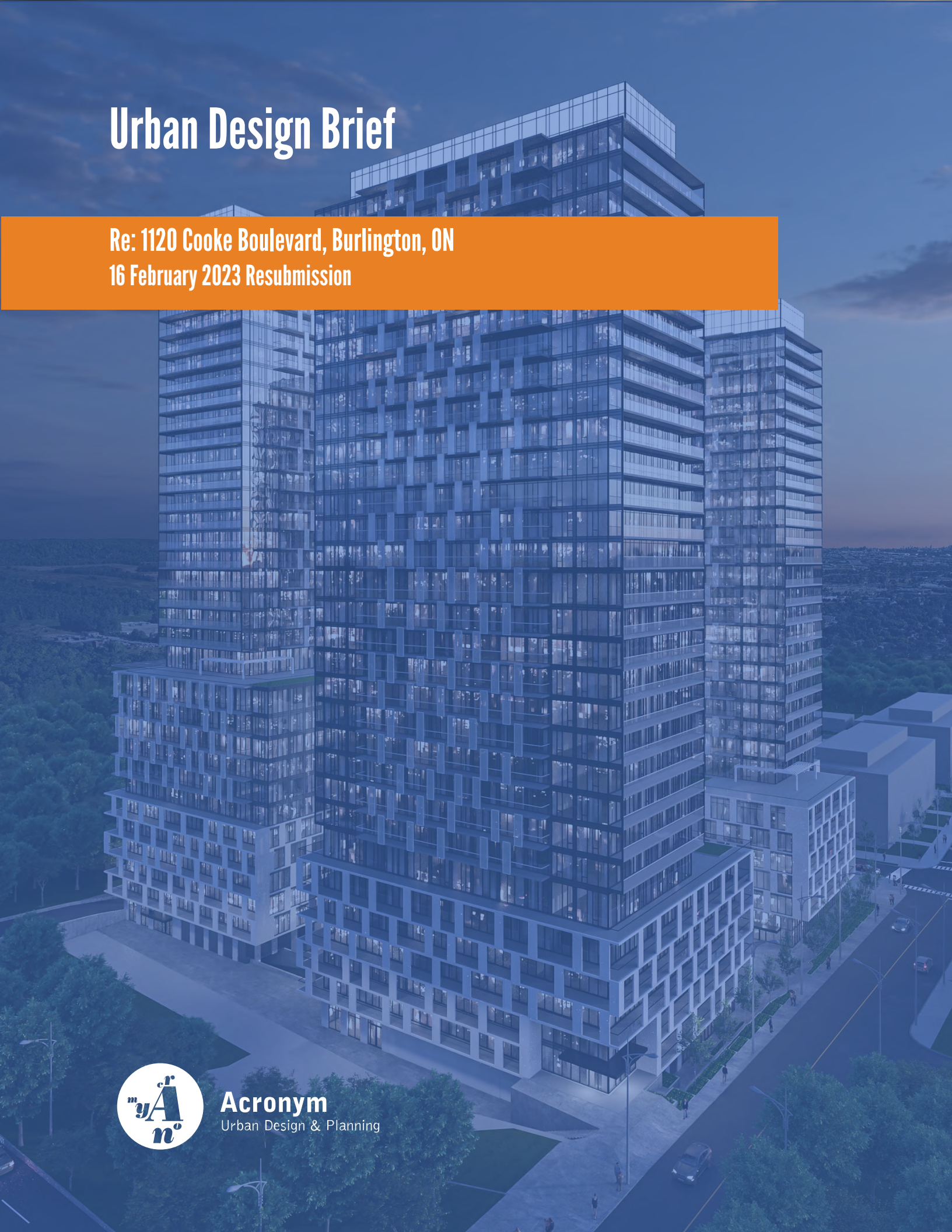
Urban Design Brief

Re: 1120 Cooke Boulevard, Burlington, ON

16 February 2023 Resubmission



Acronym

Urban Design & Planning

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16 February 2023

1120 Cooke Boulevard, Burlington, Ontario

Urban Design Brief (updated with responses to City comments)

1. Introduction

This Urban Design Brief has been prepared by Acronym Urban Design and Planning, WND, CORE Architects and Adesso Design to describe the urban design vision, strategy and rationale for the form and pattern of development being proposed by ADI Development Group ("ADI") for its lands located at 1120 Cooke Boulevard, Burlington, Ontario ("the subject property").



Figure 1 Location Plan Source Google

In November 2021 ADI submitted an application for Official Plan and Zoning By-law amendments, to permit the construction of a new multi-building high-rise mixed-use building on the subject property located at the intersection of Waterdown Road and Masonry Court nearby the Aldershot GO Station and within the Aldershot GO Mobility Hub. This application consisted of three residential tower elements on two podium elements that frame consolidated main outdoor private open spaces around the central courtyard, the "Original Proposal".

This report accompanies a revised application which consists of three residential tower elements whose orientation, height and podium configuration have been adjusted in response to City staff comments. As described in detail below, the design now includes, among other

things, an additional publicly accessible open space facing Masonry Court and increases to the amount of retail space proposed. It is referred to in this report as the “Revised Proposal”.

The Revised Proposal has been designed in the context of the City of Burlington’s Official Plan and relevant Design Guidelines as well as the City’s recent Major Transit Station Area (MTSA) Area Specific Plan (ASP) Planning Study, prepared by Dillon Consulting Limited, dated June 28, 2022.

This Urban Design Brief reviews the revised design prepared by CORE Architects Inc. and the revised landscape design prepared by Adesso Design. The Urban Design Brief concludes that the Revised Proposal is consistent with the urban design goals and objectives established in:

- the City of Burlington’s in-force Official Plan;
- the 2018 Council-adopted Official Plan (which has no policy status at this time due to ongoing revisions);
- the 2022 MTSA ASP study (which has no policy status at this time); and
- satisfies the intent of the recommendations in the City’s Tall Building Guideline document.

In addition, the Revised Proposal has been reviewed in respect of the City of Toronto’s 2019 Retail Design Manual, which do not apply, but were requested by City of Burlington staff.

In our opinion, the Revised Proposal continues to represent good urban design practice and is appropriate within the existing and future physical context.

2. Location and Physical Context

2.1. The Subject Property



Figure 2 Context Plan Source Google



Figure 3 View from Waterdown Road 403 Overpass Looking South Source Google



Figure 4 Waterdown Road / Masonry Court Intersection Looking North Source Google

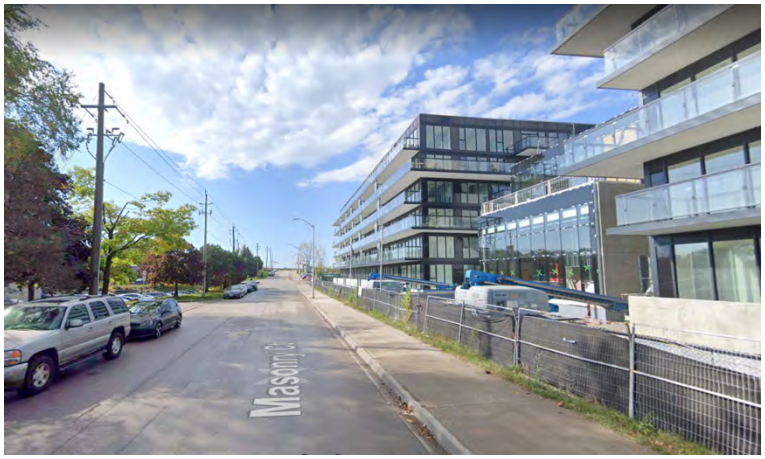


Figure 5 View from Masonry Court Looking West Source Google

The subject property is a 0.9534-hectare parcel located at the northeast corner of the intersection of Waterdown Road and Masonry Court. In addition to these two existing street frontages, the subject property is bounded on the north by a stormwater management facility and what will eventually be a new public park. Further to the north is the CN rail corridor, on which the GO Transit Lakeshore West line operates.

To the east the subject property is bounded by an extension of Cooke Boulevard right of way which runs north from Masonry Court. On the east side of this new road is the first phase of a new condominium and townhouse development by ADI Development Group currently under construction at 101 Masonry Court. This development will eventually include 233 street, back-to-back, and stacked townhouse units, and 172 condominium units in two mid-rise buildings along the Waterdown Road frontage, all connected by a network of pedestrian paths and courtyards.

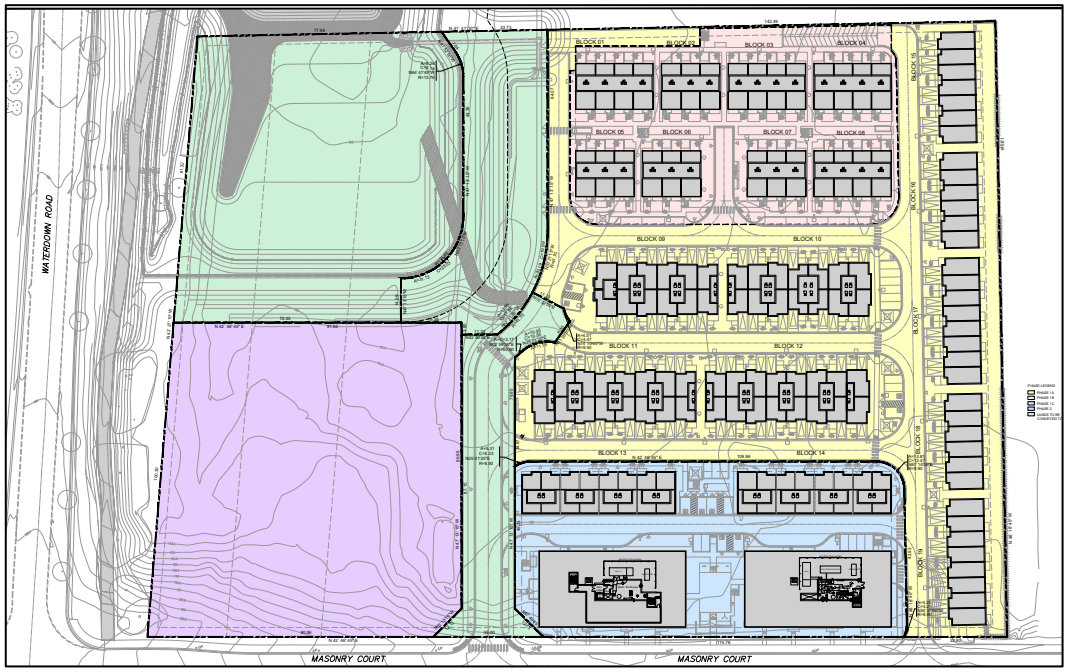


Figure 6 Station West Development Phase 1 Site Plan Source ADI



Figure 7 Phase 1 Looking North West Source ADI



Figure 8 Phase 1 Looking East Source ADI

Further to the east is the Aldershot GO Station south parking lot and access to the Aldershot GO Station. The subject property is located approximately 500 metres along Masonry Court from the south parking lot entrance to the Aldershot GO Station.

