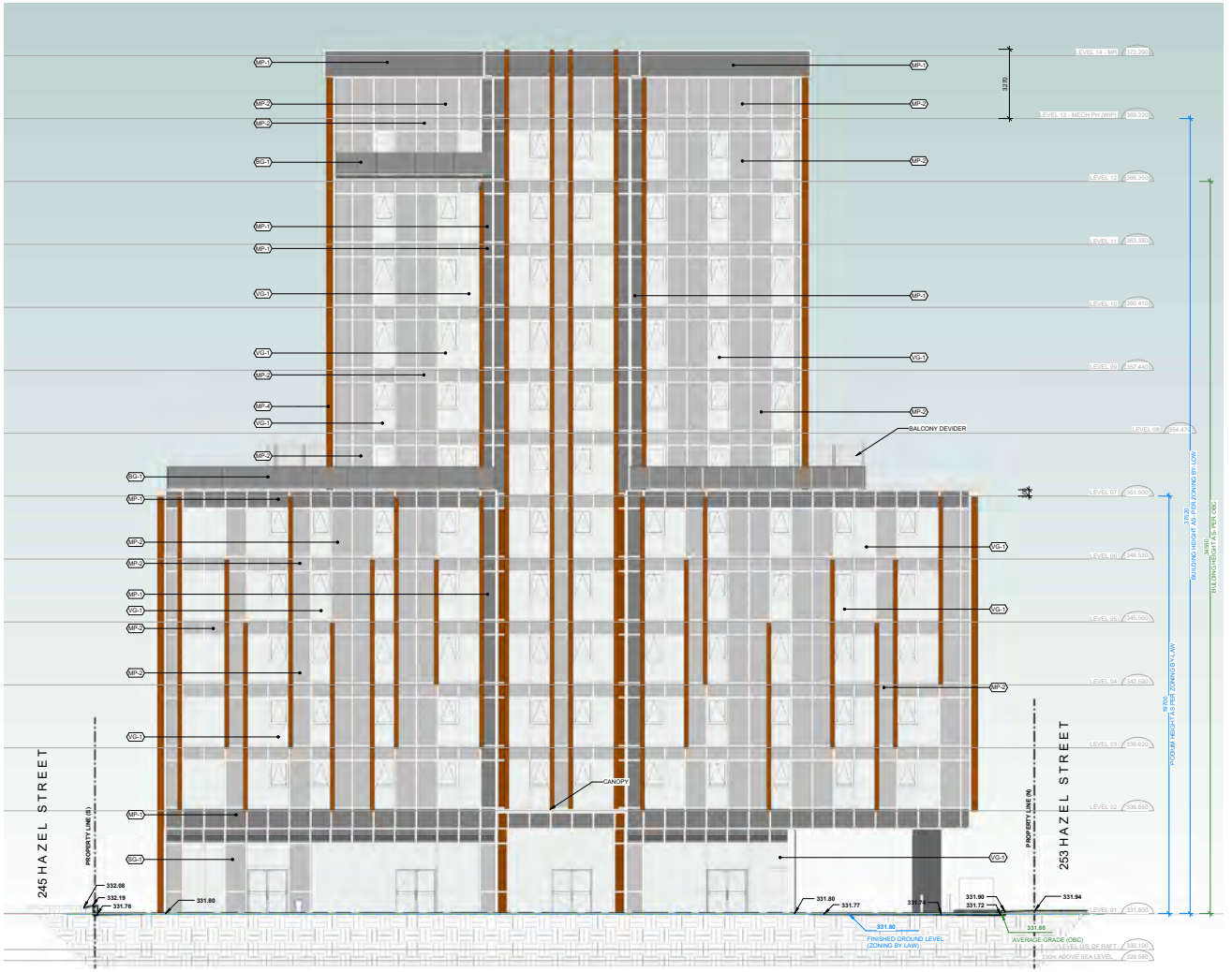


FIGURE 19: PROPOSED DEVELOPMENT EAST ELEVATION

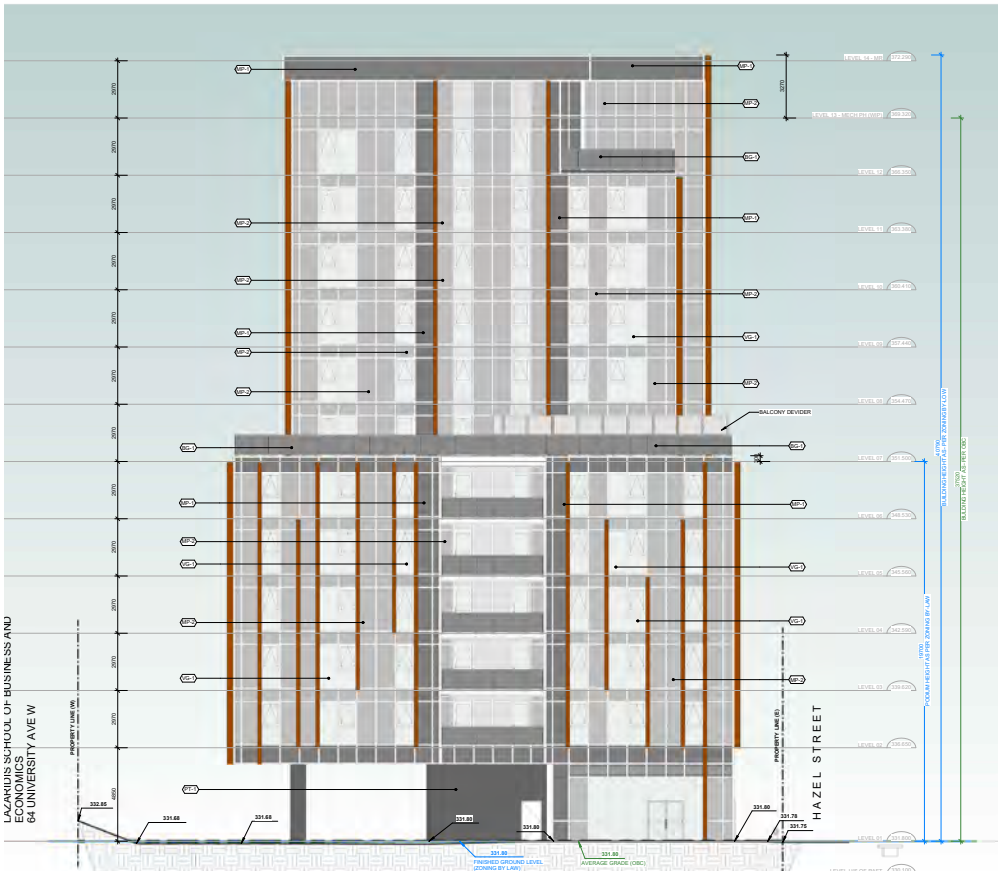


FIGURE 20: PROPOSED DEVELOPMENT SOUTH ELEVATION

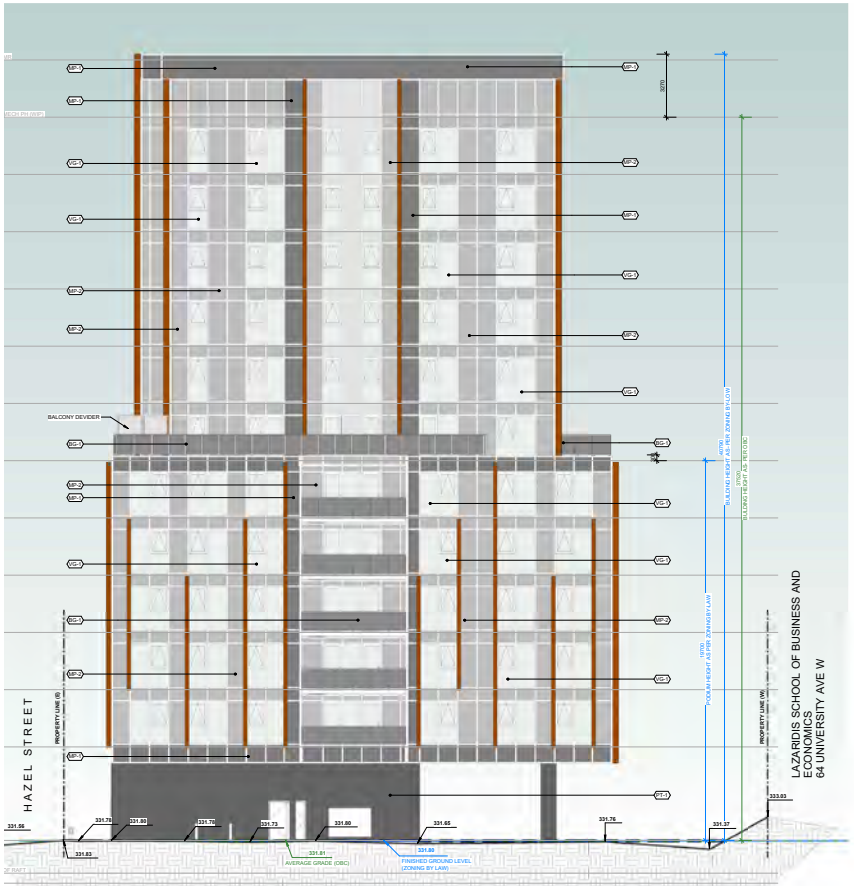


FIGURE 21: PROPOSED DEVELOPMENT NORTH ELEVATION

guidelines.

Surrounding the Subject Site are a mix of institutional and residential uses, as well as mid-rise mixed-use buildings featuring at-grade commercial uses, and residential units in the upper levels. There are also many active planning applications in the Northdale neighbourhood and surrounding the Subject Site, approving and considering mixed-use mid- and high- rise buildings ranging between 7 and 25 storeys in height, as planned and permitted by the City's Official Plan and Zoning By-law. This represents the planned and emerging context of the Northdale Neighbourhood.

The Proposed Development is designed to ensure that the built form and massing harmoniously fits with the different adjacent conditions surrounding the Subject Site including the institutional use at the rear and interim low-rise residential uses at the north and south at the side-yards. The massing of the proposed building features a podium and tower typology that is almost completely in alignment with the existing zoning permissions, notwithstanding a small portion of the building at the primary entrance of the building and corresponding area at the rear, which establishes a notch in order to create articulation and visual interest. The proposed building is sympathetic and compatible with surrounding properties through careful consideration of sunlight access and massing, which supports a transition in scale through ample tower stepbacks above the podium, compliance with building setback requirements, and a tower footprint and disposition which provides the required minimum tower separation from adjacent properties and protects for redevelopment potential of the surrounding areas, while also providing a slender tower floorplate that minimizes shadow impacts. It is important to note that though the adjacent properties to the north and south currently include low-rise residential uses, they are planned and pre-zoned to accommodate higher density development of the same built form, height and density as the Proposed Development.

