

## **DESIGN BRIEF**

November 2020

## 861 Clyde Avenue

Applications for Official Plan Amendment and Zoning By-law Amendment





URBAN STRATEGIES INC .



JAMES B. LENNOX & ASSOCIATES INC. LANDSCAPE ARCHITECTS

## TABLE OF CONTENTS

1. SUMMARY	4
2. THE SITE AND SURROUNDINGS	6
3. PROPOSED MASTER PLAN	10
4. ARCHITECTURAL DESIGN APPROACH	21
5. PUBLIC REALM APPROACH	32
6. FUTURE LAND USE CONTEXT	37
7. SHADOW STUDY	39
8. ALIGNMENT WITH URBAN DESIGN	
POLICIES AND GUIDELINES	71

# **1. SUMMARY**

This Design Brief has been prepared to support Official Plan Amendment and Zoning By-law Amendment applications for a high-density development at 861 Clyde Avenue ("the Site" or "the Subject Property"). The Site, formerly occupied by a dairy plant, is located just south of Carling Avenue, adjacent to Highway 417. Claridge Homes proposed to transform the Site with a landmark development that includes:

- Six apartment towers, three of 25 storeys and three of 30 storeys
- Mid-rise buildings with integrated townhomes facing a new east-west street through the site
- A new neighbourhood park on Clyde Avenue
- A central elevated common amenity space that ties the buildings together
- A landscape linear open space and active transportation link between Churchill Avenue and Clyde Avenue

The proposed development will become a unique self-contained neighbourhood with an identity and public realm all its own, while setting the stage for future redevelopments to the north along Carling Avenue and the west. It will support the continual transformation of the area into a new mixed-use neighbourhood integrated with the surrounding established community.



VIEW OF PROPOSED DEVELOPMENT LOOKING SOUTH

# 2. THE SITE AND SURROUNDINGS

The Subject Property stretches from Clyde Avenue to Churchill Avenue, on the north side of Highway 417. Its irregular shape has an area of 2.74 hectares. Until 2017, the Site was occupied by a dairy plant, initially operated by Neilson Dairy and then, after 2008, by Saputo Dairy Products Ltd. It is part of a block fronting Carling Avenue that contains retail uses (Canadian Tire, Boston Pizza) and two car dealerships immediately north of the Site (Mazda, Volvo).









The Site is surrounded by car-oriented commercial uses characterized by big box retail stores, strip malls, automobile dealership/service stations/rental and gas bars, office buildings, restaurants, and light industrial uses.

#### WEST

On the west side of Clyde Avenue are restaurants, an equipment rental business and other commercial services. Beyond these are more small-scale commercial and light industrial uses, including several auto repair facilities.

#### NORTH

To the north, beyond the Canadian Tire and car dealerships, on the north side of Carling Avenue, are commercial buildings of 1-2 storeys, behind which are a cluster of 3-storey apartment buildings along Tillbury Avenue.

#### EAST

To the east, is a 10-storey office building accessed from Churchill Avenue, and beyond that is a 2-storey commercial building and a 6-storey storage facility. On the north side of Carling Avenue, across from the storage facility, is Executive Park, which comprises three 7-storey office buildings.

#### SOUTH

To the south, on the other side of Highway 417, is an area of light industrial and commercial uses, beyond which is a large City works yard, Carlington Park and Clyde Woods.



**CARLING AVE & CANADIAN TIRE** 



3 - STOREY APARTMENTS AT COLE AND CARLING AVENUE



SOUTH ON CLYDE STREET



EAST ON CARLING



NORTHWEST CORNER OF DOHENY AND CLYDE AVENUE



CAR DEALERSHIPS



SOUTH ON CHURCHILL AVE

The Site has good accessibility for pedestrians, cyclists and vehicles via Clyde Avenue and Churchill Avenue. The Site is also highly accessible by transit. Route 85 offers frequent service along Carling Avenue and intersects with the Trillium Line at Carling Station and the Confederation Line at Pimisi Station. Planned dedicated bus lanes on Carling will significantly improve travel times on the route. Local route 50 travels by the Site on Clyde Avenue and terminates at Tunney's Pasture station.



**CHURCHILL OFFICE PARK** 



**VIEW FROM HWY 417** 



**KEY MAP** 

3. PROPOSED MASTER PLAN

#### SITE CONSIDERATIONS

Among the factors which influence the overall design of the proposed development are the following:

- The presence and impact of Highway 417 the noise it generates and the physical and visual obstacle it creates, segregating the Site from the adjacent neighbourhoods to the south;
- The strong east-west orientation of the Site with limited street frontage;
- The irregular shape of the Site;
- The relationship between Clyde and Churchill Streets; and
- The relationship to the existing neighbourhood to the north, including the 'big-box' sector between the Site and Carling Avenue.

The allocation of 10% of the site to a dedicated city parkland is also an important component of the design of the entire site – its location, form and treatment are an important consideration in the relationship with the proposed buildings on the site and with how the new parkland will fit with potential future developments to the north.

The Site offers the opportunity to create a buffer to the present neighbourhood and future developments to the north – sheltering these areas from the acoustic and visual impact of Highway 417. This prompted the densification of the built form of the site towards the south. The objective is to build an architectural barrier in order to localize surface acoustic treatment to areas of exposure and protect the areas to the north from spilling and reflected noise, and the visual distraction of the expressway. At the same time, the dense nature of construction facing the highway presents a scale and geometry more fitting to being perceived from vehicles at expressway speeds and (in part) elevated viewpoints - a very different experience from that of pedestrians, cyclists, local motorists and residents who are essentially slow moving or still.



BIRD'S-EYE VIEW OF PROPOSED DEVELOPMENT

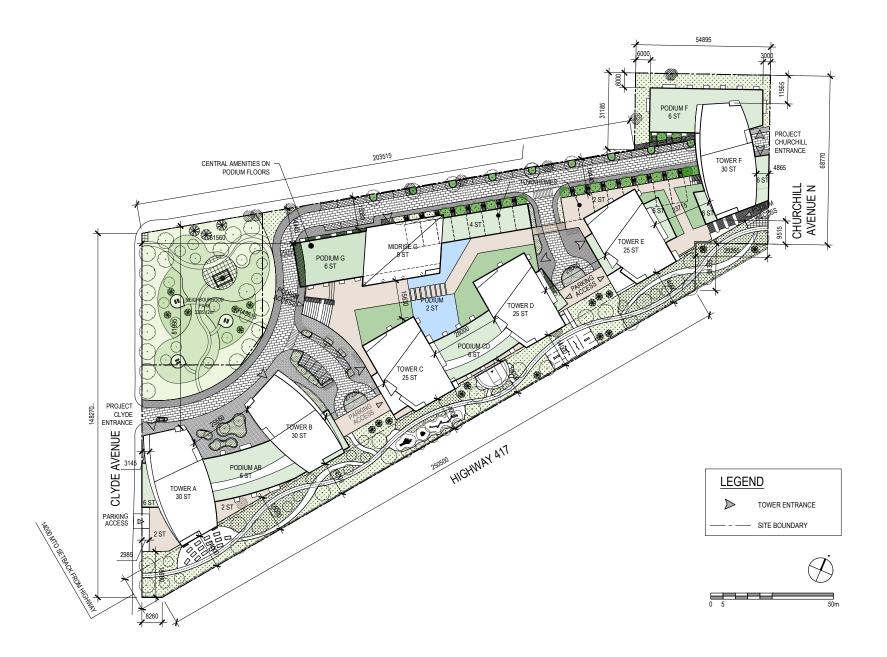
#### **MASTER SITE PLAN**

A development of elevated density is proposed, with a concentration of that density towards the south side of the Site, along the highway. The MTO requires a minimum 14 metre setback from their lands. It is proposed to treat this setback as a green buffer, including a recreation path linking Clyde and Churchill.

The Site before the 10% parkland dedication is nearly 2.7 hectares (6.65 acres) in area. Its frontage along Highway 417 is 292m long, 148m along Clyde Avenue and only 70m along Churchill Avenue. Irregular but nominally triangular in form, the site's orientation in the present city grid does not provide major street frontage. The master plan includes six towers spaced across the site, joined and anchored by mid-rise buildings. Two 30-storey towers at the west end of the Site are linked by a 6-storey building and overlook a new neighbourhood park. Three 25-storey towers will sit on 2-storey podiums containing parking and service areas, with common indoor and outdoor amenity spaces on the podium roof. On the north side of the Site, a stepped building ranging from 4 storeys to 9 storeys will help frame the elevated amenity space and accommodate townhouse units at grade. A third 30-storey building at the east end of the site will bridge the private street and be anchored by 6-storey buildings on each side. While the 6-storey elements of the master plan along the highway block noise from, and views to, the highway, the towers are slender, with widths of 20 or 24 metres and floorplates of 750-850 square metres, and they are spaced apart, 23-28 metres, to ensure interior amenity spaces and residential units have access to sunlight and sky views. The massing will also give the development an interesting and elegant profile from distant views, marking the emergence of a new transit-oriented neighbourhood node in the Carling Avenue corridor.

The rooftops of the development's 6-storey buildings will accommodate both green roofs and additional common amenity space.





Master Site Plan Concept

#### THE NEIGHBOURHOOD PARK

After studying various alternatives, locating the proposed park at the northwest corner of the Site was favored in order to create a green space that will give the development a strong address and identity. Over time it will function as a central gathering place not only for residents on the Site but also for the larger community as it evolves through redevelopment and intensification. The park, which takes the form of a truncated semicircle, becomes the focus of public open space on the site, and anchors the pedestrian and vehicular movement around and through it. It in turn generates the orientation and form of the buildings that face it.

The ground floors of the proposed buildings facing the park will contain active indoor amenity spaces and

potentially space for small-scale commercial amenities facing the park. Amphitheatre-like steps and a small plaza between the two western-most towers will complement the park with more intimate hard-surface spaces for sitting and gathering.



