URBAN DESIGN BRIEF



1 Dunbar Road North, Waterloo

Official Plan Amendment and Zoning By-law Amendment | September 2024

MHBC PLANNING URBAN DESIGN & LANDSCAPE ARCHITECTURE

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1.0 INTRODUCTION



1.0 INTRODUCTION

MacNaughton Hermsen Britton Clarkson Planning Limited ("MHBC Planning") has been retained by 2244668 Ontario Inc. (the "Owner") to prepare an Urban Design Brief in support of Official Plan Amendment and Zoning By-law Amendment applications (the "Applications") for the lands municipally addressed as 1 Dunbar Road North (the 'subject lands' or 'lands') within the City of Waterloo.

The subject lands are a consolidation of several previous lots on Erb Street West and Dunbar Road. The lands comprise 0.284 hectares (after significant previous road widening conveyances to the Region of Waterloo) with frontage on Roslin Avenue North, Erb Street West and Dunbar Road North. The lands are located on the north side of Erb Street West, spanning the block from Dunbar Road North to Roslin Avenue North. The surrounding area contains a mix of low-rise residential buildings, the Waterloo Memorial Recreation complex to the north, a spiritual use on the opposite side of Erb Street West, the Delta Hotel and Barrel Yards (9 – 25 storeys) project to the east and the Waterloo Heights apartment building (9 storey) to the west. Further to the west is an approved 12-storey building and the redevelopment of Westmount Plaza, which includes 12 (under construction) and 25 storey buildings (with additional development planned).



Above- Site looking west from Erb Street W



Above: Site looking west from Dunbar Road N

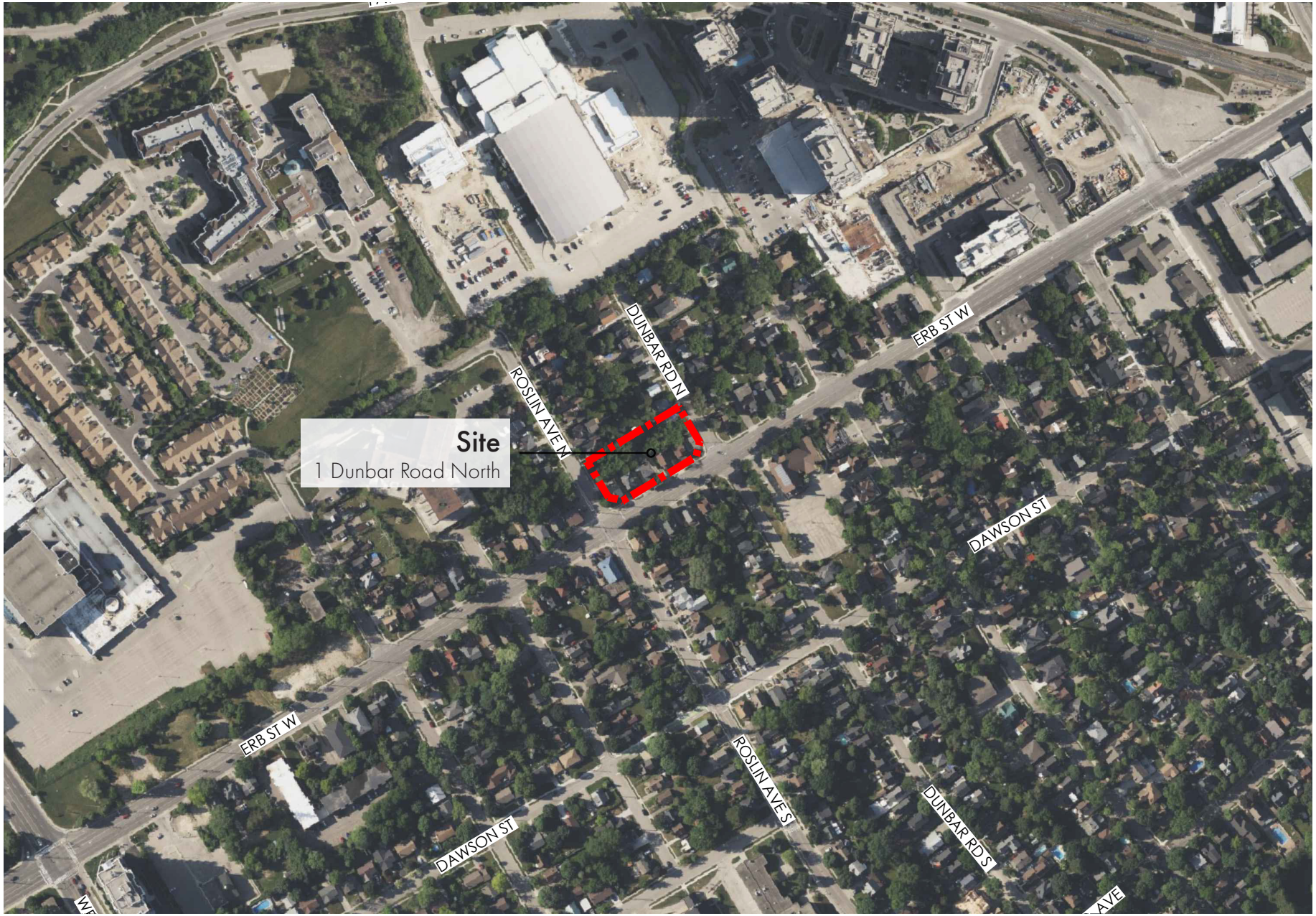
The owner plans to demolish the single detached dwellings (currently unoccupied) and redevelop the lands with a new stepped 6-10 storey residential building, oriented to Erb Street West. A total of 158 units are proposed, including studio, 1 bedroom, 1 bedroom + den and 2-bedroom units. Parking is proposed in two and a half underground levels and a small single storey covered parking area at the rear of the building – a total of 123 parking spaces are proposed, including dedicated visitor parking. Vehicular access is proposed from both Roslin Avenue North and Dunbar Road North, while the main pedestrian entrance is proposed near the corner of Dunbar Road North and Erb Street West.

The Urban Design Brief has been prepared in accordance with the applicable City of Waterloo Terms of Reference as a part of a complete application and includes the following:

- A description of the existing site conditions and surrounding context, including built form, transportation network, and landscape features.
- A detailed review of the Proposed Development, including the vision, building design, circulation, public realm design, and sustainability.
- An outline of the applicable policy context and analysis of the Proposed Development as it relates to the applicable urban design policies; and,
- A summary of the conclusions on the proposed redevelopment of the Site.

This Urban Design Brief has considered, and must be read in conjunction with, the following plans and studies supporting the applications for Official Plan Amendment and Zoning By-law Amendment:

- Planning Justification Report, prepared by MHBC Planning.
- Architectural Plans prepared by ACDF Architects.
- Wind Study prepared by SLR and,
- Shadow Images prepared by ACDF.



Site Location: 1 Dunbar Street North, Waterloo, Ontario. Frontage onto Erb Street West, Dunbar Road North and Roslin Ave N.

2.0 VISION



2.0 VISION

The architect's vision for the proposed site is derived from the following design principles:

1. **Sense of Place/Belonging** – Develop unique architectural that creates a strong sense of place and identity for residents.
2. **Livability** – Design a project that focuses on livability in all aspects of the project in terms of functionality, comfort, quality and durability of materials, generous outdoor spaces and enhanced public spaces along the street frontage.
3. **Quality of Public Spaces** – Create a meaningful interface between the private and public realms at street level, minimizing the impact of the busy Erb Street roadway. Reduce focus on the busy roadway along Erb Street and invite the pedestrian into the landscaping and architecture of the proposed development.
4. **Walkability** – Foster walkable neighbourhoods by enhancing the streetscape, reducing reliance on the automobile and encouraging alternative forms of transit. This approach will support the development of a vibrant station area and foster a more pedestrian friendly environment.