At the ground floor, the Proposed Development incorporates floor to ceiling windows and doors, which allow the development to animate the Hazel Street frontage by way of the increased visibility. Moreover, roughly 75% of the front building façade facing Hazel Street is occupied by three commercial units, with the lobby access and a secondary building entrance/exit occupying the rest, resulting in direct pedestrian access to the commercial units and residential lobby. Parking is located to the rear of the building and fully screened by the podium built form. A canopy is proposed at the 9-metre wide central portion of the front building façade which will be predominantly used by residents as an access/egress point to the residential lobby through the vestibule, providing weather protection to facilitate activation and gathering.

Whereas the Zoning By-law only requires a 3 metre tower stepback above the podium component, the Proposed Development employs an 8 metre side tower stepback to the north and south, which further highlights a slender tower floorplate that measures only 452 square metres in area. This supports a well-sculpted building massing that is further accentuated by notches and other articulation, including above the lobby entrance, where the tower footprint is bumped out slightly and podium pulled in slightly, creating a more interesting built form composition.

The architectural design of the building likewise supports an overall high standard of Urban Design. The Proposed Development uses high quality materials and building finishes including a curtain wall system with glazing and spandrel panels, to implement an understated and refined design motif that accentuates the sleek built form composition. Projecting brown metal panels in vertical orientation provide additional texture and visual interest, further highlighting the slender tower built form. The 2-metre deep canopy proposed for the 9-metre wide central portion above the principal residential entrance creates a complementary architectural element to the building that creates further visual interest along the

front facing façade along with weather protection for residents and guests. The remainder of the podium components incorporate consistent stepbacks and treatment in regards to architectural elements, window treatment, and wall materiality. Overall, the building design seeks to provide a well-articulated and cohesive building design that fits into the evolving surrounding context and is compatible with the character of the evolving Northdale neighbourhood.

Public Realm, Streetscape, and Landscaping

The Proposed Development is designed to support an activated and safe pedestrian-friendly streetscape. Through the strategic disposition of multiple pedestrian entrances to the building, thoughtful landscaping treatments, and the massing of the built form as it relates to the streetscape, the Proposed Development supports an engaging, safe, and vibrant public realm that will contribute to the creation of a complete and social community.