View of proposed Neighbourhood Park

## THE INTERIOR STREET – 'THE PROMENADE'

The relatively small amount of street frontage prompted the introduction of a cross-block interior street – the Promenade - entering at about the mid-point of the Clyde frontage, at the southern edge of the parkland. The street follows the curve, defining the inner edge of the park and then follows the northern property line - offering natural connectivity with future developments. It then bisects the western (Churchill) parcel before arriving at Churchill. The Promenade acts as the movement and access spine of the proposed development and plays a unifying role while offering diverse experiences while passing through. It will be treated as a shared neighbourhood road for cars (at low speed), bicycles and pedestrians. Gradelevel amenities and commercial spaces will address the promenade as will the street level townhomes and tower lobbies. Access to interior parking along with pick-up and drop-off will not be directly accessed from the street, but rather from branch roadways, avoiding congestion and garage doors opening directly onto it.

The Promenade will be a tree-lined 6m wide roadway with a separate discontinuous parking lane and minimum 1.8-metre-wide sidewalks. Sidewalks and roadway surfaces will be pavers with concrete curbs. Pedestrian-level lighting will be preferred. Garden walls will provide seating, and formal street furniture will be installed around the park and plaza areas in the western sector. The Clyde section will have a civic formality, passing the park, plaza and glass towers of this sector. The central section will feel like a residential street up to the point where it passes through a portal below the eastern-most tower before emerging onto Churchill.

A direct access to underground parking is also proposed on Clyde Avenue, south of the new street access. The new private interior streets within the Site will be designed for low vehicle speeds and with sidewalks to achieve a safe and comfortable environment for pedestrians and cyclists.



Promenade Cross-section Looking East

#### THE SOUTH PODIUM

Along with the Promenade, the proposed development features as a continuous element a six-storey sinuous podium structure housing 4 storeys of residential units above two levels of interior parking along the south side of the site, facing the Queensway and the 14m green setback along Highway 417. The podium forms the base for six high-rise towers to be built along the length of the Site.

The podium will provide a unifying vocabulary to the overall development as perceived from Highway 417 and from the neighbourhoods to the south. Its curved form is distinctive and soft, offering a low-rise, horizontally oriented architectural and spatial counterpoint to the verticality of the towers. Importantly and organically, it provides a sound, wind and visual barrier to the northern part of the site and beyond. Its wave shaped surface is intended to diffuse sound and provide a visual dynamic form when approached and passed by motorists. Gaps in the podium between phases are locations of access to above and below grade interior parking. These gaps will be bridged above the parking levels. Elevation treatment of the podium will be richly coloured ventilated ceramic panelling above the second floor, with vertically oriented punch windows on a regular grid above. Openings on the Queensway side will balance maximized natural lighting for the units with acoustic protection of the residents. The lower two floors will be masonry or pre-cast concrete clad and will be designed to receive intense ivy growth to contribute to the greening of the green strip of open space along Highway 417. The podium roofs will be occupied as amenity space (common and private) and will be landscaped.



VIEW OF PROPOSED DEVELOPMENT LOOKING NORTHWES

### **Proposed Master Plan Elements**

#### **MOBILITY NETWORK**

The proposed mobility network will enhance connectivity through the Site as well as connectivity to the immediate surroundings. Vehicles will access the Site from both Clyde Avenue and Churchill Avenue. The new internal streets will be low-speed and designed to be shared comfortably with pedestrians, cyclists and vehicles. North-south pedestrian connections to and through future development on the commercial to the north are anticipates. The south edge of the development will feature a multiuse trail in a landscaped private but publicly accessible open space within the required 14-metre setback from the highway, to provide a direct connection between Clyde Avenue and Churchill Avenue for cyclists, pedestrians and other trail users.

#### PROPOSED MOBILITY NETWORK



#### **OPEN SPACE**

The Neighbourhood Park will become the heart of the community and will help create a desirable interface between the proposed development and the future redevelopment of the lots to the north and west of the Site. It is part of an open space network within the Site that includes the central common amenity space on top of the podium along with the landscaped strip of open space along Highway 417. Accessible green roofs on the 6-storey elements of the development will provide additional open space for residents.

#### **PROPOSED OPEN SPACE NETWORK**



#### **BUILT FORM**

The proposed development will be a neighbourhood of mostly tall buildings to achieve a population density that will help support transit use along Carling Avenue. The population density for the proposed development will support the City's growth strategy and will bring a desirable liveliness to the area.

The towers are spaced out on top of the podium with a structured disposition along Highway 417 to frame the proposed development against the streets of Clyde Avenue and Churchill Avenue. The building form of varying heights and massing are designed to create internal streets and open spaces at both the ground floor and elevated podium grades for a consistent street wall condition. The towers are also stepped back from the podium to allow for a transition in height of building forms.

The landmark towers of 30 storeys at the western and eastern end of the Site are designed to signify the transformation brought by the proposed development and to create an interesting skyline when viewed from surrounding vantage points. New buildings on the remainder of the Site will vary in height, with maximums not exceeding 25 storeys.

Built form controls will be adopted to ensure that tall buildings support an inviting and comfortable pedestrian realm and a light-filled living environment. Towers are designed to be slender with the landmark towers having rounded forms as well, and generally restricted to a maximum floor plate of 750-850 m2. The towers will also be spaced a minimum of 23 metres and generally 28 metres from each other to maintain sky views and to moderate shadow impacts.

#### **PROPOSED MAXIMUM BUILDING HEIGHTS**



4. ARCHITECTURAL DESIGN APPROACH The architectural design of the proposed development has taken into consideration the problems associated with the adjacent Highway 417, and proposes an architecture intended to mitigate sound issues and offer an iconic architectural image from the Queensway and a somewhat softer image towards the north. Strong east-west architectural and circulation elements tie the proposed development together across this axis and tie Clyde Avenue and Churchill Avenue together, a composition intended to encourage leisurely and enjoyable movement across the site.

Densification is concentrated to the south, permitting a more neighbourhood-scaled architecture to the north, in anticipation of medium-scaled future developments on adjacent lands. Each of the three blocks of the proposed development that divide the site from east to west offers a variety of spatial, architectural and movement qualities and distinct street experiences.

Exterior realms of public and semi-public space have been introduced at different levels, along with different volumes and different textures. Streets and open exterior circulation areas are addressed with amenities, lobbies, townhome entrances and retail with a variety of treatments and scales. Different housing typologies are offered with occupied roofs and ground area providing space for private residential amenities.

The iconic towers address the Highway 417 and the park at the east and west extremes of the Site, signaling approach. The placement of the Neighbourhood Park, plaza and western towers along with the orientation of the Pavilion and the Agora create a civic space for the use and enjoyment of residents and visitors.

Surface parking is kept to a minimum, and service entrances are segregated from areas of outdoor activity. It is hoped that the variety of architectural experiences across the site will create an urban microcosm, where residents identify with their personal place while enjoying the variety of the whole. With maximized greening and with careful landscaping, the proposed development will create an iconic gateway and a sustainable urban neighbourhood.



VIEW OF PROPOSED DEVELOPMENT LOOKING SOUTHEAS

### Phasing and Block Identity

The scope of the proposed development necessitates a phasing strategy. At the same time, the nature of the site with its varying geometry as one moves from west to east promotes the division of the Site into three blocks which will in turn generate the phasing divisions. Looking at the site plan, the planning blocks emerge as small city blocks, separated by the branch access 'avenues' leading from the promenade to the parking accesses located in the south podium gaps. The Promenade links the 3 blocks together. While being composed of elements repeating major themes and vocabularies from one to the other, each block is distinctive and identifiable in the arrangement of structures, their relationship to landscape and the amenities and architectural features they offer. The below grade configuration of indoor parking will be phased with each block – each zone is provided with independent access. The blocks, in turn, can be phased in their above grade construction, permitting a flexibility in the order of development of the large site over time. The three blocks are identified as 'Clyde', 'Central' and 'Churchill'.

#### **CLYDE BLOCK**

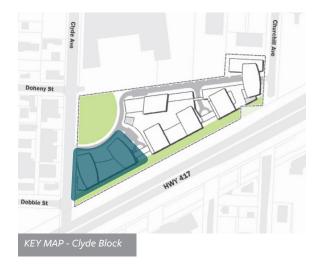
The westerly block which we project as being the last phase of the development faces Clyde Street on the southern portion; the northern portion being occupied by the Park. The phase features two 30-storey towers (A closer to Clyde and B) on the respective section of the south podium. The towers and podium sit on hard-surfaced Entrance Plaza which faces the park. The towers feature elongated floor plates and curved long facades. They are oriented along rays of the circle which defines the park, presenting their narrow façades towards the park to emphasize their verticality and slenderness. Tower lobbies are located in double height spaces facing the plaza. The Podium between the towers rests on an open glazed ground floor permitting visual continuity with the plaza and the park. Common amenities will be located here. Activities here can spill onto the plaza space between the two tower bases which offer a partially sheltered civic pocket open to the park.

The south podium will project west of tower A and terminate at zero setback from the Clyde property line to provide a smaller scaled face to the project's city street face. Commercial-retail space will be located facing Clyde at this location.

Towers A and B will be fully glass-clad. There floor plates are roughly ellipsoid with truncated ends facing north and south. Narrow facades face Highway 417, exposing the minimum face to the noise of the highway and maximizing the southern sky's luminosity and sunshine's penetration to the north. Continuous glass balcony railings on the south façade will assist in acoustically protecting the apartments within. Projected continuous balconies and railings on the lateral outward facing elevations are curved at a slightly different radius and centre from that of the envelope, creating a dynamic geometric effect. The outboard long elevations feature large vertical baffles of brightly coloured glass and perforated aluminum, projecting beyond the balcony railings creating an irregular grid pattern on the elevations. These serve as wind baffles intended to disrupt airflow otherwise accelerated by the curved facades and are positioned based on consultant's wind analysis. They also serve as balcony dividers between adjacent units.

The overall treatment of the facades of the elliptical towers are further elaborated through punctual interruption of the continuous balconies, variation of glass treatment and mullion spacing at the 2 levels above the podium to create a transition level, and the partial extension of the towers' volume to provide screened mechanical space and to enhance the visual heights of the towers and their verticality. Tower B, more axially situated with respect to the park than A is oriented with the extended elevation towards the park to subtly define it as the primary structure. At lower levels, facing south, the continuous balconies can include planters and grilles to promote growth of low-maintenance ivy and other creeping plants, enhancing the greening of the building walls facing the Queensway.