Architect's Rendering - Perspective from Erb Street West and Roslin Street North. (ACDF Architects)



Architect's Rendering - Perspective from Erb Street West and Dunbar Street North (ACDF Architects)



Architect's Rendering - Perspective from Dunbar Street North - facing South(ACDF Architects)

Site Design

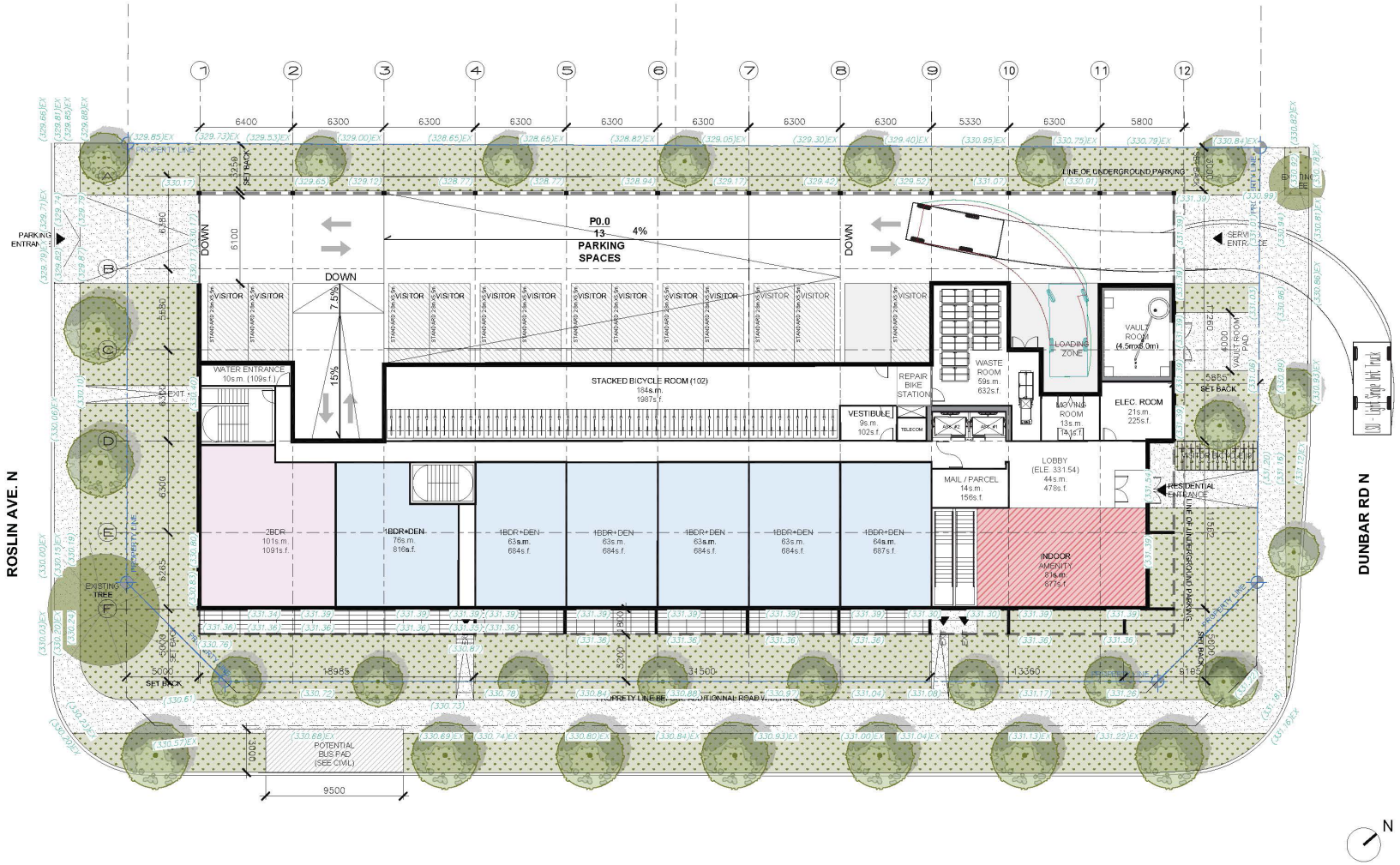
The development includes a new stepped 6 to 10 storey residential building with 158 units (191 bedrooms), oriented to Erb Street West. Parking is primarily located within two underground parking levels, above the water table, accessed from two driveways – one each from Roslin Avenue North and Dunbar Road.

The building includes a range of unit sizes, including studio, one-bedroom, one bedroom + den, and two-bedroom units, as outlined in **Table 1** below. The ground floor contains residential units facing Erb Street West as well as a prominent amenity area at the corner of Erb Street West and Dunbar Road North. Parking is not visible from the street, or from the adjacent lands to the north.

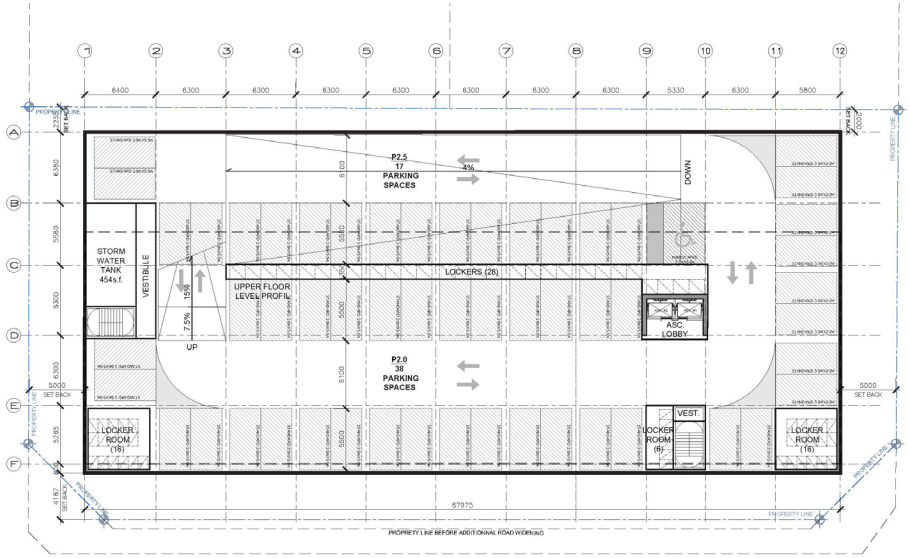
Table 1. Proposed Units

Unit Type	Units	% of Units
Studio	9	6
One bedroom	48	30
One bedroom + den	68	43
Two bedrooms	33	21
Total	**158**	**100%**

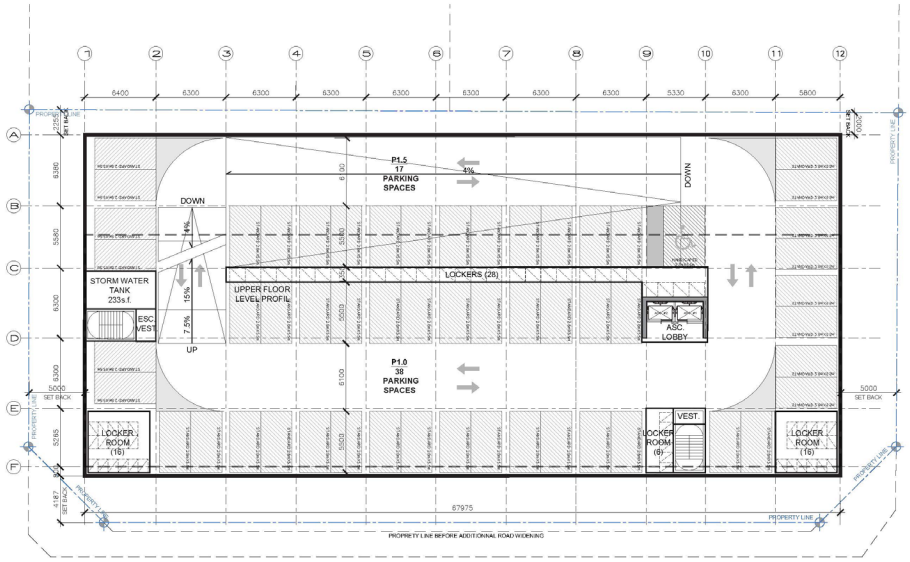
With respect to amenity area, both indoor and outdoor common amenity spaces are included in the proposed development. Each unit contains a private balcony and/or terrace, while ground floor amenity space is provided as common amenity area, and the rooftop includes common outdoor amenity area facing south. Overall, the development proposes approximately 873 m^2 of common indoor and 2,285 m^2 outdoor amenity space. Further to this, the stepped design of the building allows for generous terraces for units facing west.



