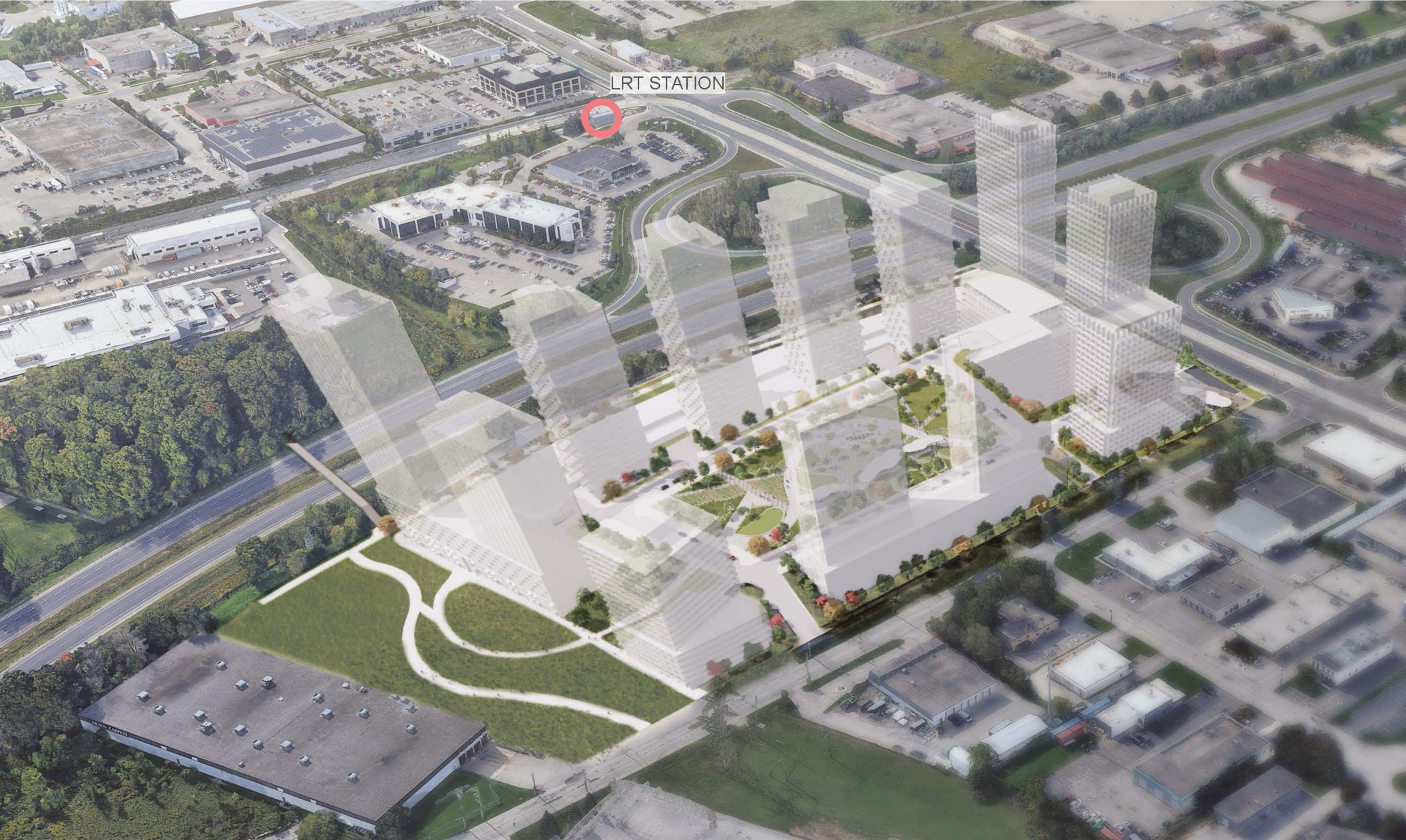




URBAN DESIGN REPORT ADDENDUM

565 CONESTOGO ROAD WEST

Official Plan and Zoning By-law Amendment
City of Waterloo





Urban Design Report Addendum

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Official Plan and Zoning By-law Amendment
City of Waterloo

March, 2023

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1. BACKGROUND

1.1 Scope and Purpose

GSP Group was retained by 65 Northfield Drive Inc., (the “Owner”) for the property located at 565 Conestogo Road West (the “site”), formerly owned and used by Kraus Flooring under the Kraus Group of Companies. This report is an addendum and should be read in conjunction with the original Urban Design Report dated June 2021 in support of an Official Plan Amendment (the “OPA”), Zoning Bylaw Amendment (“ZBA”) and Draft Plan of Subdivision (“DPS”).

The Original Conceptual Master Plan Proposal (2021)

In 2021, 65 Northfield Drive Inc, (the “Owner”) applied for an Official Plan Amendment, Draft Plan of Subdivision and Zone Change to support a master-planned mixed-use community that would contain residential, commercial, and employment and community uses. The original Master Plan proposed eight development blocks comprised of mid-rise and high rise mixed-use buildings with parking accommodated underground and within building podiums, and connected by internal driveways, walkways and courtyards yards.

The Revised Conceptual Master Plan Proposal (2023)

The Revised Conceptual Master Plan for the Site has further evolved, both in response to comments and suggestions from City staff, and as a result of a more detailed review to support this combined Official Plan Amendment application, Zoning By-law Amendment application, and Draft Plan of Subdivision application. The Revised Conceptual Master Plan continues to propose a compact, high-density, mixed-use community that contains residential, commercial and community uses. The revised plan includes 9 future development blocks connected by new public streets, walkway connections and open spaces. The revised plan’s built approach is different from its original submission, breaking from the traditional rectilinear street grid, new public streets have been configured as a loop and proposes

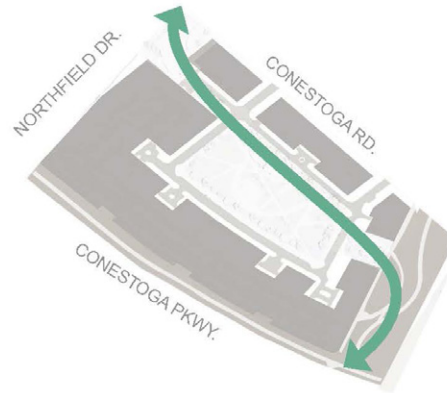
a significant contribution of new open spaces to the neighbourhood, including a new 1-hectare privately owned public park that is centrally located, highly visible and accessible within the site. The revised plan is comprised of mid-rise and high-rise mixed-use buildings with parking accommodated below-grade and above-grade. As originally proposed in the initial conceptual plan, the Revised Conceptual Master Plan continues to maintain the opportunity for Pedestrian Promenade paralleling the Conestoga Parkway and Pedestrian Overpass spanning the Conestoga Parkway to facilitate pedestrian movement in and around the site as well as to the Northfield ION Station west of the site.

The overall site conditions and characteristics, community context and overview of applicable City urban design direction and guidance remains unchanged per the original 2021 Urban Design Report submission. This Addendum addresses the sections affected by the Revised Conceptual Master Plan since the 2021 submission.

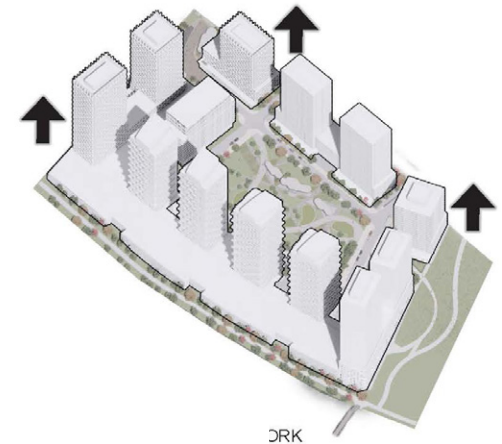
The plans and recommendations are written to provide a master direction for the site while still being flexible and nimble to adjust to changes and refinements that are naturally expected to be implemented through the detailed design stage of such a comprehensive development project. All plans, recommendations, and imagery should be read with that understanding.