The Clyde block is built above three levels of underground parking. Two partial above-grade levels occupy the south side of the podium (facing the Queensway). Access to interior parking is from Clyde Street and from the 1st Avenue to the east.





## CENTRAL BLOCK AND SUSPENDED GARDEN

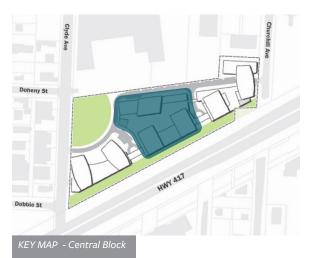
The Central Block will be the first constructed of the development and can be built in as many as three distinct above-ground phases. It is the most complex and diverse block of the development. It consists of a 2 to 3 level sub-grade parking structure, a 2 level podium structure housing parking, community amenities and townhomes, two 25-storey residential towers linked at their bases by the six-storey South Podium and a four to nine storey mid-rise structure -'the Pavilion'- to the north, facing the Promenade. Between the high-rise/south podium component and the midrise is the 'Suspended Garden' an open landscaped space accessible to the public and residents by monumental exterior stairs or by interior elevator. The garden is located at 7 metres from grade above the 2-level interior parking podium. It will be bounded by amenity or circulation space so that privacy will not be compromised. The stair facing west facing the park is integrated into an amphitheater segment - 'the Agora'- which provides an openair public seating area oriented towards afternoon sun and the green space. This gesture also offers a generous 'spilling' of the garden into the more public park. The Suspended Garden will be treated as a partially green roof with integrated planters, generous paver - finished surfaces for circulation. A shallow river stone-filled basin can catch and retain storm water to create a periodic reflecting pool. Benches and bollard lighting will enhance the pedestrian experience. Footbridges link the garden to the Churchill Block.

Twin 25-storey residential towers C and D on the south side of the block (a third equally spaced identical tower on the Churchill block completes the 'triplets') are more modest than towers A and

B described above in form and surface treatment. Clad mainly in masonry with punched windows in combination with planes of glass wall systems, their floor plates are basically chamfered rectangles; their truncated corner towards the Queensway in order to reduce the face of the towers directly facing the Queensway and increase the visual spacing between the towers. Mechanical penthouses and screens are expressed as extensions of the narrower volume of the towers towards the south, increasing the vertical impact of the towers as viewed from Highway 417 and from the south, reducing the height across the block from south to north. Balconies on the long east façade are projected and varied in length creating an irregular 'second plane' in front of the otherwise static grid of punctual windows. Balconies on the north and west sides are partially recessed, slipping into setbacks so that railings are flush with the envelope on one side, and project on the other. The balconies at the southwest wrap the corner, recessed into a setback on the south, but projected on the west. The transition treatment on the south creates an ambiguous edge between the volume incorporating the mechanical penthouse and the lower volume of the chamfered corner.

The lower storey of the towers where they meet the Suspended Garden house amenity spaces and are setback from the main facades and completely glazed. Here, terraces and gardens will serve as outdoor extensions to the amenity spaces.

Between the Suspended Garden and the Promenade, the Pavilion is a smaller but complex structure of varying uses, volumes and surface treatments. Its position intimately addresses the Neighbourhood Park, the Promenade, the Suspended Garden and the towers to the south and east. It is more or less at the geographic centre of the Block and an important element of transition scale at the cross-section of the site, allowing the project to relate to the probable



lower scale of future developments to the north. The Pavilion itself is constituted of distinct volumes of varying heights as experienced along the Promenade.

Its western wing, including the Agora, addresses the Neighbourhood Park – at grade and second and third levels, it houses community amenities (possibly pool, gym, theatre, art studios) which will be used by residents of the entire project and small commercial spaces. Its upper levels reaching 6 storeys and projecting its simple rectangular volume towards the park present a surface for projection, mural or other special treatment of the façade giving the project a recognizable, urban-scaled 'face' - tying the project to the park and its environment. The western wing is clad in masonry, with full glazing at the ground and second floor facing the park to promote openness and transparency at grade. The street related expression along the promenade becomes an irregular colonnade with deep inset glazing along the Promenade, introducing a more pedestrian-friendly scale as one heads to the east.

VIEW OF PODIUM AND SUSPENDED GARDEN

2

CENTRAL CONTRACT

C FERRE

terrete.

111

TAL

ITA

1114

44

AU A

The four-storey eastern wing of the pavilion consists of stacked townhomes, the lower set relate to grade and feature individual street entrances with small front yard raised gardens and patios facing the promenade. Upper level townhomes are internally accessed from a naturally lit corridor facing the suspended garden, and the upper floor of these units face north and south, benefitting from double views and cross-ventilation. The townhomes present a regularly modulated masonry façade towards the promenade with a rhythm created by double height entry and balcony loggias defining each residential bay, clearly defining each unit.

The central element of the Pavilion rises nine floors above the Promenade, seven above the suspended garden. It is treated as a distinct volume of particular geometry and material. Its floor plate is trapezoidal, presenting acute angled corners on opposite sides exaggerating the perspective views of the building edges. The roof is double-pitched, concealing mechanical equipment and creating a prismatic volume visible from all angles and from above. The exterior is finished in shiny flat-seam metal panels, inspired by the traditional 'tôle canadienne'. Partially recessed balcony loggias are finished in brightlycoloured flat metal panels to provide punctual colour accent. The wall treatment descends to ground and frames the entrance loggia leading to the pavilion's lobby, contrasting the masonry colonnades to the east and west. The angular pitched roof is finished in the same metal with similar treatment for roof-wall continuity, to enhance the reading of this component of the pavilion as a precious object, embraced by the surrounding structures which flank it.



VIEW OF PODIUM AND THE AGORA



#### **CHURCHILL BLOCK**

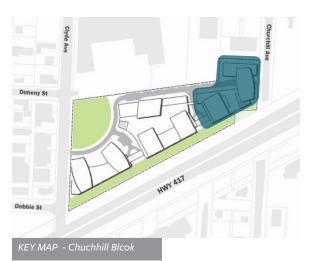
The parcel of land at the eastern entry point of the project facing Churchill, is roughly rectangular. This block consists of the 25 storey tower E, which completes the composition of the triplets with the two towers of the central block and the 30 storey tower F, which is similar to Tower A and B of the Clyde Block. Each of the towers sits on a segment of the 6 storey south podium towards Highway 417. Tower F also rests on a northern podium block, also 6 floors high. Straddling the podiums, the built form creates 'the Portal', a large archway through which the promenade passes below the tower, between the podiums. The Portal is nearly 15m wide and rises to 4 storeys in height with two glass 'bridges' crossing the void at levels 5 and 6, linking the podiums. The core of tower F projects into the portal. It is the eastern gateway of the project and offers an enticing entrance to the development from Churchill, a counter point to the cul-de-sac at Highway 417. The exterior wall treatment within the volume of the portal is the same metallic flat seam panels as that of the pavilion – a positive/negative dialogue between the two blocks. West-bound motorists on Highway 417 will see Tower F with its twin podiums and portal in almost pure elevation and will have an axial view through the portal along the axis of the promenade leading to the park.

A 2-storey podium on the south side of the Promenade containing parking, amenities and townhomes facing the Promenade connects the towers. The roof of the two storey podium is a continuation of the Suspended Garden, linked to the central block by a footbridge crossing the 2nd avenue, as described above. Exterior stairs allow a descent to street level – one stair leads to the Portal, the other to the green band and the recreation path - and a direct connection to Churchill, creating an alternate through-block multi-level pedestrian connection.

The North podium functions independently with its own entrance and elevator. It links via 5th and 6th floor bridges to the elevator core of tower F and to the south podium. This structure, facing future development to the north is modestly expressed in masonry – reflecting the materiality and modulation of the townhomes except on its southern face where it passes through the portal.

As in the other blocks, the podium roofs are occupied by terraces and will be combinations of green roof, planters and hard surfaces.

The block is built over two storeys of underground parking accessed from the second avenue.





VIEW OF THE PROMENADE TOWARDS CHURCHILL AVENUE

5. PUBLIC REALM APPROACH The landscape design for the proposed development is organized in spaces surrounding the buildings, connecting it to other parts of the neighbourhood. Many of these spaces are extensions of the buildings' interiors and bring the outside into the building. The character of the landscaping is intended to be "campus urban", capable of accommodating small or medium-size gatherings in the landscape.

#### NEIGHBOURHOOD PARK AND PARK PAVILION

The dominant exterior green space or room is the Neighbourhood Park, which will function as a central green open space or park for the campus. Situated between the residences and Clyde Avenue, the Neighbourhood Park will act as a gateway into the proposed development from both Carling and Woodward Drive. Throughout the year it could be a central gathering area for many structured and unstructured events. These activities may include a seasonal ice skating, outdoor concerts, and playing catch, frisbee and volleyball.

The Park Pavilion provides an ideal space for many structured and unstructured events throughout the year. Significant large trees and several clumps of coniferous trees will be specified to act as wind breaks and provide shade at maturity to the proposed commons area. Under-planting with trees is proposed to support maximum tree growth in this area in perpetuity. The park will form a green focal point when one approaches from the north along Clyde Avenue.

#### LINEAR OPEN SPACE

A landscaped strip of open space along the south edge of the Site is proposed as a linear, publicly-accessible landscape with both social and recreational activity areas along the route, including basketball facilities and fitness stations. Functionally, the landscaped strip will form a linkage between Clyde Avenue and Churchill Avenue and a circuitous route around the Site. In order to sustain heavy use and compaction the grass area will be constructed at a slope with a special soil mixture and irrigation. Irrigation water will be supplied from underground storage tanks collecting water from the roof of the buildings.



LANDSCAPE CONCEPT PLAN







#### **ENTRANCE PLAZA**

At the western entry points to the Site, a plaza and 'agora' are planned across from the park. The function of these spaces is to provide a major pedestrian gateway to the elevated amenity space and network of building entrances. Continuity in the pavement materials and patterns from the inside of the building to the exterior plaza and park will be used to extend the interior space to the exterior of the building. Pavement is to be a large format precast concrete paver with the total percentage of exposed asphalt pavement not to exceed a certain percentage of the total paved area.