Proposed Site Plan (prepared by: ACDF Architects)



Floor Plan: P2 Parking Plan (below grade) (prepared by: ACDF Architects)

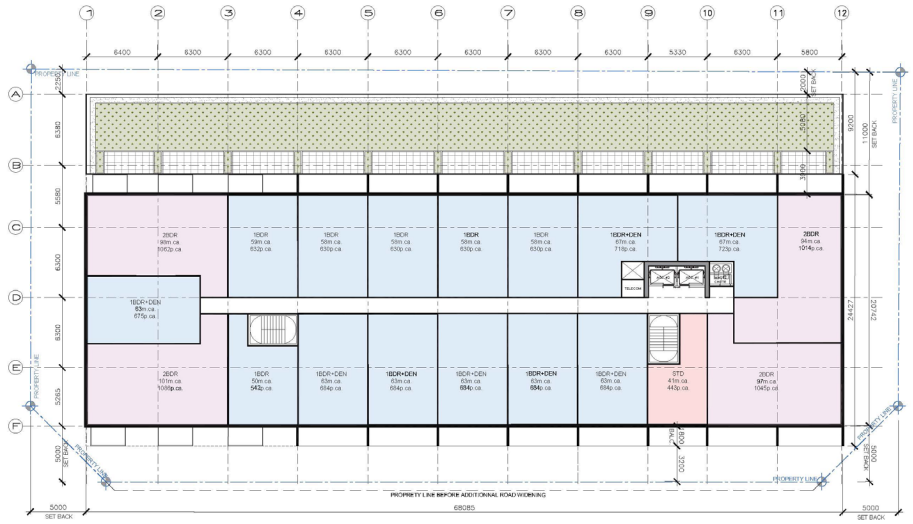


Floor Plan: P1 Parking Plan (below grade) (prepared by: ACDF Architects)

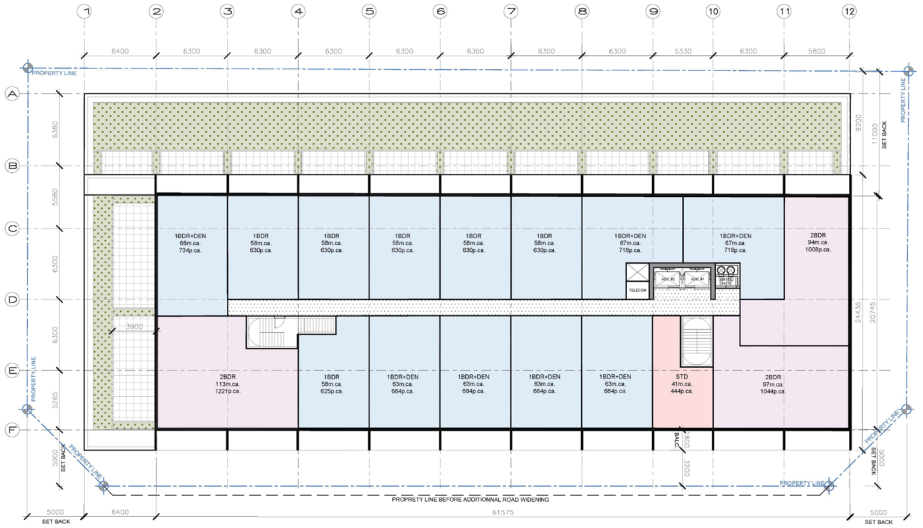
As noted earlier, vehicular parking is entirely enclosed within the building, primarily within two and a half levels of underground parking. Parking for both residential and visitors is provided, while a dedicated bicycle parking room is located on the ground floor, complete with a separate entry at grade from the internal driveway. The bicycle parking area includes a bike repair room.

Renderings and floor plans have been submitted concurrently with this Report. The building has been designed to both address Erb Street with pedestrian focused elements, while also stepping the building down in height from east to west, to allow more sunlight to penetrate through the site to the lands to the north. The stepped design allows for large outdoor terraces for upper units facing southwest. These terraces will benefit from a panoramic view during sunsets, embrace sustainability and include opportunities for soft landscaping. These rooftop terraces are intended to function as an extension of the unit's living space for relaxation, entertainment, and recreation.

Parking is shielded both from the street and from adjacent or surrounding properties. The driveways lead into a single storey enclosed structure to hide cars and headlights, while the majority of the parking, including all of the resident parking, is located below grade. A full 3 metre landscape buffer is provided along the north lot line to allow for a range of plantings, as well as fencing.



Typical Floor Plan: Levels 2 through 6 (prepared by: ACDF Architects)



Above: Typical Floor Plan: Level 7 - showing private terraces as building ascends (prepared by: ACDF Architects)

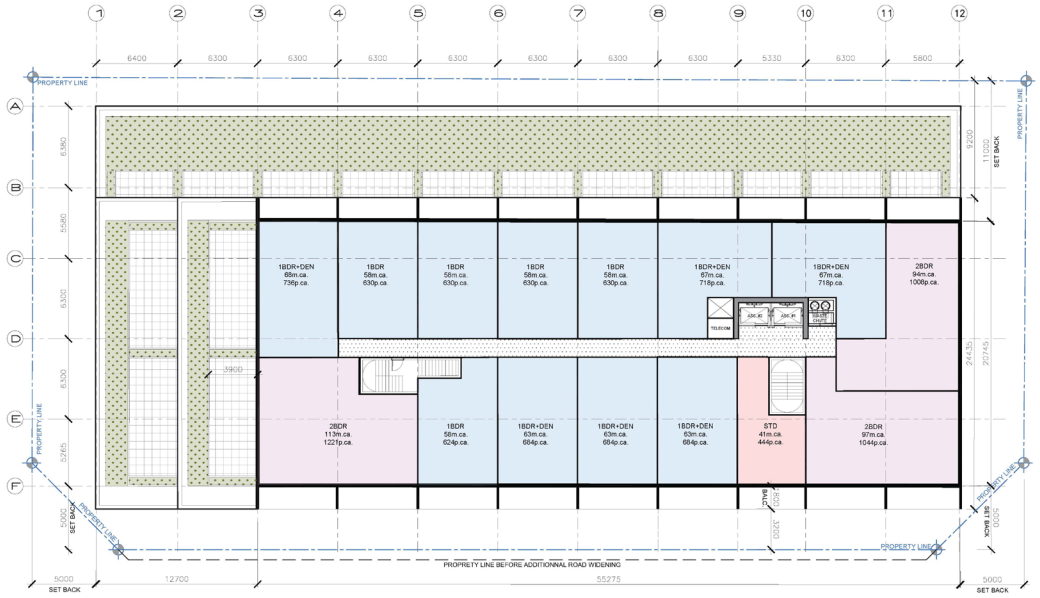
Right: Rending shoing increased ceiling heights at grade with large windows for main floor units.