2. DESIGN EVOLUTION

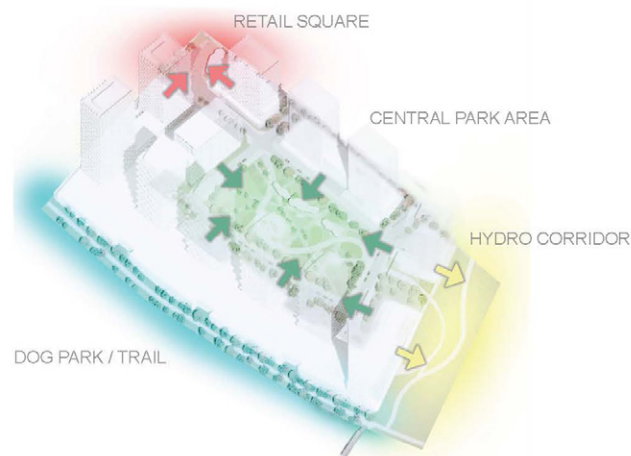
The Revised Conceptual Master Plan has seen enhancements to the public realm with a larger central park and more pedestrian focused shared transition areas. Building heights have been redistributed to frame the park, and above grade parking structures have been strategically located to blend in with the overall development as well as play a crucial role in relating the development with the Conestoga Expressway, ameliorating environmental impacts.



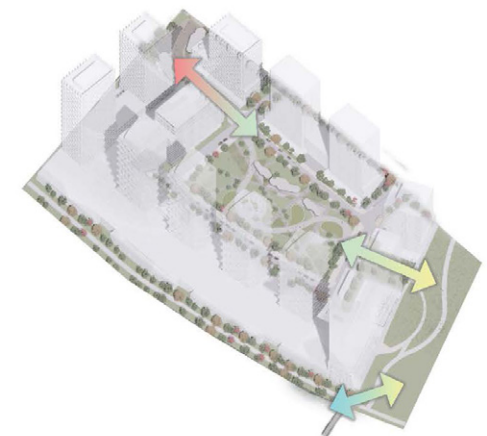
CONNECTIVITY SPINE



ARCHITECTURAL FRAMEWORK



KEY PUBLIC SPACES



PUBLIC SPACE TRANSITIONS

3. CONCEPTUAL MASTER PLAN

3.1 Overall Conceptual Master Plan

The overall Conceptual Master Plan is proposed to be redeveloped into a mixed-use high density residential use with approximately 4,000 new residential dwelling units, non-residential uses, a new public street network, and a range of new open spaces. New public streets extend from the surrounding street network creating a loop road and breaking up the large site into 9 smaller development blocks. These new urban streets will set the basis for a tree-lined public realm accommodating walking and cycling through the site. Complementing the public streets, a publicly-accessible series of parks and plazas throughout the development will be the public realm focal points for the development and the surrounding neighbourhood.

The three main areas of these public realm focal points are the Retail Square, the Central Park and the Hydro Corridor. The Retail Square at the north corner is a pedestrian-friendly area featuring a variety of shops and restaurants. At the center of the development is a beautifully landscaped Central Park which serves as the heart of the overall Master Plan, integrated with walking paths, seating areas, and play areas for children. Down to the south is the Hydro Corridor, which completes the public spaces connectivity spine, creating a natural and serene environment. The Hydro Corridor is home to a lush meadow, complete with native grasses and wildflowers,

providing a habitat for a variety of wildlife. The transformation of the former industrial land into a vibrant and sustainable residential and mixed-use community supported by a park and public spaces is a testament to the power of revitalization and the importance of returning spaces back to the community. Whether strolling through the Retail Square, relaxing in the Central Park, or exploring the Hydro Corridor and meadow, there is something for everyone to enjoy in this beautiful and rejuvenated space. Collectively, the proposed development would be tied together with an array of gathering spaces and green infrastructure that promote community interaction and a sense of place.

The Conceptual Master Plan contemplates mid-rise and high-rise buildings comprising thirteen towers ranging in height from 14 to 35 storeys, with the tallest towers generally clustered near the west side of the site, abutting Conestoga Parkway. With unobstructed views to and from the Conestoga Parkway, the massing of these tall towers provides an attractive profile for the Master Plan to passing motorists. In the addition to that, a three storey podium parking structure is proposed along the Conestoga Parkway which plays a crucial role in ameliorating environmental impacts, traffic, and noise concerns. The proposed buildings provide a perimeter framing to the Central Park and the towers feature generous separation distances, interspersed with a range of standalone mid-rise

and high-rise building typologies to create a sense of place and openness by maximizing the amount of sky visible between buildings from within the park.

The Conceptual Master Plan has not yet reached the level of detail to define the precise types of non-residential uses to be delivered. Nonetheless, the Master Plan identifies the general locations of these non-residential uses, and it is anticipated to provide a variety of spaces designed for a range of uses including retail and daycare.



LOBBY ENTRANCE



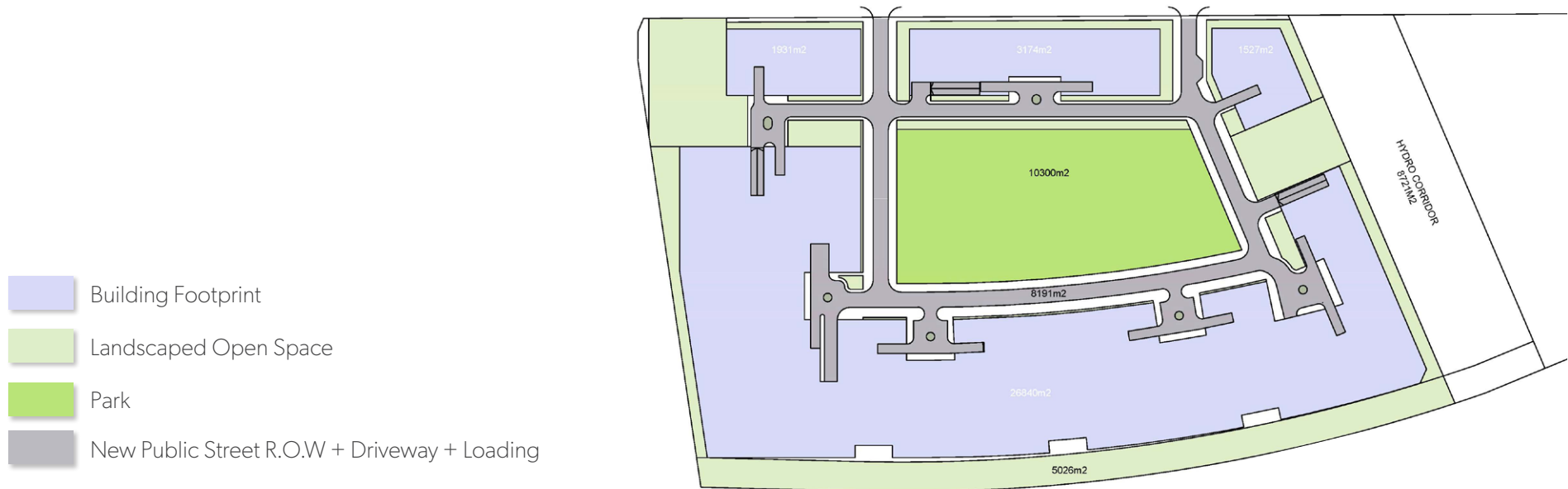
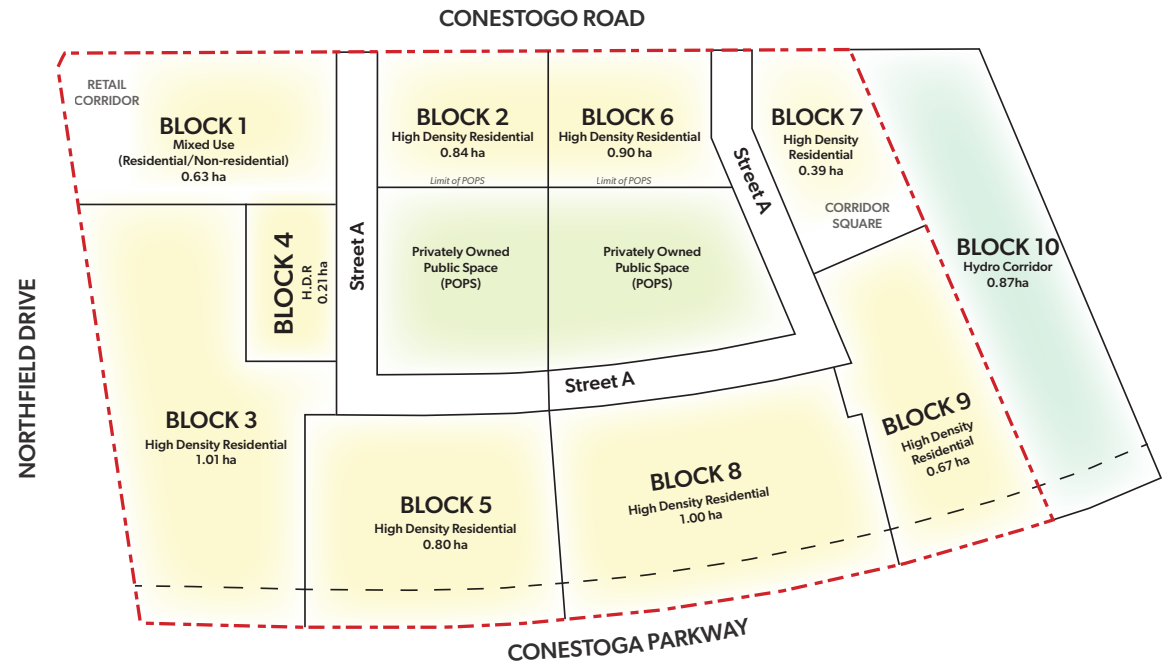
NON-RESIDENTIAL USES