The subject property is vacant and generally flat. Waterdown Road along its west edge rises up from the intersection with Masonry Court to eventually become an overpass above the rail corridor and Highway 403 which is located further to the north. The rising elevation of Waterdown Road and its relatively high speed mitigate against its potential as an active street frontage. It does, however have painted bicycle lanes in both directions and is identified in the new Official Plan as a Minor Arterial with a Primary Bus Service and designated Bike Lane Street. Cooke Boulevard on the east edge of the subject property is designated as a combination Bicycle Priority Street that transitions into a multi-use path as it continues to the north. The street frontage along Masonry Court is approximately 90.96 metres. The new municipal street frontage is approximately 90.95 metres. The subject property is approximately 100 metres in depth from Masonry Court.

2.2. Immediate Surroundings

To the West: across Waterdown Road is the spur road called Railway Road that serves currently operating employment uses including trucking and concrete batching facilities. Lands further to the west share the Aldershot GO Centre designation in the Draft Precinct Plan documents and as such are intended to develop in the future.



Figure 9 Railway Road Looking North Source Google



Figure 10 View Toward Future SWM Facility Source Google

To the North: adjacent to the subject property is a future stormwater management facility and public park further to the north is the CN Rail corridor, the Aldershot GO station and Highway 403.

To the East: beyond the Station West development is the Aldershot GO Station south parking lot.



Figure 11 Aldershot GO Parking Lot Source Google.



Figure 12 Waterdown Road Looking South Source Google

To the South: A mixed group of commercial and single-family house form buildings line both sides of Waterdown Road.

To the South East is Cooke Boulevard, a street which runs between Masonry Court and Plains Road further to the south, which is lined on both sides with low rise employment use buildings.



Figure 13 Cook Boulevard Aerial View Source Google

2.3. Area Context

The subject property is located to the north of Plains Road which is the primary commercial main street of Aldershot. The built form along Plains Road in the vicinity is primarily low-rise, auto-oriented retail, restaurant and entertainment use buildings with some low-rise and multi-unit residential development.

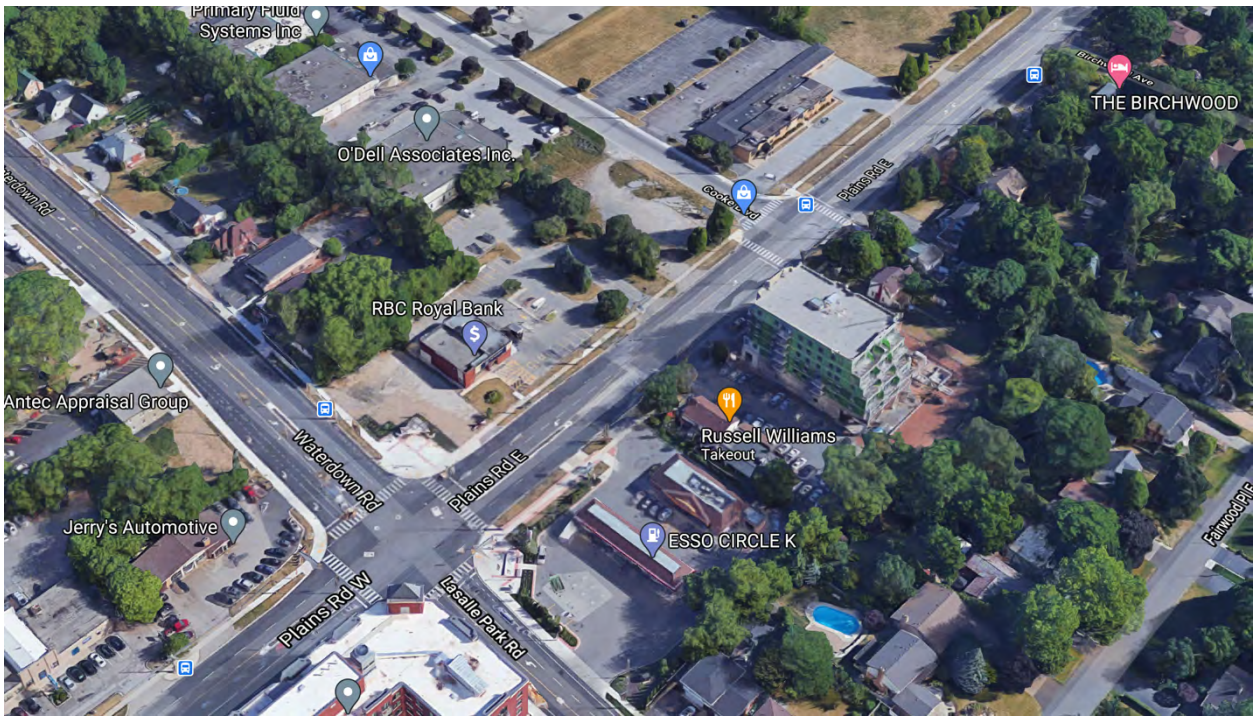


Figure 14 Plains Road and Waterdown Road Looking Toward the North East Source Google

To the southeast is the Grove Park/St. Matthew's Neighbourhood which is a stable residential area generally characterized by single family houses, developed in the 1960s. Reflecting the former industrial use of the lands to the north, the street system of these neighbourhoods is not currently connected to Masonry Court.

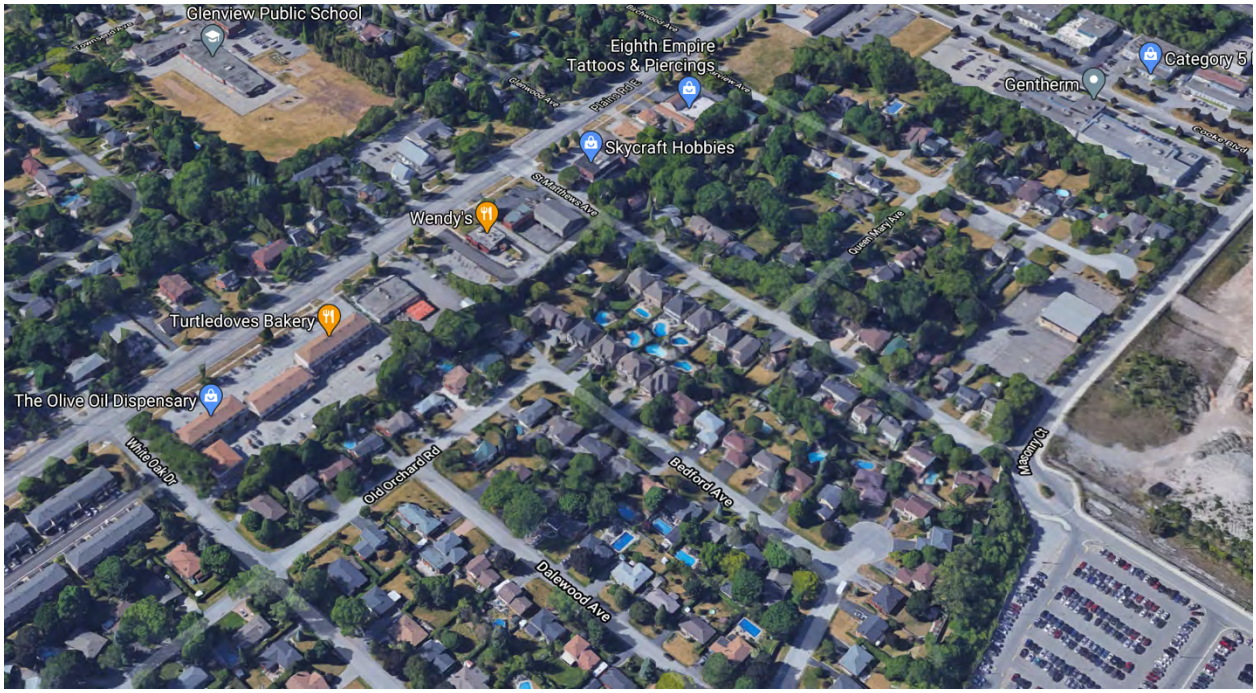


Figure 15 Grove Park/St. Matthew's Neighbourhood Looking Toward the South West Source Google

2.4. Transportation Network

In addition to the Aldershot GO station, which is within 500 metres of the subject property, and access to Highway 403, the transportation network in the area includes the following bus routes:

- Route 4 Central has stops along Waterdown Road;
- Routes 1 and 101 have stops within walking distance; and
- Route 87 (at Aldershot GO north).

Masonry Court, Waterdown Road and a number of minor streets in the area have been identified as parts of a future active transportation network in the area – connecting to Grove Park and Aldershot Park in the east and Hidden Valley Park and beyond in the west.

The Waterdown Road ROW in the vicinity of the subject property is 30 metres wide while the Plains Road ROW varies between 30 and 36 metres. Masonry Court opposite the subject property is 20 meres in width.

Waterdown Road is classified as a Minor Arterial while Plains Road is a Multi-Purpose Arterial.

3. Description of the Revised Proposal

The Revised Proposal consists of three residential tower elements ranging between 29 and 33 storeys on podium elements as well as a large consolidated open space located primarily in the mid-block with an additional open space that links the mid-block to the Masonry Court frontage.



Figure 16 View from the Intersection of Masonry Court and Cooke Boulevard Source CORE Architects

6-storey podium elements of the two southern towers (C and B) frame the north east corner of the intersection of Waterdown Road and Masonry Court and the south east corner of Cooke Boulevard and Masonry Court, separated by a Retail Plaza.

Tower C on the south west is a total of 31 storeys in height with a tower floor plate of 750 square metres.