#### THE PROMENADE

The private street along the northern edge of the Site is the Promenade. This area is divided into spaces created by entrance plazas and terraces of the Suspended Garden on top of the podium. The proximity of the Promenade adjacent to the building edge is intended to help animate the edge of the buildings and provide vitality to the interior/exterior of the buildings. Covered bicycle parking and covered seating is provided under the overhangs along the Promenade. In addition to the covered seating areas the walls of planter areas will provide ample seating.

A minimum number of deciduous and coniferous trees of either a 100mm caliper or 2500mm height will be planted on the site. Pavement is to be a minimum of 40% large format (300x300x100mm min.)precast concrete pavers with the total percentage of exposed asphalt pavement not to exceed 40% of the total paved area. Outdoor rooms accessible from the Promenade will be provided for meeting and chance encounters between residents.

A "Rain Garden Pond" will be included within the Suspended Garden on top of the podium to encourage vitality in these spaces. The amphitheater steps that are part of the agora provides space for events, with hard surfaces provided for wheelchair access.

Lighting will exceed the City of Ottawa standards, with additional security and feature lighting.

# 6. FUTURE LAND USE CONTEXT

Based on the City's Official Plan and development trends along arterial transit corridors, it is reasonable to assume that future redevelopment immediately to the north and west will mostly consist of apartment buildings and townhouse developments, with commercial uses concentrated in mixed-use buildings along Carling Avenue. Office and institutional buildings also would be appropriate and compatible.

A potential framework of streets and open spaces that would coherently and holistically organize future development on the adjacent commercial lands has been conceptualized, recognizing that each property on the block likely can function independently in terms of vehicular access; nevertheless, a second eastwest street through the block is suggested to minimize access points on Carling Avenue and rationalize circulation by all modes.

Central to the larger block framework is a chain of open spaces, beginning with the proposed "quartercircle" park on the Subject Property, that over time could form a contiguous park extending to each street bordering the block. A linear open space or other green connection near the east end of the Canadian Tire site would provide a mid-block pedestrian connection running north-south through the block. More intimate park spaces at the south ends of the dealership sites would complete the open space connection to Churchill Avenue. As illustrated, there may be opportunities to extend the chain of green spaces through mid-block open spaces west of Clyde Avenue.

The illustrated framework could accommodate an unlimited number of built form scenarios, although it is suggested that taller buildings would be best in peripheral locations on the block, while mid-rise buildings (4-9 storeys) would be appropriate in the interior of the block, adjacent to open spaces.



# 7. SHADOW STUDY



 TEST DATE:
 SEPTEMBER 21

 TEST TIME:
 08:00 AM EDT

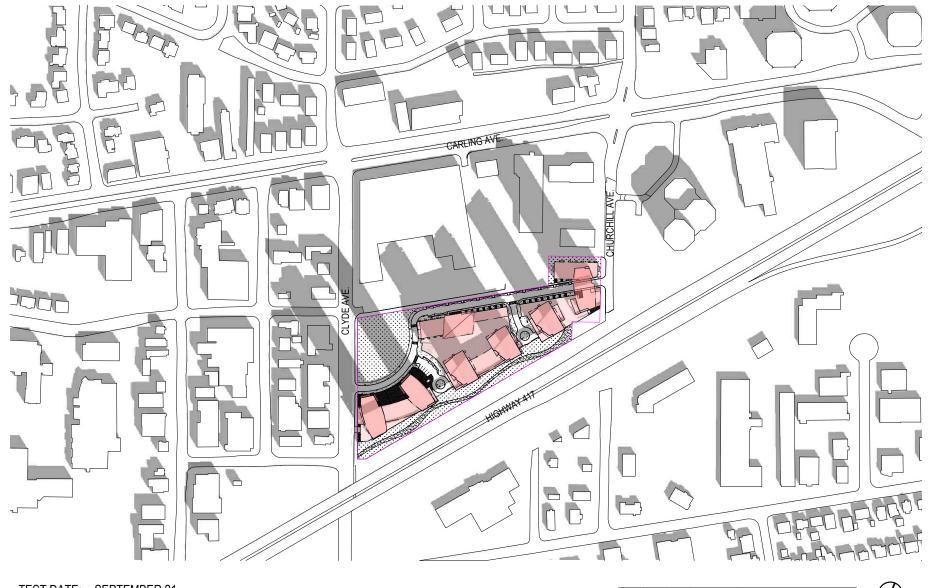
 0
 25

 250m



TEST DATE: SEPTEMBER 21 TEST TIME: 09:00 AM EDT





TEST DATE:SEPTEMBER 21TEST TIME:10:00 AM EDT





TEST TIME: 11:00 AM EDT





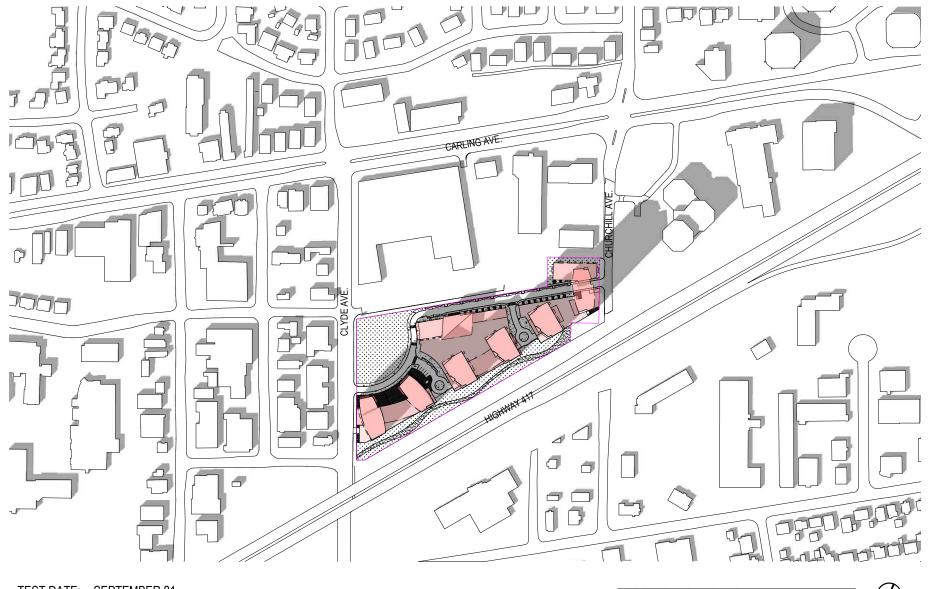
TEST TIME: 12:00 PM EDT





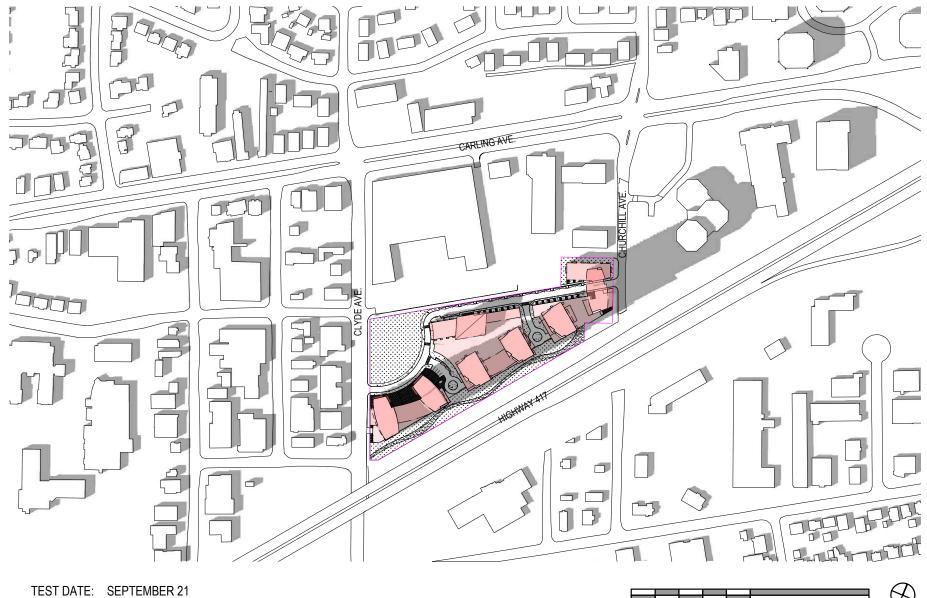
TEST DATE:SEPTEMBER 21TEST TIME:01:00 PM EDT





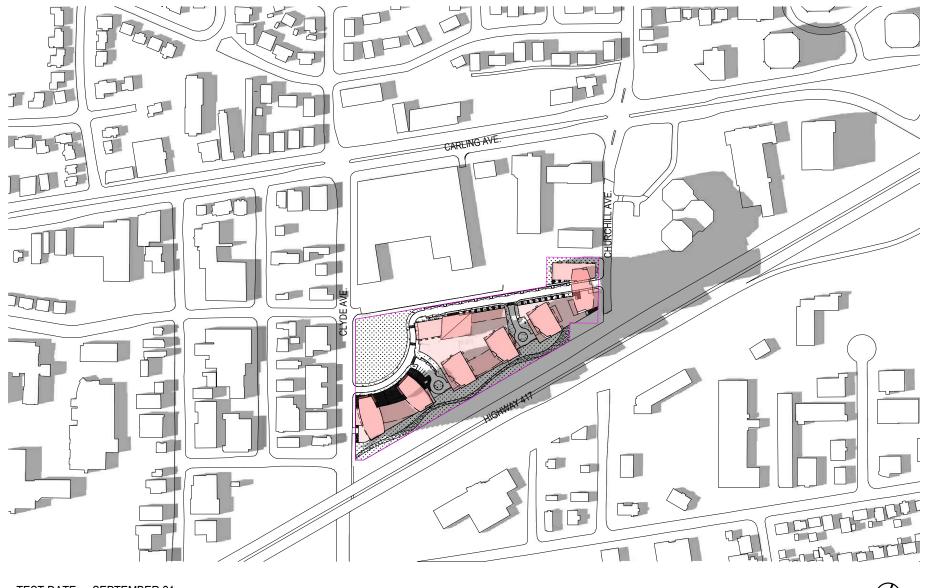
TEST DATE:SEPTEMBER 21TEST TIME:02:00 PM EDT