Building Design

The Proposed Development employs a 6 to 10 storey stepped building, stepping down in height from east to west, minimizing the impacts on surrounding existing residential dwellings. The Proposed Development is central to the Site, with a building footprint of 1,203 square metres.

The first floor of the building is planned at an increased height of 4.0m. The main lobby area and amenity room is located at the corner of Erb Street West and Dunbar Road North. Large windows line the lobby entry and the amenity room which provides transparency into the public realm and encourages activity/interaction between the public and private realms. Further, the residential units plans for large windows, further addressing the public realm. Brick material is utilized at this level, considering a more sensitive urban integration, adding warmth to the southbound pedestrian path and providing a welcoming presence.





Typical Floor Plan: Level 8 - additng additional tier of private terrace area (prepared by: ACDF Architects)

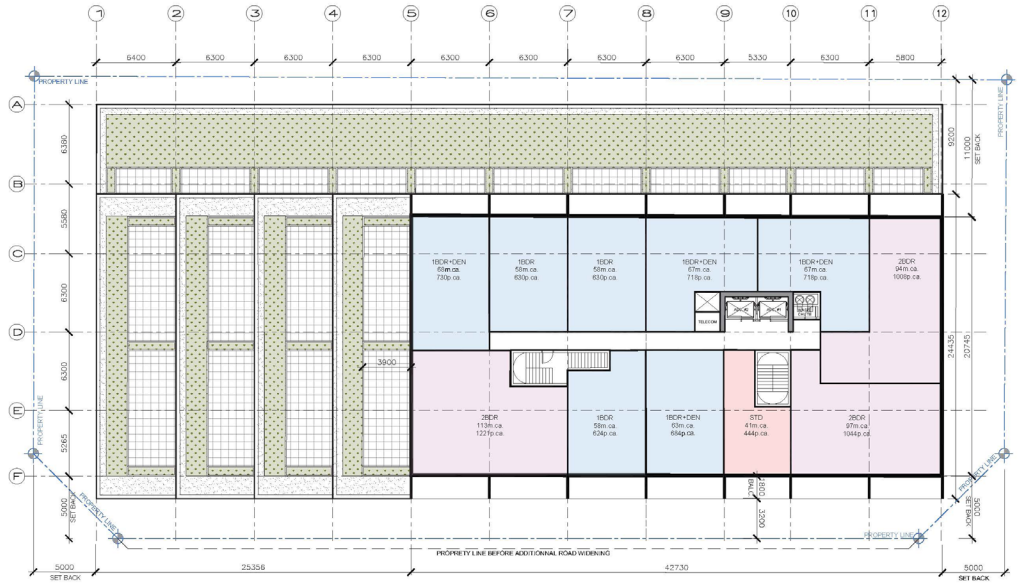


Typical Floor Plan: Level 9 - additng additional tier of private terrace area (prepared by: ACDF Architects)

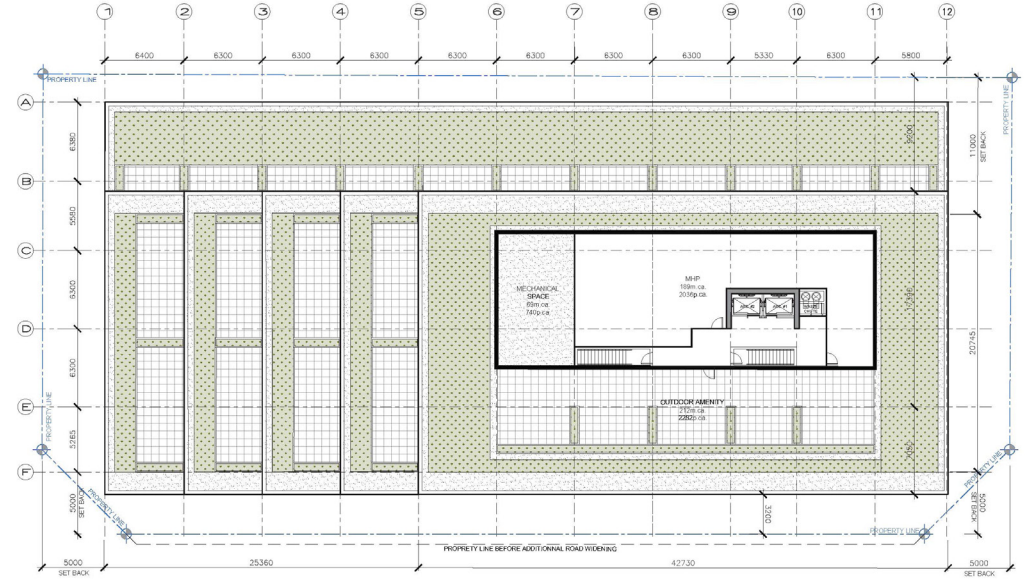
The upper portion of the development features a contemporary design of pre-casted concrete panels and glazing. Inspired by the surrounding built form, brick material is also apparent through introducing material insertions on the dividing panels of balconies. This choice creates a distinctive design and dynamic rhythm throughout the facade. Large, outdoor roof terraces are provided for upper units on the southwest corner, acting as an extension of living space, offering opportunities for relaxation, entertainment, and recreation. Moreover, these terraces embrace sustainability and reduce environmental footprint through greenery. An outdoor common amenity space is planned on the rooftop which is also planned to incorporate green elements to feel like a lush outdoor private space for residents. The rooftop amenity space is planned to be accessible to all residents.



Right: Rendering showing contemporary balcony design with pre cast panelling and rhythm between brick and pre-cast panels.



Typical Floor Plan: Level 10 - additng additional tier of private terrace area (prepared by: ACDF Architects)



Typical Floor Plan: Mechanical Penthouse and Rooftop Amenity Space (prepared by: ACDF Architects)

Landscape Design

The development provides significant space around the perimeter, along the public/private realm interface where plantings can be used to both provide shade for the public sidewalks and privacy for the ground floor units. Hardscaping has been limited to building entrances/exits and vehicular focused areas to maximize the potential for softscaping.

The stepped nature of the building affords opportunities for landscaping on the terraces facing west. The use of strategically located planters can provide inviting outdoor spaces for the residents while reducing the urban heat island effect. The north landscape buffer, a full 3 metres wide, will be used for visual screening to assist with privacy for the two residential lots to the north. While all parking will be located inside a structure and no headlights will be visible, this landscaped area will be used for planting.

3.0 CONTEXT ANALYSIS



3.0 CONTEXT ANALYSIS

Site Attributes and Surrounding Context

The subject lands are a consolidation of several previous lots on Erb Street West and Dunbar Road. The lands comprise 0.284 hectares (after significant previous road widening conveyances to the Region of Waterloo and prior to a further widening requested by the Region) with frontage on Roslin Avenue North, Erb Street West and Dunbar Road North. The lands are located on the north side of Erb Street West, spanning the block from Dunbar Road North to Roslin Avenue North.

The subject lands are located east of Westmount Road North and west of Father David Bauer Drive, and south of the Waterloo Memorial Recreation Complex. The lands are located within the Willis Way Major Transit Station Area (MTSA) and within walking distance of both the Laurier/Waterloo Park Station and the Public Square Station. Furthermore, the lands are located within a Minor Corridor that connects the Westmount/Erb Major Node in the west with the Uptown (Primary) Node in the east. The Minor Corridor is planned to accommodate a mix of uses and greater densities over time. Transit routes travel along Erb Street West and Westmount Road. Transit stops associated with GRT routes are in the vicinity of the subject lands as follows:

Route 5 Erb: GRT has requested a new stop on the subject lands in front of the building.

Route 12 Westmount: located on the east side of Westmount Road north of Erb Street West, approximately 460 metres from the site; and

Route 202 iXpress University: located on the east side of Westmount Road north of Erb Street West, approximately 460 metres from the site.