The Subject Site is located along a Mixed-use Street as defined by the Northdale Urban Design Guidelines, and in close proximity to a Minor Gateway. On the opposing side of Hazel Street, the Subject Site is facing the Veterans Green memorial park – the only public open space in the immediate neighbourhood. This portion of Hazel Street support two lanes of traffic,

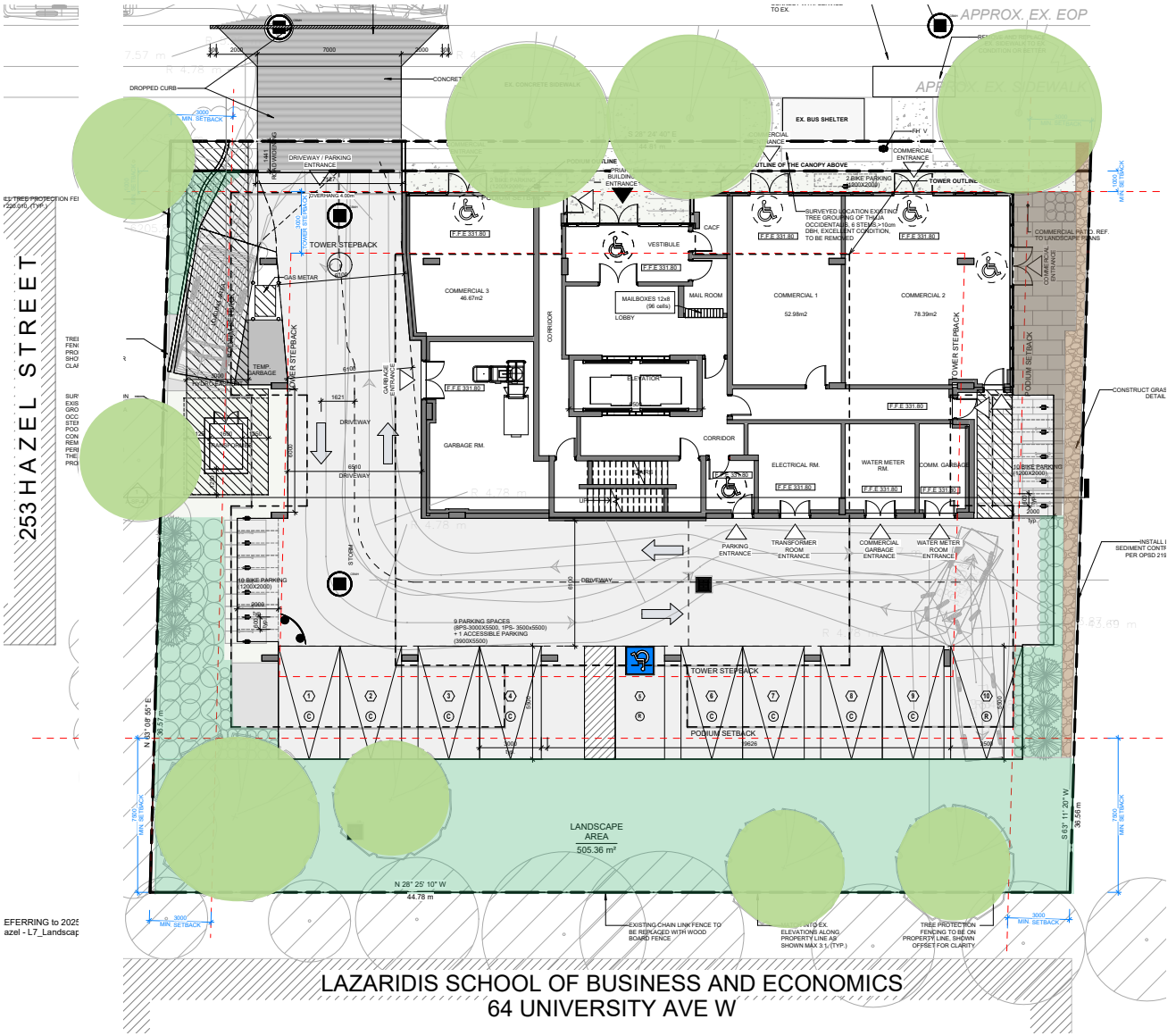


FIGURE 22: PROPOSED DEVELOPMENT STREETSCAPE AND PROPERTY LANDSCAPING

one southbound and one northbound, as well as a southbound left turn lane, and a northbound bus lay-by. In addition, the Subject Site's proximity to University Avenue and Wilfrid Laurier University results in significant pedestrian traffic.

The Proposed Development is seeking to activate the street frontage by establishing an urban built form and setback condition, and concentrating active uses along the street frontage, to encourage pedestrian access to the lobby and commercial units at-grade, and provide strong interconnectivity with the surrounding area.

The Proposed Development will improve upon the existing conditions of the public realm by eliminating existing curb cuts for each single detached dwelling, and replacing with one sole driveway at the north edge of the property, located as far as possible from University Avenue. The subordinate location of the proposed vehicular parking at the rear of the Subject Site, behind the building podium, screens the parking area from public view along Hazel Street, and contributes to safe and efficient vehicle circulation that is well-distinguished and separated from the pedestrian environment. Bicycle parking is also located towards the north-west edge of the podium, allowing for ease of access to Hazel Street – considered part of the City-Wide Cycling and Multi-Use Route – and to the building.

In terms of landscaping and planting, the Proposed Development strategically places soft landscaping to screen infrastructure (i.e. the transformer) and the parking area, from the public realm. A total of 4 street trees are proposed along the Hazel Street frontage, and 5 deciduous trees are proposed at the rear of the building along the west edge of the property. 8 existing deciduous trees located along the western property boundary are likewise proposed to be retained, ensuring a robust landscape buffer between the Subject Site and adjacent properties.

Other soft landscaping includes coniferous and deciduous shrubs within metal planters and other planting beds dispersed throughout the perimeter of the property. Hardscaped treatments are varied, including proposed unit paving at the south edge of the property, providing access to bicycle parking, accessory building entrances and area commercial patio area, and decorative concrete providing pedestrian access to the sidewalk along Hazel Street.

Site Circulation and Access

In terms of access to the Subject Site, the Proposed Development capitalizes on its prime location along Hazel Street, within close proximity to a range of transit routes, active transportation networks, and pedestrian routes. The primary building entrance and entrances to the three commercial at-grade units all front onto Hazel Street and connect to the abutting sidewalk. An additional pedestrian connection is also provided for the secondary building entrances, and for the commercial patio area to the south of the building.

