

**265 Catherine Street,
Ottawa**



Design Brief

1.0 Project Summary |

This submission for Site Plan Approval facilitates the redevelopment of the former bus depot site on 265 Catherine Street. The development consists of a 32, 36 and 34-storey tower on two 6-storey podiums with a 3-storey townhouse block, park dedication and retail uses split into two phases. The redevelopment of the site is a great opportunity to introduce a mixed-use development.

The proposed development will include, two levels of underground parking and retail at the ground floor along Catherine Street, Lyon Street North, Kent Street and along Arlington Avenue in the form of market space. The proposal also includes bicycle storage for residents at a 1:1 ratio per suite located in secured bicycle storage rooms within the below grade parking garage. Visitor bicycle parking spaces will be provided on ringed bike pins in the exterior open spaces around the site at grade. The buildings are proposed to contain indoor and outdoor amenity spaces located throughout the buildings on the Ground Floor and Seventh Floor including the podium roofs which will be connected by a pedestrian bridge. Additionally, there will be a 'sky lounge' located at the top of Tower 2 with views of the city.

2.0 Subject Property |

The subject site is located at 265 Catherine Street in Ottawa, Ontario. Located in the GM(1875) S271 zone and the Central and East Downtown Core Secondary Plan. The lot is approximately 9943 square metres with a frontage of 92.3m along Catherine Street and 60.7m along Kent Street. The site is bordered by four streets, Catherine Street, Kent Street, Arlington Avenue and Lyon Street North. The property is currently occupied by the former Bus Depot.

3.0 Surrounding Area |

To the south of the site are commercial land uses along Catherine Street, Highway 417 (with an exit at Kent Street) and the northern edge of the Glebe. Low rise residential dwellings are located to the north with a mixed of residential uses along Catherine street and Bay Street to the west of the site. Glashan Public School is located to the east of the site with commercial and residential land uses along Bank Street.

Key destinations around the site include Arlington Park, Glashan Public School, McNabb Recreation Centre and Central Park. The Rideau Canal and Canadian Museum of Nature are east of the property. The subject site is located a block west of Bank Street, which provides access to commercial and retail businesses.

4.0 Site Plan Configuration |

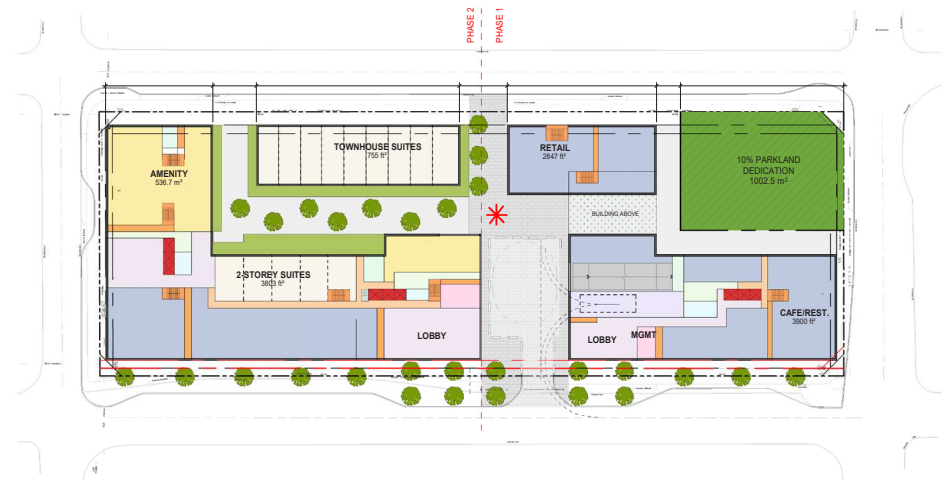
4.1 Site Plan Development

The proposed site plan carefully addresses the four-sided nature of the block. The aim is to provide a site with no typical 'back-of-house' areas. As a result, multiple circulation studies were undertaken to achieve the optimal experience within the public realm for users, residents and vehicles required for solid waste management and residential move-ins.

Initially, the first iteration of the site plan proposed four separate buildings that included an office use at the northeast corner of the block. After a pre-consultation meeting with the City, it was suggested to provide parkland dedication equating to 10% of the overall site area at the northeast corner of the site instead. The revised site plan that included the park was presented at a subsequent meeting with City staff where a further suggestion to rotate the north-east building and connect it to the podium of the building at the south to provide a wing or building façade to frame the park.

Following these changes, the new proposed site plan maintained both a contiguous east-west and north-south landscaped open space connection across the site by implementing a pedestrian link under the newly connected buildings to provide access to the park from the entire site. This resulted in a publicly accessible open space representing 30% of the area of the total site - surpassing the 25% minimum required in the initial zoning bylaw. The park and its property boundary has been carefully integrated into the design of the overall site. The adjacent buildings are setback from the park boundary to allow for pedestrian circulation at grade and windows as unprotected openings on the building façades.

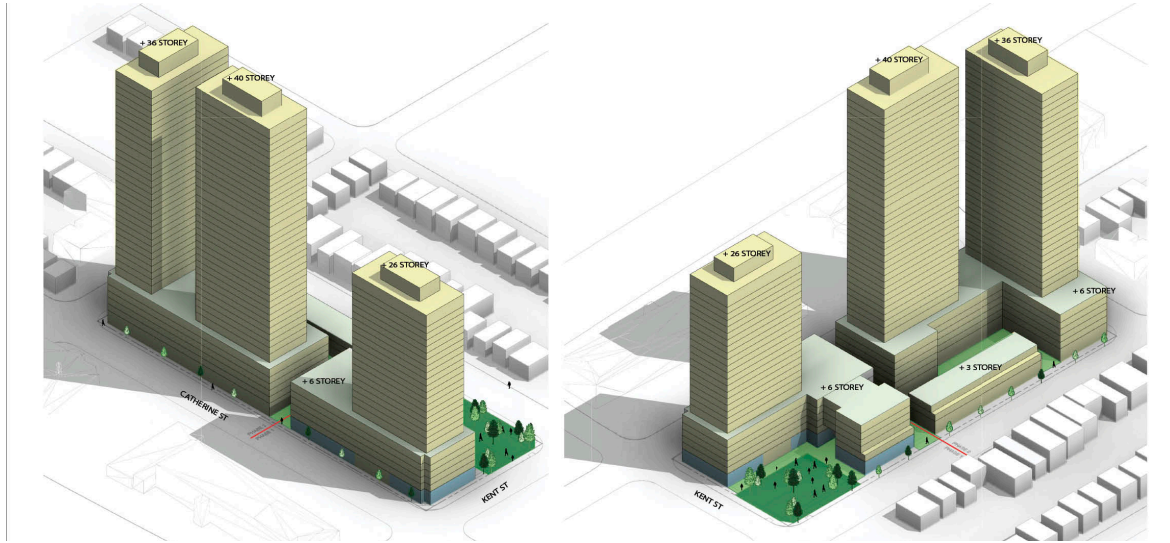
The required setbacks along each street are compliant per the zoning bylaw. A 1.5 m easement has been provided on both Lyon and Kent Streets. As per the Ottawa Urban Design Guidelines for High-rise Buildings, the proposal complies with the maximum tower floor plate size of 750 sm and surpasses the recommended tower separation distances.



5.0 Massing Development |

5.1 Overall Massing and Height

Early versions of our massing consisted of Building A Tower 1 as a 26-storey tower, Building B Tower 2 as a 40-storey tower, and Building B Tower 3 as a 36-storey tower with podiums that were more or less uniform at 6 storeys.



After a series of internal design charrettes and consultations with the Urban Design Review Panel and City staff, the councilor and the community, the massing and tower heights were revised to accommodate transition, scale, daylighting and the public realm. As a result, Building A Tower 1 has been increased from 26 to 32 storeys, Building B Tower 2 has been reduced from 40 to 36 storeys, and Building B Tower 3 has been reduced from 36 to 34 storeys. The podiums were also reshaped to include some stepping that range in height from 4 to 6 storeys along Catherine, Lyon and Arlington Street.