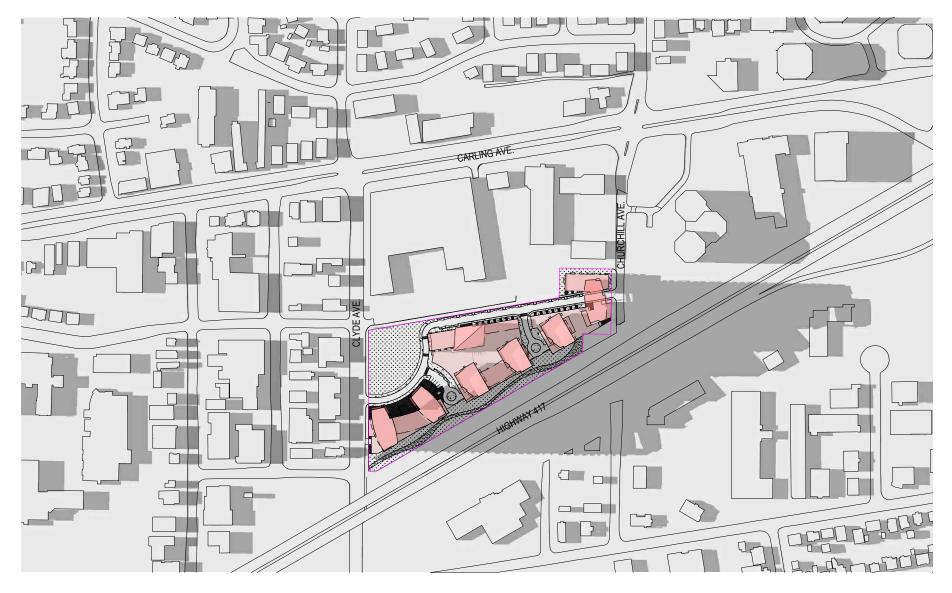
TEST TIME: 03:00 PM EDT





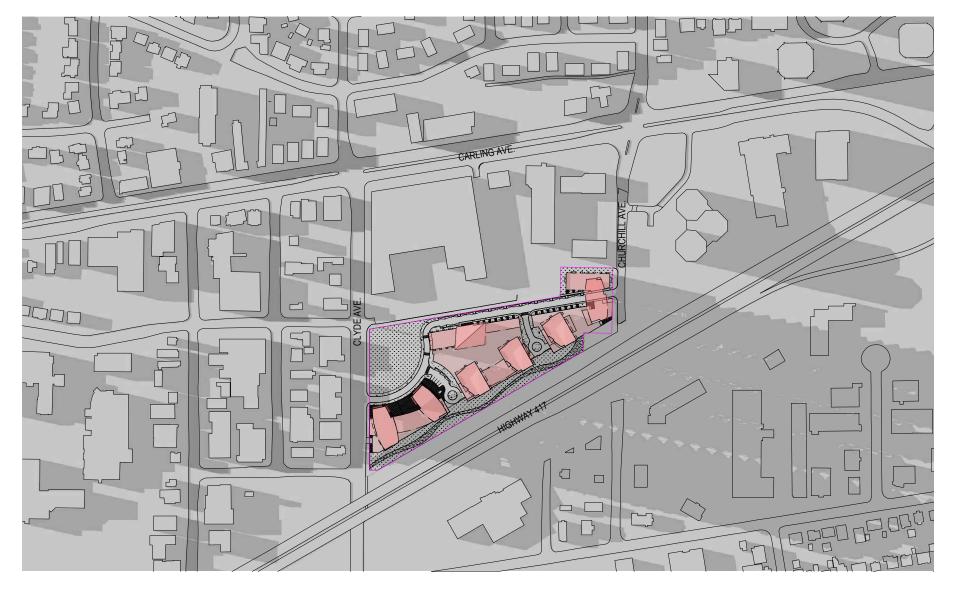
TEST DATE: SEPTEMBER 21 TEST TIME: 04:00 PM EDT





TEST DATE:SEPTEMBER 21TEST TIME:05:00 PM EDT





TEST DATE:SEPTEMBER 21TEST TIME:06:00 PM EDT



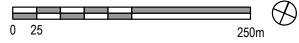


TEST DATE: DECEMBER 21 TEST TIME: 09:00 AM EST





TEST DATE: DECEMBER 21 TEST TIME: 10:00 AM EST





TEST DATE: DECEMBER 21 TEST TIME: 11:00 AM EST





TEST DATE: DECEMBER 21 TEST TIME: 12:00 PM EST





TEST DATE: DECEMBER 21 TEST TIME: 01:00 PM EST



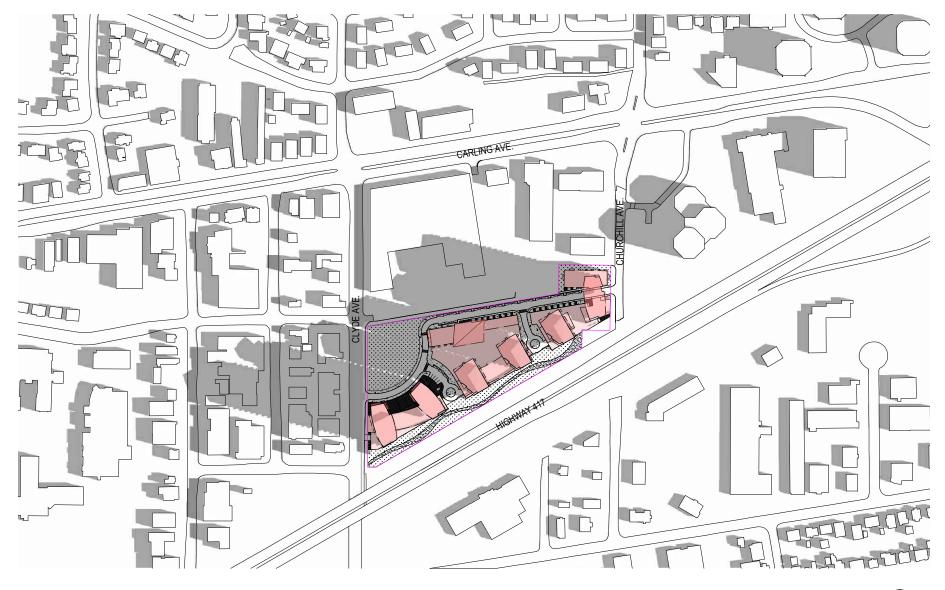


TEST DATE: DECEMBER 21 TEST TIME: 02:00 PM EST

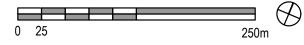


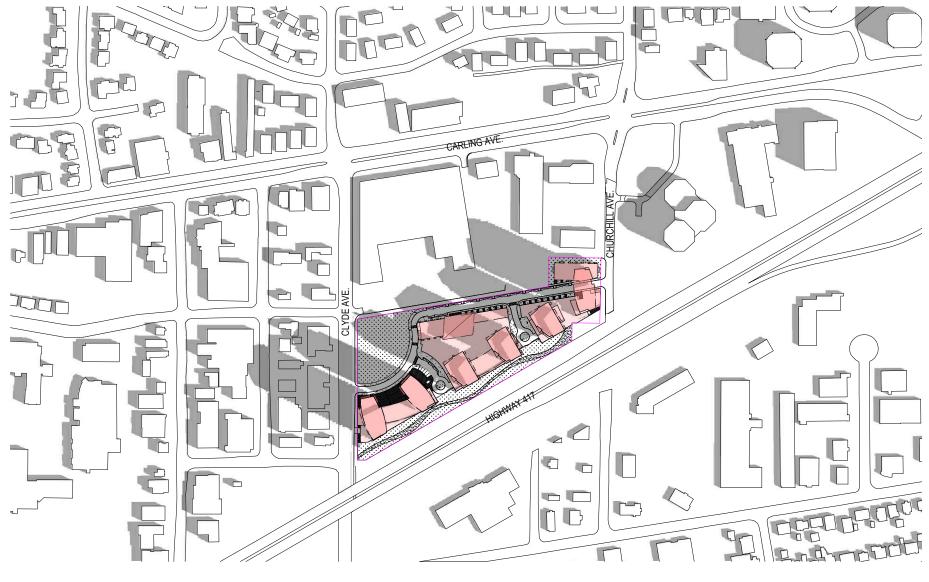


TEST DATE:DECEMBER 21TEST TIME:03:00 PM EST025250m



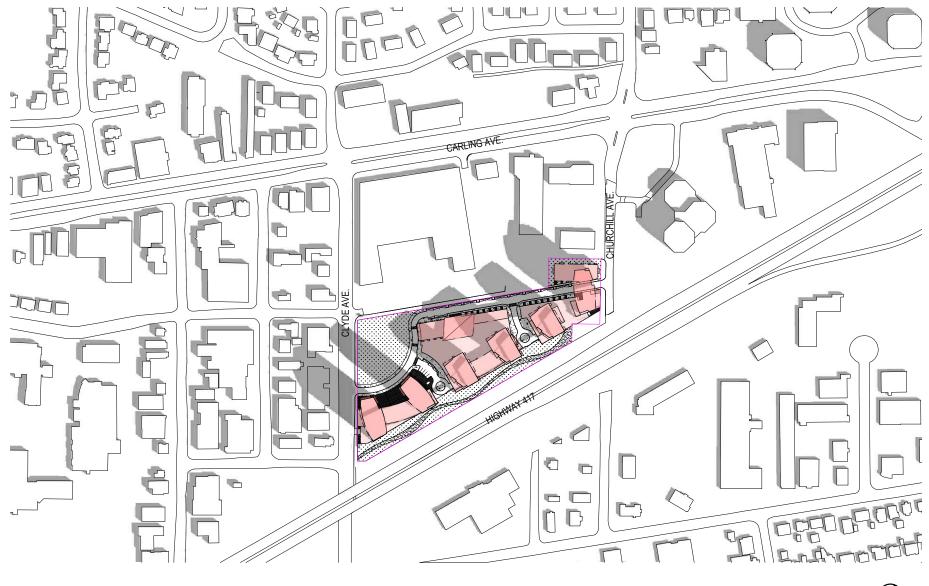
TEST DATE: JUNE 21 TEST TIME: 08:00 AM EDT