The vehicular access is located underneath the podium, with just one driveway from Hazel Street connecting to the parking area at the rear of the building. The driveway is located as far north on the Site as possible, thereby maximizing separation from University Avenue. Bicycle parking is conveniently located directly off of the driveway, and directly off of the pedestrian connection at the south end of the Site, providing convenient access to and from the building and Hazel Street.

With only 10 vehicular parking spaces being provided, the majority of site circulation to and from the Site is anticipated for pedestrian and cyclist related traffic. To support this, the building is positioned and framed towards Hazel Street, and the limited vehicular driveway and structured parking areas are placed in a subordinate manner that supports safety while also screening these areas to maintain an attractive streetscape.

In the same regard, servicing functions such as loading and the hydro transformer are designed to consider impacts between the Proposed Development and the public realm. The loading space is located partially underneath the podium, shared with the

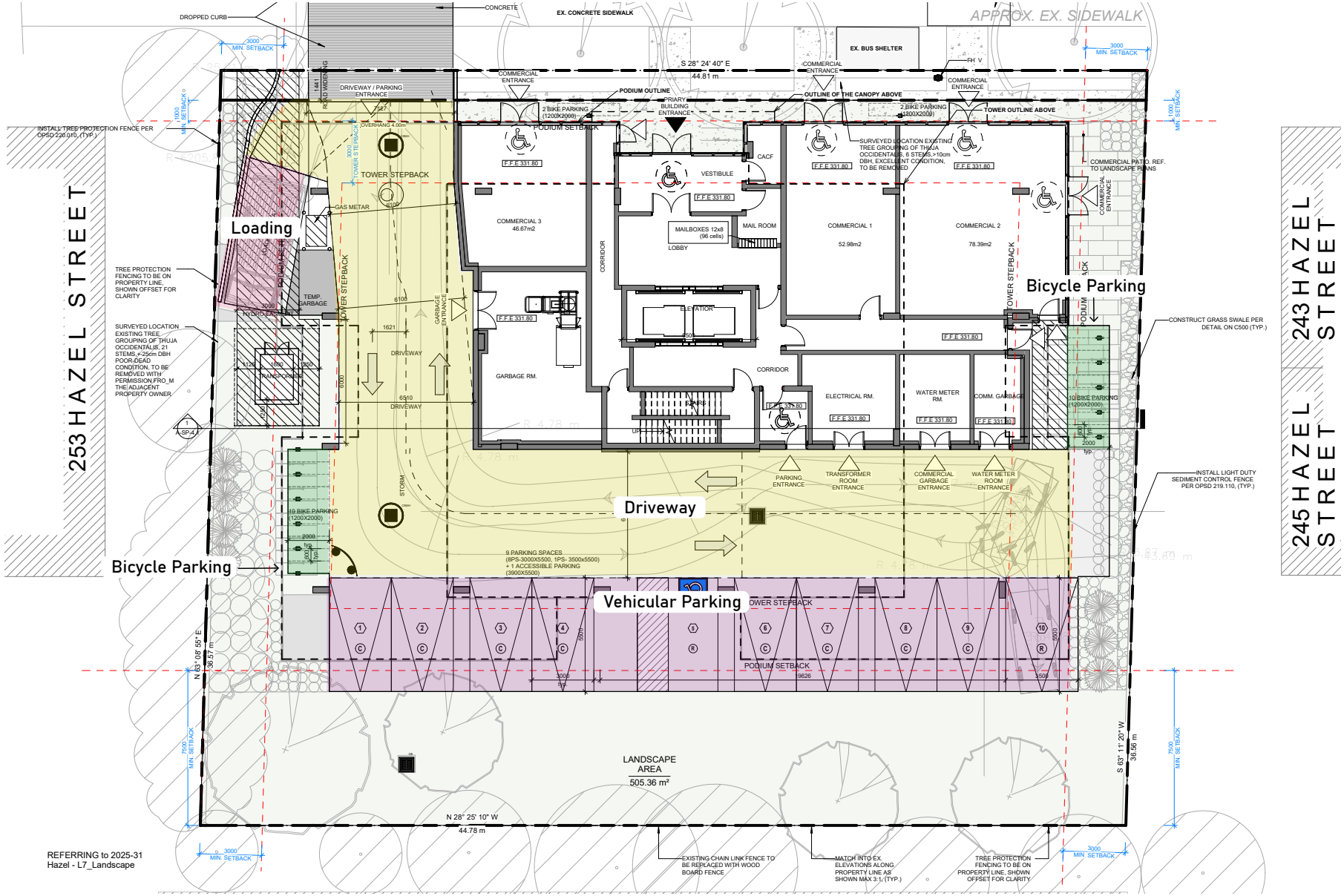


FIGURE 23: AT-GRADE CIRCULATION AND PARKING

structured parking area driveway, within close proximity to the garbage room at the first storey. The hydro transformer is located behind the loading area, further away from Hazel Street. Both of these features will be screened from Hazel Street using soft landscaping treatments in the form of coniferous and deciduous shrubs, which will also maintain sufficient visibility in terms of vehicular circulation and safety. In addition, these functions will make use of the sole vehicular driveway, thereby minimizing the need for driveways and curb cuts along Hazel Street.

Overall, pedestrian access to the residential lobby and commercial units along the majority of the building face fronting onto Hazel Street will activate the street frontage by integrating with the public realm and allow for a more cohesive relationships with the street, allowing visitors to access the commercial area, and residents and visitors to access the lobby with ease. Coupled with the placement of parking and loading to the rear of the Site, this intentional site layout and design will create a more pedestrian friendly streetscape that allows the active uses at grade to integrate well into the existing active transportation network and contribute to a lively and vibrant public realm.

Sustainability

The Proposed Development will incorporate a number of sustainable design features, including energy-efficient LED lighting, low-flow high efficiency water fixtures, and increased energy efficiency through the use of a curtain wall system. In addition, the increased density of the Proposed Development compared to the existing condition, as well as the mix of uses and urban built form and site layout, encompass a substantially more sustainable form of development that the existing single-detached form buildings. The Proposed Development will significantly increase the number of housing units and create new commercial services and job opportunities within the City's existing built boundary, without requiring any new greenfield development. It will also support existing infrastructure and services in the area, including the ION LRT network and other public transit services.