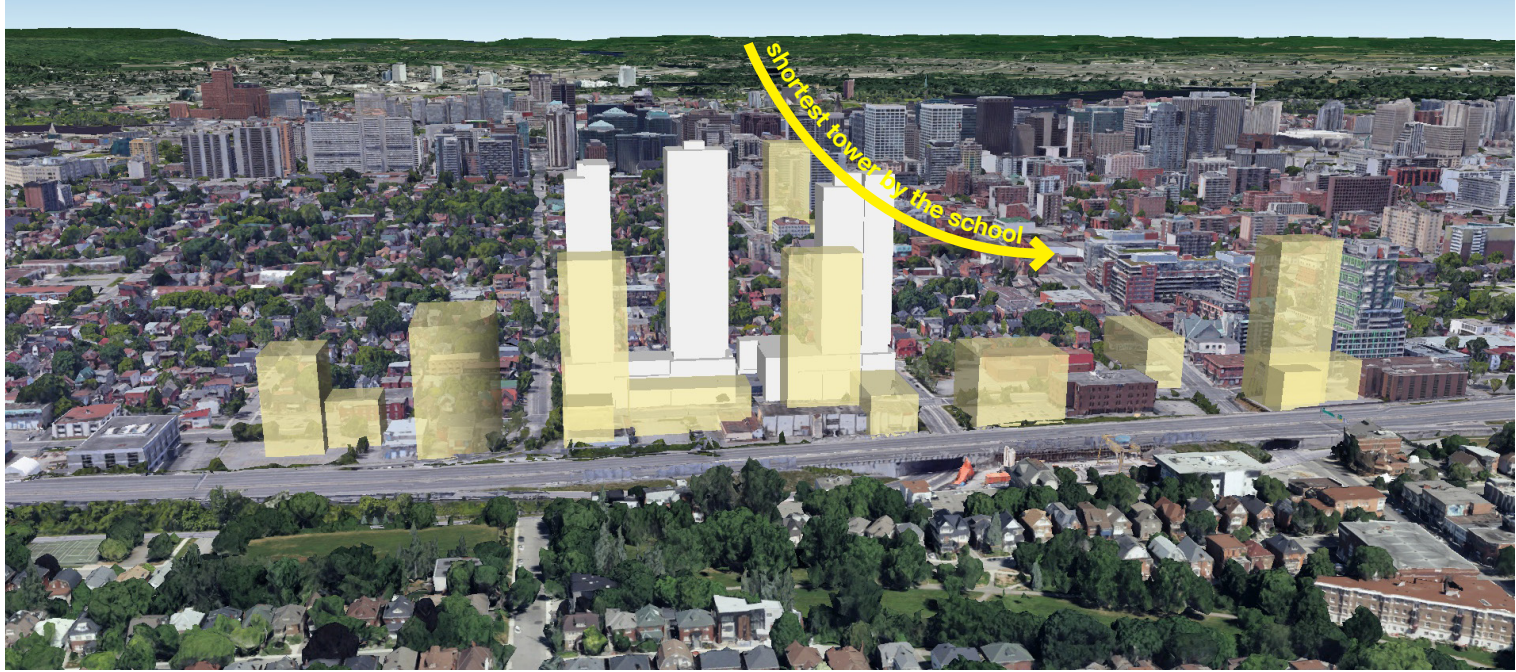
The overall height of the podium was also reduced as the design continued to develop. The bicycle storage rooms that were initially located between the ground and second floors was relocated to be below grade, allowing the overall height of the podium to be reduced by approximately 2 m. This revision also provides a more human-scale retail experience at a height of 4.5 m (as opposed to 6 m) to tie in with the finer-grained retail concept.

Option 1 shown above was preferred for the reasons below:

- It is a more balanced approach to tower heights, as the towers no longer overpower the podium.
- The shorter tower on Kent is maintained to provide a better visual transition to the school and park.
- Based on tower positioning, setbacks and other constraints, the two towers flanking the middle tower share a similar footprint and cladding approach which allows the center tower to become a differentiated 'feature' tower, that is ultimately the tallest of the three.

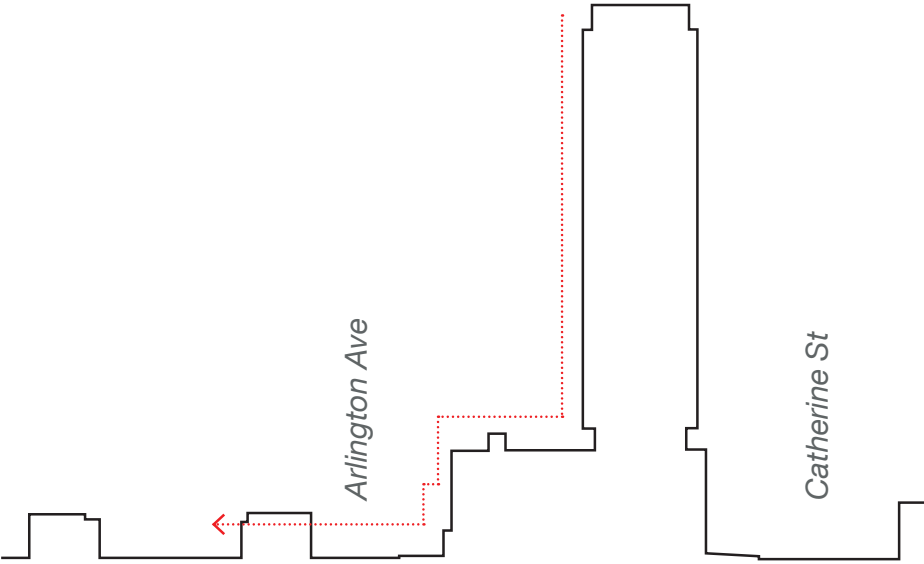


Proposed Development in the Existing Context



Proposed Development in the Planned Context

Building A - Tower 1



Diagrams Showing the Built Transition towards Arlington Ave

The diagrams shown in the previous pages, as well as the rendering below show how the podium was adjusted to provide a better transition to the residential areas north of the site along Arlington Avenue and beyond. A combination of podium stepping, tower setbacks, and built-in buffers in the form of outdoor spaces, building separation and smaller building blocks are used to stitch the block into the fabric of the adjacent neighbourhoods more respectfully. The overall building height datum interacting with the length of Arlington Avenue is much lower than the full 6-storey height proposed for Catherine Street.

6.0 Design |

The Design of this project is rooted in variation and differentiation in the micro and macro scale. This is evident in the podium articulation, the tower grouping and expression, the use of materials and in the programmatic distribution.

The design of the project can be broken down into three distinct categories: the ground plane and public realm; the podiums; and the towers.