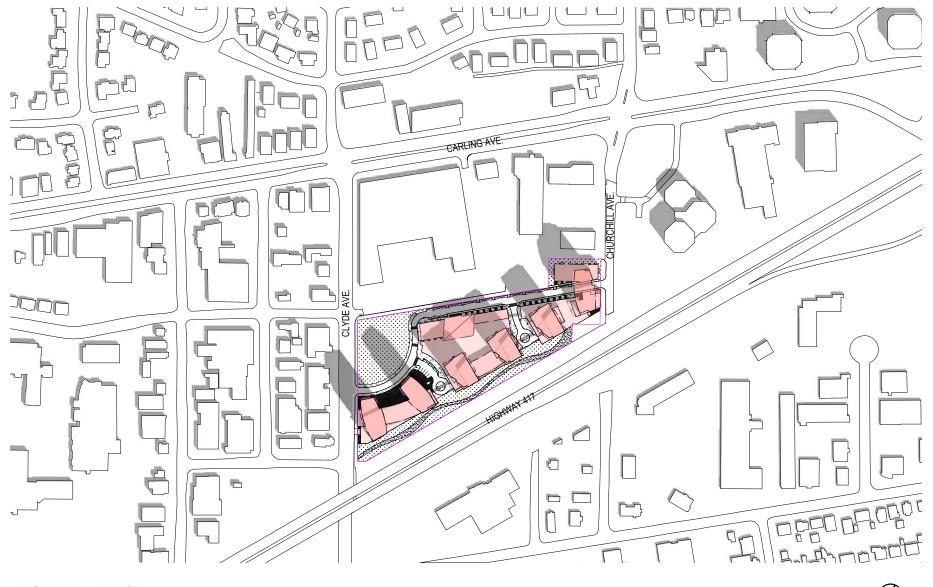
TEST DATE: JUNE 21 TEST TIME: 09:00 AM EDT





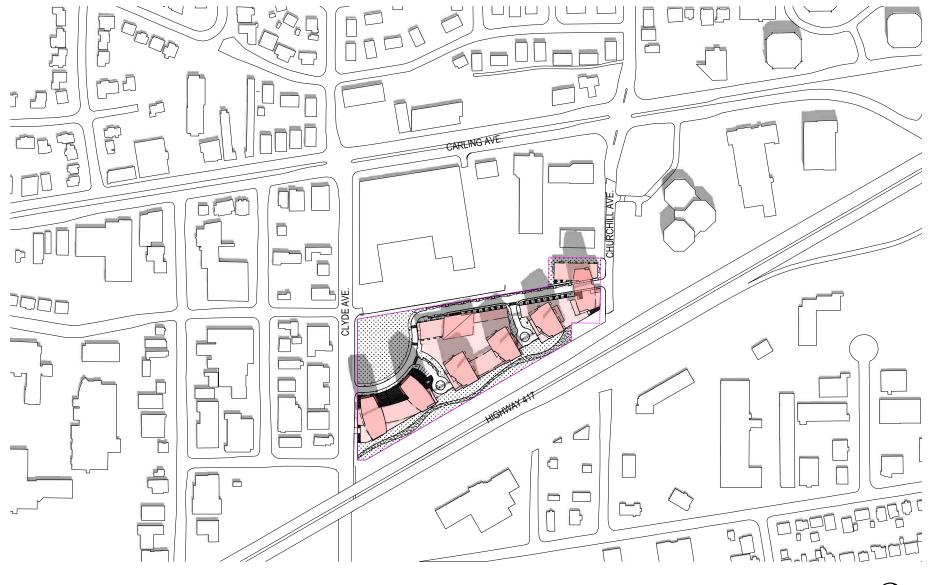
TEST DATE: JUNE 21 TEST TIME: 10:00 AM EDT





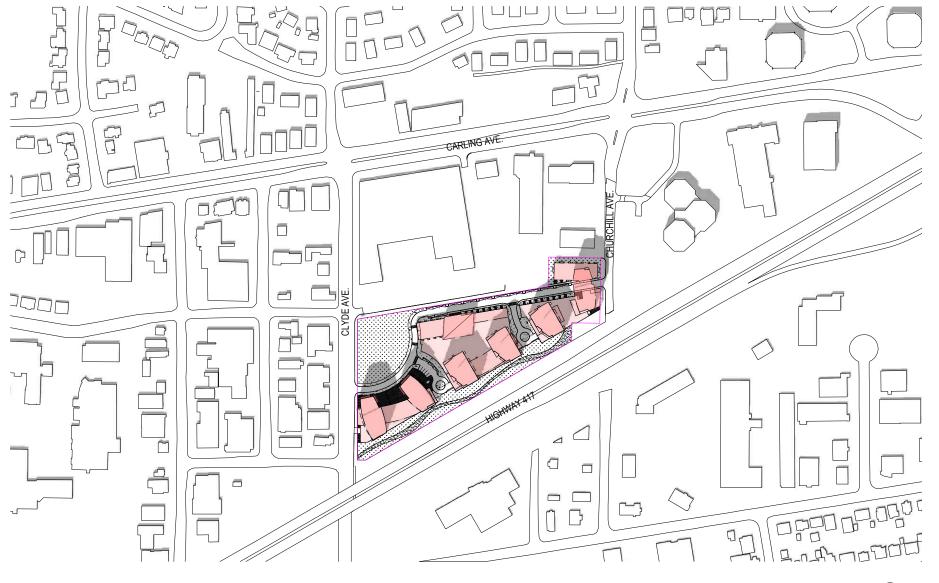
TEST DATE: JUNE 21 TEST TIME: 11:00 AM EDT





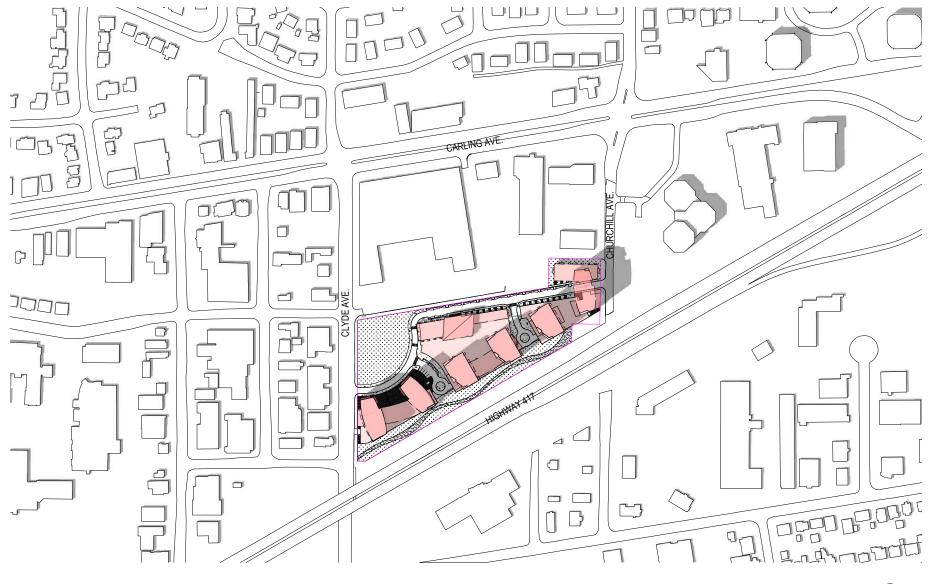
TEST DATE: JUNE 21 TEST TIME: 12:00 PM EDT





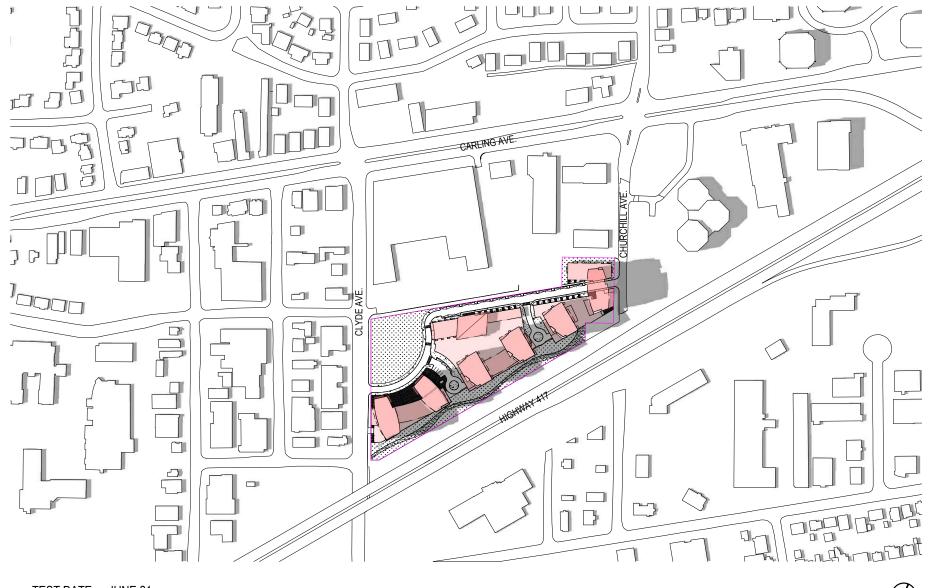
TEST DATE: JUNE 21 TEST TIME: 01:00 PM EDT