3-STOREY PARKING GARAGE

3.2 Development Blocks

Nine (9) core development blocks result from the new street fabric, circulation, open space, and general built form. In total, these development blocks will contain approximately 4,000 new residential dwelling units in mid-rise and high-rise buildings plus approximately 4,645 square metres of maximum non-residential uses, 14,000 square metres of landscaped open spaces and approximately 10,000 square metres of privately owned public spaces.



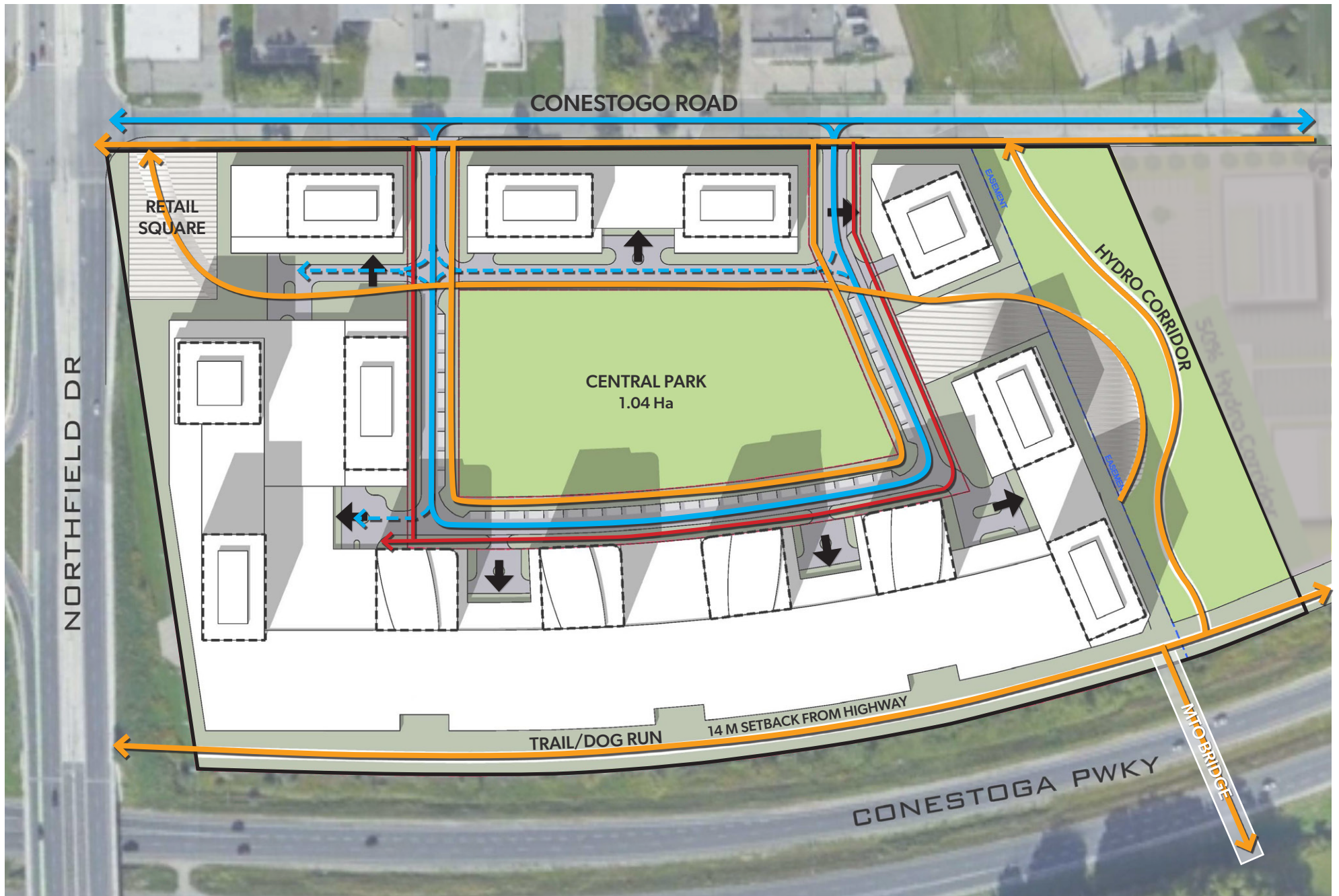
3.3 Circulation and Connectivity

The looped configuration of the new public streets will establish the overall circulation pattern for vehicular traffic as well as sidewalks provide for pedestrian circulation into the site from Conestogo Road. These new streets will provide the site with two connections from Conestogo Road, and they are complemented by private driveways within the individual development blocks.

The planned street right-of-way is 16 metres wide and is designed to accommodate two-way traffic with curbside planted boulevards and decorative street lights, and a sidewalk on one side for a building-to-building interface; and the same right-of-way design with minimal building setbacks and addition of on-street parking and multi-use pathway abutting the park, for a building-to-park interface (see Pages 10 and 11 for street cross sections). The new public streets, sidewalks, and pathways are lined with active frontages, retail uses and civic uses for a lively pedestrian experience and contribute to a cohesive transportation network, integrated with existing roads and existing sidewalks.