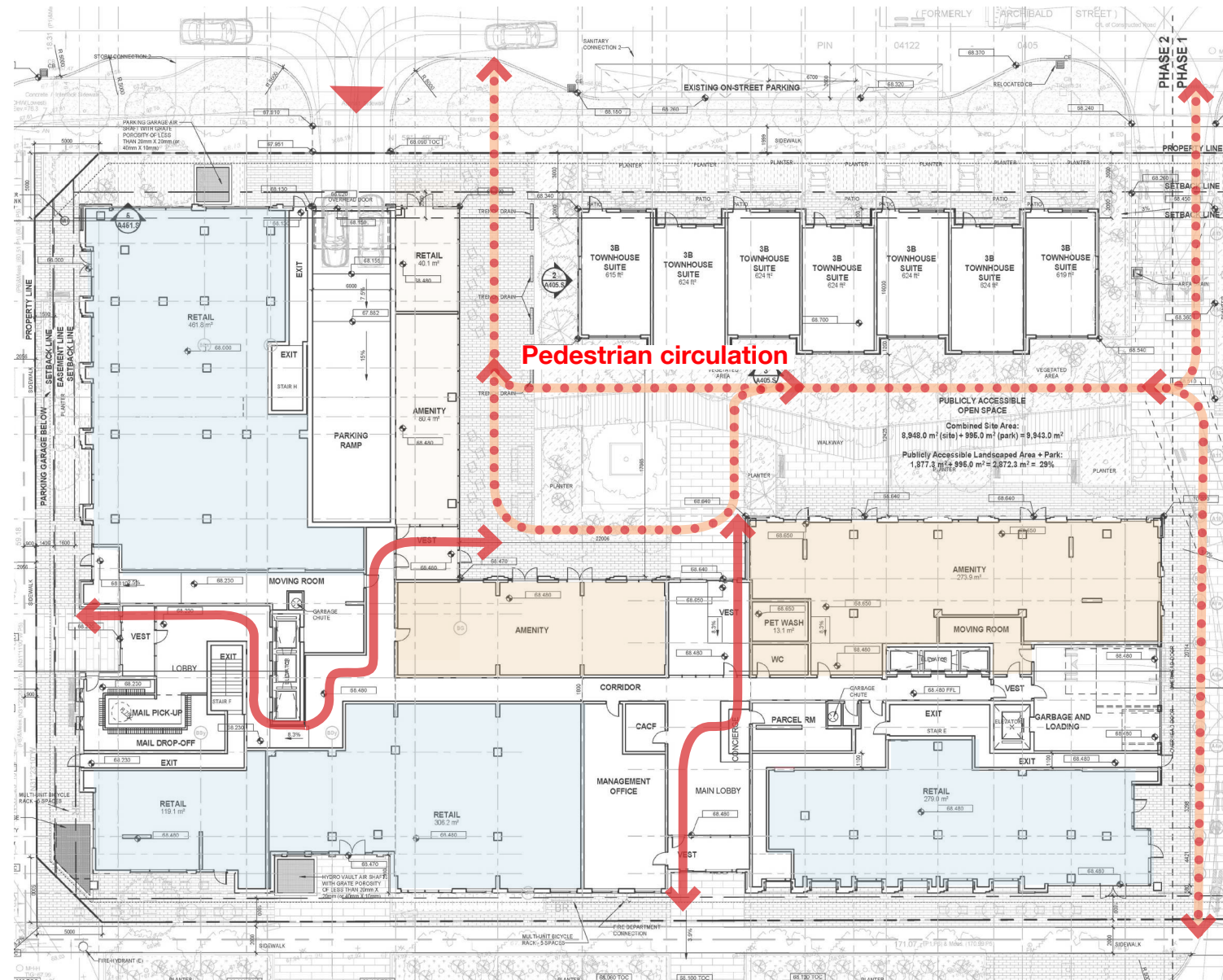
6.1 Ground Plane and Public Realm

A unique component of the proposal is how porous or accessible the development is. A chain of different outdoor public spaces weave through the site, guiding pedestrians through the use of paving, greenery, public art, and programming.

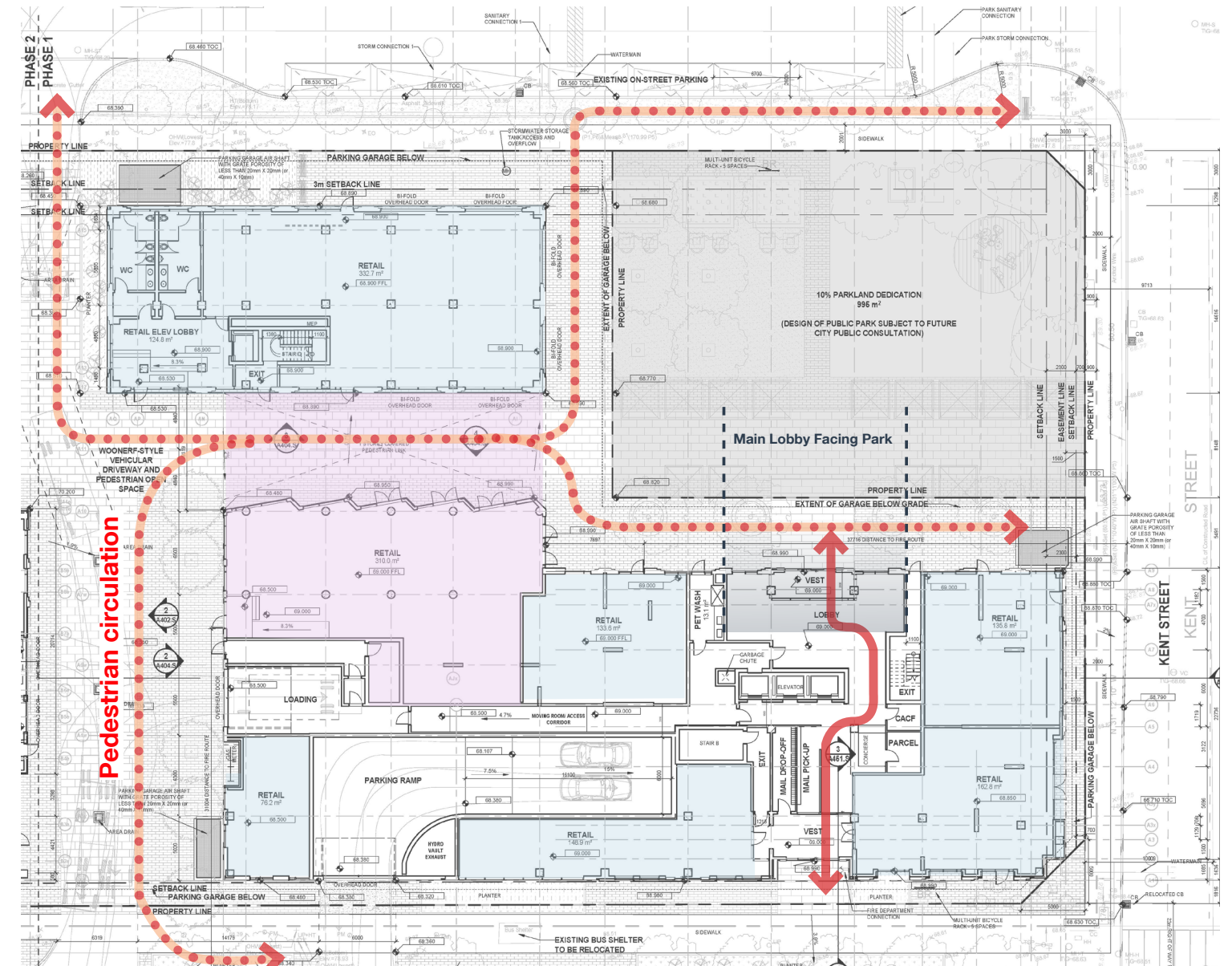


Rendering Looking Southeast Showing the Built-form Transition Towards Arlington Avenue and Lyon St

The ground floor of the development is designed with pedestrian accessibility and privacy in mind. The north-south publicly accessible lane (woonerf) will provide a sense of openness and security with an ease of access for pedestrians, so that they do not have to walk around the entire site to reach their destination. The east-west pedestrian link connects the west side of the site (which is more residential in nature) to the park at the east side of the site by way of a one-storey exterior passage flanking the planned market and art space. The east side of the site acts as the public side with connections to retail, open spaces and the market building framing the park.



Phase 2 Ground Floor Plan - Note: * This diagram illustrating the Ground Floor area is an earlier

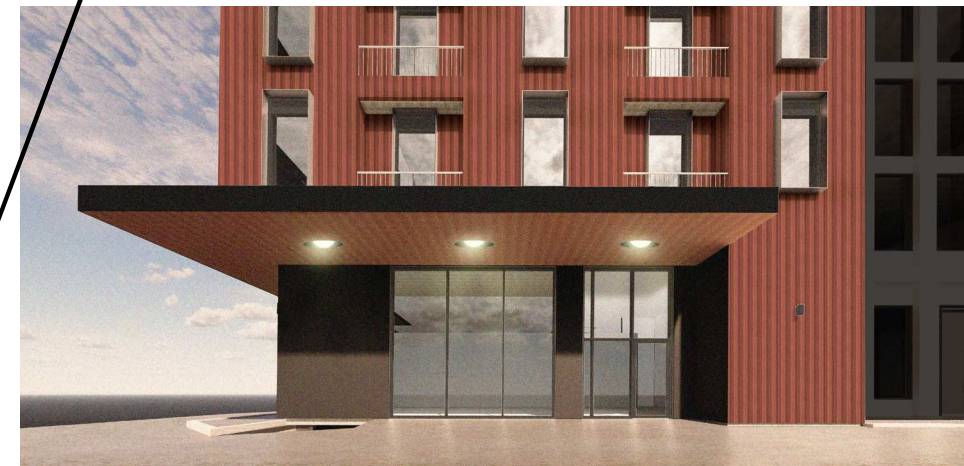


To provide an approachable, and personalized pedestrian street experience, different architectural strategies are introduced along the façade on Catherine Street, with large expanses of glazed curtain wall windows minimized to provide the independent retailers with a unique storefront. Main residential and retail entrances are highlighted with canopies to define their entrances, enhance wayfinding and ensure a safe, friendly and weather-protected pedestrian zone.