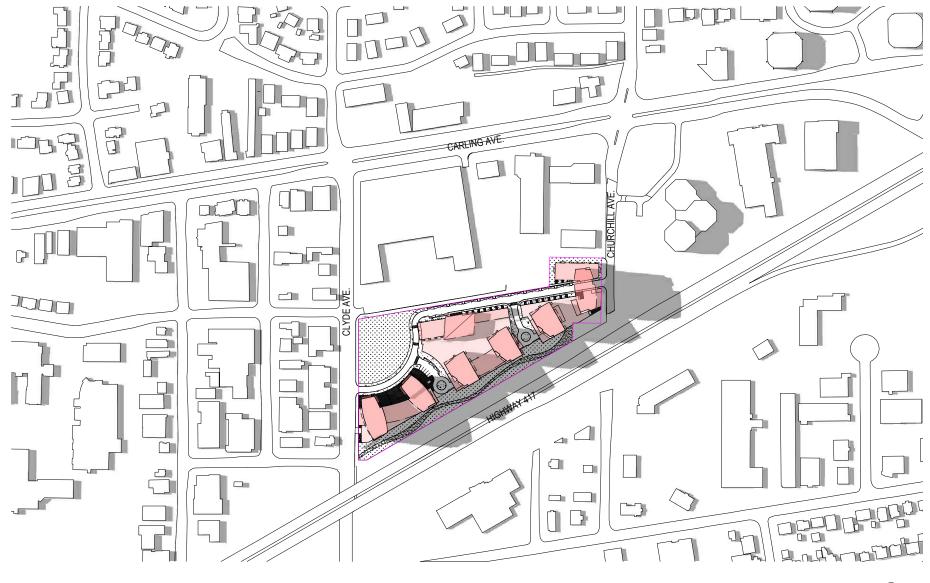
TEST DATE: JUNE 21 TEST TIME: 02:00 PM EDT





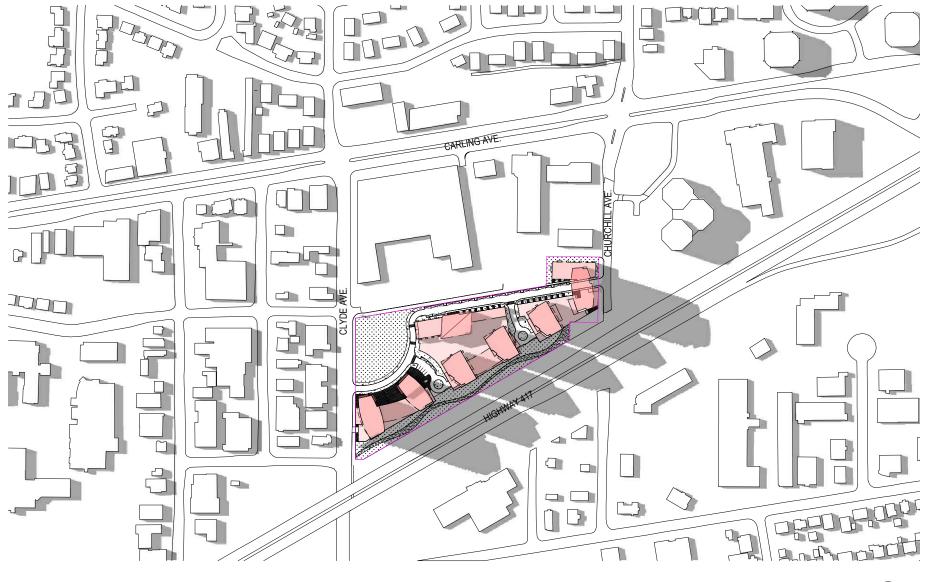
TEST DATE: JUNE 21 TEST TIME: 03:00 PM EDT

<sup>0 25 250</sup>m



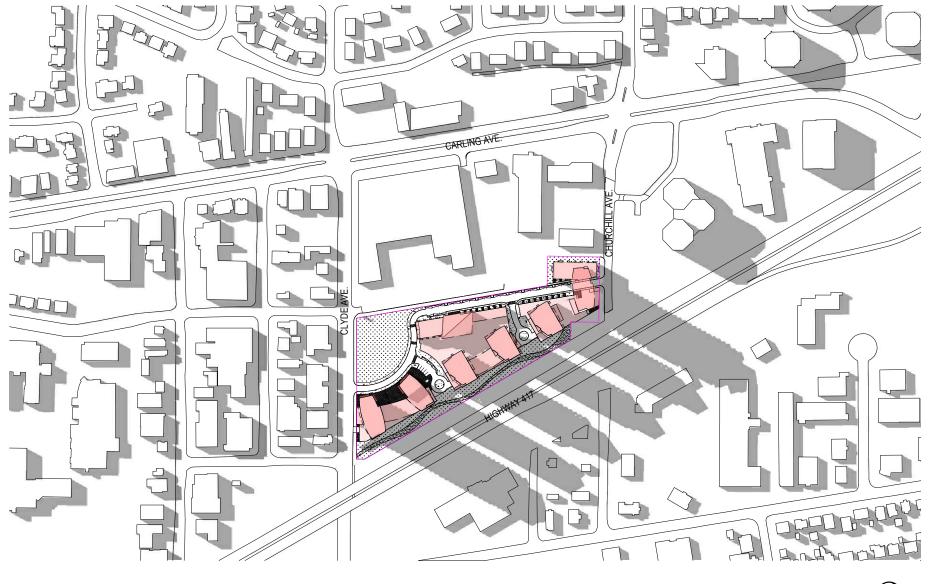
TEST DATE: JUNE 21 TEST TIME: 04:00 PM EDT





TEST DATE: JUNE 21 TEST TIME: 05:00 PM EDT



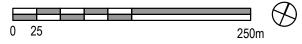


TEST DATE: JUNE 21 TEST TIME: 06:00 PM EDT





TEST DATE: JUNE 21 TEST TIME: 07:00 PM EDT





TEST DATE: JUNE 21 TEST TIME: 08:00 PM EDT



8. ALIGNMENT WITH URBAN DESIGN POLICIES AND GUIDELINES

## CITY OF OTTAWA OFFICIAL PLAN

## Urban Design and Compatibility

Section 2.5.1 of the Official Plan sets out the following design objectives to guide how the City wants to influence the built environment as the city matures and evolves. Under Policy 2.5.1.1, proponents of new development or redevelopment are required to demonstrate how their proposal addresses the objectives.:

 To enhance the sense of community by creating and maintaining places with their own distinct identity.

The proposed development will transform an underutilized brownfield property into a new neighbourhood with a strong sense of community through its design of new public spaces and common amenity areas. The overall form, the high-quality architecture of the buildings and the new neighbourhood park will give it a distinct and attractive identity.

2. To define quality public and private spaces through development

The proposed development has been designed to include a new street fronted by townhouses; a new park and common private amenity spaces framed by buildings with active ground floors; and a landscaped, heavily programmed and publicly-accessible linear open space along the south edge of the property. In addition, buildings at the west end of the site and the new park will significantly improve the adjacent Clyde Avenue streetscape for pedestrians. **3.** To create places that are safe, accessible and are easy to get to, and move through.

The new streets, park and linear open space will be highly visible and accessible to the public, and will have eyes on them from adjacent buildings. The central common amenity area on the 2-storey podium will also be framed by active uses and is designed to facilitate movement through the site.

4. To ensure that new development respects the character of existing areas.

While respecting and appropriately responding to existing neighbouring uses, the proposed development will significantly enhance the character of the surrounding area with a strong urban form, new public spaces and distinctive architecture.

5. To consider adaptability and diversity by creating places that can adapt and evolve easily over time and that are characterized by variety and choice.

The proposed development will bring more housing choices and built form variety to the broader community. The mix of housing types, sizes and tenures, and the variety of amenities, will help ensure the development offers attractive housing choices for a wide diversity of households. 6. To understand and respect natural processes and features in development design.

The proposed development will bring nature to the site through the vegetation of open spaces and rooftops. The park and other open spaces will also allow for stormwater infiltration.

 To maximize energy-efficiency and promote sustainable design to reduce the resource consumption, energy use, and carbon footprint of the built environment.

The proposed buildings will be designed to LEED<sup>™</sup>-Silver standards. Triple glazing is planned for the residential buildings to maximize the capture of natural light and heat, and for a high insulation rating. The location and design of the development (e.g., the high rate of bicycle parking) will discourage residents from owning or using a private vehicle.

### **Building Design**

#### Policy 4.11.5 states:

Compatibility of new buildings with their surroundings will be achieved in part through the design of the portions of the structure adjacent to existing buildings and/or facing the public realm. Proponents of new development will demonstrate, at the time of application, how the design of their development fits with the existing desirable character and planned function of the surrounding area in the context of:

- a. Setbacks, heights and transition;
- **b.** Façade and roofline articulation;
- c. Colours and materials;
- **d.** Architectural elements, including windows, doors and projections;
- e. Pre- and post-construction grades on site; and
- f. Incorporating elements and details of common characteristics of the area.

Policy 4.11.6 specifies that "the City will require that all applications for new development:

- a. Orient the principal façade and entrance(s) of main building(s) to the street.
- b. Include windows on the building elevations that are adjacent to public spaces;
- c. C. Use architectural elements, massing, and landscaping to accentuate main building entrances."

#### Policy 4.11.8 states:

To maintain a high quality, obstacle free pedestrian environment, all servicing, loading areas, and other required mechanical equipment and utilities should be internalized and integrated into the design of the base of the building where possible. If they cannot be internalized these services are to be screened from public view (i.e. trees, landscaping, decorative walls and fences etc.) and are to be acoustically dampened where possible. The location and operation these areas and equipment should be designed to maintain a pedestrian friendly environment and not impede public use of the sidewalk.

Policy 4.11.9 specifies that "Roof-top mechanical or telecommunications equipment, signage, and amenity spaces should be incorporated into the design and massing of the upper floors of the building."

The proposed development's massing and conceptual design will set the tone for future redevelopment in the area, introducing such urban characteristics as streetwalls to define the pedestrian realm, height variation, articulated facades and high-quality materials. Facades and main entrances are oriented to streets, buildings facing streets and open spaces are heavily glazed, and main building entrances will be accentuated through architectural details and landscaping. All loading and service areas will be located within building podiums or underground.