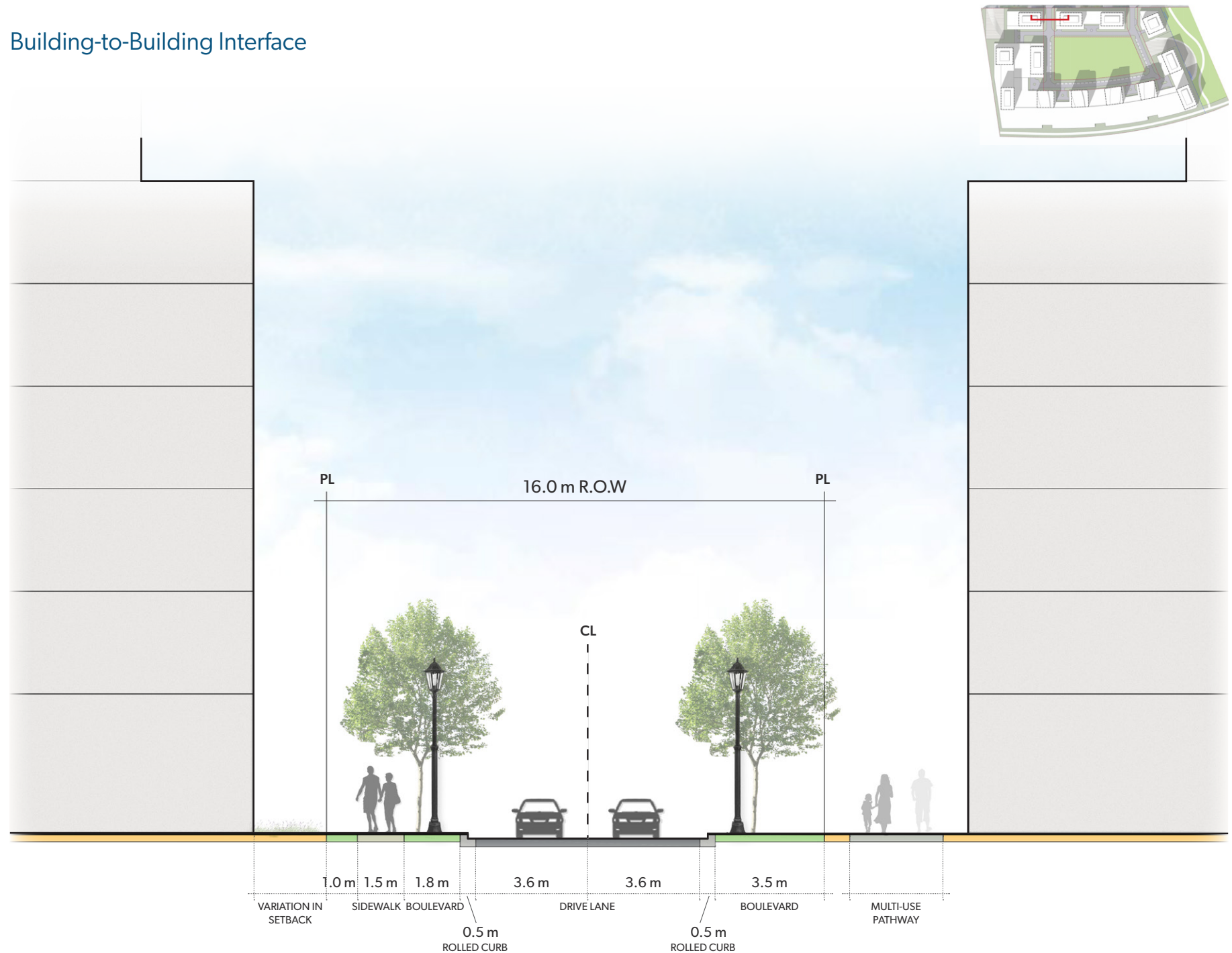
Pedestrian circulation is furthered through the site within the open space network that crisscrosses, providing a multi-directional permeable circulation network supporting a compact, transit-oriented built form. Three major pedestrian routes structure this circulation pattern:

- The pedestrian-oriented Promenade runs from Northfield Drive along the Parkway edge (situated within the 14 metres MTO setback) and rounding back to Conestogo Road through the Hydro Corridor; providing pedestrians and cyclists with full access to the interior of the site without any interference from vehicular traffic.
- Landscaped edges with pedestrian routes connect Northfield Drive via the Retail Square and the Hydro Corridor, through Central Park.
- A new Pedestrian Overpass spans the Conestoga Parkway, contributing to the overall pedestrian circulation system of the site's development. Leading to the site's heart, this new Pedestrian Overpass more directly connects new residents and workers to the Northfield ION Station without having to move up to and across Northfield Drive.



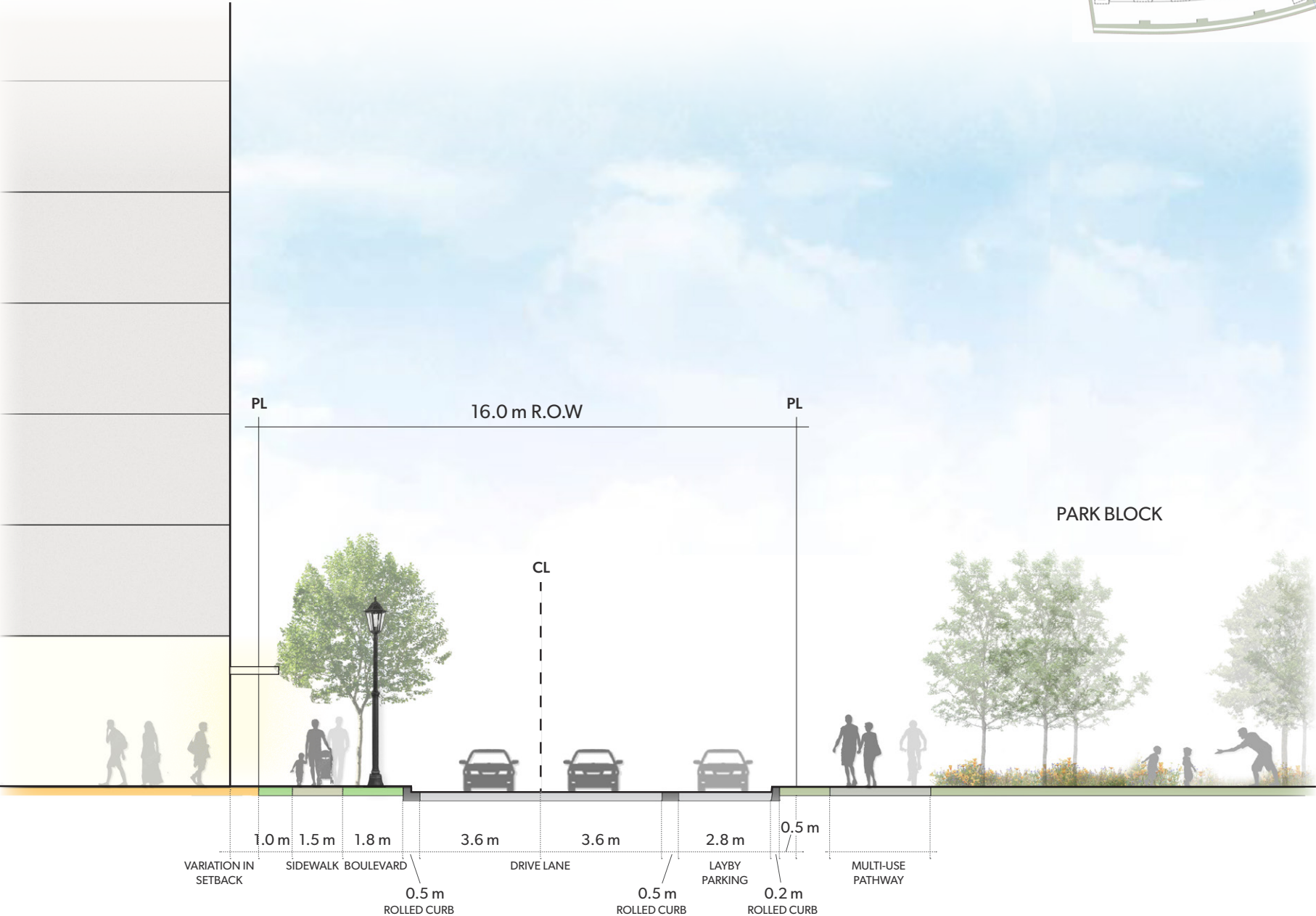
→ VEHICULAR ROUTE
 → SIDEWALK
 → MULTI-USE PATHWAY