Main Residential Entrance Study



Retail Entrance Study



Retail Entrance Study



Retail Entrance Study



Section Showing the Art Space and Exterior Passage

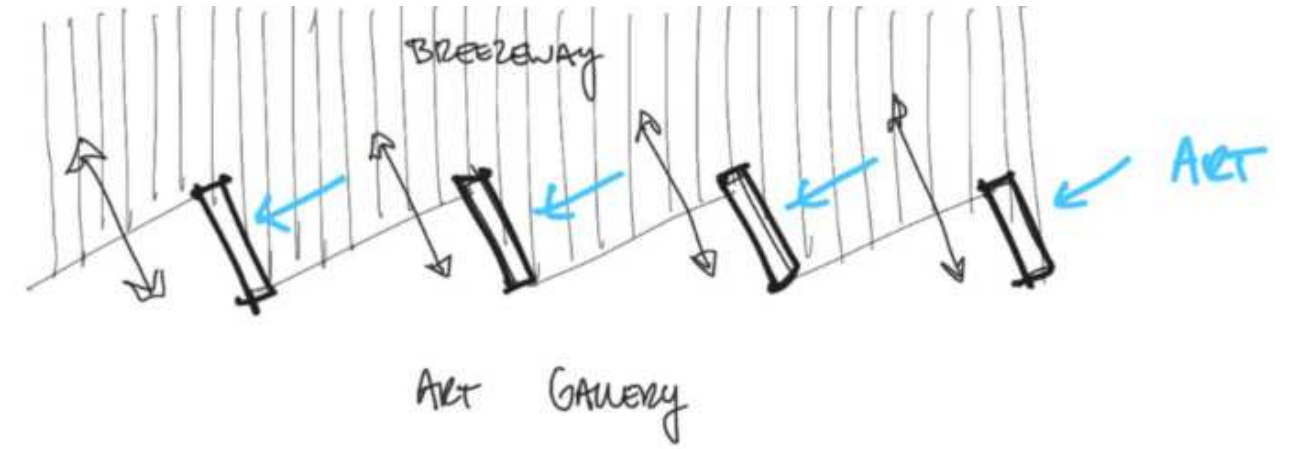


Diagram Showing the Sawtooth Concept

One of the main programmatic elements that has been embedded into the project from the beginning was this concept of an industrial-style market space that abuts Arlington Avenue and the park. Architecturally, this market component plays on Ottawa's industrial heritage, hinting to the past in its design details. This market functions as a base for the building above and has large bi-fold doors that open up, allowing for the market to spill out into the park. The aim for this market is to become a destination for the neighborhood and beyond.

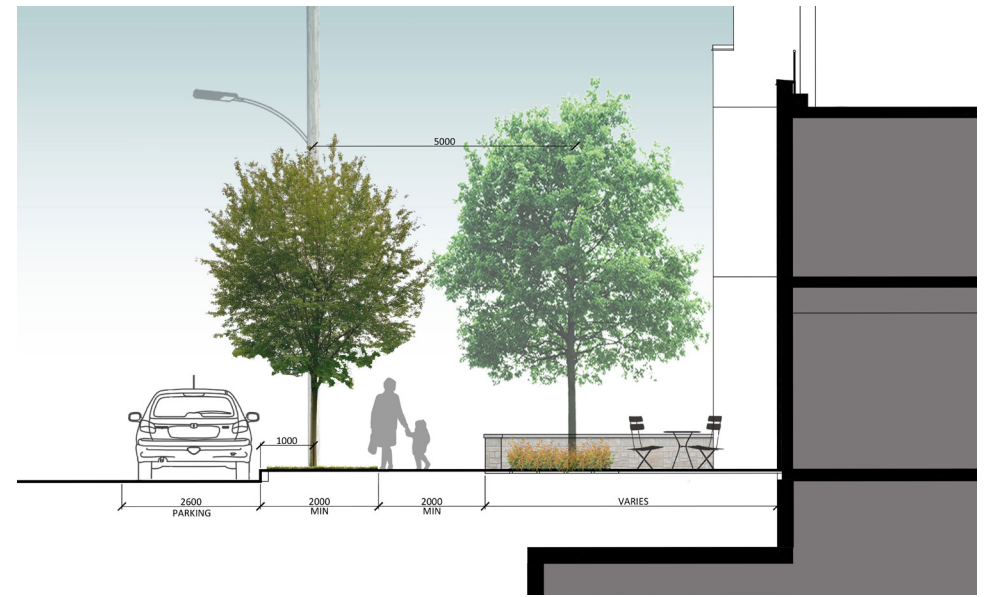
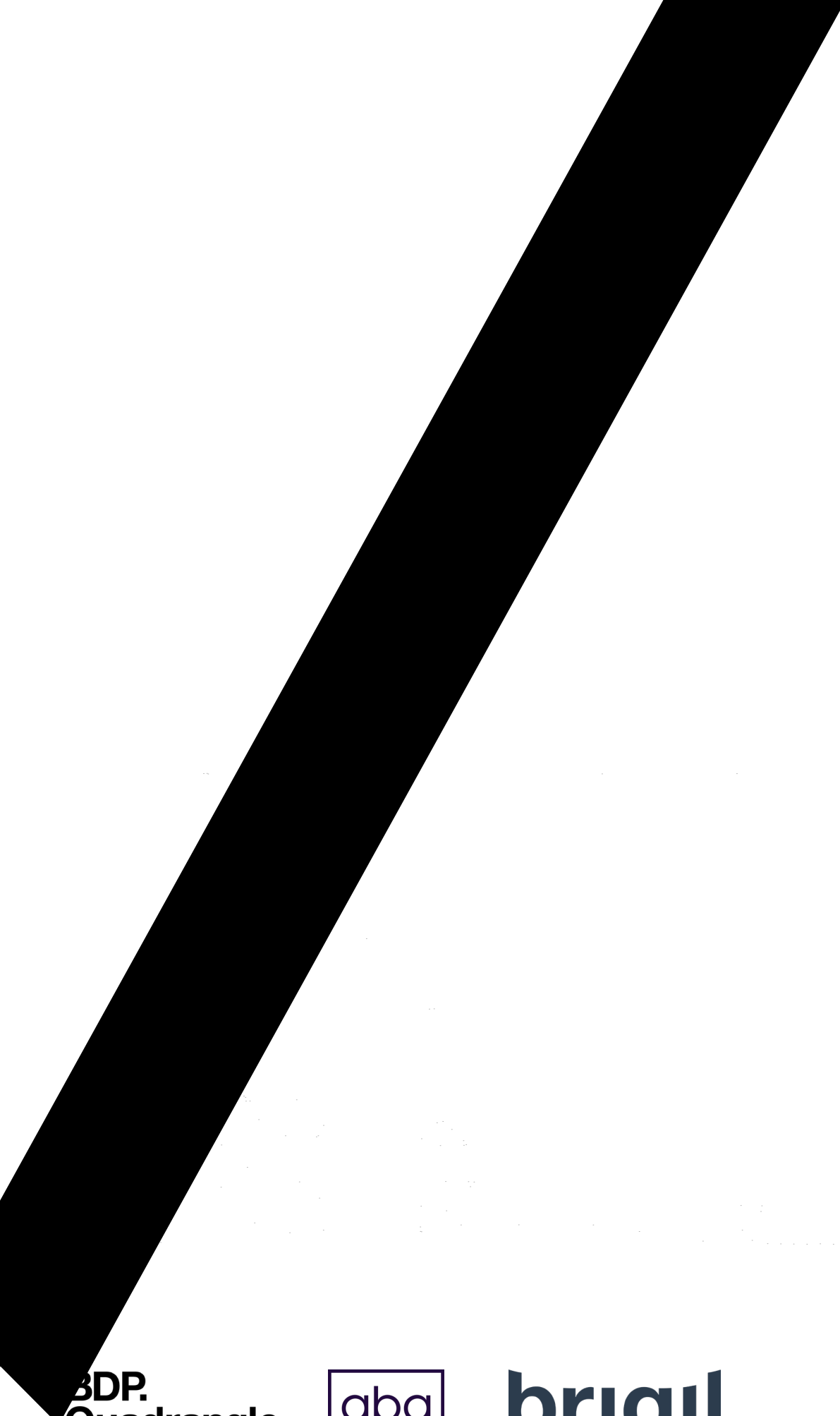
Another unique element that has been planned, is a designated space for art. The art space has exterior access from the east lane and on the west side next to the park with a feature wall along the exterior pedestrian passage. This feature wall within the exterior passage is envisioned as a sawtooth wall with solid fins and glazed windows to allow for a seamless transition between the interior space and the exterior passage that can house art exhibitions, murals, and feature lighting.



Vignette showing the Market Concept



Vignette showing the Art Space and Pedestrian Underpass



6.3 Public Realm Design Guidelines



CONNECTIVITY

Provide clear connections between places for sustainable transportation modes - including walking, cycling and transit.

SAFE

Ensure a safe, protected pedestrian zone that defines entrances, gateways and transitions of space. Reduced speed limits for vehicular traffic.

ACCESSIBLE AND INCLUSIVE

Provide defined and accessible paths for all residents and visitors that are both functional and attractive spaces.



IDENTITY OF PLACE

Create distinctive and inviting places that strengthen a local identity and create a sense of community.