Transit-Oriented Design/Design within Major Transit Station Areas

The Proposed Development is a transit-oriented development and allows for the surrounding properties to likewise be redeveloped in a transit-oriented format in the future. The Subject Site is located within the Major Transit Station Area ("MTSA") for the University of Waterloo ION Rapid Transit Station, and so is subject to the minimum density target of 160 people and jobs combined per hectare. MTSAs are planned to capitalize on the public transit investments made by the City, Region and other levels of government through greater intensification and the creation of higher density, transit-oriented development and mixed-use communities. Specifically, OPA 58, as part of Phase 1 of the City's Official Plan Review, establishes the following definition for Transit-Oriented Development:

"Transit Oriented Development - This form of development is characterized by a greater mix of medium to high density land uses located within an easy walk of a Major Transit Station Area, or a higher frequency transit stop. Transit Oriented Development differs from conventional development in that the built form is specifically designed to integrate with and promote transit use and facilitate walking and transit use for everyday activities."

The Proposed Development seeks to support the planned function of the MTSA through much needed intensification of an otherwise underutilized site, and transit-oriented design that also respects and maintains the future redevelopment potential of the surrounding properties. The Proposed Development optimizes the development density under the current zoning regulations, with a total of 94 beds proposed for a total density of 598 bedrooms per hectare, thus far surpassing the minimum MTSA density target. Likewise, the building is positioned towards Hazel Street and provides the primary entrances to the building along the

building frontage, while also maintaining setbacks and stepbacks for the podium and tower which support a compatible transition to the adjacent neighbourhood and institutional uses.

The orientation of the three commercial units and residential lobby towards Hazel Street directly supports pedestrian and cyclist mobility. This is further supported by the minimal vehicular parking supply, which will ensure a tenant mix that is predominately focused on non-vehicular transportation modes, as should be the case for such a strategic location within an MTSA.

Shadow Study

The Subject Site is abutting Hazel Street along the frontage of the property, and institutional uses along the rear property boundary. The property boundaries along the north and south are abutting properties with low-density residential buildings, but which are planned for higher density residential and mixed-use development of the same form and scale as the Proposed Development. The evaluation of potential adverse impacts of the Proposed Development includes an analysis of anticipated shadow impacts on surrounding uses, with a particular focus on Veterans' Green memorial park, located further east across Hazel Street.

The Shadow Study prepared by the Project Architect provides an hourly illustration of shadow impacts for the spring equinox on March 21st, the summer solstice on June 21st, autumn equinox on September 21st, and winter solstice on December 21st. The study provides hourly depictions of the sun and shadow location and disposition from 8AM to 8PM (20:00), which establishes a greater range of shadow times than required by the City's Urban Design Manual.

The Urban Design Manual outlines specific criteria that are to be used to evaluate shadow impacts of new development, in order to determine compatibility with adjacent uses. These criteria are:

- "As a principle, at least 50% or more of any property should not be shaded for more than two interval times (a four-hour equivalency); or,
- As a principle, at least 50% of any property should be in full sun for at least two interval times (a four-hour equivalency)."

Focusing first on the Veterans' Green memorial park, new shadow impacts are compliant with the criteria. For the winter solstice, the day with the shortest sunlight availability of the year, the Proposed Development remains compliant with the criteria since the shadows reach the park in the later afternoon hours, at which point the sun is already close to setting, allowing for the park to be in full sun between 9AM to 1PM. At the 1PM time interval, shadowing is limited to the northwest corner of the park, with only narrow bands of the park shadowed in the subsequent intervals.

It should be noted that the new shadows will be at their most significant at the winter solstice, and will be significantly reduced during the Spring, Fall and Summer. As such, shadow impacts are even further reduced during these times of the year. During the Spring and Fall, shadowing does not impact the park until the 2PM interval, and the subsequent shadows cast on the park are confined to very narrow bands that are reflective of the slender tower floorplate. In the Summer, shadow impacts are reduced further still, with extremely limit shadowing cast at any interval. Overall, it is our opinion that the shadowing cast on the Veterans' Green Memorial Park is limited and acceptable as a result of the slender built form of the Proposed Development.

The shadowing cast on the properties to the north of the Subject Site is more prevalent, but we note that this would be the case for any mid-rise or high-rise development project on the Subject Site. Despite this, shadow impacts in the Spring and Fall are generally confined to just the two nearest properties to the north, with Summer shadow impacts limited to just a portion of the neighbouring property to the north.

We note that the two properties to the north are planned to support medium high density built forms and at this time do not have any outdoor amenity uses. The rear yards of these properties are fully paved and support surface parking areas, while the front yards also do not provide any outdoor amenities – solely landscaped areas. As such, though there will be shadowing from the Proposed Development, it will not impact any outdoor amenity areas, which are of particular focus for such impacts, and the properties will likely be redeveloped in the future for higher density uses, in accordance with the City's Official Plan and Zoning By-law. We also note that the shadow impacts on these properties are largely from the podium component of the Proposed Development. This exemplifies that any mid-rise or taller development on the Subject Site would have similar shadow impacts, and that such impacts are unavoidable and acceptable with the intensification of the Subject Site.

It is our opinion that the Proposed Development largely achieves the shadow criteria outlined in the City's Urban Design Manual, and directly achieves the intent of those criteria, being to appropriately limit shadow impacts, particularly for sensitive uses that have the potential to be most adversely affected. The Proposed Development is compliant with the vast majority of applicable zoning provisions and other policies which set out the built form, urban design, and massing of the proposed building, and the Shadow Study demonstrates that any mid-rise or taller development project on the Subject Site would result in some shadow impacts. Overall, we feel that the Proposed Development is massed in such a way that is permitted by the Zoning By-law, contextually appropriate, mindful of the impact of intensification of the Subject Site, and allows for usability of public and private open spaces, at the times which these spaces are most likely to be used and visited.