Building-to-Building Interface



Illustrative diagram shows streetscape cross-sections of the new public street

Building-to-Park Interface



Illustrative diagram shows streetscape cross-sections of the new public street

3.4 Open Space Network

Diverse open spaces of different scales allow pedestrians to experience and move throughout the site. These publicly accessible spaces knit together the public and private realms, creating opportunities for a variety of activities to take place, including a wide variety of active and passive recreation opportunities for urban life. Enhanced streetscapes that prioritize the pedestrian experience are key along Northfield Drive and Conestogo Road as part of the site's structure. An urban landscaped edge will transform the interface with the principal Northfield Drive corridor, picking up the significant grade changes with a combination of hardscaped and softscaped spaces. Along Conestogo Road, the streetscape will transition from the current industrial character to a more urban, mixed-use function through streetscape plantings and building forms along the street. Three core open spaces within the site establish the structure of the open space system and these include the Retail Square, the Central Park (privately-owned and publicly-accessible space), and the Hydro Corridor. Additionally, the site's proposed open space system also includes the pedestrian Promenade along the site's western edge lining the Parkway. The open space network would be complemented by the private amenity spaces on each of the development blocks in the form of landscaped terraces and podiums.

The following description and conceptual depiction of the potential design, layout, facilities and programming are included here for the purpose of illustrating the potential opportunities and activities associated with each open space. The final design and programming for Central Park, a privately-owned and publicly-accessible space, will be determined in collaboration with the City of Waterloo.

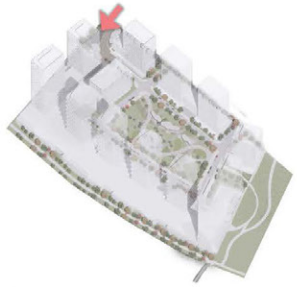


3.4.1 Retail Square

Retail Square is approximately 0.25 hectares in area and will provide a contemporary vibrant square which will 'anchor' the proposed development firmly along Conestogo Road and Northfield Drive. Framed by ample landscaping and strong building facades, the square will serve as a space of civic gathering not only for the proposed development but also for the surrounding neighbourhood and provide a variety of programming opportunities, which may include:

- A combination of hardscaped and landscaped spaces to provide opportunities for a diversity of activities;
- Seating opportunities throughout the space with a combination of free-standing seating and integrated seatwalls, with supporting shade structures or features as appropriate;
- Structured programmable space to provide a diversity of uses and activities, such as stages and games tables;
- Spaces lining the abutting buildings providing spill-out space for ground floor commercial uses, such as patio or retail;
- High quality paving and lighting that frames the space and its uses;
- Landscape coordinated with the surrounding building profiles to create a pleasant microclimate in the square, mitigating wind and urban heat island effects; and
- Water feature and/or public art that provides a placemaking element.





3.4.2 Central Park

Central Park will be a privately-owned and publicly-accessible space, strategically positioned and imagined as a high quality contemporary urban park. The park is approximately 1.04 hectares in area and will serve as the heart of the overall Conceptual Master Plan. The substantial size of the park provides flexibility in design to support a variety of uses and programming opportunities, and support pedestrian comfort, biodiversity, universal accessibility, safety, and design excellence. The sense of centrality is accentuated by the loop road and reinforced by the massing strategy of the buildings. The location of the park also ensures that it is protected from potential impacts from the Conestoga Parkway by the 3-storey parking structure that frames the western edge of the park. It is expected that Central Park will be characterized by a mix of recreational functions, potentially including:

- A meandering multi-use pathway with variations in pathway width;
- A range of different recreation functions to cater to a range of different users, including opportunities for multipurpose courts, splash pads, play equipment, multi-purpose playing fields, and open lawns;
- Distinctive shade structures with seating;
- Pedestrian-scaled lighting and seating opportunities around the above activity spaces; Unprogrammed lawn areas for flexible passive and active recreation; and
- Formal and informal layout of trees to define garden and park paths and spaces and to provide shade.





3.4.3 Hydro Corridor

Hydro Corridor is approximately 0.87 hectares in area and will transform a currently in-use transmission corridor into a revitalized green space and a community destination with safe pedestrian connectivity that runs east-west along the site's southern edge. The approximately 45 metres wide landscape buffer fronting Conestogo Road becomes a highly visible and inviting point of entry into the site for pedestrians and cyclists. The Corridor offers access from the west via the newly proposed pedestrian bridge. A pedestrian connection from the Northfield LRT Station traverses the area north of the existing ION LRT Operation Maintenance Facility and then links to a proposed Pedestrian Overpass connection over the Conestoga Parkway, onto the proposed Promenade along the Parkway edge.

To enhance the character of the Hydro Corridor, future landscaping features may include:

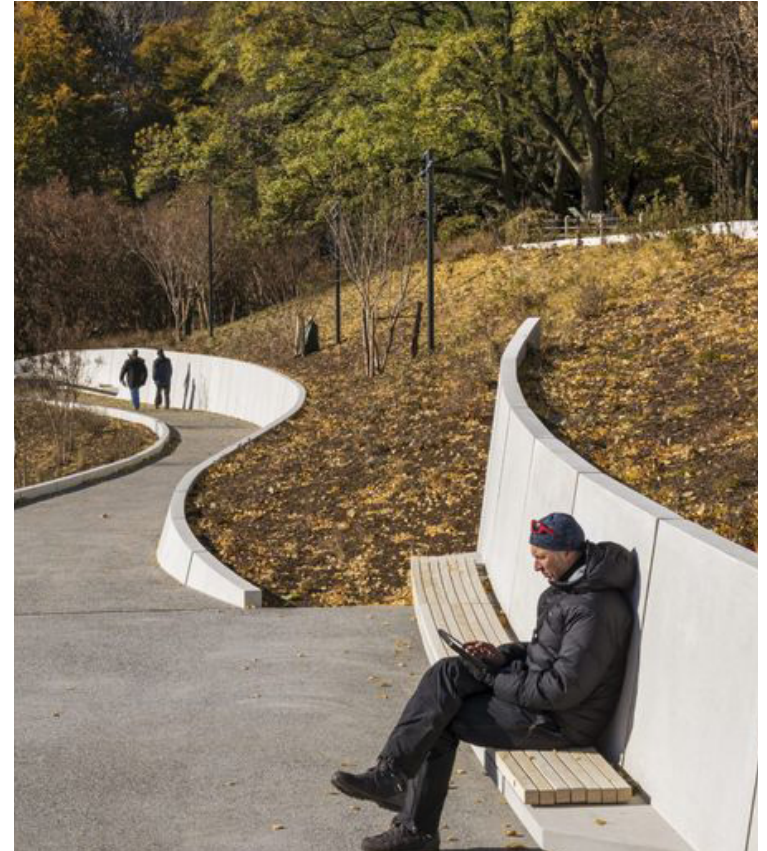
- Shade and visual interest to the area while also applying Hydro Corridor restrictions on plant species within the Hydro Corridor easement to protect transmission lines;
- A variety of planting to stimulate biodiversity particularly, resilient native species from the Forwell Creek area, as well as drought resistant planting;
- Wayfinding features to direct pedestrian and cycling users through the site;
- Visual connections to building entrances and programming related to the corridor; and
- A meandering multi-use pathway to create a clear and inviting route weaving through the developed portion of the site for a seamless experience.