Tower B on the south east is a total of 29 storeys in height with a tower floor plate of 750 square metres.

Both Tower C and B have deep balconies with substantial architectural frames facing the street and courtyard, which create 3.0 metre stepbacks above the 6th floor and serve to differentiates the base building and tower elements when seen from the public realm.



Figure 17 View from Cooke Boulevard Looking South Source CORE Architects

The third tower, Tower A with a total of 33 storeys in height and a tower floor plate of 750 square metres, is located in the north west corner of the subject property. Tower A has a 12-storey podium element, with a similar balcony framing / stepback strategy to the other towers, which provides enclosure to the proposed central courtyard and vehicular drop off area. The proposed consolidated open space is located at the north east corner of the subject property fronting on to Cooke Boulevard and the future park space to the north. The Retail Plaza faces south onto Masonry Court.

A retail space is proposed at the Corner of Masonry Court and Cooke Boulevard, at the south east corner of the Revised Proposal. It wraps around the corner, forms a corner plaza and has a second entrance on the Retail Plaza. A second proposed grade related retail is proposed in Building C facing Masonry Court and the Retail Plaza, with frontage along the portion of the street where practical grade relationships are possible.

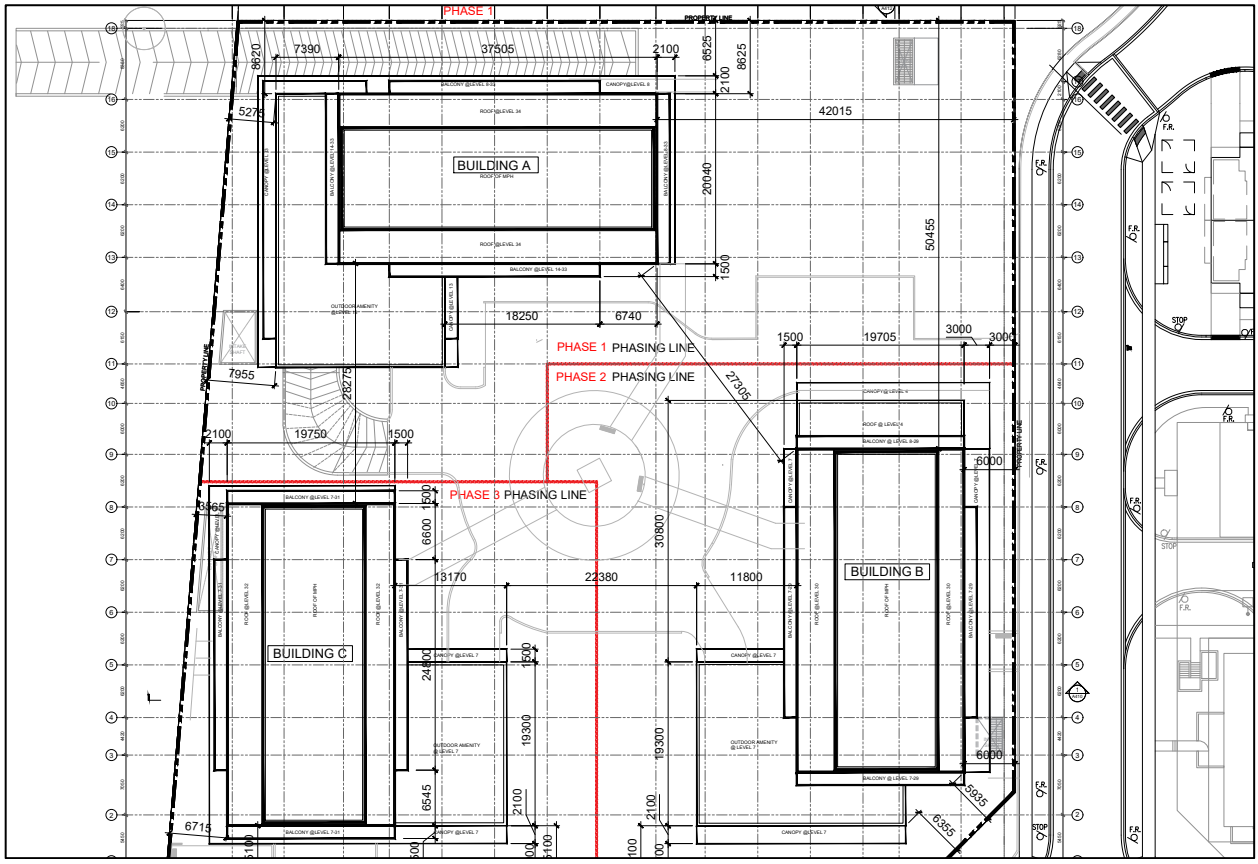


Figure 18 Site/Phasing Plan Source CORE Architects

The total Gross Floor Area of the Revised Proposal is approximately 73,149 square metres or 7.7 FSI. Approximately 495 square metres of commercial GFA are included within that total, accommodated on the ground floor at the intersection of Masonry Court and Cooke Boulevard and in Building C on Masonry Court.

Each of the three buildings have entrances to residential lobbies from the proposed central courtyard.

Pedestrian access to the Revised Proposal is by means of a network of sidewalks connecting the central courtyard with Masonry Court – through the Retail Plaza - Cooke Boulevard and the future park to the north east.

1,165 dwelling units are proposed. 6 levels of underground parking, accommodating a total of approximately 1,145 parking spaces are proposed (including 6 commercial parking spaces). 696 bicycle parking spaces are proposed in a variety of locations throughout the development primarily on the ground floor and P1 levels.

Vehicular access to the Revised Proposal is by means of: a 6.0-metre-wide driveway from Cooke Boulevard that is aligned with the private street to the east; and a ramp from Waterdown Road at the north west corner of the subject property.

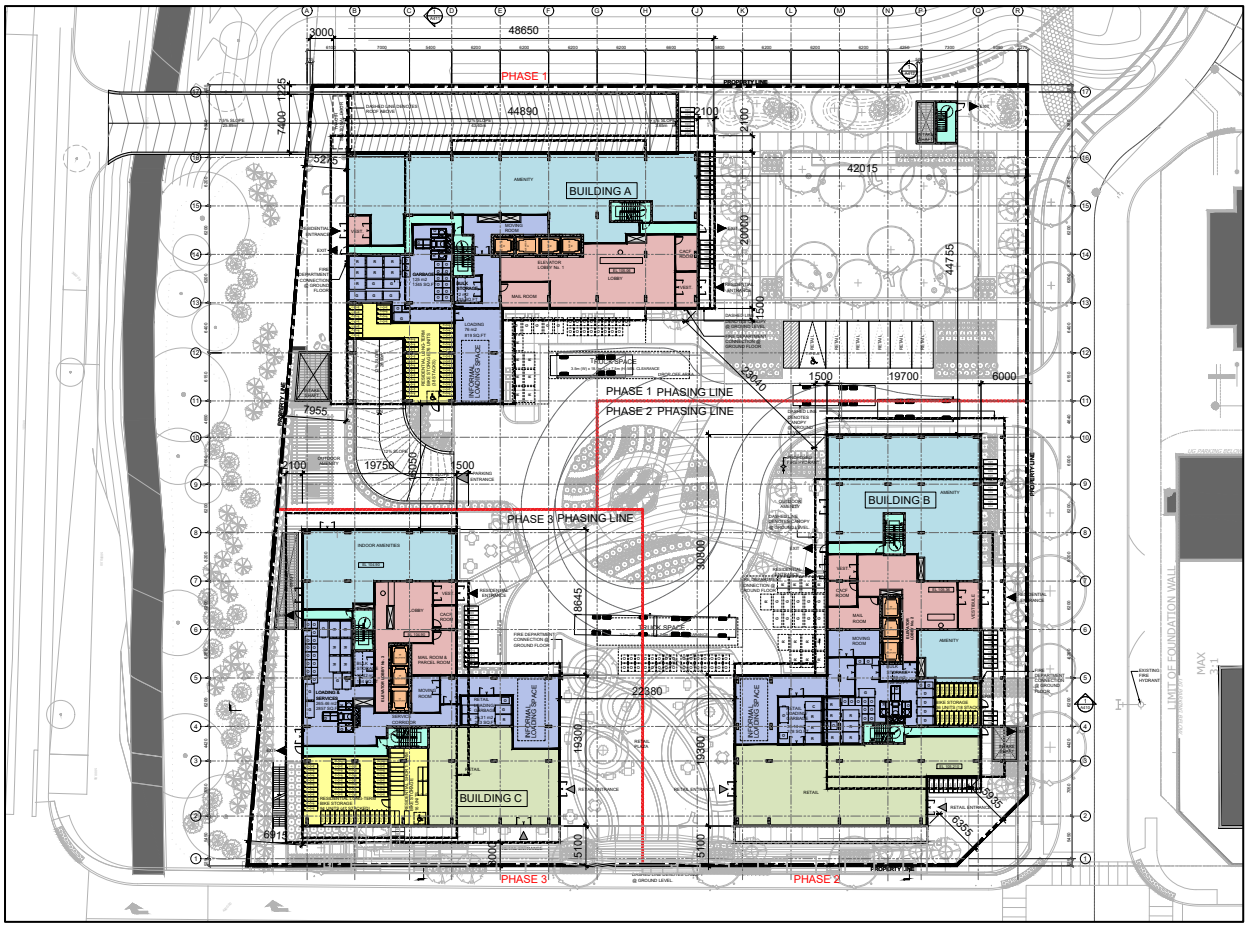


Figure 19 Site Plan Source CORE Architects

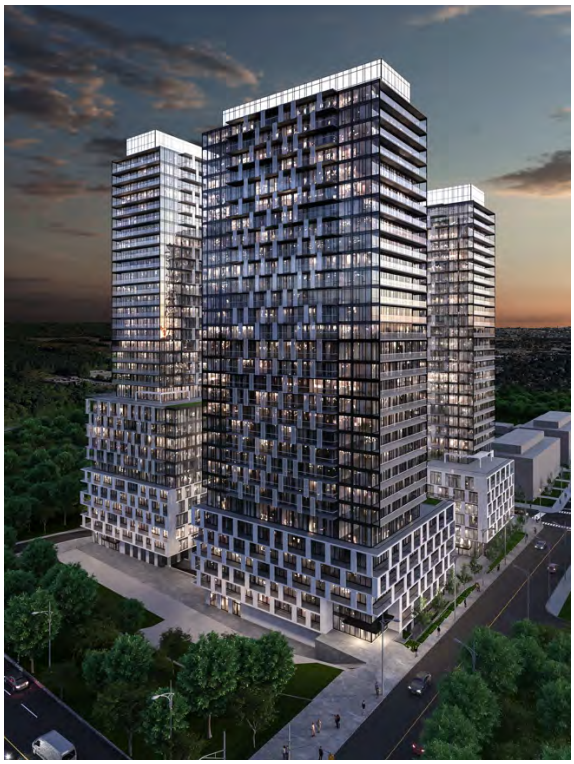


Figure 20 View from Waterdown Road looking East Source CORE Architects



Figure 21 View from the Corner of Waterdown Road and Masonry Court Source CORE

3.1. Building Materials and Sustainability Features

Building Envelope

The project will comply with the requirements of the Ontario Building Code for Energy modeling.