The Waterloo Public Square and Willis Way ION Stations and the Laurier-Waterloo Park ION station are within a 15-minute walking distance of the subject lands. The transportation network, along with surrounding Major Transit Station Areas.

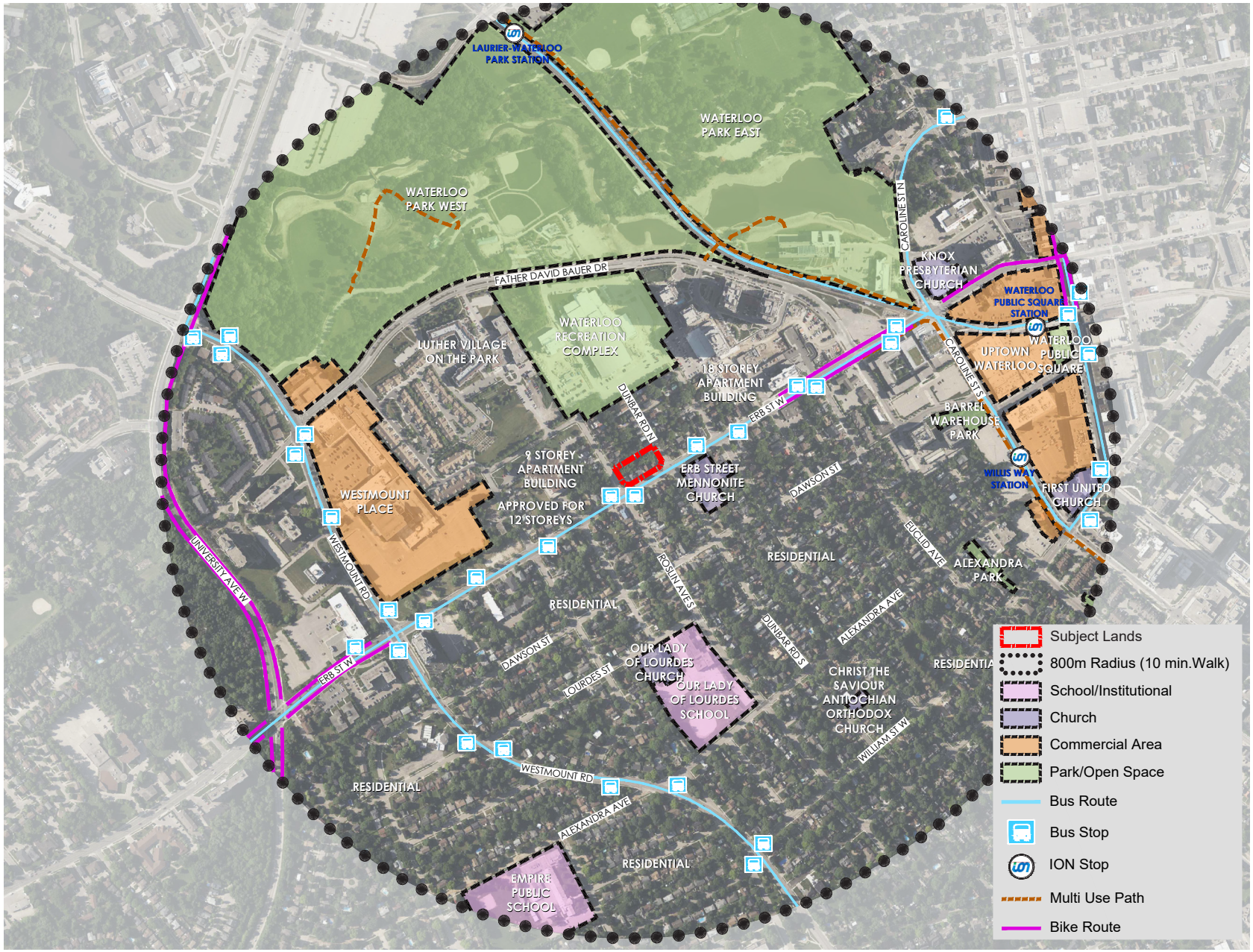
Surrounding Context

Built Form & Land Use

The surrounding built form typology consists of a commercial node to the west, the evolving Erb Street West corridor, and residential uses.

To the north of the subject lands are existing low-rise residential buildings fronting on either Dunbar Road North or Roslin Avenue. Further to the north (approximately a 150-metre walk) is the Waterloo Memorial Recreation Complex, a mid-rise building with seniors programming and broader community recreational facilities. Only two properties abut the subject lands to the north.

Low rise residential buildings are located to the west facing Roslin Avenue North, while the Waterloo Heights apartment building (9 storeys) is located immediately behind those dwellings. Further to the west is the Westmount Plaza, which contains commercial and office buildings, a 12-storey building under construction and an approved 24 storey building on Dietz Avenue North. The subject lands do not abut any other property to the west and are separated from surrounding lands by Roslin Avenue North.



Context Plan: Existing land uses within 800m of the Site

On the opposite side of Erb Street West are a mixture of low-rise buildings, spiritual uses and multi-unit residential buildings. No properties abut the lands to the south, as Erb Street West, a regional road with a 4-lane cross section, separates these lands from the subject lands.

The north side of Erb Street, east of the subject lands, contains a mix of residential and commercial buildings, while the Delta Hotel and Barrel Yards development is located approximately 150 metres to the east (with buildings up to 25 storeys). Further to the east is the Uptown, which contains a broad mix of uses, as well as two ION Stations. There are no properties that abut the subject lands to the east. Surrounding properties are separated from the subject property by Dunbar Road North.

Circulation

The surrounding streets follow a modified grid pattern, with the Site being well connected to the existing provincial (via Erb Street), regional, and local road network. The overall street pattern includes larger lots around institutional and commercial uses, transitioning into more fine-grained streets in the residential neighbourhoods. Erb Street West is a Regional Arterial Road with four vehicular lanes, sidewalks, and landscaping with the boulevard. The Erb Street corridor acts as a central connecting road through Waterloo and towards the City of Kitchener (where it merges with Bridgeport Road). Dunbar Road North and Roslin Avenue North are Local Roads with two vehicular lanes, sidewalks, and landscape buffering. Dunbar Road terminates with a dead end, while Roslin Avenue ends at Sunshine Avenue, which is not a through street – it runs west, where it connects with Dietz Avenue north.

Dual sidewalks are provided on all adjacent streets, directly servicing the Site. Moreover, the Laurel Trail is located 400 metres east of the Site, connecting to the Spur Line Trail, University of Waterloo campus, and Uptown Waterloo. Erb Street West is identified as a City-Wide Cycling and Multi-Use Route, providing further accessibility and connection to the Site. Cycling lanes are planned for this section of Erb Street West.

The Site is connected to a robust alternative transportation network. The Site is located within the Willis Way Major Transit Station Area (MTSA), with the Willis Way Light Rail Transit (LRT) station (630 metres east), Waterloo Public Square LRT station (700 metres east), and the Laurier-Waterloo Park LRT station (800 metres north) within walking distance of the subject lands. Moreover, bus route 5 runs along Erb Street West, connecting to The Boardwalk to the west, and Uptown Waterloo to the east, where additional transit routes are accessible. A bus stop is proposed (via a request from GRT) directly in front of the proposed building along Erb Street.

Open Spaces/Areas for Recreation

Waterloo Park is approximately 400 metres north of the Site, including Silver Lake, Eby Farmstead Animal Farm, Waterloo Park Baseball Diamond 1 and 2, Waterloo Park Soccer Field, Waterloo Skatepark, public washrooms, and parking. The Laurel Trial is located 400 metres east of the Site, connecting to further open spaces such as Waterloo Park, the Spur Line Train, and Waterloo Public Square. Our Lady of Lourdes School, 400 metres south, also has a field and baseball diamond, owned by the school board.