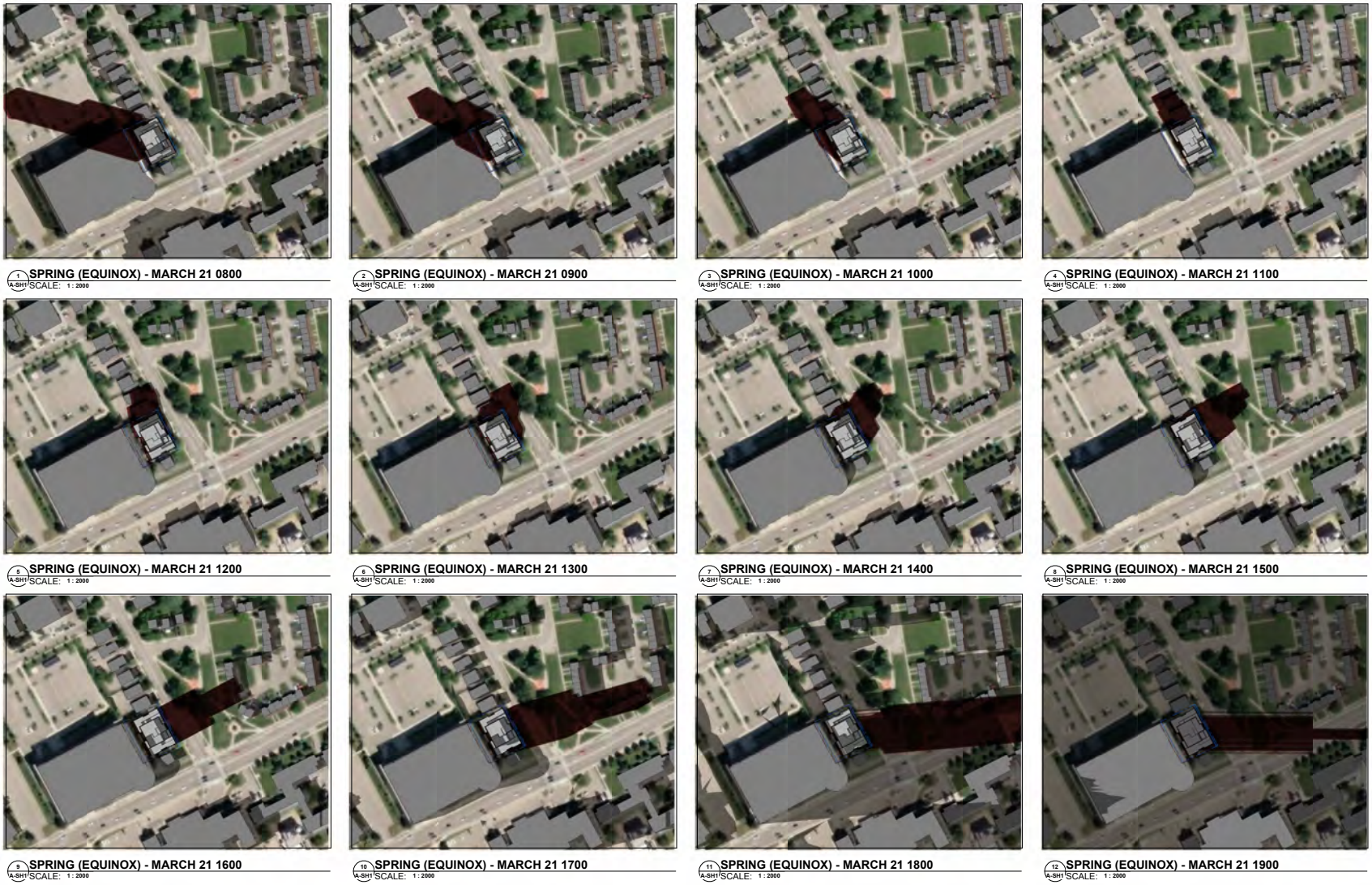


FIGURE 24: SPRING EQUINOX SHADOW STUDY (MARCH 21)

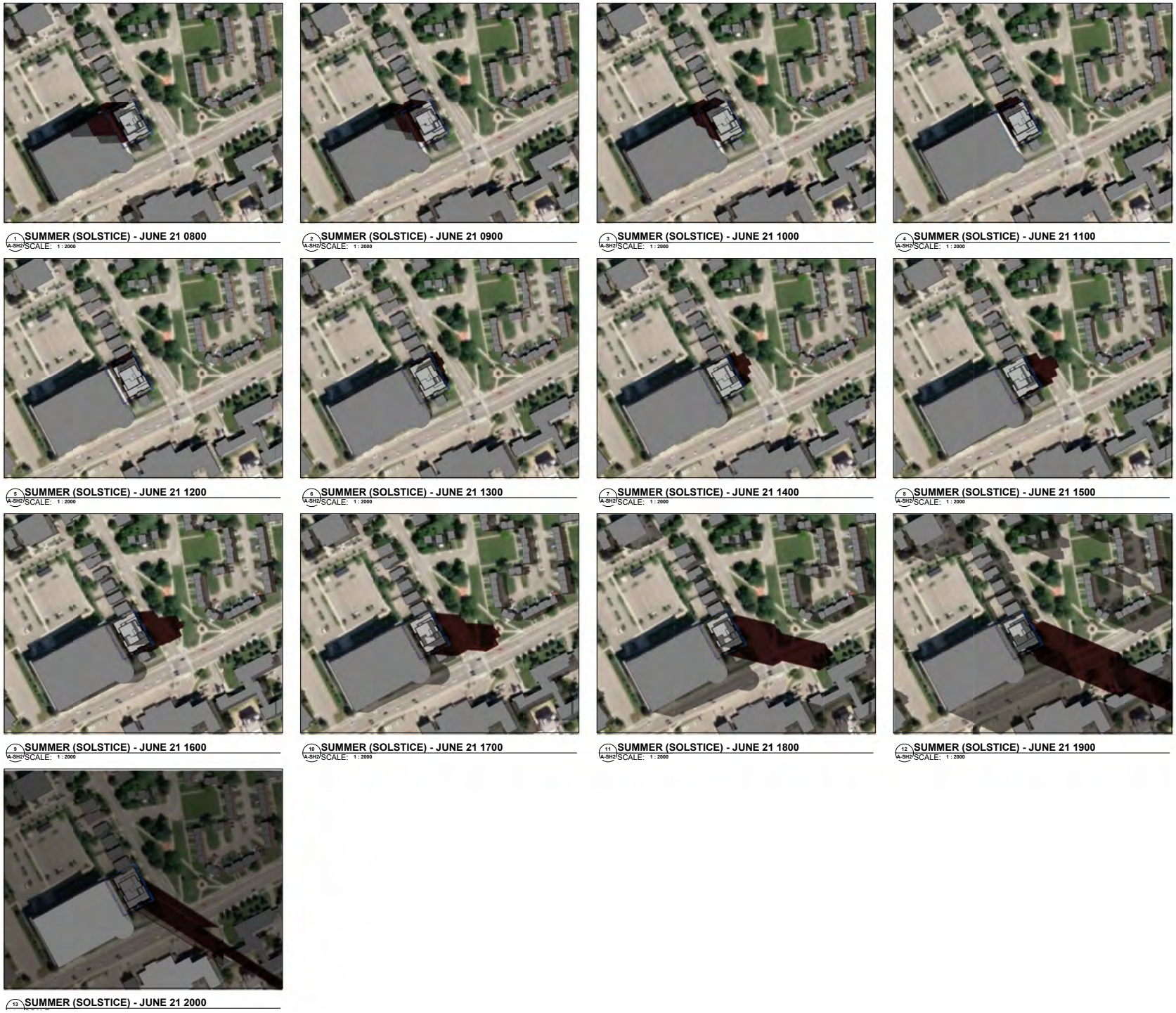


FIGURE 25: SUMMER SOLSTICE SHADOW STUDY (JUNE 21)