Roof areas will include exterior amenity and private residential terraces. Continuous tower balconies will provide shading to the building glazing in order to mute reflections to deter bird collisions.

Vertical panels in frosted glass attached to the outside of balconies help with solar shading as well as creating depth and interest to the tower façade while also keeping the appearance light.

The more solid materiality of the podium elements and the projected balconies that create further shading combine to assist in the reduction of energy consumption from solar gain/heat loss.

Mobility

The design of 1120 Cooke Boulevard is intended to contribute to the development of a future mobility hub, providing environmentally sustainable, well located, places to live within good proximity to mass transit. The Revised Proposal will promote the use of public transit and support cycling and pedestrian modes of travel - reducing auto dependency. Proposed car share facilities and interior bicycle storage for residents and visitors further contributes to this reduction.

Public Realm

Covered outdoor waiting areas will be provided at the building entrances for pedestrian comfort in inclement weather.

Sidewalk zones of 7-8 metres measured from curb to building face will support a variety of streetscape elements that contribute to a vibrant street, including: residential terraces; pedestrian clearway; trees and other landscaping with appropriate soil volumes; furniture, lighting and utilities etc.

Solid Waste

A construction waste management plan and tracking system will be implemented. The building will have triple chute waste management.

4. Policy and Guideline Context

4.1. City of Burlington Official Plan (2008)

The following is a summary of the relevant urban design policies in the In-force City of Burlington Official Plan.

Site Design and Orientation

6.5 a) The density, form, bulk, height, setbacks, spacing and materials of development are to be compatible with the surrounding area.

6.5 b) The compatibility of adjacent residential and non-residential development shall be encouraged through site design and buffering measures, including landscape screening and fencing.

6.5 c) The design of all buildings must recognize pedestrian scale, safety and the perception of safety and access and the preservation of public vistas and views.

6.5 i) Reverse frontage lotting patterns and the use of acoustical walls next to major, multi-purpose and minor arterial and collector roads should be avoided. In addition, side and end elevations of buildings facing major, multi-purpose and minor arterial and collector roads should be designed with an upgraded level of architectural treatment

for the purpose of avoiding the use of blank walls facing these roads. Building setbacks from the street are to be minimized along pedestrian and transit-oriented streets.

Site Circulation

6.5 e) All developments shall be designed having regard for public transit accessibility in the Urban Planning Area, convenience and comfort, and access and parking for the physically challenged, and to ensure that the needs of persons with disabilities and other special needs groups are addressed.

6.5 h) The streetscape appearance of major, multi-purpose and minor arterial roads and collector streets shall be enhanced by encouraging buildings to present their main building facades to these roads or to enhance their treatment to avoid the appearance of blank buildings at service entrances.

Public Realm and Open Space

6.5 d) The creation of a continuous and harmonious streetscape environment shall be encouraged with emphasis on maintaining the continuity of grade-related activity areas, both inside and outside of buildings.

Parking Servicing and Utilities

6.5 f) City Council shall require that design plans promote public safety and security, with adequate visibility and lighting and the avoidance of secluded areas.

6.5 g) The location, amount, position and design of parking areas shall be reviewed to minimize their potential to erode the qualities of the public streetscape, and to lessen their visual impact. City Council shall require landscaped islands and screening in the design of large parking lots.

6.5 j) The functional and visual impact of site servicing, loading, air conditioning and ventilation equipment and waste handling facilities shall be minimized, by integrating them into the building's main structure, by screening or by site design.

Sustainability and Microclimate

6.5 m) All development shall be designed having regard for Sustainable Development considerations as set out in Part II, Subsection 2.7.3 of this Plan.

4.2. City of Burlington Official Plan (Council-adopted April 2018; no policy status at this time due to ongoing revisions and appeals)

The following is a summary of the relevant urban design related policies in the 2018 Council-adopted City of Burlington Official Plan (February 2021 version).

Site Design and Orientation

7.3.2(1)a)(i)a.	locate buildings generally parallel to the public street to define the street edge and along the edges of parks, urban squares and other open space features, and in close proximity to the street and transit services;
7.3.2(1)a)(i)b.	provide appropriate transitions to adjacent land uses, particularly residential uses;
7.3.2(1)a)(i)c.	mass new buildings to frame adjacent streets in a way that respects the existing and planned street width but also provides for a pedestrian-scale environment;
8.1.2.(1) b)	to develop the MTSAs into compact, pedestrian, environmentally sustainable and transit-supportive places each with a distinct character;
8.1.2.(1) j)	To provide low-rise, mid-rise and tall building forms, where appropriate, that support a variety of demographics in MTSAs;
8.1.2.(1)m)	To ensure the provision of a range of open spaces and connections;
8.1.2.(1)n)	To ensure that there is an appropriate transition in scale, intensity, height, massing and spacing of development in including appropriate transitions between various land uses and built forms;
8.1.2.(1)p)	To achieve design excellence in MTSAs that will encourage long-term investment and the creation of high quality and sustainable built forms in the public and private realm;
8.1.2.(1)u)	To encourage transit-supportive, pedestrian-oriented and cycling-friendly development in a compact built form, while ensuring compatibility with the surrounding areas is achieved.

Site Circulation

7.3.2(1)a)(i)e.	include direct pedestrian access, including barrier free access from grade level, to the primary public entrances located on the building façade;
7.3.2(1)a)(i)d.	locate building primary public entrances for uses located at grade towards a public right-of-way and visible and accessible from the public sidewalk;
7.3.2(1)a)(ii)c.	limit the number and location of vehicular access points to minimize disruption to traffic flows; and to minimize the impact on local streets, pedestrian travel along sidewalks or cyclists' travel along bikeways;

Public Realm and Open Space

7.3.2(1)a)(i)g.	create an attractive and connected interface between the private and the public.
7.3.2(1)a)(i)h.	create a continuous streetscape with emphasis on maintaining the continuity of grade-related activity areas, both inside and outside of buildings;
7.3.2(1)a)(i)i.	provide appropriate outdoor amenity areas and open spaces and promoting the incorporation of private open spaces to the open space network of the immediate community.
7.3.2(1)a)(ii)f.	incorporate landscaped islands and pedestrian walkways

8.1.2.(1)v) To ensure development establishes a high-quality public realm featuring a network of new and existing public squares, parks and open space that incorporate street trees, landscaping and vegetation.

Parking Servicing and Utilities

7.3.2(1)a)(i)f. screen or integrate roof top mechanical equipment within the overall composition of the building;
7.3.2(1)a)(ii)a. locate off-street parking in the side and/or rear yards, in underground or structured parking where appropriate, away from the street edge and adjacent residential uses;
7.3.2(1)a)(ii)b. integrate parking areas located at or above grade within the built form of the building and away from the street frontage, where appropriate;
7.3.2(1)a)(ii)d. screen and buffer off-street parking areas from public view through the use of setbacks and landscaping;
7.3.2(1)a)(ii)e. locating loading areas and service areas to avoid conflict between pedestrian and vehicular traffic, and away from adjacent residential uses and adjoining streets;
7.3.2(1)a)(ii)g. incorporating fencing and/or screening of service facilities, such as loading bays or outdoor storage areas, in a manner which enhances screening from adjacent land uses and the public right-of-way and improves the aesthetic quality of the development.

4.3. City of Burlington Tall Building Guidelines (May 2017)

General Guidelines

2.1a) The podium shall be located to frame the street. On corner lots, the podium shall be located to frame both streets.
2.4j) On corner lots, articulation of the podium should acknowledge its important location through corner entrances, chamfering (and associated public space), and/or other architectural features.
3.1b) Where multiple towers exist on a site, they shall be arranged to provide a gradual and appropriate transition in height to adjacent uses.
4.1d) Where located at a gateway intersection or terminating view, the tower top is encouraged to act as a recognizable landmark with signature features defining its importance.

Response:

The Revised Proposal has been designed to satisfy the intent of these reccomendations. It lines the adjacent streets with podium buildings. which aknowledge the importance of both intersections: Cooke Boulevard and Masonry Court; and Warteredown Road and Masonry Court. Both corners have open spaces that respond to the importance of the corners. The

tower heughs decrease from the north west to the south east – toward existing lower scale development.

Site Circulation

2.1d) On sites with multiple towers, mid-block pedestrian connections should be provided through the podium to enhance permeability, break-up the podium, and create additional corner conditions.

2.4g) Main building entrances shall be clearly demarcated, and should be a focal point of the building design. Where applicable, main building entrances should be located at the corner of an intersection and/or in close proximity to transit stops.

2.5e) Publicly-accessible private open spaces should be used to provide mid-block pedestrian connections through the site and create short block lengths (80-120 metres).

Response:

A mid-block pedestrian connection has been provided between Masonry Court (the Retail Plaza) and the new park on Cooke Boulevard, crossing through the courtyard and the across the publicly accessible open space in the north east. All block lengths satisfy the criteria of these guidelines.

Podium Massing

2.1c) Where no streetwall has been established, setbacks should create a 6.0 metre boulevard width to accommodate pedestrians, street trees and landscaping, and active at-grade uses.

2.2a) The height of the podium, and the tower stepbacks above, should generally reflect the established streetwall subject to the guidelines below. Small variations are encouraged to create a varied streetscape.

2.2b) Where no established streetwall exists, the minimum height of the podium should be 10.5 metres.

2.2 c) The maximum height of the podium should be 80% of the adjacent right-of-way width, up to a max of 20 metres.