### Massing and Scale

Policy 4.11.12 specifies that "proponents for developments that are taller in height than the existing or planned context or are adjacent to a public open space or street shall demonstrate that an effective transition in height and massing, that respects the surrounding planned context, such as a stepping down or variation in building form has been incorporated into the design."

Policy 4.11.13 states that "Building height and massing transitions will be accomplished through a variety of means, including:

- Incremental changes in building height (e.g. angular planes or stepping building profile up or down);
- Massing (e.g. inserting ground-oriented housing adjacent to the street as part of a high-profile development or incorporating podiums along a Mainstreet);
- c. Building setbacks and step-backs.

There is wide variation in the proposed massing for visual interest and to ensure compatibility with the planned context. The proposed development locates tall buildings along the southern edge of the property, adjacent to Highway 417, a considerable distance from existing surrounding development and in anticipation of mostly mid-rise development in the south half of the commercial properties to the north, when they redevelop. The proposed towers transition to mid-rise buildings along the north edge of the Subject Property to ensure an appropriate transition to future development on the larger block. In addition, the proposed 9-storey building central to the Site steps down to six storeys adjacent to the new park.

### **Public Art**

Policy 4.11.21 specifies that "proponents of prominent developments, such as Major Urban Facilities and High-Rise Buildings, are encouraged to include site-specific public art. Public art may be identified as a means to satisfy the policies of Section 5.2.1 where proponents of development are seeking an increase in height and density."

The proposed park and overlooking buildings present opportunities for public art on the Site. The opportunities will be explored and discussed through the application review process.

## **High-rise Buildings**

#### Policy 4.11.14 states:

High-Rise Buildings are a form of highdensity development that can contribute to intensification, housing and employment opportunities and provide new view, skyline and landmark possibilities. High-Rise buildings should be designed to achieve the objectives of this Plan and avoid or reduce impacts or disruptions associated with:

- a. pedestrian comfort, safety and usability resulting from changes to wind and shadow patterns in outdoor amenities and adjacent public and private spaces surrounding the building;...
- **b.** reduced privacy for existing building occupants on the same lot or on adjacent lots.

Policy 4.11.15 states:

Generally, High-Rise buildings, which consist of three integrated parts, a base, a middle and a top, can achieve many of the urban design objectives and address the impacts described above in the following ways:

- c. a. The base of a high-rise building should respect the scale, proportion, and character of the surrounding buildings, adjacent streets, parks, and public or private open spaces and animate such spaces.
- d. b. The tower, which typically includes a middle and a top, should step back from the base where possible. The tower design can reduce the building impacts identified above by incorporating an appropriate separation from existing or future adjacent towers located on the same lot or on an adjacent lot. The responsibility for providing an appropriate tower separation shall generally be shared between owners of abutting properties where high-rise buildings are permitted. A separation distance of 23m has been the City's general guidance but actual separation requirements may vary in different parts of the City depending on the context.

c. Floor plates may also vary depending on the uses and the context. Generally, towers with a larger floor plates may require a greater separation from adjacent towers. The towers in the proposed development conform to the Official Plan's high-rise building policies. They have been arranged and designed to be a landmark within the city, marking a unique mixed-use node. Each of the towers has a podium element that steps down from six storeys to two storeys and architectural details to create comfortable environments at grade and in the elevated common amenity areas.

The towers will cast shadows across the Site through the day. However, because the towers are slender and spaced apart 23-28 metres there are generous gaps of sunlight penetration from 9:00am to noon in spring, summer and fall, and by 2:00 the Neighbourhood Park is entirely or almost entirely out of shadow. Later in the afternoon in the three seasons, there are minimal shadows on the elevated outdoor amenity space. The tower spacing also ensures residents have adequate levels of privacy and adequate access to daylight and sky views.

# OTTAWA TRANSIT-ORIENTED DEVELOPMENT GUIDELINES

Approved by the Ottawa City Council in September 2007, the City of Ottawa's Transit-Oriented Development (TOD) Guidelines were formulated to provide guidance to assess, promote and achieve appropriate TOD within the City of Ottawa, which is defined as "a mix of moderate to high-density transitsupportive land uses located within an easy walk of a rapid transit stop or station that is oriented and designed to facilitate transit use." The Guidelines are applicable to every development within a 600-metre walking distance to a rapid transit stop or station. Cycling facilities and infrastructure should be considered within a 1,500-metre cycling distance.

Although Carling Avenue is not currently planned for rapid transit, the proposed development has been reviewed against the TOD Guidelines, in light of the longer-term potential for an LRT in the corridor.

The guidelines are organized into six broad aspects which are summarized as follows:

Land Use – Development within 600 metres of a rapid transit station should be of high density and mixeduse, incorporating both employment and residential uses to encourage day- and year-round travel.

Site Layout – Development should be organized into a series of interconnected blocks of no more than 150 metres in length supported by a network of connections that include sidewalks, bike lanes, and laneways where buildings not only frame the street but are clustered together and transition in height and density from a peak closest to the rapid transit station.

Built Form – Buildings should be designed to provide a comfortable pedestrian experience by incorporating step-backs at critical heights to frame the street, setbacks to define the street edge, and architectural variety to provide visual interest.

Pedestrians and Cyclists – Improve the pedestrian and cyclist travel experience by ensuring connections, sidewalks, and streets are barrier free, utilizing pavement treatments to recognize pedestrian/cyclist traffic priority over vehicular traffic, and providing amenities at-grade to encourage walking and biking.

Vehicles and Parking – Minimize the amount of vehicular parking included in development near rapid transit stations by encouraging shared and underground parking, developing a transportation demand management plan, and designing parking lots so that they are out of sight and out of the way of pedestrians and cyclists.

Streetscape and Environment – Provide pedestrian amenities such as benches, public art, street lighting, vegetation, signage, and shelters to encourage walking. Locate utilities and industrial equipment within buildings or behind screens.

The proposed development aligns with the TOD Guidelines. It has a high density and is structured by a network of streets and pedestrian connections. Building podiums frame and address streets and open spaces to support a walkable environment, and there will be architectural variety. Pedestrians and cyclists will have direct and inviting connections through the site and to Carling Avenue via Churchill Avenue and Clyde Avenue (and an anticipated mid-block connection through the lands to the north in the future). In addition, by locating parking underground and within the podium, the proposed development will provide more space at street level for pedestrians and cyclists. A transportation demand management plan will be prepared for the development, and the pedestrian environment will include lighting, benches, trees and other vegetation.

# OTTAWA URBAN DESIGN GUIDELINES FOR HIGH-RISE BUILDINGS



The Urban Design Guidelines for High-rise Buildings apply to high-rise (10 storeys or more) buildings as well as to high-rise buildings in mixed-use development. The guidelines are used during the review of development proposals to promote and achieve appropriate high-rise development.

The main objectives of the Guidelines are to:

- Address the compatibility and relationship between high-rise buildings and their existing or planned context;
- Coordinate and integrate parking, services, utilities, and public transit into the design of the building and the site;
- Encourage a mix of uses and open spaces that contribute to the amenities of urban living;
- Create human-scaled, pedestrian-friendly streets, and attractive public spaces that contribute to liveable, safe and healthy communities;

- Promote high-rise buildings that contribute to views of the skyline and enhance orientation and the image of the city;
- Promote development that responds to the physical environment and microclimate through design.

## KEY GUIDELINES RELEVANT TO THE SITE INCLUDE:

- Enhance and create the overall pedestrian experience in the immediate surrounding public spaces through the design of the lower portion (base) of the building, which fits into the existing urban fabric, animates existing public spaces, and frames existing views; and creates a new urban fabric, defines and animates new public spaces, and establishes new views. (Guideline 2.1)
- Enhance and create the image of a community and a city through the design of the upper portion of the building (middle and top) that protects and/or creates views and landmarks; and respects and/or enriches urban fabric and skylines. (Guideline 2.2)
- Design the lower portion of the buildings to support human-scaled streetscapes, open spaces and quality pedestrian environments. This can be achieved with fine-grain architectural design and detailing, use of high-quality, durable, and environmentally sustainable materials, an appropriate variety in texture, and carefully crafted details to achieve visual interest and longevity for the facade. The ground floor of the base should be animated and highly transparent. (Guidelines 2.13, 2.14, 2.20, 2.21 and 2.23)

- The base or podium usually abuts and continues a similar setback and height relationship with adjacent development. (Guideline 2.19)
- Create sufficient separation between towers to allow for adequate light, solar exposure, views and privacy for people in the building, as well as people on the street. Separation of towers on a site or in relationship to an adjacent site can be achieved through a distance separation between towers, staggering the towers or through the orientation of the towers. (Guideline 2.25)
- Locate active uses along the street façade to enhance the building's relationship to the public realm. Uses include: lobbies, dining rooms, seating areas, offices, retail stores, community or institutional uses, and residences. (Guideline 3.12)
- Introduce landscaping and/or residential patios between the sidewalk and the building face on a street with residential character, to allow for public private transition. (Guideline 3.1c)
- Provide public spaces that provide direct visual and physical connections to the surrounding public streets, pathways, parks, and open spaces; support the proposed high-rise development particularly at grade functions; allow for yearround public use and access; and maximize safety, comfort and amenities for pedestrians. (Guideline 3.5)

The proposed development is consistent with the Ottawa Urban Design Guidelines for High Rise Buildings:

- The podiums of the towers establish a new pattern of development blocks and streetwalls that fits into the existing urban fabric while defining new streets and the proposed park.
- Variety in the form and architecture of the buildings, together with the public realm elements, will give the development a distinct sense of place, and enrich the urban fabric and skylines.
- The podiums and mid-rise buildings at the bases of the towers will support human-scale spaces and pedestrian-friendly environments.
- Podium setbacks will allow for generous sidewalks and street trees.

- Townhouse units and lobbies at the edges of podiums will front the east-west street through the site, and active uses, such as fitness facilities and commercial space, will face onto the park.
- The townhouses will have small landscaped front yards as a buffer between the public and private realms.
- Generous separation between the towers will allow for adequate light, direct sun, views and privacy for residents in their units and people enjoying the public realm.
- The elevated common outdoor amenity space running through the site and connected to indoor amenity space will function like a courtyard that maximizes safety, comfort and amenities for residents.