Residential uses north of the Site along Dunbar Rd (sources: google streetview)



Residential uses south west of the Site along Roslin Avenue North. (source: google streetview)



Laurel Trail - Through Waterloo Park



Erb St W corridor looking east (source: google streetview)



Waterloo Park (Source: Google Images)



Barrel Yards apartments



Westmount Rd and Erb St W commercial node



Waterloo Memorial Recreation Complex (Source: architecturepressrelease.com) Parkin Architects Ltd.

4.0 POLICY ANALYSIS



4.0 POLICY ANALYSIS

City of Waterloo Official Plan

Section 3.11 of the City of Waterloo Official Plan provides for policies relating to site development to encourage a high standard of urban design for the development within Waterloo and create an attractive and livable city with a strong sense of place. Specifically, Sections 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) of the Waterloo Official Plan apply to the proposed development. The following subsections provide a summary of how the proposed development addresses the applicable policies of Section 3.11 of the City of Waterloo Official Plan.

Building Design & Compatibility

3.11.1 (1, 2, 18-20) & 3.11.2 (2, 4-6), 3.11.4 (5, 6, 8)

The proposed development of a six to ten-storey residential building with 158 units (191 bedrooms) along Erb Street West is designed to add additional density within a Major Transit Station Area.

Character and Compatibility: The building has been designed to utilize similar materials to the residential dwellings being removed from the site (and surrounding residential dwelling units). The brick colours will be incorporated into the building design in repeating patterns separated by pre-cast concrete panels framing the balconies.

In terms of mass stepping down from ten to six storeys, pulling the building massing to the street frontage along Erb Street, the building addresses the transition between the higher-density transit corridor and the adjacent low-rise residential areas.

The scale of the infill development is appropriate in a Station Area, where increased densities are supportive to increase ridership on public transit, encourage active transportation uses and to support the mix of uses within the Station Area.



Above: Demonstration of building materials selected by project architect. (ACDF Architects)

Human Scale Development: Ensuring human scale development is a core principle of good urban design, particularly in areas with varying building heights. The proposed design incorporates architectural features that engage pedestrians and create a welcoming environment. This includes having large windows at grade, residential units and patios which encourage interaction between the private and public realm and covered primary entry and shared amenity space at the corner of Erb Street and Dunbar Road which are framed by the architect's balcony design along with enhanced softscaping features.

Parking is located within the building and below grade, with the primary entrance to the facility located behind the building from Roslin Avenue and Dunbar Road. Parking is completely screened from all property lines of the site with active uses lining the street and reducing focus on the automobile.

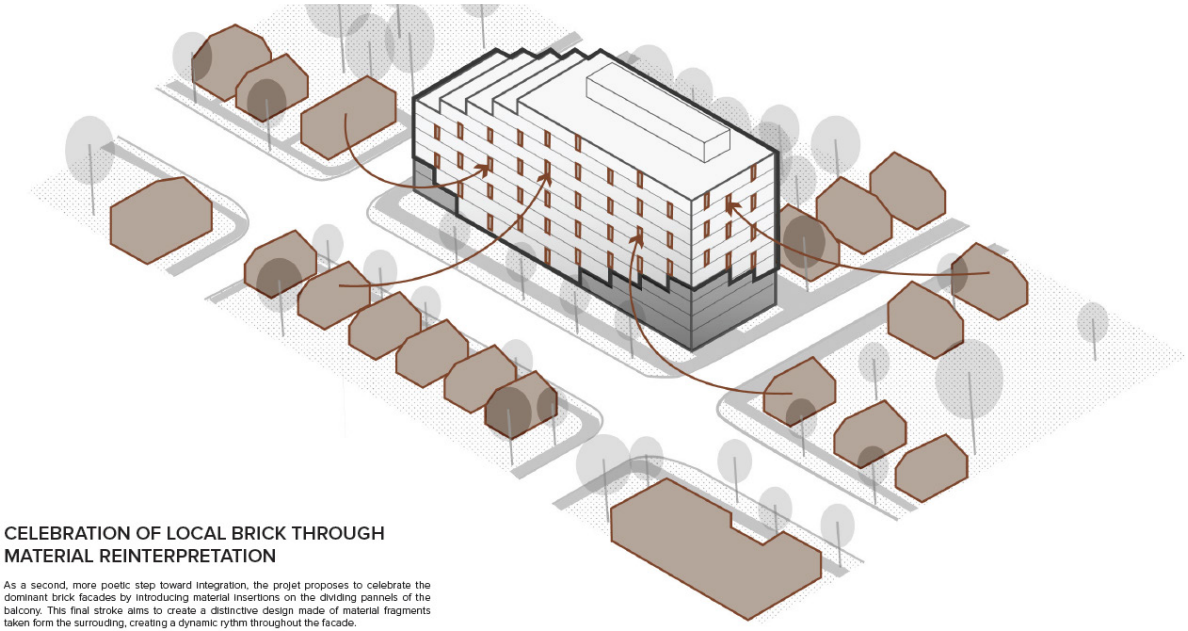
Building Design and Interest: The building design focuses on creating visual interest and architectural distinctiveness. By avoiding a standard appearance, the design incorporates varied facade treatments, including defined balconies lined with contrasting building materials as the elements extend up the building. The incorporation of similar brick colours to commemorate the residential units that are being replaced on site, to also blend in with the existing residential in the neighbourhood. In addition, the stepping as the building ascends provides visual interest for those near and far from the site as it varies from the typical podium/tower structure design typically seen through infill projects. These elements not only contribute to the aesthetic appeal of the building but also maintain visual interest for pedestrians and residents alike, enriching the urban environment and defining the street edge along a minor corridor.

Infill Development: As an infill project, the development effectively utilizes an underused parcel of land within the Station Area and on a minor corridor. The infill development uses existing infrastructure and services available in the public right of way. Infill development also helps to revitalize the area, bringing new residents and amenities that support the station area and Uptown Waterloo businesses only a short walk away.



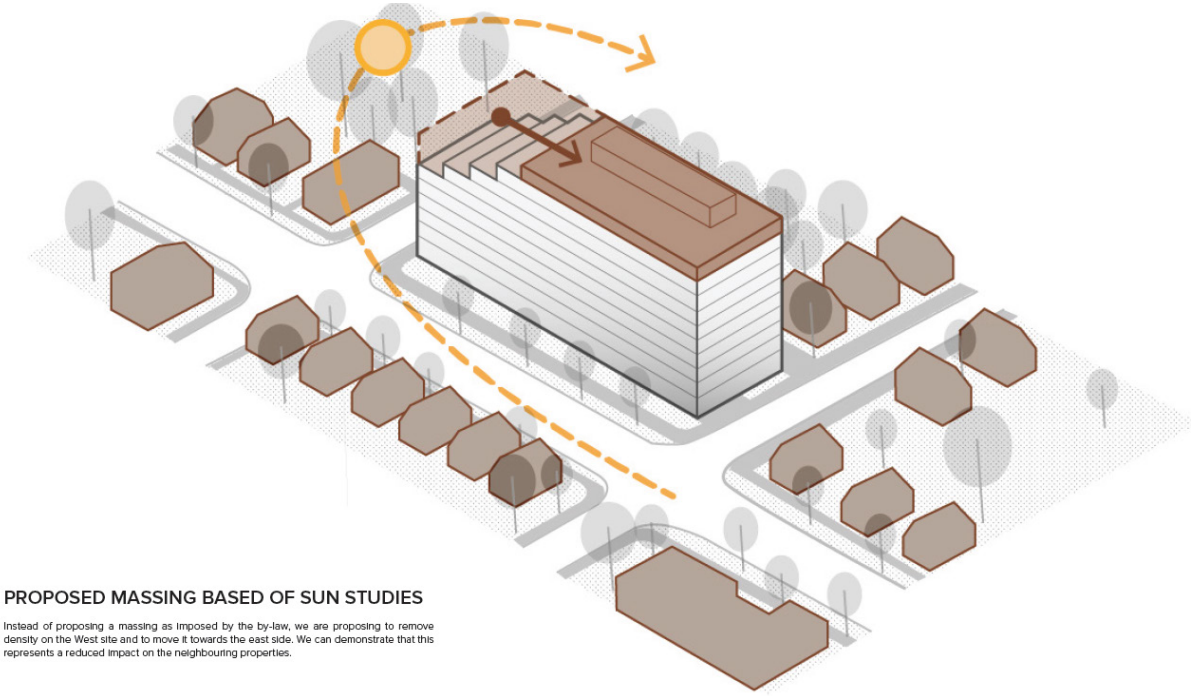
Built Form and Massing: The building's massing is thoughtfully designed to bring visual interest to the neighbourhood. The stepped profile draws the eye upwards along with the framed balconies. The design addresses-built form considerations by pulling the mass of the building to the street frontage (along the minor corridor) and step down at the rear towards the low rise residential where the parking entry is located. Above the parking area are large patios extending out from the units with large amount of outdoor amenity area for the residents. This approach helps maintain the area's scale from the established low rise residential north of the site. The covered parking deck is a feature for the north side residents and also limits the use of deicing salts by protecting the driveway.