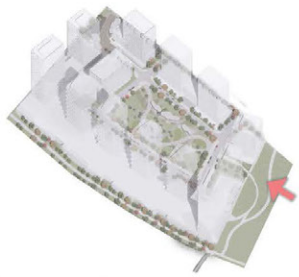




3.4.4 Pedestrian Promenade

A 14 metres wide MTO setback along the western property line creates a generous separation from the busy Conestoga Parkway. The conceptual Master Plan envisions a “dog run/community trail” which could provide a connection from Northfield Drive to the Hydro corridor and future Community Trail and Pedestrian Overpass. This area presents an opportunity for adding a landscape buffer as a lush, ecologically diverse green corridor with the proposed pedestrian Promenade to encourage active interaction with the surrounding neighbourhood.

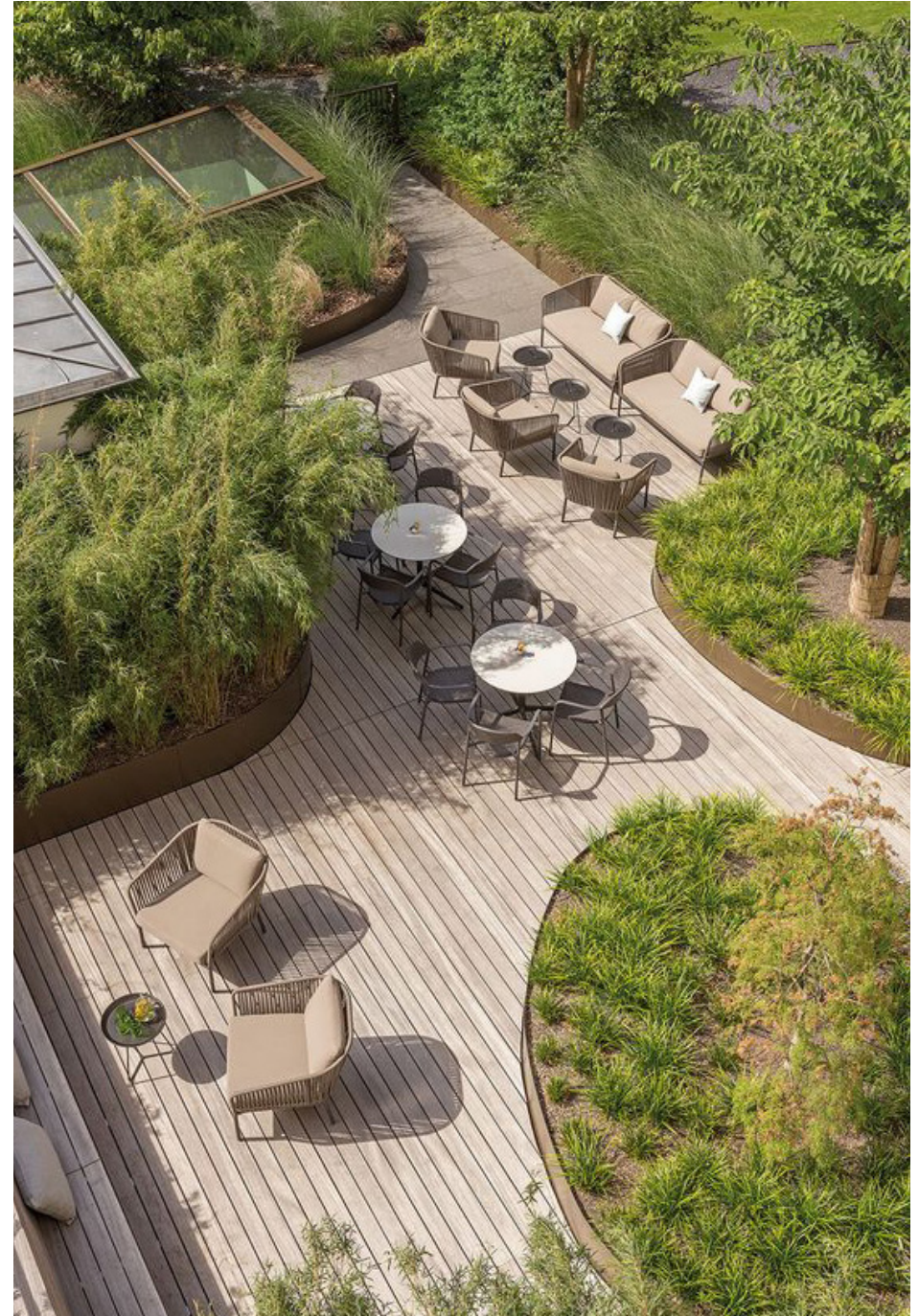




3.4.5 Landscape Terraces and Podiums

Publicly-accessible open spaces will be complemented by private outdoor amenity spaces on residential development blocks for the use of building residents. The apartment blocks include a range of high-quality, comfortable private and shared outdoor amenity spaces that provide opportunities for a range of casual use activities and functions for residents. The design of these different spaces should, when considered together, capture a broad range of functions and elements to diversify the recreation opportunities available to residents and visitors, such as:

- Indoor amenity spaces co-located with rooftop terraces to round out the recreation and relaxation opportunities for residents;
- Soft landscape treatments such as raised massed planting beds with small canopy trees/shrubs and different types of seating arrangements through moveable furnishings and shade structures to accommodate various group sizes;
- Areas including the potential for cooking and warming facilities;
- Mitigation measures of wind assessments, if any recognizing the proposed mid-rise form, to ensure comfortable outdoor living spaces.
- Green roofs, where possible, with a multi-purpose function such as bio-diversity, amelioration of climate, storage and management of rain.



4. BUILT FORM RECOMMENDATIONS

The Conceptual Master Plan illustrates the long-term build-out of the site. It is a Conceptual Master Plan illustrating the arrangement and composition of new buildings within the fabric of new public streets and open spaces. The Conceptual Master Plan is comprised of 13 towers across the 9 development blocks within the site. In total, the Conceptual Master Plan contains approximately 4,000 new residential dwelling units, 4,645 square metres of maximum non-residential uses, and approximately 3,200 parking spaces. The bulk of the parking is accommodated within underground parking garage, some of which also contain integrated above-grade parking garages. Surface parking is limited to the internal public street.

The Conceptual Master Plan is meant to assist with a preliminary dialogue on design with an understanding that detailed design is required further to the site planning approvals. The built form recommendations have been created to guide the design and evaluation of future development proposals.

4.1 Building Base

4.1.1 Base Positioning

- Conestogo Road: a consistent street edge along Conestogo Road with a similar setback to the public street right-of-way (3 meters) including full use of street frontages of different blocks is a key part of an urbanized streetscape along this access street for the site.
- Northfield Drive: similarly, an urbanized street edge along Northfield Drive is desired as well, although the angled property line and significant grade changes at the street edge affect building positioning. This built edge can still be consistent in placement but will be greater in extent from the Northfield right-of-way, the intervening space as significant landscaped areas.
- Internal Streets: Internal to the site, the new public streets will benefit from an intimate urban edge with buildings for the most part situated 1 metre to the curb edges, abutting the Central Park on the opposite side of the internal street (*See examples on Page 25*). The portion of the building lined with ground floor non-residential uses warrants large pedestrian spaces on those sides, such as 5 to 7 meters in width, to accommodate pedestrian flows as well as the potential for modest commercial spill-out space.

4.1.2 Base Height

The height and form of the base building may need to vary in order to respond appropriately to each facing condition. A low rise base height of one-storey or 6 metres provides an appropriate interface for buildings facing the Central Park with some design flexibility of up to 40% of a point tower frontage within the stepback may extend to the ground. A mid-rise base height of 6 to 7 storeys is shown to establish a more appropriate scale for the abutting existing streets and the Hydro Corridor.

At the internal street level, the varying heights of the streetwall reinforce the sense of openness by maximizing the amount of sky visibility between buildings from within the park. Landscaped terraces at lower building levels are encouraged, to increase street animation.