FLEXIBLE AND ADAPTABLE

Flexibility in design to allow community growth and evolution of space. The public realm will provide meaningful and pedestrian friendly spaces that have versatility in use and function.

ENVIRONMENT

Native and drought tolerant plant material will be used to reference adjacent natural lands and limit the need for irrigation. Design will provide infrastructure for healthy, mature trees.



MULTI-SEASON

Design spaces for four season use and programming to encourage healthy living and improve quality of life.

PLAY AND ACTIVATE

Play can be introduced to city streets and public spaces with elements that invite all generations to explore and discover plan in an urban environment. From small temporary interventions to permanent displays.



Rendering Looking Southwest, Showing the Public Park

6.3 Podium

The podiums in this proposal took inspiration from the architectural history of Bank, Sussex and Queen Streets in Ottawa. The rhythm and scale was studied which inspired the articulation of the podiums. The remnants of these historical precedents are still found in contemporary developments in Ottawa.

Ottawa's industrial heritage



Ottawa now

A strong and noticeable verticality with subtle heights variations.



Maintaining a streetwall condition along Cathrine Street was desired, but in order to keep visual interest and walkability, the massing was fragmented using a toolkit of different architectural motifs and materials. This fragmentation was derived by overlaying different layers of information that correspond to at-grade programming, entrances, tower positioning and an established grid.

In terms of materiality, the podium largely consists of masonry cladding. Similar red and brown tones were clustered together under the towers to create a base that grounds the towers above. The residual space is treated as infill and will be clad in a lighter toned brick material.



View Looking Northwest Along Cathrine Street

Podium Articulation Diagrams

Podium Toolkit

Colour/Material

Treatment

Colour/Material

Treatment

Colour/Material

Treatment

Colour/Material

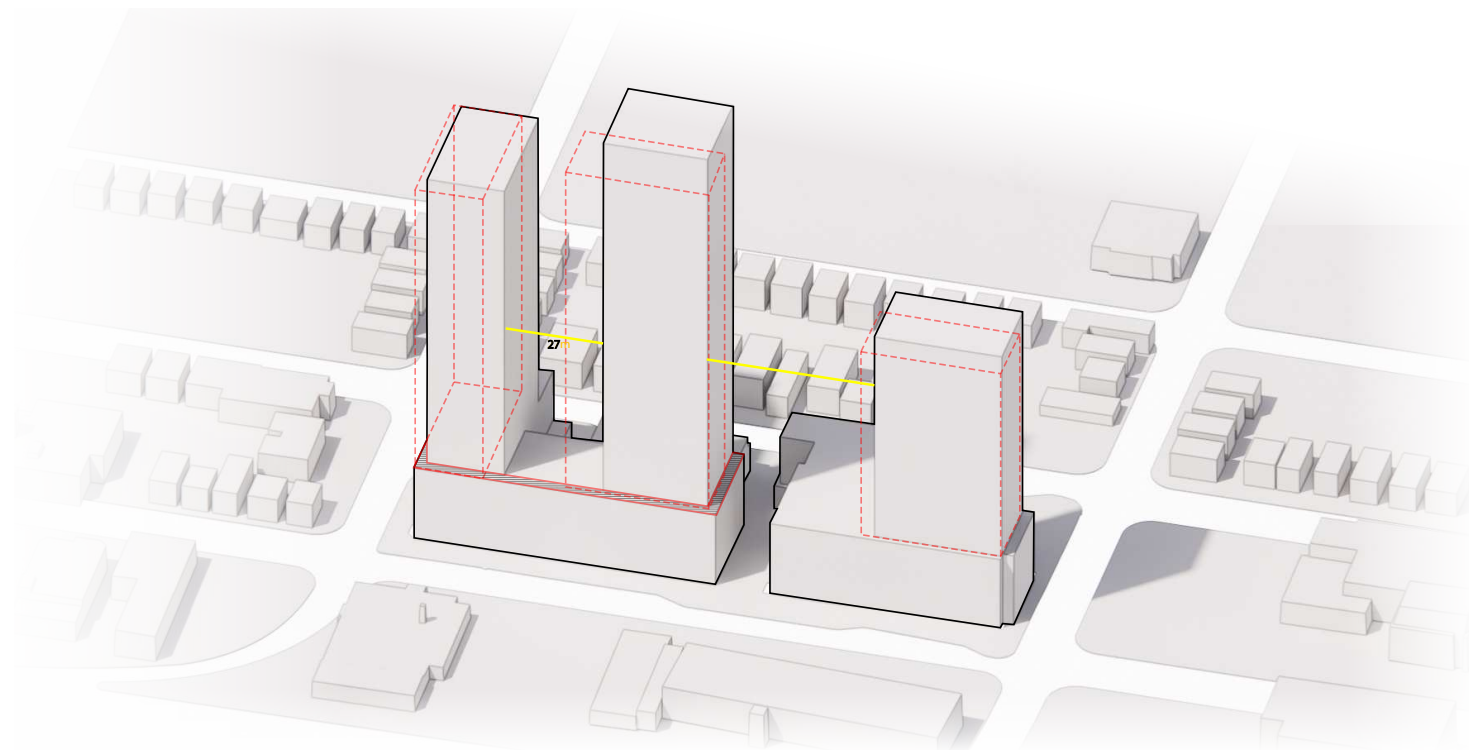
Treatment



South elevation along Catherine Street

The middle tower also houses a unique program on its roof - a 'skylounge' that can be lit differently and expressed architecturally as a beacon.

The middle tower has a unique and elegant architectural expression, which is bolstered by being the tallest tower as well as being book-ended by towers of a similar expression.



To reinforce the concept of the central tower as a landmark element, the the two side towers were designed to be similar to each other. The two halves of the split form were treated differently to create a visual illusion of an even more slender form. A light-coloured vertical expression was maintained on the outer sides of the side towers to compliment the middle tower. Originally, a two-storey jogged window pattern was considered. Later, a four-storey jogged pattern was explored while finally, an elongated linear approach was applied as a means to simplify the design and relate more to the middle tower to provide a more elegant and cohesive design approach overall.





Updated View Looking Northeast Along Catherine Street

7.0 Accessibility & Sustainability |

The proposed development has incorporated sustainable measures such as barrier free accessibility, site connections, bicycle parking and bird friendly guidelines into the design.

The following features are to be considered for this project:

Accessibility: 15% of the residential units will be provided as accessible, barrier free-style units. These units will be designed to include zero step entrances, larger washrooms and wider doorways with clear passages to washrooms and bedrooms.

Site Connections: Pedestrian pathways have been placed into the publicly accessible open space design along all site frontages with links to the public realm and adjacent roadways. The sidewalks will be continuous and wide, with access to barrier-free podium entrances along Catherine Street, Lyon Street North and Kent Street and will be in accordance with the Accessibility for Ontarians with Disabilities Act & City of Ottawa Standards.

Bicycle Storage: Bicycle parking for residents at a 1:1 ratio will be provided in weather-protected areas below grade. The bicycle storage rooms will be accessed by the ramps or building cores.

Bird-Safe Design Guidelines: Clear dotted glass panes will be used at a minimum of 90% for the first 16 m of glass located above grade in accordance with the Bird-Safe Guidelines for Ottawa. The glazing transparency and reflectivity will be minimized. Along rooftop terraces a 4 m glazing treatment will be included from the surface of the roof or the height of adjacent mature vegetation.

Cladding: The proposed towers will have reduced window-to-wall ratio and fewer balconies to reduce thermal bridging and provide more fully insulated walls.

Vehicle Strategy: The development minimizes the amount of vehicles on the site by limiting parking, while car share vehicles and parking spaces will also be provided.

Energy Modelling: An energy modelling consultant has been retained by the client to provide energy modelling consulting services to advise on achieving Ontario Building Code requirements and the CMHC energy performance standards.