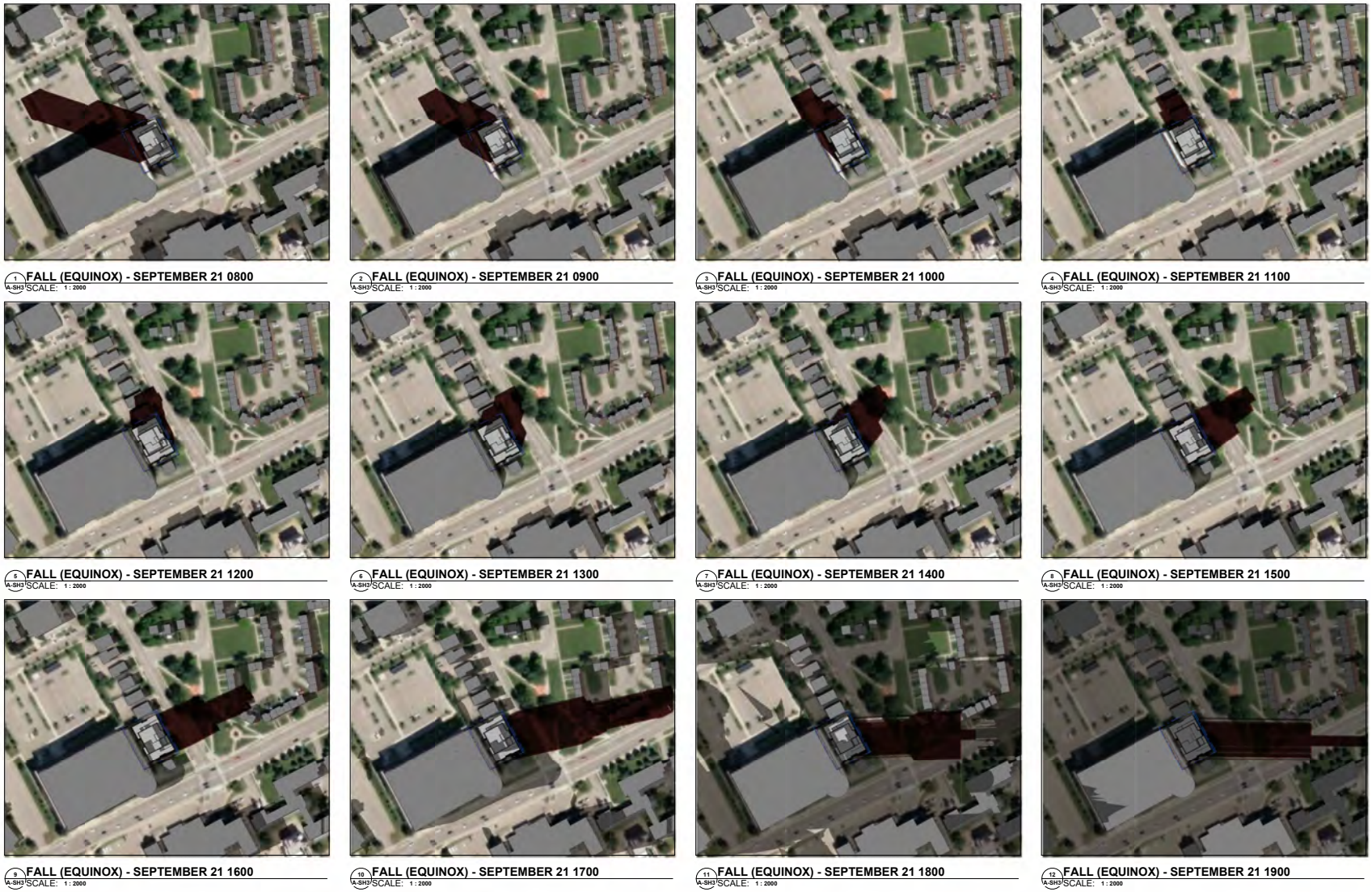


FIGURE 26: FALL EQUINOX SHADOW STUDY (SEPTEMBER 21)



FIGURE 27: WINTER SOLSTICE SHADOW STUDY (DECEMBER 21)

6. TECHNICAL STUDIES

6.1 NOISE IMPACT STUDY

A Noise Impact Study was completed by Rowan Williams Davies & Irwin Inc. (RWDI) to assess and evaluate any sources of elevated sound levels and provide recommendations for mitigating the volumes as needed. The Noise Impact Study was completed in accordance with the City of Waterloo's Noise Study Terms of Reference and applied the criteria on the basis of the Regional Municipality of Waterloo Implementation Guideline for Noise policies and the Ontario Ministry of the Environment, Conservation and Parks NPC-300 Environmental Noise Guideline.

The Noise Impact Study modelled and considered transportation sources of volume as well as stationary sources surrounding the Subject Site. The recommendations to mitigate noise from transportation sources are as follows:

- "Installation of central air-conditioning so that all suites' windows can remain closed.
- The inclusion of noise warning clauses related to:
    - Transportation sound levels at the building façade and in the outdoor amenity areas
- Minimum sound isolation performance:
    - Suite bedroom window glazing with minimum sound isolation performance up to STC_28 on the south side of the podium facing the University Ave.
    - Suite exterior balcony door with minimum sound isolation performance up to STC-28
- Construction perimeter noise barriers along the outdoor amenity areas if feasible, with the applicable warning clause."

In relation to the stationary sources, the study indicates that mitigation recommendations for elevated sound levels will be finalized and provided upon discussion with the Lazaridis School of Business. Should the University of Wildred Laurier not be in agreement for source specific mitigation, a Class 4 designation is recommended for the Proposed Development.

6.2 COMPUTER MODEL WIND STUDY/PEDESTRIAN LEVEL WIND STUDY

A Pedestrian Wind Comfort Assessment was completed by Rowan Williams Davies & Irwin Inc. (RWDI) to evaluate any wind impacts of the Proposed Development. As part of the study, a Computational Fluid Dynamics (CFD) modelling assessment was completed as it relates to the Proposed Development and surrounding built form context. To predict the wind conditions, the study utilized long-term wind data from the Waterloo-Wellington International Airport and tested conditions based on the City of Waterloo's pedestrian level wind study terms of reference guide.