Caroline Street South



Allen Street West



Father David Bauer Drive

Examples of existing street right-of-way with zero to minimal setbacks within City of Waterloo

4.1.3 Ground Floor Treatment

The Conceptual Master Plan envisions townhouse style units and residential lobbies with direct access to the public sidewalk along Conestogo Road and non-residential uses at the corner of Conestogo Road and Northfield Drive, creating opportunities for improved streetscape elements to be implemented along this corridor. Buildings that front onto internal streets, park and open space will require special attention to their frontage treatments and architectural design in order to achieve the kind of character, a comfortable pedestrian environment with access to sunlight and sky views, street activity, and vibrancy warranted for these important elements of the public realm.

The base of the buildings should occupy the full extent of the urban blocks, framing streets and open spaces with a continuous street wall. Lining these street frontages with ground floors containing active pedestrian spaces will be critical for ensuring an animated edge to public streets and open spaces. Ground floor commercial units, residential lobbies, and residential amenity spaces are meant to occupy the majority of the ground floor space. Non-residential uses should be concentrated along public streets or towards an open landscaped area, wherever possible. Ground floor residential units with individual entrances at grade facing onto public and internal streets would also contribute to activating and animating street edges. Ground floor for non-residential uses should have a minimum floor-to-ceiling height of 4 metres to convey publicly oriented nature of the internal uses and for residential uses should have a minimum floor-to-ceiling height of 3 metres.

Appropriately articulating these building frontages will be particularly important in supporting a vibrant pedestrian-oriented environment facing bounding open spaces. Vertical and horizontal architectural elements and detailing that provide visual interest and functionality such as fenestration detailing, balconies, canopies and railings are key. This includes considerations for recessions or projections of the building envelope with a regular rhythm of divisions along the street as well as architectural touches related to changes in materials and colours, balcony design, and supporting architectural features. Higher proportions of transparent windows and doors on the ground floor are important, although a balanced proportion of solid and glass fits the context and brings energy

conservation benefits. Use of glazing at the ground floor and above two storeys should have visual markers to avoid bird collisions. Canopies over main building entrances, or alternatively recessed entrances are also recommended. Where residential uses are recommended on the ground floor, special design standards should be applied to ensure that there is a suitable transition from the public sidewalk to private residential units and, landscaping and other design features are used to augment this transition zone.



Ground floor active uses enlivening the public realm

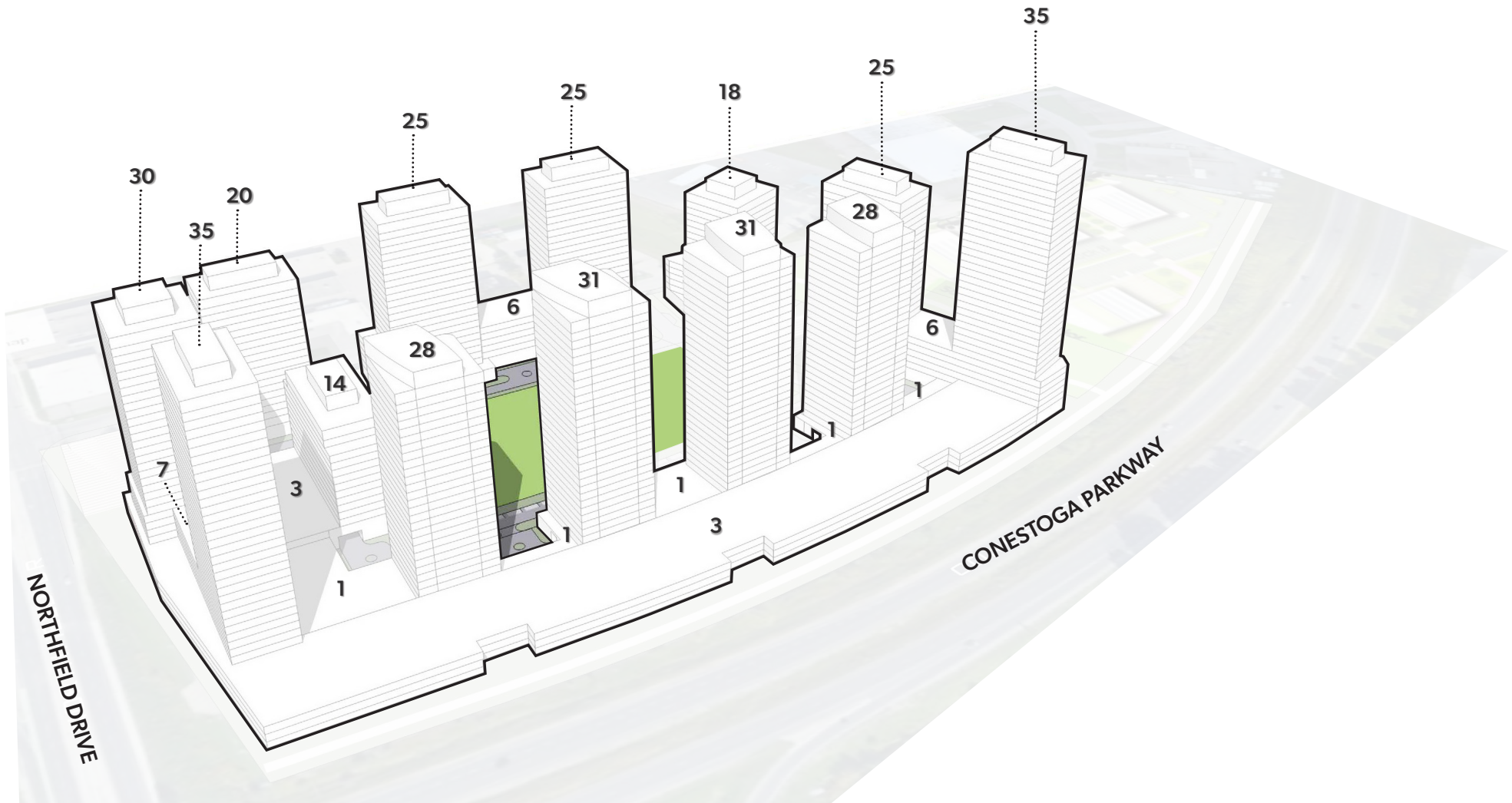


Ground floor with direct access to public realm

4.2 Building Tower

4.2.1 Tower Height

Offsetting and staggering towers is recommended to add variation and visual interest, to facilitate sunlight and sky views and mitigate wind impacts.



4.2.2 Tower Stepback

A minimum stepback of 1 metre or more above the base portion is demonstrated with some design flexibility of no stepback for a portion of the tower that may extend through the base to the ground.