2.4f) Large podiums shall be broken into smaller components both visually and functionally. Mixed-use podiums shall reflect multiple retail units, while residential buildings shall provide individual entrances for ground floor units.

2.4k) Mixed-use buildings with retail at grade should incorporate vestibules, frequent building entrances, canopies and structural overhangs to provide weather protection for the length of the street.

Response:

The podium heights facing Masonry Court and Cooke Boulevard are 6 storeys in height, in response to the scale of those streets. Multiple retail entrances are proposed along Masonry Court. Structural overhangs are proposed on both primary street frontages.

Tower Massing

2.2e) Above the podium, stepbacks should be provided on all sides to clearly differentiate between the building podium and tower.

3.1a) The placement of the tower shall have no adverse impacts on adjacent Residential Neighbourhood Areas, parks, open spaces, or natural areas.

3.1c) A minimum separation distance of 25 metres shall be provided between towers to maximize privacy and sky views, and to minimize the cumulative shadow impacts of multiple tall buildings. Balconies shall not be provided within this separation distance.

3.2b) The height of the tower, and its location on the building base, shall provide a gradual and appropriate transition in height to adjacent uses. Where multiple towers exist on a site, this transition shall be reflected across the entire site.

3.2c) The tower portion of a tall building should be slender and shall not exceed 750 square metres, excluding balconies.

5.2c) Mixed-use, commercial and apartment buildings shall provide flexibility in the building floor plate, envelope and façade design to accommodate a variety of uses over their lifespan.

Response:

Stepbacks above the podiums are provided on all street frontages. Separation distances in excess of 25.0 metres are provided throughout. The tower proportions are slender with floor plates that are approximately 765 square metres, excluding balconies.

Public Realm and Open Space

2.2f) Stepbacks should be a minimum of 3 metres to ensure usable outdoor amenity space (i.e. patios).

2.4e) Portions of the podium that are not occupied by a tower should be used as outdoor amenity space to provide casual surveillance and interesting views from the street.

2.5c) Publicly-accessible private open space, including courtyards and plazas, parkettes, or Neighbourhood Parks (where site size permits) should be encouraged within tall building sites through applicable planning tools (i.e. Section 37).

2.5d) Publicly-accessible private open spaces shall be designed and located to encourage public use, provide connections to the broader open space network, and/or highlight important site characteristics (i.e. plazas at corner sites).

2.5f) Public art should be encouraged within tall building sites where appropriate (i.e. on corner sites, sites with publicly-accessible private open spaces, etc.) through applicable

planning tools (i.e. Section 37). The selection and location of public art should reinforce the objectives of the City's Public Art Master Plan.

4.1e) Where possible, outdoor amenity space should be included within the top of the building, including balconies and patios, terraces, rooftop gardens, pools, etc.

5.1b) On larger sites, vegetative or grassy swales should be provided between buildings, and within courtyards and open spaces. These drainage basins should be planted with native plant materials that thrive in wet conditions.

5.1d) Existing significant trees and vegetation should be protected and incorporated into site design.

5.1e) Recommended landscape materials should include species that are native to the City of Burlington and non-invasive, as well as species that are generally drought resistant and require minimal maintenance.

5.2d) Vegetated or "green" roofs are recommended, especially in areas with minimal landscaping, to minimize water runoff, improve building insulation, and provide additional outdoor amenity areas.

Response:

Outdoor amenity spaces are proposed on the roof tops of all three podium buildings as are extensive green roof areas. Publicly accessible open spaces including the Retail Plaza are provided on the ground floor of the Revised Proposal. Open spaces are proposed at both major street corners. See the Landscape Plan for detailed information on the planting strategy.

Parking Servicing and Utilities

2.2d) The floor-to-ceiling height of the ground floor shall be a minimum of 4.5 metres to accommodate internal servicing and loading, and active commercial uses (where permitted).

2.5a) Parking, servicing and loading shall be accommodated internally within the building podium and screened from the street.

2.5b) Access to parking, servicing and loading shall be provided from the rear of the building, or a laneway where possible. On corner sites, access may be provided from secondary streets provided the entrance facilities are well integrated into the rest of the frontage.

4.2a) Rooftop mechanical equipment shall be sized and located and screened from view, in order to protect or enhance views from other buildings and the public realm.

4.2b) Where possible, rooftop mechanical equipment should be wrapped by residential units, or other occupiable space (i.e. amenity areas).

4.2c) Rooftop mechanical equipment should be limited to no more than 50% of the area of the uppermost floor, and stepbacks on all sides should be no less than 3 metres from the edge of the floor below to ensure they are screened from view.

5.2g) All buildings should have conveniently located waste management facilities to support the separation of waste into different streams according to reuse and recycling regulation (i.e. compost, paper, plastics, etc.).

5.1a) Site design shall minimize impervious hard surfaces. Parking should be located underground, and driveways should be as small as possible within allowable standards.

Response:

The Revised Proposal has been designed to satisfy the intent of these recommendations.

Weather Protection

3.2a) The total height of the tower (including the top) shall ensure no adverse impacts on adjacent Residential Neighbourhood Areas, parks, open spaces, or natural areas.

3.2d) The massing of the tower, and its relationship to the building base, shall not result in adverse wind effects at the street level.

3.3a) The design and placement of the tower shall be carefully considered to minimize the size of shadows on the opposite streetscape, and the time it takes for them to pass.

3.3c) The widest edge of the tower should generally be oriented in an east-west direction to minimize the impacts of shadows.

3.3d) It is recommended that a shadow study be provided with tall building applications to demonstrate the impacts at the equinoxes (March 21 and September 21).

Sustainability and Microclimate

2.4n) Notwithstanding the above, the design and materiality of the podium should reflect bird-friendly best practices.

5.1c) Porous pavement, and landscaped areas with adequate size and soil conditions, should be maximized to increase the total amount of water run-off absorbed through infiltration.

5.1f) Landscape design should incorporate strategies to minimize water consumption (i.e. use of mulches and compost, alternatives to grass and rainwater collection systems).

5.1g) Well-drained snow storage areas should be provided on site in locations that enable melting snow to enter a filtration feature prior to being released into the storm water drainage system.

5.2a) New buildings should be encouraged to seek Leadership in Energy and Environmental Design (LEED) certification, or an equivalent design standard.

5.2b) New buildings are encouraged to reduce the energy consumption of building and site systems (HVAC, hot water, lighting) through the use of appropriate mechanical and construction technology (natural cooling, light recovery, passive solar design, etc.).

5.2e) Water use reduction technologies are encouraged, including water-efficient appliances, such as aerators, low-flow shower heads, dual-flush toilets, front-loading washers, waterless urinals and high-efficiency dishwashers.

5.2f) Waste water technologies, such as rain barrels or cisterns, are encouraged in new buildings to collect and filter rain water to be recycled for non-potable domestic uses.

5.2h) Where possible, construction materials should be recycled to reduce the environmental impacts of extracting and manufacturing new materials. If there are no salvageable materials available, efforts should be made to purchase materials from demolition sales, salvage contractors and used materials dealers.

5.2i) New construction materials should be locally sourced to reduce the impacts of transportation. Canadian products are generally designed to withstand our climate.

5.2j) Construction materials should be durable and consider life cycle costing to avoid premature replacement.

Response:

The Revised Proposal has been designed to satisfy the intent of these recommendations.

4.4. Draft Precinct Plan for the Aldershot GO Station Major Transit Station Area (May 2018 and June 2022)

The original development application was prepared with reference to the Draft Precinct Plan for the Aldershot GO Station Mobility Hub which was part of a broader consideration of the City's Mobility Hubs through the Official Plan Review process in 2014.

City Council received and filed the discussion draft precinct plans and land use policy directions 16 July2018.

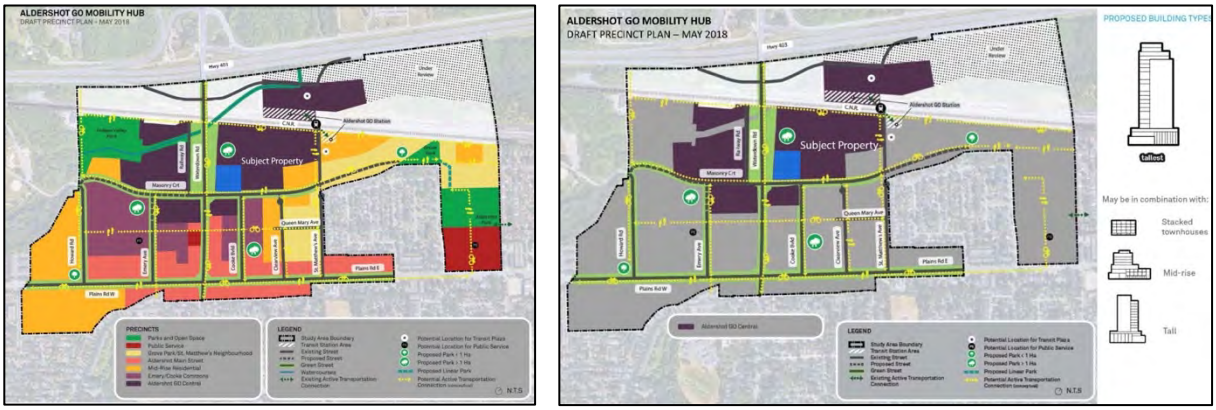


Figure 22 and 23 Draft Aldershot Go Mobility Hub Precinct Plan 2018

The subject property is located within the Aldershot GO Central Precinct which is conceptually centred around the intersection of Waterdown Road and Masonry Court. The Precinct Plan, at that time recommended, among other things, the establishment of a maximum building height of 30 storeys, where appropriate and compatible

The draft precinct plan was not endorsed or approved by City Council in 2018. In early 2019, the Mobility Hubs Study was paused. A Council Workshop took place on 17 May 2021, a draft MTSA project workplan and draft public engagement plan were considered and endorsed by Community Planning, Regulation and Mobility (CPRM) Committee of Council in early June 2021.

More recently, in January 2022, following additional consultation and study, Council endorsed a Major Transit Station Areas, Area-Specific Planning Study Final Report which included an Area Specific Plan ("ASP") for the Aldershot GO MTSA. The Aldershot GO MTSA area was named

"Aldershot Corners" in reference to the former Village of Aldershot Corners which was located at the intersection of Plains Road and Waterdown Road in the 1877 Halton Township Atlas.