Building Orientation: The orientation of the building along Erb Street West is positioned along the minor corridor, maximizing access to public transportation and existing sidewalk network. The building is designed to engage with the street, with residential dwellings and common amenity area and primary entrances facing Erb Street.



CELEBRATION OF LOCAL BRICK THROUGH MATERIAL REINTERPRETATION

As a second, more poetic step toward integration, the projet proposes to celebrate the dominant brick facades by introducing material insertions on the dividing pannels of the balcony. This final stroke aims to create a distinctive design made of material fragments taken form the surrouding, creating a dynamic rythm throughout the facade.



PROPOSED MASSING BASED OF SUN STUDIES

Instead of proposing a massing as imposed by the by-law, we are proposing to remove density on the West site and to move it towards the east side. We can demonstrate that this represents a reduced impact on the neighbouring properties.

Streetscapes & Site Circulation

3.11.1 (4, 10-15, 27), 3.11.2 (1), 3.11.4 (3, 4, 9)

Streetscapes: The proposed development enhances the streetscape along Erb Street West by integrating pedestrian-friendly features into its design. The building's ground floor includes high levels of glazing and transparency along street-facing facades, creating an engaging and dynamic street environment between the private residential units at grade and the public realm. The prominent amenity area at the corner of Erb Street West and Dunbar Road North contributes to a vibrant and interactive public realm, enhancing the overall streetscape. The entry is inset into the corner of the building to provide protection from the various seasonal elements for the residents and visitors to the site.

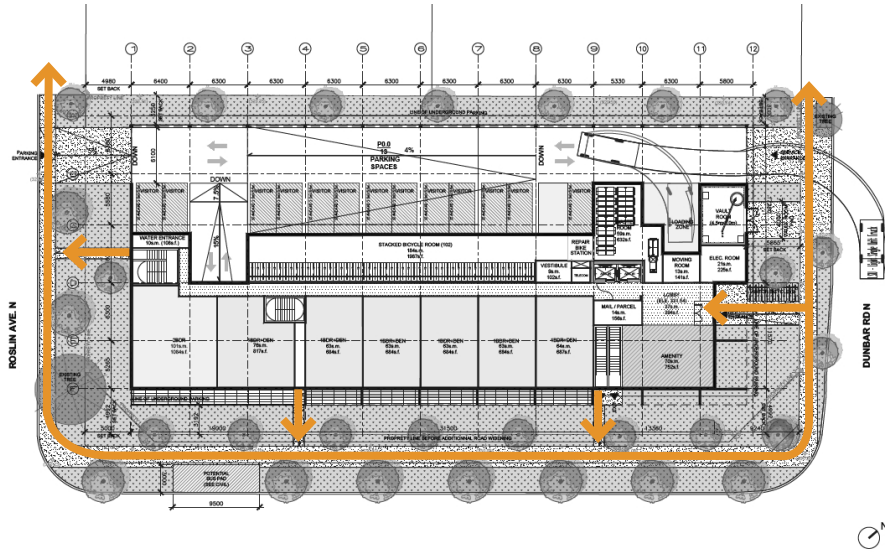
Pedestrian Oriented within a Station Area: Designed with a focus on pedestrian orientation, the development features active ground floor residential uses and transparent facades that encourage foot traffic and interaction between the private and public realms. The integration of high-quality materials with contrasting colours and design elements creates a welcoming atmosphere for pedestrians, supporting a lively and accessible urban environment within the Station Area.

Safety and Security: CPTED Design principles will be considered through the detailed design process through a future site plan application.

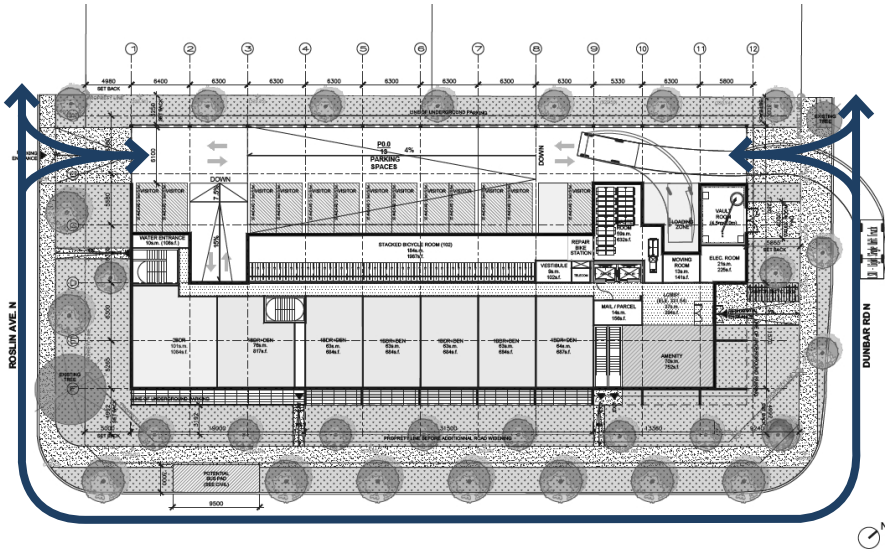
Site Circulation: Site circulation for vehicles is efficiently planned with clearly defined driveways into an indoor parking garage. Residents and visitors vehicles will enter the building via Roslin Avenue North, while service vehicles such as waste removal and moving trucks will enter via the Dunbar Road North entrance.A total of 123 parking spaces are proposed, including 13 visitor parking spaces. Accessible parking spaces are in proximity to elevators and entrances, with barrier-free paths of travel.

Pedestrian circulation will make use of the existing sidewalk network within the public realm.

Cycling circulation is encouraged through the inclusion of 102 bicycle parking spaces located on the ground floor of the Proposed Development, within the Stacked Bicycle Room. Moreover, 9 visitor parking spaces are located alongside the main residential entrance, off of Dunbar Road North. The bicycle parking located next to the main entrance increases convenience, accessibility, and visibility.



Proposed pedestrian circulation



Proposed vehicle circulation

Transit Oriented Design: By orienting the building along Erb Street West, a major transit route, the design maximizes accessibility to public transit and supports sustainable transportation practices, reducing dependence on private vehicles. In addition, the applicant has added a transit stop in front of the proposed development at the request of Grand River Transit.

Universal Design: The project incorporates universal design principles to ensure accessibility for all residents. Barrier-free entrances, accessible common areas (at grade and rooftop), and thoughtfully designed amenities cater to a diverse range of needs, promoting inclusivity and ease of access throughout the development.