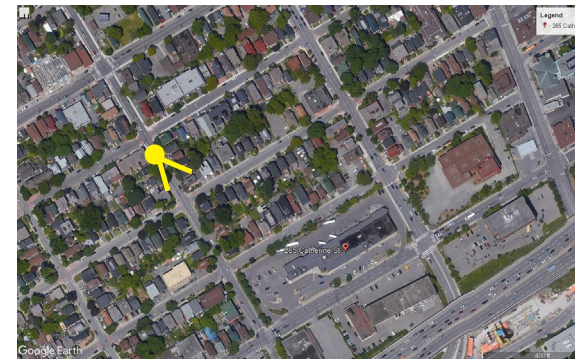
Stormwater Management: A stormwater storage tank is provided in the parking garage to capture, store and slowly release stormwater collected from area drains around the site overtop

NEIGHBOURHOOD VIEW ANALYSIS

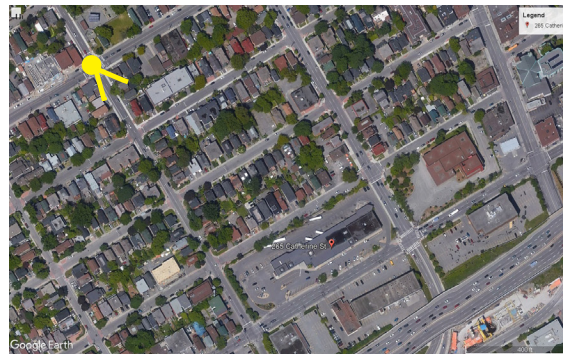
View Looking South Along Lyon 1



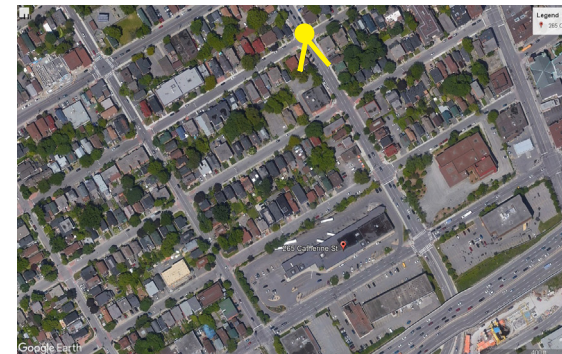
View Looking South Along Lyon 2



View Looking South Along Lyon 3



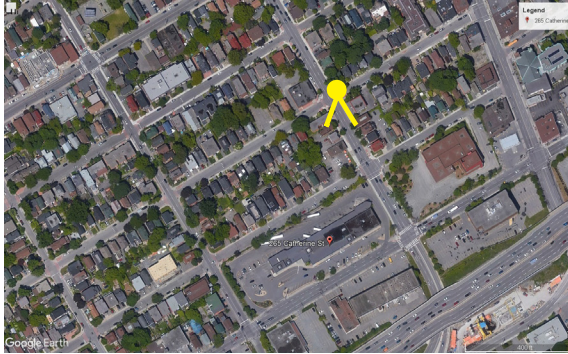
View Looking South Along Kent 1



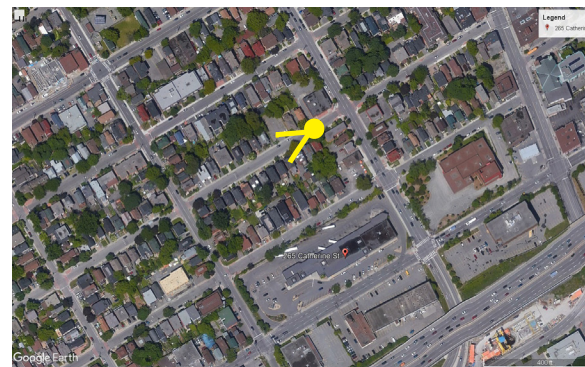
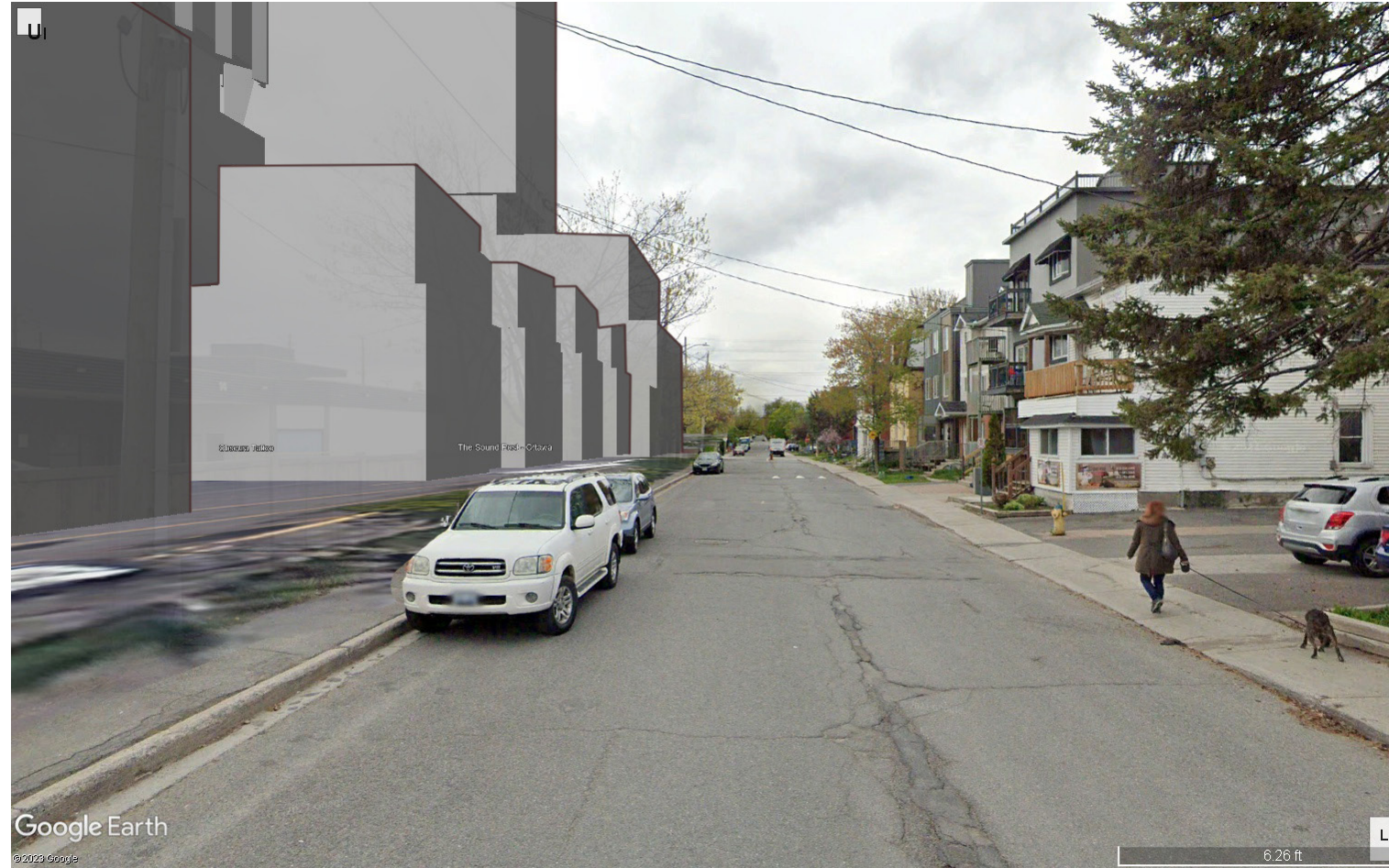
View Looking South Along Kent 2



View Looking East Along Arlington 1



View Looking West Along Arlington 2



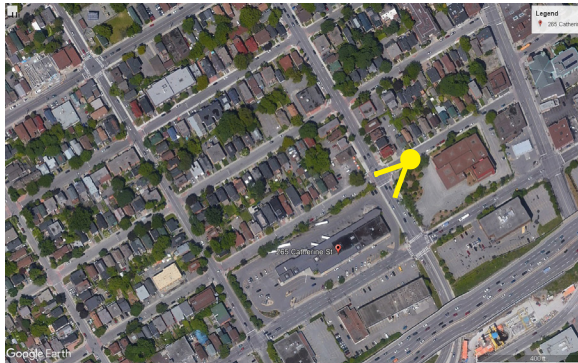
View Looking West Along the Highway



View Looking East from the Glashan Elementary School Yard



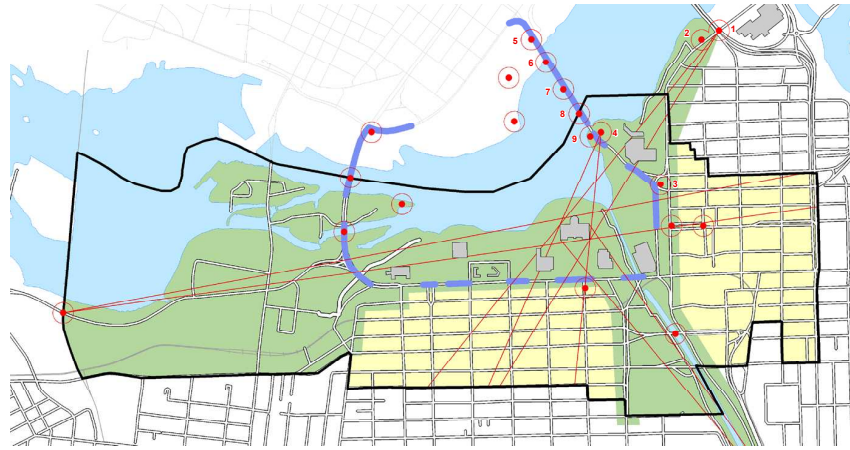
View From the Entrance of the Museum of Nature