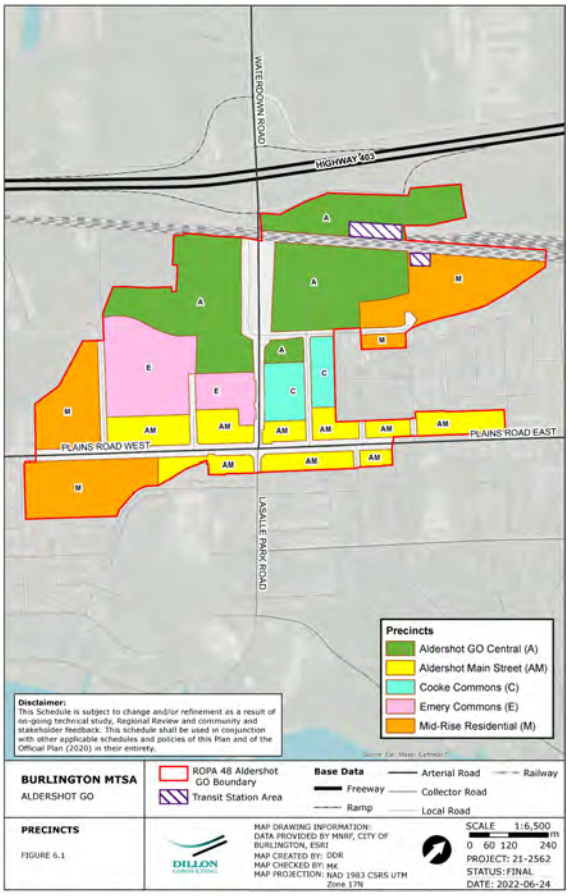


Figure 7 Aldershot Corners ASP Districts.

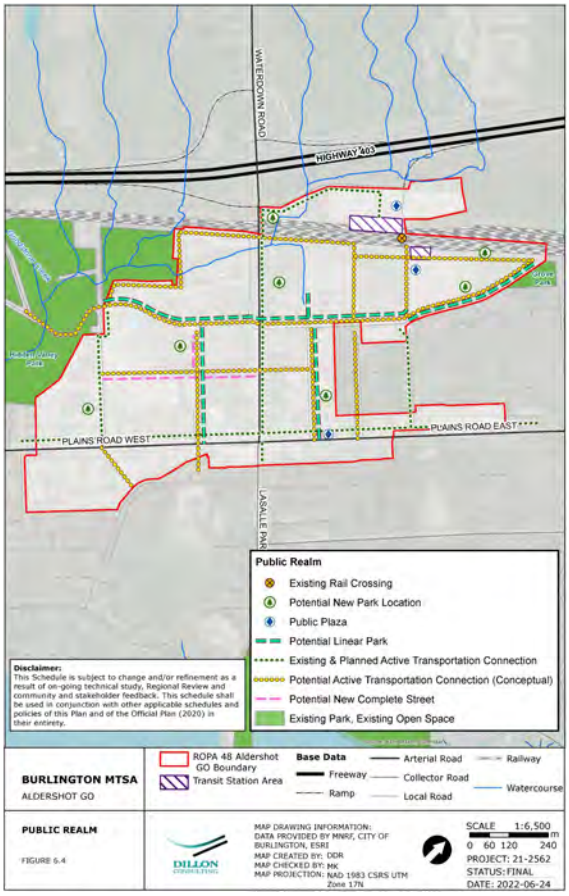


Figure 9 Aldershot Corners Open Space Structure

Notwithstanding the fact that the work to translate the ASP into policy is not complete at the time of the writing of this report, we have included review of the urban design aspects of the Revised Proposal in light of the ASP.

The ASP identifies a number of general urban design policy directions in its Section 3.3.3.1. These include the need to:

- refer to relevant guideline documents;
- balance engineering and other objectives in the design of the public realm;
- the potential need for additional urban design and built form guidance relevant to each individual ASP;
- strategies for establishing appropriate building heights with the ASP;
- shadow study standards and additional specific standards for shadows on parks;
- design considerations for gateways and the broader public realm;
- appropriate transitions including street wall building stepbacks; screening and buffering between adjacent uses; and
- the requirement for barrier free travel throughout new developments and in connection to existing uses.

Retail Street policy directions are set out in its Section 3.3.3.1.

Masonry Court and Cooke Boulevard are identified as MTSA Mixed Use Major Streets in this section. Aspects of retail design for such streets to be included in a future By-law are outlined, including:

- minimum floor area at grade for new individual retail and service commercial units;
- promotion of community identity and character;
- creation of a fine grain of entrances along the street edge that supports the character and rhythm along the streets;
- the use of clear glazing on windows and doors along front facades to ensure active store frontages;
- increased setbacks adjacent to the retail streets;
- restriction of lobbies to side streets;
- support for walkability; articulation of storefronts; and
- flexibility of design for future changes.

In addition, general policy directions related to Streetscape (3.3.3.3) and the private realm (3.3.3.4) and comprehensive block plans (3.3.8.1) are included.

The Aldershot Corners illustrates five precincts with varying characteristics. Taller buildings are to be concentrated along the rail line and will decrease in height and intensity closer to Plains Road and the existing residential neighborhoods

The following are the unique objectives for Aldershot Corners:

- To achieve context-sensitive transitions to established residential neighbourhood areas outside of the MTSA by varying the maximum heights for new-mid-rise development within the MTSA;
- To encourage mixed use development by concentrating higher intensity development on large brownfield/greyfield sites that contain existing employment uses in order to encourage mixed use development;
- To recognize the existing employment function in the area and planning for future employment and commercial uses in the MTSA;
- Planning for flexible commercial and retail spaces that can respond to the changing commercial/retail landscape;
- Creating new streets and active transportation connections to enhance the existing transportation network, including the establishment of new east-west corridors which will improve permeability through the area for pedestrians and cyclists and mitigate traffic associated with future growth; and,
- Focusing height away from Plains Road and towards the rail corridor to concentrate future residents in close proximity to the GO station and to maintain the mid-rise vision for Plains Road.

The ASP identifies the subject property as being within the Aldershot GO Central Precinct which is the focus area for the MTSA area's highest density, where the tallest maximum heights are located (30 storeys). The ASP notes that the tallest buildings are planned to be located along the rail corridor, where shadows will have the least impact, and the height peak of the precinct is planned to be where Waterdown Road intersects the rail line.

Response:

The Revised Proposal establishes a gateway condition at the intersection of Masonry Court and Cooke Boulevard through the creation of a retail focussed publicly accessible open space at the corner. It achieves appropriate transitions to adjacent areas by proposing street wall buildings which line Masonry Court and Cooke Boulevard, punctuated by two generously scaled, publicly accessible open spaces that promote mid-block pedestrian links across the Subject Property.

Appropriate variety in the height of proposed towers, tower stepbacks above the podium elements and tower separation distances which exceed the minimum standards all contribute toi an appropriate transition in scale to nearby areas of lower intensity identified in the ASP.

The Revised Proposal creates a fine grain of entrances along the Masonry Court and Cooke Boulevard street edges, along with two publicly accessible open spaces which, together, will support a new, recognizably local character and rhythm along the streets; Clear glazing on windows and doors along front facades is anticipated on active store frontages where deep 6.0 metre setbacks adjacent to the retail streets is proposed. The retail uses have been designed to provide flexibility of layout.

Residential lobbies are located internal to the block. There is a secondary lobby entrance proposed from Cooke Boulevard to Building B.

The Revised proposal achieves the objective for Aldershot Corners of focusing height away from Plains Road and towards the rail corridor, through the deployment of the tallest elements along Waterdown Road. The tallest tower, Building A at 33 storeys, is located near the northern edge of the MTSA.

4.5. City of Toronto Retail Design Manual 2019 (Reference Only)

City of Burlington staff recommended that the Revised Proposal be reviewed in respect of the City of Toronto Retail Design Manual 2019, in the absence of such a document prepared for the City of Burlington. The document is a collection of best practices and is intended to provide guidance on developing successful ground floor retail spaces. The recommendations contained within this document are similar to but much more detailed than the policy directions for retail uses found in the Major Transit Station Areas, Area-Specific Planning Study Final Report. As such they may be most relevant in relation to applications for Site Plan Approval.

These best practices are organized into three sections: The Building; The Street and Retail Frontage; and The Retail Space. Relevant excerpts from the guidelines are set out below:

1.0 The Building

1.1 Building Massing and Geometry

Differentiate the building's various uses to ensure strong retail visibility.

1. Use horizontal architectural details such as cornices, continuous balconies, frames, projections and step-backs to differentiate the retail floor(s) from upper storeys. Architectural projections as small as 300 mm (12 in.) can be effective.
2. Use vertical architectural details such as projections and step-backs on the façade of the retail floor(s) to differentiate the retail component of the building from adjacent non-retail uses and to visually separate each retail tenant from its neighbours (see also Section 2.3).
3. Emphasize the primary entrance to each retail tenant
4. Articulate storefront window treatments (e.g. by using projecting glass boxes; see Section 2.5).
5. Establish a consistent architectural style across the whole retail façade with arches, canopies, etc. where appropriate. Each retail tenant will need to establish it's own storefront identity within the retail façade (See Section 2.3).
6. Make colonnades and overhangs inviting by designing them with proportions that are appropriate to the street context and avoid shadowing the storefronts. Test storefront shadowing effects during the design process with an assessment of the depth of the overhang and height of the colonnades (See Section 3.1).
7. Where appropriate, use canopies combined with other architectural elements, such as setbacks or projections, to reinforce the horizontal differentiation of functions to achieve a more effective massing distinction.
8. The proportions and design of any overhangs, including the height, depth, as well as location of the overhang, should be carefully considered alongside the streetscape design. This is particularly important with regards to location of street trees to ensure there is adequate space for trees to grow to maturity and to ensure the building, including any projections will not interfere with this growth.

1.2 Material Differentiation

Use building materials on the façade and detailing to accentuate the building's different uses, ensure strong retail visibility and integrate buildings into their context.

1.3 Canopies, Overhangs and Awnings

Canopies, overhangs and awnings provide three-dimensional articulation on storefronts. They can help accentuate storefront entrances, add colour, provide a pedestrian scale, and can also provide weather protection.