Parking: Parking is strategically concealed within two and a half levels underground, and within the structure itself (at grade level) maintaining the visual appeal of the streetscape.

Site Servicing: The development is equipped with efficient site servicing infrastructure to support the needs of both residents and visitors. This includes well-integrated facilities for waste management, utilities, and other essential services, ensuring smooth operation and maintenance of the site.

Placemaking:

3.11.1 (5, 7, 16, 17, 22, 23, 25 - 28), 3.11.2 (3, 8), 3.11.4 (1)

Compatible and Innovative Development: The architect has carefully thought out a design that is sensitive to the surrounding neighbourhood, uses similar and complementary building materials, while providing a visually appealing and innovative design for a residential building along a minor corridor and within a station area.

The play on balconies emphasizes the residential look for the building, while providing for a textured façade along the building frontage. The balconies become the façade and animate the public realm.

The architect has used framing techniques to create the form of the building. The framing provides a significant impact on the overall form and is used to accentuate the silhouette and create defined edges on the building design as a whole.

The white precast panels provide for a framing that extends from residential units at grade and steps up to the top of the building. The framing of the balconies separates the residential uses from the common amenity space and the main entrance way at Erb and Dunbar.

Site Amenities: A common outdoor amenity area is proposed in the form of a rooftop terrace and indoor private amenity room on the first floor, while private outdoor amenity area is provided via balconies and, in the case of the first floor residential units, at-grade front yard patios.

Landscape Plan: A detailed landscape plan will be prepared in support of the Site Plan Approval. It is anticipated that trees and enhanced landscaping elements will be detailed between the public realm and the building interface to delineate private versus public realm and bring the pedestrian focus from the busy traffic on Erb Street into the pedestrian and private realm as the streetscape character will be improved.

Outdoor Lighting: Outdoor lighting will be detailed through the Site Plan Approval process. Plans will also include proper lighting at the primary lobby entrance to the building and ensure safety and visibility for all. Lighting will also be planned at the parking garage entrances along with adequate lighting within the parking structure to meet CTPED principles for safety.

Utilities: The proposed development will make use of existing services within the right of way. The transformer will be located internal to the building within the vault room, which is accessed via Dunbar Road North (adjacent to the vehicular access to the building).



Above: showing private terraced amenity areas overlooking Waterloo to the south west. (ACDF Architects)



Above: Rendering of rooftop common amenity area and mechanicaal penthouse.(ACDF Architects)

Sustainable Design:

3.11.1 (24), 3.11.4 (7)

Sustainable Design within a Station Area: DEI Consulting Engineers have prepared an Energy Strategy Report which was submitted concurrently with the Official Plan and Zoning By-law Applications. The intent of the study was to evaluate various energy conservation measures to achieve the targets of a high-performance scenario and Net-Zero ready performance scenario.

The architectural design of the building provides energy efficient design elements such as reducing the total perimeter walls and eliminating recessed balconies. This design element helps improve heat loss and reduces energy consumption as the perimeter wall area is reduced.

In addition, the building plans intend to make use of as much open roof top areas to provide for landscaped patios which will reduce the overall heat island effect. These elements can be found in the stepped roof design on the upper floors (which make use of the sun's direction for heat and light), as well as the common roof top amenity space.

City of Waterloo Urban Design Manual

The City of Waterloo Urban Design Manual implements the objectives and policies of the Waterloo Official Plan for developments across the City. The following section addresses how the guidelines of the Urban Design Manual have been considered.

2.1 High Standard of Urban Design

The proposed development features a stepped building design, rising from 6 to 10 storeys, which transitions from east to west to minimize its impact on adjacent residential areas. The ground floor plans for extensive glazing and brickwork to allow transparency with the public realm while defined by precast panels to frame the patio areas, while the upper floors and balconies are framed with modern pre-cast concrete panels and integrated brick elements. This design includes expansive outdoor terraces and a rooftop amenity space, elevating both the building's aesthetic appeal and providing for quality outdoor amenity space for the residents in both a private and shared fashion.

The building enhances the visual interest of the Erb Street corridor by drawing its mass towards the street and away from the established low-rise neighborhood. At street level, large windows create a seamless connection between the public and private spaces, complemented by soft landscaping elements within the front yard setback. This landscaping will cover 26% of the site at street level (24.6% pre-road widening), softening the transition between the building and its surroundings.

The main entrance is clearly defined and provides covered access, protecting users from the elements throughout the year. Parking is integrated into the building structure along with secure bicycle parking, with entrances situated on side streets. Additional measures have been taken to screen the parking areas to preserve the privacy of the residential units to the north and to mitigate light pollution from vehicle headlights. With parking being



Above: Vision for rooftop common amenity area adjacent to mechanical penthouse. (ACDF Architects)



Above: Vision for Private Terraced Amenity Areas (ACDF Architects)



Above: Large terraces from north facing units above parking structure. Trellis also shown on parking structure for climbing vines and greenery to screen views into parking structure and provide privacy to neighbourhing units. (ACDF Architects)

integrated into the structure and screened from all street frontages, the emphasis on the vehicle is reduced and alternative forms of active transportation are encouraged.

Utilities, including the transformer, are housed within the building's base as well as a loading area for residents moving in and out of the building. Waste management is efficiently handled within the building, with removal managed by property management teams. Any rooftop mechanical systems will be located within the top floor of the structure and screened from view of the shared amenity space within the mechanical penthouse.

The building is set back at the minimum of 5.0 metres along Erb Street, in addition to road widening requirements. This setback enhances the perceived width of the pedestrian realm, which includes the sidewalk, boulevard, street trees, and the 5.0-metre landscaped area between the property line and the building's façade. Despite the building's height ranging from 6 to 10 storeys, the increased setback helps diminish its visual bulk along the pedestrian zone. The defined balconies, extending up the building, use contrasting materials and colours to create a linear break in the building's mass. As pedestrians approach the main entrance, these balconies frame and define the entrance, inviting them into the building's main lobby.

The details of the landscape design, lighting design and incorporation of any wind screening elements will be included through the Site Plan process.



Above: Architectural design leading user to lobby area and common amenity space. The main entry and common space are framed by the balconies climbing above, distiguishing the point of entry and area for most interaction with the private realm (ACDF Architects)

2.3 Connectivity and Interaction

The development enhances connectivity by being well-integrated into the existing transit network, with proximity to multiple ION stations and bus routes. The design focuses on pedestrian-friendly features, such as transparent facades and a prominent corner amenity area, which fosters interaction between the building and the public realm. Bicycle parking is conveniently located within the parking structure and visitor bicycle parking will be located nearby the main entry. The site is well-connected to local amenities and transportation routes, promoting active transportation and ease of movement.

Direct access will be provided from the main lobby area to the existing sidewalk network. Barrier free paths of travel are provided in the main lobby area and units and rooftop amenity space are accessible via elevators.

2.4 Creativity and Innovation

The building's design incorporates creative architectural elements, such as varied façade treatments and the use of contrasting materials like pre-cast concrete and brick. The stepped profile and framed balconies add visual interest and differentiate the development from typical infill projects. Innovative features include large outdoor terraces and a lush rooftop amenity space, which provide functional and aesthetic enhancements to the building's design.



Rendering of rooftop terraces - prepared by ACDF Architects

5.0 CONCLUSION



5.0 CONCLUSION

In conclusion, the proposed development exemplifies a commitment to high standards of urban design through its thoughtful integration of form, function, and context.

Overall, this development not only enriches the urban fabric of the Erb Street corridor but also sets a precedent for future projects by balancing density with respect for existing contexts, promoting active transportation, and enhancing overall livability in the area.

It is our opinion that the proposed Official Plan Amendment and Zoning By-law Amendment applications achieves the Official Plan's Urban Design policies and objectives.

MHBC

PLANNING
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