PARLIAMENTARY VIEW ANALYSIS

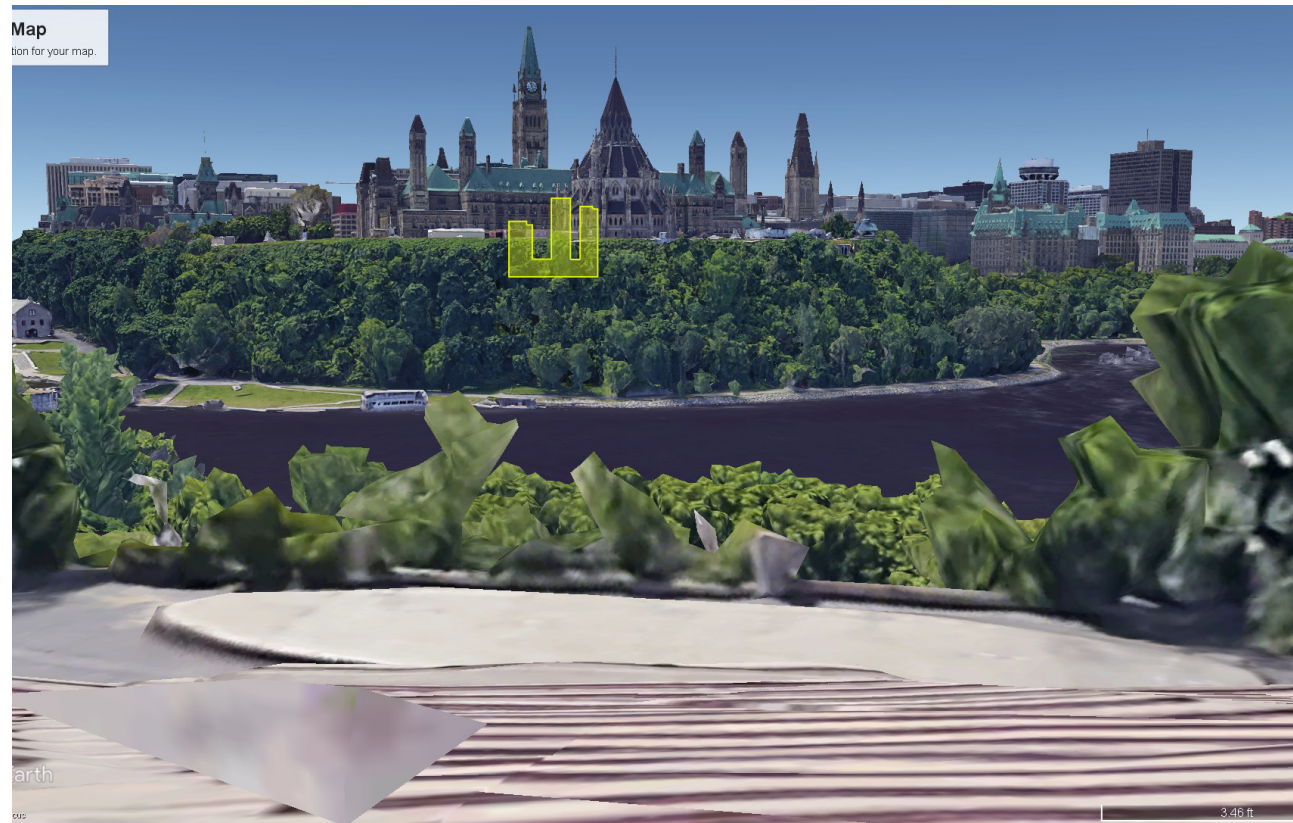
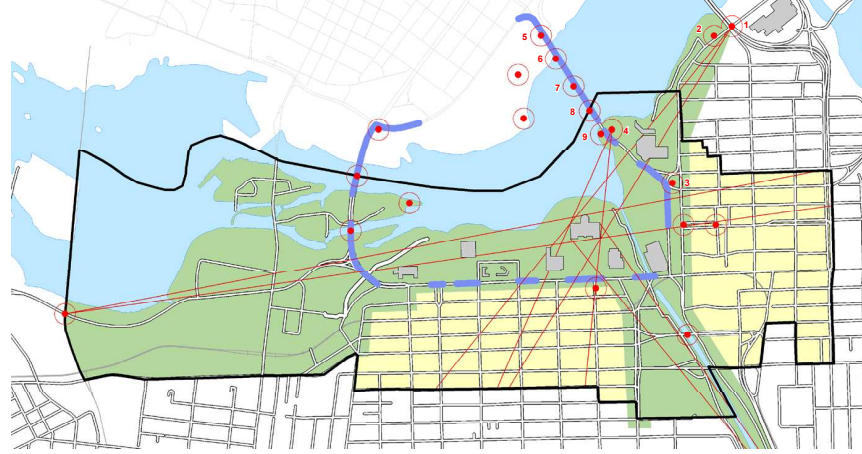
View Analysis