1.4 Storefront Width to Store Depth

Design unit layouts to allow for adaptability to future change while meeting the functional needs of retail tenants.

3. Design the majority of units with a storefront to depth ratio of 1:3 in a rectangular format
4. Design corner units with ample sidewalk or setback space for patios and outdoor merchandising. The ideal ratio for the space is approximately 1:1.
5. Accommodate large stores on pedestrian-oriented streets by using L-shaped floor plates.

1.5 Ceiling Heights

1. Provide approximately 4.5 m (15 ft.) ceiling height from slab to slab for boutique type retail spaces (unit sizes less than 140 sq. m (1500 sq. ft).
2. Provide approximately 6 m (20 ft.) ceiling height from slab to slab for retail spaces larger than 200 sq. m (2150 sq. ft.).

Response:

The proposed retail uses are differentiated form the part of the podium of the respective buildings in which they are located by being recessed below the primary facades facing the public streets. The overhangs of these façade elements are approximately 3.0 metres above the retail frontages. They are in an area of the subject property where there is a deep setback and sufficient vertical clearance space for trees to grow to maturity.

The two retail units are shown with an appropriate storefront to depth ratio, for what are corner units, in a rectangular format. The Retail Plaza and the corner gateway open space both have ratios for the space of approximately 1:1 as recommended.

Ceiling heights in the retail spaces are all at least approximately 6.0 metres from slab to slab.

Additional architectural details will be added in Site Plan Approval and other applications in the future.

2.0 The Street and Retail Frontages

2.1 Sidewalk Interface

1. Create a visual hierarchy of façades that reflects the City's hierarchy by using different architectural treatments and materials such as projections, setbacks and graphics on each side. The primary retail façade can be emphasized by using higher quality materials and interesting detailing as well as through the location of retail entrances and storefronts
2. At corners, wrap the primary retail façade of the storefront around the corner to also include the first 6 m (20 ft.) of the secondary façade.

3. Where there is a rear parking lot, reduce walking distances to the primary retail frontage and store entrances by providing well-lit walkways or mid-block connections between or through buildings approximately every 50 m (165 ft.).
4. Avoid fully glazed storefronts that are un-animated or which enable views of the back of interior shelves.
5. Wrap long store frontages with smaller retail storefronts on the primary retail façade to avoid long uninterrupted spans of unanimated façade and locate larger floor plates above or below grade.
6. Avoid unanimated blank walls on all street frontages.
10. Provide tree-lined sidewalks for a more comfortable pedestrian scale, weather protection and pleasant connections with nature.
12. Where full-service patios are appropriate, these should have a minimum depth of 3.5 m (12 ft.) to allow for adequately sized tables and chairs and circulation
13. Design the transition from sidewalk to retail space without any visual or physical obstacles and meet all related accessibility requirements.

2.2 Hierarchy of Retail Frontages

1. Create a visual hierarchy of façades that reflects the City's hierarchy by using different architectural treatments and materials such as projections, setbacks and graphics on each side
2. At corners, wrap the primary retail façade of the storefront around the corner to also include the first 6 m (20 ft.) of the secondary façade.
6. Avoid unanimated blank walls on all street frontages

2.3 Contiguous Retail Frontage

1. Design the base building to be sufficiently flexible to accommodate a variety of store design options.
2. Allow variations such as slight projections, setbacks and the use of canopies between different storefronts.
3. Separate retail units with at least 0.6 m to 1.2 m (2 to 4 ft.) of opaque facade to allow for wall display in the interior.
4. Ensure that store entrances in fully glazed façades can still be clearly identified from a 100 m (about 300 ft.) distance.

2.4 Entrances

1. Locate the entrance along the main pedestrian route to the store. For smaller retailer units where it is important to maximize the window display area, locate the entrance to one side of the retail space.
2. Design the entrance in proportion with the storefront, accentuating the height and creating an inviting setting.
3. Visually emphasize the entrance by using architectural elements such as projected or recessed walls, signage and more prominent colours and finishes.

5. Consider recessing the entrance.
6. Minimize the number of public entrances to individual retailers while balancing the need for a fine grain of entrances along the retail street.

2.5 Display Windows

1. Use non-reflective, clear glass for optimum transparency.
2. Avoid fully glazed curtain walls with large areas of glass or multiple storefronts that are undifferentiated.
3. Use a 150 to 600 mm (6 to 24 in.) window base to protect the storefront and windows from snow removal equipment and other sidewalk activities.
4. Design retail display windows to showcase merchandise and provide clear views into the retail space.

2.6 Identity, Branding and Signage

1. Design the base building to be sufficiently flexible to accommodate a variety of options for future retail tenants to use in expressing their brand identities.
2. Use a combination of storefront materials, lighting, hardware, and signage to establish the brand.

Response:

The retail spaces, which have their primary frontages on Masonry Court wrap around the corners to face onto Cooke Boulevard and onto the Retail Plaza. Tree-lined sidewalks and weather protection in the form of deep overhangs of the facades above are provided. No blank walls on any street frontages are proposed.

Areas for potential patios, in the Retail Plaza and the corner plaza, have depths well in excess of 3.5 metres and are more than adequately sized to allow tables and chairs and circulation, as well as landscape elements. All retail spaces will meet all related accessibility requirements.

The retail spaces have been designed to be flexible, to accommodate a variety of store design options at a number of different sizes. Recessed entrances are a possibility.

Additional architectural details will be added in Site Plan Approval and other applications in the future.

3.0 The Retail Space

Response:

The guidelines in this section are highly specific and would typically be dealt with in a Site Plan Approval process.

5. Urban Design Assessment

5.1. Strategies

The urban design intention of the Revised Proposal continues to be, to:

(i) expand on the neighbourhood of the successfully created Phase 1 by introducing a different residential typology consisting of a higher density condominium development to create a variety of housing choices for the area;
(ii) utilize a built form that defines street edges and reinforces the spatial definition of the park to the North;
(iii) attract new residents to the area with a high quality of life and amenities that create a community in itself; and
(iv) enhance the pedestrian experience on surrounding streets.

The design of the Revised Proposal is intended to contribute to the development of a future mobility hub, providing environmentally-sustainable well-located places to live.

5.2. Site Organization

The Revised Proposal is a composition of tall buildings with street defining podium elements complemented by a series of outdoor spaces, varying in size and configuration. The building elements are generally organized around a central outdoor courtyard with the podium components providing buffering against: the relatively high-speed traffic on Waterdown Road to the west where it becomes an overpass; and the CN Rail corridor further to the north.

The proposed central courtyard is open on the north east corner of the property where an at grade outdoor open space is proposed. This open space, which is private, provides a visual connection between the more contained courtyard and the adjacent future public open spaces that will be located to the north.

The courtyard is also open to the Waterdown Road frontage the west in a gap between the podiums of Building A and C. Pedestrian links are provided along this edge of the property by means of a sidewalk parallel to Waterdown Road. No direct pedestrian access to Waterdown Road itself is possible along this frontage because of the grading of the embankment, other than the sidewalk connection at the intersection of Waterdown Road and Masonry Court. Underground parking is proposed below the at-grade open spaces.

The tallest towers (Buildings A at 33 storeys and Building B at 31 storeys) are located on the west edge of the subject property on the Waterdown Road frontage. Building C, which is located at the intersection of Masonry Court and Cooke Boulevard, steps down in height to 29 storeys in total. The podium elements are: 6 storeys in Buildings B and C and 12 storeys at Building A.

Three roof top outdoor amenity areas are included in the Revised Proposal: one on each of Buildings B and C overlooking both Masonry Court, the Retail Plaza and the proposed courtyard; and another on the roof of the podium of Building A, overlooking Waterdown Road and the proposed courtyard.

The major intersection in the immediate vicinity is at Waterdown Road and Masonry Court. A gateway/open space area that will provide a sense of arrival from the west is proposed for the intersection of Masonry Court and Cooke Boulevard at the south east corner of the subject property in Building B. It will be framed by well-proportioned podium elements and designed with consideration of the approved mid-rise buildings that will be located opposite, east of Cooke Boulevard. A retail use is proposed at this corner of the Revised Proposal.

A Retail Plaza is proposed in a mid-block position along Masonry Court. The Retail Court serves as a second entrance to the corner retail described above and for a second retail use that is proposed in Building C. In addition to providing a focus for the retail uses, the Retail Plaza also serves as a mid-block pedestrian connection to the courtyard.

As noted elsewhere in this report, access for vehicles is organized in two locations, along the eastern edge and at the north west corner of the subject property, while pedestrian access throughout the Revised Proposal is provided by pathways in and across the courtyard and associated open spaces linking proposed outdoor areas with Cooke Boulevard and the future park to the north.

The site organization will support the overall vison for the lands north of Masonry Court while respecting and reinforcing the existing and planned context. Approved mid-rise buildings to the east provide a context for the podium elements of the Revised Proposal which in turn, with appropriate stepbacks, will provide a transition between the proposed 29 storey eastern Building B tower element and the emerging mid and low-rise neighbourhoods to the east and south.

Taller tower elements are located to the west and north along the Waterdown Road frontage, further away from the existing and approved lower scale residential buildings and closer to Hwy 403 and the rail corridor.

5.3. Pedestrian Circulation and Access

Pedestrian access to the main entrances and lobbies are located adjacent to drop-off areas in the central courtyard. Direct pedestrian access to the proposed courtyard space is provided from the public sidewalk on both Masonry Court and Cooke Boulevard. Building C has a second lobby access directly from the sidewalk on Cooke Boulevard.

Pedestrian connections around the Revised Proposal are located around the periphery of the subject property and include landscaped sidewalk areas on both Masonry Court and Cooke Boulevard.

Framed by active amenity spaces and large residential lobby spaces, the central courtyard is the focal point for the Revised Proposal. Indoor amenity spaces at grade will have direct access to a variety of landscaped outdoor amenity spaces that line the edge of the courtyard.

The Revised Proposal includes a large consolidated outdoor amenity space at the north east corner of the subject property. Direct access to this outdoor amenity space is provided from a large indoor amenity space that is shared by all residents.

5.4. Parking, Loading, and Servicing

The City of Burlington's Official Plan and Tall Building Guidelines provide guidance for servicing, parking and loading areas in development. In general, both documents indicate the importance of: strategically locating parking, loading and servicing areas to minimize their visibility from the public realm; and providing for a continuous streetscape adjacent to buildings.