The study results establish the comfort of wind conditions for the sidewalk and neighbouring properties, at grade underneath the building, and at the outdoor amenity area on level 7. The findings are as follows:

- *"The existing wind conditions on and around the project site are comfortable for the intended use.*
- *The proposed project includes a large podium and is well sheltered by the existing surroundings. Given the local wind climate, wind speeds are predicted to meet the safety criterion in all pedestrian areas at and above grade.*

- *With the proposed project in place, wind conditions are expected to be similar to those that currently exist. Wind conditions are generally comfortable for sitting or standing in the summer and for sanding or walking in the winter.*
- *Suitable wind conditions are predicted for all entrances, sidewalks, parking spaces and the outdoor patio at grade.*
- *Slightly higher-than-desired wind speeds are expected on the amenity space at Level 7, especially in the area around the southwest tower corner. Improved wind conditions can be achieved by taller guardrails, trellises, wind screens, planters and other landscaping features."*

6.3 TRANSPORTATION IMPACT STUDY AND TRANSPORTATION DEMAND MANAGEMENT PLAN

A Transportation Impact Study and Transportation Demand Management (TDM) Plan ("TIS") was prepared by Paradigm Transportation Solutions Limited to evaluate the existing and future traffic conditions, assess the impact of the Proposed Development on traffic conditions and operations, and provide a Transportation Demand Management Plan for the Proposed Development.

In evaluating the existing traffic conditions, the TIS reviews the road characteristics of University Avenue and Hazel Street, local and inter-regional transit services, active transportation, traffic volumes and patters, and traffic operations. The Proposed Development is evaluated as it relates to the existing surrounding conditions. Likewise, future surrounding traffic and forecasted site traffic are reviewed. The TIS analysis indicates that the Proposed Development will have negligible impact on traffic operations.

The Transportation Demand Management reviewed existing policies, programs, and strategies as it relates efficiency of the road network, use of alternative modes of transportation, and incentivizing active forms of transportation. The TDM establishes the following recommendations:

- *"Active building frontages and primary building entrances onto Hazel Street;*
- *Providing 26 bicycle parking spaces, comprising 24 residential spaces, and 2 commercial/retail spaces.*
- *Providing a vehicle parking supply consistent with the site's locational context, including its proximity to transit services operated by Grand River Transit (GRT) and GO Transit.*
- *Providing transit and active transportation information in a welcome package to new residents and tenants, including the posting of this information in a central location."*

The study concludes that the Proposed Development "*is forecast to have a negligible impact on traffic operations at the intersection of University Avenue and Hazel Street.*" The characteristics and location of the Subject Site is a TDM supportive development. The final recommendation of the study is for the Subject Site to be approved "*without the requirement for off-site transportation related improvements.*"

6.4 FUNCTIONAL SERVICING REPORT AND STORMWATER MANAGEMENT REPORT

A Functional Servicing and Stormwater Management Report ("FSR") was prepared by GRIT Engineering Inc, to evaluate and provide recommendations for sanitary, water and storm servicing strategies for the Subject Site. The FSR report evaluated sanitary servicing, water distribution, stormwater management, existing conditions, anticipated post development conditions, stormwater management quality control, water balance, erosion and sediment control.

The FSR concludes that the Proposed Development is able to be service by the existing and proposed onsite infrastructure, and can appropriately provide new and existing connections to municipal infrastructure.

6.5 ENERGY STRATEGY REPORT

EQ Building Performance Inc. prepared an Energy Study to provide recommendations for how the Proposed Development can achieve higher levels of energy efficiency. The study conducts an energy analysis and reviews active design measures, active design best practices, project specific energy opportunities, renewables, embodies carbon, financial incentives, and preferred scenario and recommendations.

Based on the preliminary analysis, the report concludes that it may be pertinent to further explore the following design considerations:

- *"Improving the effective performance of the opaque building envelope*
- *Look for opportunities to reduce glazing areas and improve glazing performance*
- *Reducing domestic hot water natural gas consumption by using enhanced low flow fixtures*
- *Exploring options to de-carbonize space and domestic hot water heating by electrification and heat pump technologies"*

The proposed measures that have been included as part of the Energy Study are at a high level and will require a more fulsome cost and feasibility analysis.

7. CONCLUSIONS

The Proposed Development is a desirable, well-proportioned and urban built form, that aligns with the evolving context of the Northdale Neighbourhood and is nearly fully compliant with the detailed built form regulatory framework provided by the City's Zoning By-law. Currently, the Subject Site contains three single-detached dwellings which provide a total of 9 units, mainly available for lease by students attending the local post-secondary educational institutions. The proposed Site Plan Approval application will allow the Subject Site to be intensified, to support an improved building design and an enhanced public realm, and create new housing and job opportunities that make use of the existing transit infrastructure, and contribute to the ongoing creation of a complete community.

The Proposed Development will contribute to this evolving transit-supportive complete community, bringing the existing conditions of the property into conformity with policy objectives, by utilizing policy direction, urban design guidelines, and direction of zoning regulations, to facilitate a compatible and contextually appropriate urban built form. The Proposed Development incorporates a mid-rise podium/tower configuration that responds to the surrounding existing and emerging context of the Subject Site, and nearly fully complies with applicable zoning regulations as noted above.

The intentional design of the building considers a pedestrian-oriented approach to the circulation and use of the Subject Site, where visitors and residents are able to safely, conveniently and efficiently access the commercial units and lobby entrance at-grade along the frontage facing Hazel Street, while at the same time providing screened and safe access to vehicles entering the structured parking area to the rear. The landscape enhancements in the form of street trees, shrubs, planters, unit paving and river pebble add to the existing public realm and enhance the streetscape, focusing on enhancing the pedestrian realm and providing interconnectivity with active uses in the Proposed Development.

The proposed new housing and commercial opportunities will leverage the existing services and infrastructure, including the local transit network, active transportation network, and a range of public services, amenities, and institutional uses. This intensification will also assist the City in achieving the intensification and growth targets for the City as a whole and the delineated MTSA in particular.

This Planning and Urban Design Brief is intended to satisfy the criterion of the Holding Symbol for the (Holding) Residential Northdale – 12 Zone, which requires preparation of an Urban Design Brief in support of development approval applications, and to support the proposed Site Plan Approval application. Based on a detailed evaluation of all applicable planning policies and urban design guidelines, as summarized in this Brief, it is our opinion that the Proposed Development conforms with both of the City's Official Plans (including the Regional Official Plan), complies with all but two provisions within the City's Zoning By-law, and is consistent with the applicable urban design policies and guidelines. Furthermore, the two minor zoning deficiencies can be appropriately addressed through a Minor Variance application after staff have endorsed the proposed Site Plan application.