Viewshed 1



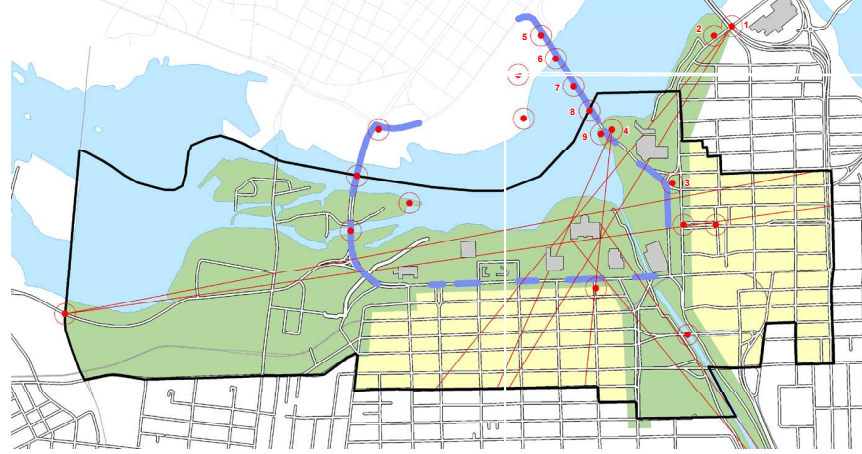
View Analysis

Viewshed 4



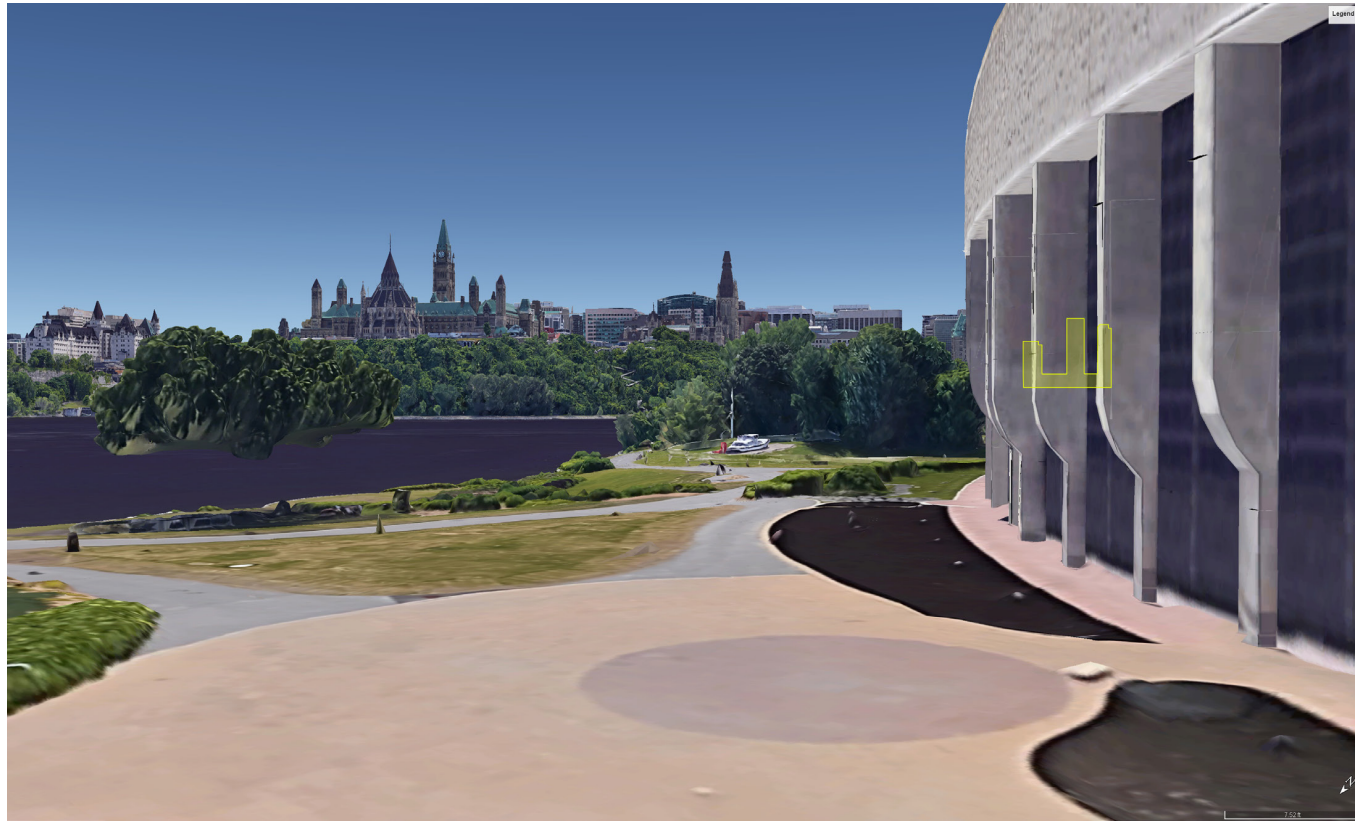
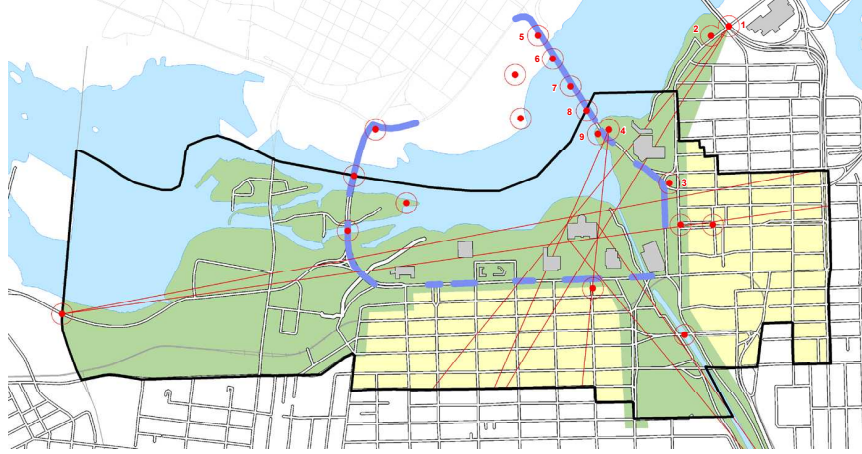
View Analysis

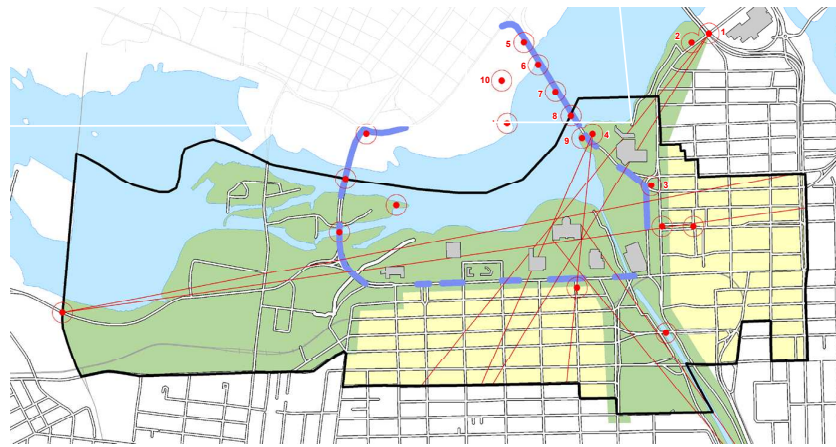
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View Analysis

Viewshed 10





SHADOW STUDY EXCERPT

8.0 Shadow Impacts |

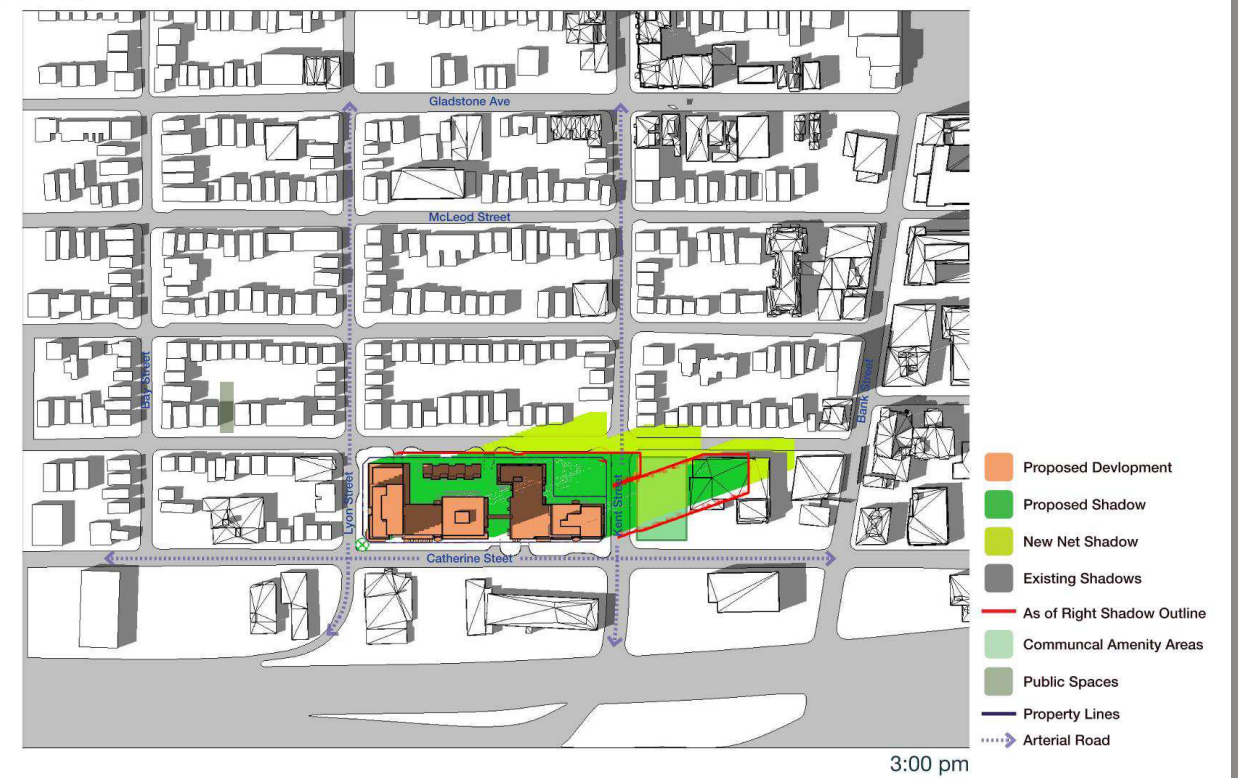
The towers are positioned to be along the southern edge of the site to minimize the shadow impact on the blocks to the north and to allow for increased access to light.

In September, the shadows cast by the towers stretch across two blocks to the north starting around 10:00 am, but are fast-moving and no longer impact these blocks after 3:00 pm. Furthermore, the shadowing of the towers begins to approach the school yard at 1:00 pm with significant shadowing that occurs at 2:00 pm, nearing the end of the school day. Regardless of the height, the as-of-right shadows stretch across the complete width of the schoolyard by 2:00 pm as well.

Shadow Study - September 21st



Shadow Study - September 21st



In June, the shadow impacts are minimal, especially between 11:00 am and 4:00 pm. The shadows also begin to approach the school yard at 1:00 pm.

In all instances, the decision to not build out to the full height of the as-of-right zoning along Arlington Avenue, minimizes shadowing on the street, to the neighborhood to the north, and within the proposed development and dedicated park area.

Shadow Study - June 21st



Shadow Study - June 21st