The Revised Proposal includes two vehicular entrances: one from Cooke Boulevard, located approximately at the midpoint of the subject property aligned with the private street to the east; and a second driveway and ramp, connected to Waterdown Road at the north west corner of the subject property, leading directly to and from the underground parking facilities. Drop-off points and entrances to parking and loading facilities take their access from the central courtyard. The parking ramps and all garbage handling and moving facilities located off the courtyard are located fully within the volumes of the proposed buildings and will not be visible from the public realm.

The Revised Proposal a continuous pedestrian zone in front of the building along the active street frontages of Masonry Court and Cooke Boulevard with a single curb cut.

A consolidated internal residential garbage and loading facility is located in the podium level of Building A. Residential garbage facilities are located at the P1 level below Buildings B and C through which bins can be moved to the primary facility in Building A for pick up. A dedicated garbage handling elevator is provided in Building A. Three individual moving room facilities are distributed in the podium buildings – one below each of the three proposed towers, each with access to Type C loading facilities. Details regarding the phasing of these operations are discussed in a Waste Management Planning Review memo prepared by Dillon Consulting and included in the development application package.

Bicycle parking in both options is provided on the ground floor and P1 levels in a number of enclosed spaces distributed around and accessible from the central courtyard and the lobby/common areas of the podium buildings in which they are located.

5.5. Built Form and Massing

The City of Burlington's Official Plan and Tall Building Guidelines include similar descriptions of appropriate built form and massing strategies. In general, these include policies and recommendations to ensure that new buildings: are compatible with the surrounding area;

provide an appropriate transition in scale with regard to adjacent and nearby buildings; create appropriate relationships with the public realm; and provide architectural articulation to achieve an attractive urban built form.

The urban design strategy employed is to locate building elements around a central courtyard, and to deploy the tallest locating building components away from more sensitive lower scale areas.

The area to the east of the subject property is a medium-density mixed-building-form residential neighbourhood.

The proposal has been massed to provide appropriate transitions in height and built form towards areas of lower intensity through a variety of design methods such as the careful consideration of building location and orientation and the use of setbacks and stepbacks of building mass - limiting impacts on this new residential area and enabling: the creation of a comfortable human scale and public realm; the provision of sunlight on sidewalks; and the mitigation of potential uncomfortable wind conditions.

Potential light, view and privacy (LVP) impacts from and within developments are generally dealt with through a combination of spatial separation and tower orientation. The Revised Proposal generates minimal impacts on LVP within the development and in relation to the neighbourhood to the east and to the existing urban fabric to the south and south east.

The tower elements are separated from one another by: 28.275 metres (Building A to Building C); 47.35 metres (Building B to Building C); and 27.305 metres (Building A to Building B)

These tower separation distances all exceed the recommendations of the City's Tall Building Guidelines, and will allow for ample sunlight to enter into the proposed central courtyard.

Setbacks and Stepbacks include:

Ground Floor facing Masonry Court	5.1 metres
Ground Floor facing Cooke Boulevard	6.0 metres
Ground Floor facing SWM/Park	8.62 metres
Ground Floor facing Waterdown Road	3.57 – 5.28 metres minimum (varies)
Podium facing Masonry Court	3.0 metres
Podium facing Cooke Boulevard	3.0 metres
Podium facing SWM/Park	6.52 metres
Podium facing Waterdown Road	1.47 – 3.78 metres minimum (varies)
Tower C facing Masonry Court	5.1 metre setback – 2.1 metre stepback from podium
Tower B facing Masonry Court	10.3 metre setback – 7.5 metre stepback from podium
Tower B facing Cooke Boulevard	6.0 metre setback - 3.0 metre stepback from podium

Tower A facing SWM/Park	8.62 metres metre setback – 2.0 metre stepback from podium
Tower A facing Waterdown Road	12.67 metre min. setback (varies) – 8.89 metre stepback from podium
Tower C facing Waterdown Road	3.57 metre min. setback (varies) – 2.1 metre min. stepback from podium

Neither the in-force Official Plan or the 2018 Council adopted Official Plan (which has no policy status at this point in time) identify a minimum or maximum height for the subject property. However, the both the Draft Aldershot GO Station Precinct Plan and the more recent Area Specific Plan ("ASP") for the Aldershot GO MTSA (which also have no policy status at this point in time) states that the maximum height should not exceed thirty (30) storeys.

Notwithstanding the proposed requirements of the Draft Precinct Plan and the ASP, the proposed taller buildings along the west side (31-33-storeys) are appropriate at this location for the following reasons:

- The tallest buildings (those over 30 storeys) have been carefully located along the western edge of the Revised Proposal, where in any event the tallest buildings in the area should be located;

- The Revised Proposal with the tallest buildings to the west, maximizes access to light and sky view from the new adjacent mid to low-rise neighbourhood to the east and the existing neighbourhoods to the south and south east. Any incremental increase in shadows cast by the buildings over 30 storeys in height in this area, will generally be cast onto areas on the highway-like roadway of the Waterdown Road overpass and on rail infrastructure. While these elements may cast some additional shadow onto future development lands to the west in the morning periods, in our opinion this incremental increase represents a minor and therefore acceptable increase over that which would be cast by buildings up to 30 storeys in height in these areas;

- The proposed tower heights will ensure visibility and landmark potential of the Revised Proposal, given the unique gateway location - at the centre of the area designated as the Aldershot GO MTSA.

- The added height above thirty storeys will assist in better realizing the density potential of the Go Central Area in proximity to expanded GO Transit service.

The tower elements have footprints that are 750 square metres as recommended in the City's Tall Building Guidelines.

The proposed towers meet and, in many cases, exceed the minimum separation distances recommended in Burlington's Tall Building Guidelines. Concentration of the density in the tower elements allows the southern podiums (Buildings B and C) to be kept to 6 storeys which will contribute substantially to the access to sunlight in the nearby public realm.

5.6. Public Realm

The streetscape and the central courtyard and associated open spaces, and the Retail Plaza, which vary in size and configuration, will contribute to the creation of a human-scaled and visually interesting urban environment at this gateway location in Aldershot Corners.

The connections of the central courtyard to Cooke Boulevard to the east and through the Retail Plaza, to Masonry Court to the south, are generously scaled and appropriately landscaped. The Revised Proposal offers an enhanced landscape condition at the edge of the municipal streets in the form of a landscaped interface and broad visual connections to the open spaces to the north (new public park and storm water management facility).

5.7. Shadow Study

Shadow studies have been prepared by CORE Architects to meet the City of Burlington's Shadow Study Guidelines and Terms of Reference (June 2020) which provide standardized shadow impact criteria, recommending that shadows from a Revised Proposal may be depicted on the hours between early morning through early evening on March 21st, June 21st September 21st, and December 21st. Shadow studies between 9:00AM and 18:00PM have been prepared.

The shadow study is not illustrated in the Urban Design brief. The full shadow study is part of the development application package.

The Council-adopted City of Burlington Official Plan (2018) states in Policy 7.3.2 that development shall adequately limit any resulting shadowing on the streetscape, neighbouring properties, parks and open spaces and natural areas.

Additional guidance is provided in the City's Tall Building Guidelines for the height and massing of the podium as well as the tower. For podiums, the guidelines recommend that the height and massing of the podium (not including the tower) should ensure a minimum of five consecutive hours of sunlight on the opposite side of the street at the equinoxes, except where existing conditions preclude.

The guidelines also recommend that the height and massing of the podium should ensure a minimum of five consecutive hours of sunlight over more than 60% of a park or playground area or a public open space at the equinoxes.

Beyond the shadow guidance for the podium the Tall Building Guidelines recommend the minimum separation distance of 25 metres between towers to minimize cumulative shadow impacts.

The City's shadow study terms of reference require the calculation of a number of sun access factors. These calculations are part of the shadow study package. The shadow study concludes that:

"*The proposed buildings at 1120 Cooke Blvd, Burlington and its resultant massing exceeds the requirements for Sun Access Factor per the City of Burlington's Shadow Impact Criteria, for the specified dates and times, for each of the relevant categories. The categories that we feel relate to this site are as follows: Neighborhood Park area, Private Outdoor Amenity Space, Private Backyard Amenity Space and Public Realm/Sidewalks*."

With particular reference to the Neighbourhood Park Area the Shadow Study includes the following analysis:

Sun Access on the Neighbourhood Park, Parks and Open Space are:

21 March – 0.83
21 June – 0.98
21 September – 0.80
21 December – 0.51

The criterion is met if the Sun Access Factor is at least 0.5 on each of the three test dates identified in the Guidelines 21 March, 21 September and 21 December.

Based on the foregoing the Revised Proposal will conform to the Official Plan policy requiring development to adequately limit any resulting shadowing on the the existing and planned context including; streetscape, neighbouring properties, parks and open spaces and natural areas.

The Revised Proposal will provide integrated weather protection elements in the building façade in a number of locations associated with pedestrian circulation and recreation. Down drafts and wind effects will be mitigated by the façade treatment and building articulation. All weather protection design elements will be finalized at the Site Plan Approval stage.

6. Conclusions

This Urban Design brief concludes that the urban design, form and pattern of the Revised Proposal appropriately addresses the relevant municipal policy objectives and guideline recommendations with respect to the intensification within built-up areas, with a particular focus on sites located within strategic growth areas, including Major Transit Station Areas (MTSA).

The development is supportive of and appropriately address the urban design-related policies in the City of Burlington current and new Official Plans, in addition to the recommendations contained in the Burlington Tall Buildings Guidelines.

The Revised Proposal will be appropriate and desirable at its important location within the Aldershot Mobility Hub. It has an urban design character that appropriately reflects transit-supportive, pedestrian-oriented development and supports the City's planned urban structure for the area.

The Revised Proposal represents appropriate development in terms of fit within the urban design structure of Burlington, building heights and scale within the emerging Major Transportation Station Area. The proposed composition of tower and podium components, results in an appropriately scaled pedestrian oriented development that will address and frame Masonry Court, Cooke Boulevard and Waterdown Road and the future park and SWM facility to the north with good proportions.

For the reasons set out in this brief, we are confident from an urban design perspective, that the Revised Proposal will be appropriate and desirable, represent good urban design practice and will be able to be appropriately accommodated within the overall regulatory framework for the area.

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