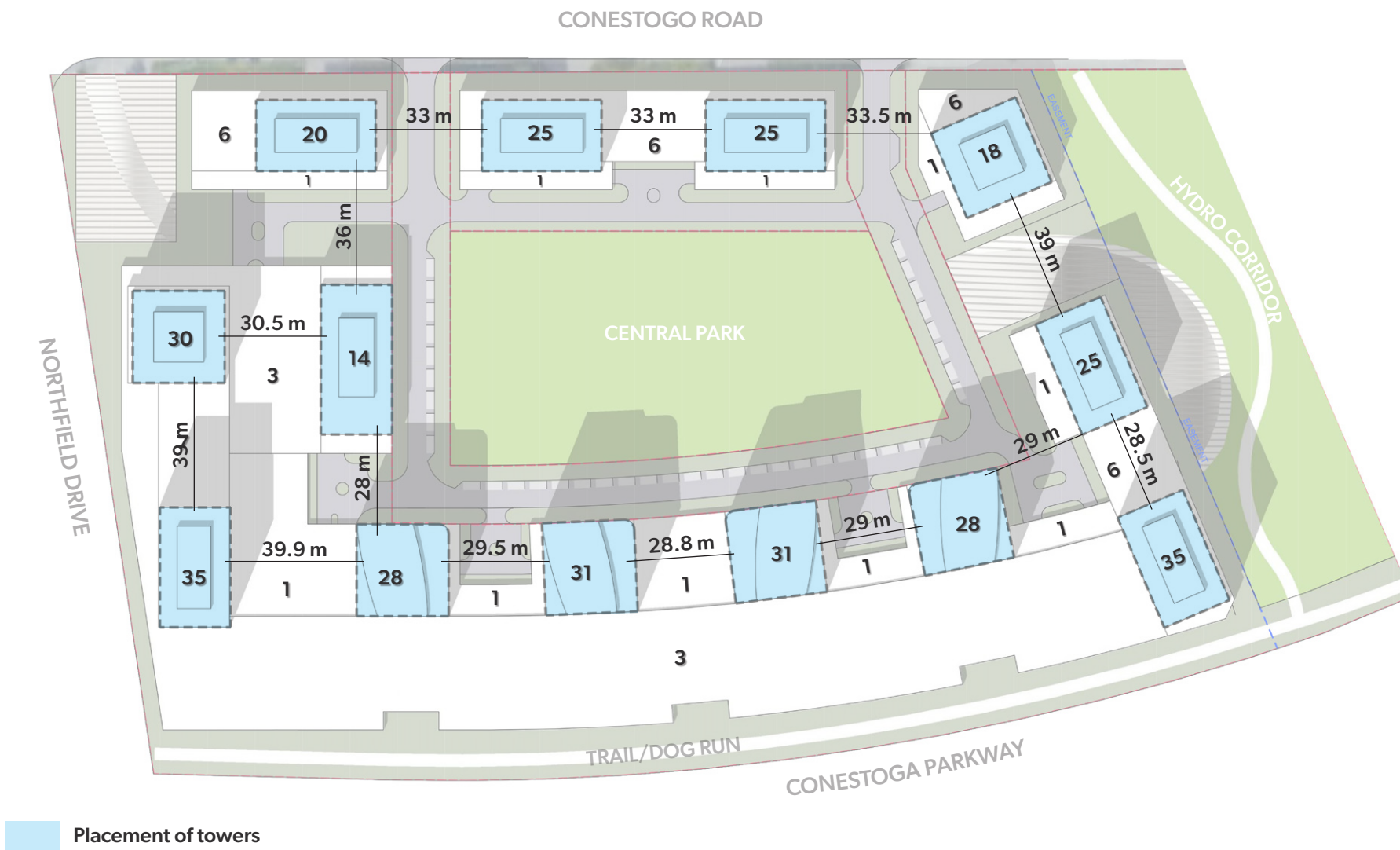
Stepbacks for tower edges facing open spaces on the site can be reduced, where appropriate, given the large central open space and the road right-of-way. At locations where tower extends down to the ground, only 40% of tower is recommended to be extended directly to the ground with no stepback and should provide high level of building articulations and features such as overhangs and canopies to help mitigate pedestrian level wind.

Setting the building stepback at 1 metre should meet favourable wind conditions at pedestrian level and maintain sufficient access to sunlight and sky view from streets and open spaces.



4.2.3 Tower Separation

A minimum of 22 metres tower separation distances is recommended throughout the site to ensure ample access to sunlight and sky view onto the public realm, as well as maintaining privacy for residents. The proposed tower separation distances as shown in the Conceptual Master Plan are mostly at a distance of 28 metres, and as wide as 39 metres in some cases, ensuring adequate access to sky view. Due to this larger distances between most buildings, a reduced stepback in combination with varied tower heights could demonstrate minimal effect from a pedestrian perspective.



4.2.4 Tower Footprint

There are two types of building tower typologies – a point tower and a slab tower.

- Point Tower: The term “point tower” refers to more slender towers that have a floor plate of equal or similar length and width. The six point towers in the site are shown ranging from 18 to 35 storeys on the Conceptual Master Plan, strategically positioned to accentuate and transition through the site.
- Slab Tower: The term “slab tower” refers to towers that typically have a rectangular floor plate with narrower widths and two times the length, and typically lower in height.

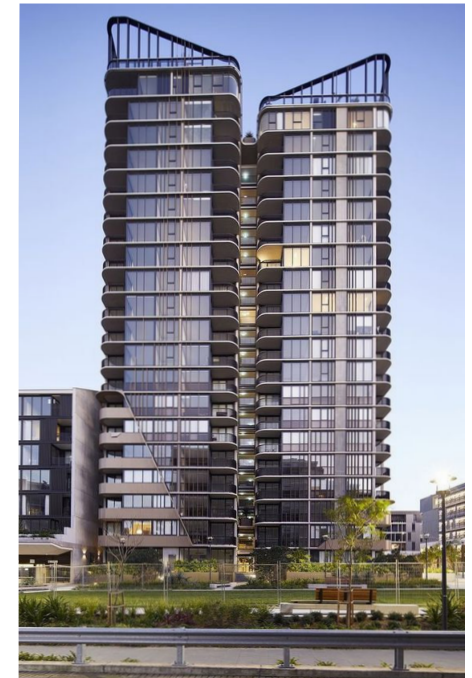
The point tower footprints represented in the Conceptual Master Plan are generally 850 square meters, measuring 29 to 30 metres in a square configuration. The slab tower footprints are generally between 850 to 1100 square metres and maximum dimension of 47 metres. These dimensions generally recognize the Waterloo’s preferred zoning approach for a maximum tower footprint of 1,000 square metres.

4.3 Rooftop Treatment

Reducing the bulk of the top of a tower (“sculpting” the tower) can make it more attractive. Minimizing views to enclosed mechanical penthouses at this level can be accomplished either by positioning these back from the roof edges or architecturally integrating them with the immediate storeys below. Coordinated opportunities for photovoltaic panels, green roofs or rooftop terraces, can further assist with screening strategies.

4.4 Architectural Differentiation

The buildings that frame the Central Park should have a shared architectural expression and should be designed to complement the architectural style of the podium base; more subtle variations between the buildings are also recommended, such as varied arrangement of materials, colour differentiations, different combinations of solid massing and glazing, orientation of building architectural features, as well as distinct roofline profiles and features.



4.5 Parking, Loading and Servicing

Locating the majority of parking underground with some above grade parking structures, maximizes public space at grade and contributes to a safer and more attractive pedestrian environment. The above-grade parking structure proposed along the Conestoga Parkway plays a crucial role in ameliorating environmental impacts, traffic, and noise concerns. The following recommendations should be considered:

- Vehicular access points to the development blocks should be located internal to the site;
- Above-grade parking structures, loading and services should be located behind the habitable building or designed to be integrated with the overall design of the façade; and
- Above-grade parking structures, incorporated into a mid-scale or base building, should be subtle in appearance and screen the structure through creative architectural design and landscaping.
- Sufficient setbacks should be provided for the integration of trees and other landscape elements visible from surrounding streets, sidewalks, park areas, and buildings.

4.6 Shadow and Wind Impact

Design and mass buildings to minimize adverse impacts on adjacent properties, outdoor amenity spaces and public spaces with respect to sunlight access, wind tunneling effect, noise attenuation and snow disposition. In addition to the tower stepbacks, canopies and other projections may also be used to deflect wind.



APPENDIX A: SHADOW STUDY



Mar 21, 10:00 am



June 21, 10:00 am



Sept 21, 10:00 am



Dec 21, 10:00 am



Mar 21, 12:00 pm



June 21, 12:00 pm



Sept 21, 12:00 pm



Dec 21, 12:00 pm



Mar 21, 2:00 pm



June 21, 2:00 pm



Sept 21, 2:00 pm



Dec 21, 2:00 pm



Mar 21, 4:00 pm



June 21, 4:00 pm



Sept 21, 4:00 pm



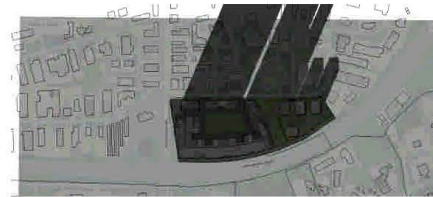
Dec 21, 4:00 pm



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June 21, 6:00 pm



Sept 21, 6:00 pm