



URBAN DESIGN BRIEF

4220 King Street East & 25 Sportsworld Crossing Road

City of Kitchener
Official Plan Amendment
Zoning By-law Amendment

January, 2022



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1. BACKGROUND AND PURPOSE

1.1 Proposal

GSP Group Inc. has been retained by The Tricar Group (the “Applicant”) to prepare an Urban Design Brief in support of redevelopment of the property at 4220 King Street East and 25 Sportsworld Crossing Road (the “Site”). The Site is proposed to develop three residential towers with at-grade amenity spaces and commercial units to activate the frontages along Sportsworld Crossing Road, King Street East, and Deer Ridge Drive.

1.2 Purpose

Official Plan Amendment (“OPA”) and Zoning By-law Amendment (“ZBA”) applications are required in order to facilitate the proposed development on the Site. An Urban Design Brief was identified as a requirement of these applications as per the record of pre-submission consultation dated October 14, 2021. The Kitchener Official Plan defines an Urban Design Brief as an “urban design document that may be required of an owner/applicant to demonstrate how a development application implements the City’s Urban Design Manual”, which “does not require Council approval”.

Based on the matters for consideration and evaluation identified in the pre-submission consultation record, this Urban Design Brief contains:

- A description of the existing physical conditions on the Site (Section 2);
- A description and characterization of the Site’s surrounding area and neighbourhood context (Section 3);
- A description of the design components of the Proposed Development (Section 4);

- An assessment of the proposed design concept in respect to relevant design policies and guidelines (Section 5); and
- A summary of the report findings (Section 6).

1.3 Supporting Studies and Materials

This Urban Design Brief has considered the following plans and reports prepared in support of the subject applications:

- Topographic Sketch of the Existing Site prepared by Stantec ;
- Site Plan prepared by Kaisan Architects;
- Floor Plans prepared by Kaisan Architects;
- Elevations prepared by Kaisan Architects;
- Renderings prepared by Kaisan Architects; and
- Shadow Impact Analysis drawings prepared by Kaisan Architects

2. EXISTING SITE CONDITIONS AND CONTEXT

2.1 Location and Description

The Site is located on the east side of King Street East, lying between Sportsworld Crossing Road and Deer Ridge Drive. The Site has a total area of approximately 2.04 hectares (5.1 acres) in area with 125 metres of frontage onto Sportsworld Crossing Road, 171 metres of frontage onto King Street East, and 122 metres of frontage onto Deer Ridge Drive.

2.2 Existing Conditions

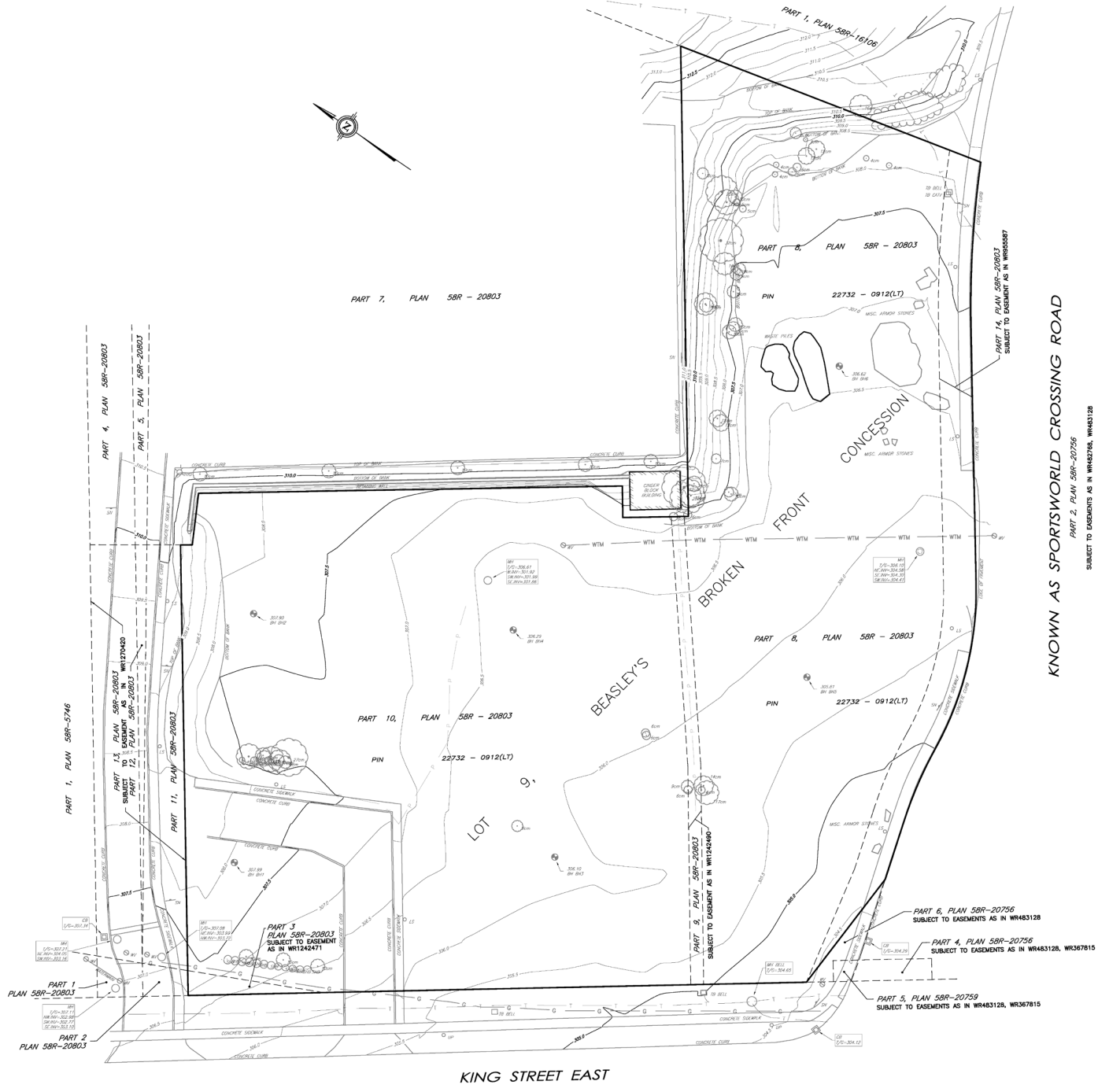
The north portion of the property (municipally known as 4220 King Street East) currently contains an existing commercial building with two units, currently occupied by a furniture company (Home Style Furniture) and restaurant (Mandarin) with two entry/exit access points from Deer Ridge Drive. 25 Sportsworld Crossing Road is a vacant land and there is an asphalt driveway on the Site, providing direct access from King Street East to the property to the north of the Site. The existing commercial building at 4220 King Street East is proposed to be removed to facilitate the proposed development.

2.3 Existing Vegetation and Topography

The north portion of the property (4220 King Street East) has some planting to the perimeter of the Site, recognizing the extent of the building footprints and parking area. However, 25 Sportsworld Crossing Road is a vacant land with grassed areas and perimeter landscape trees and minor grade changes along the northern property line.



Study Area



Topographic Sketch of the Existing Site, prepared by Stantec

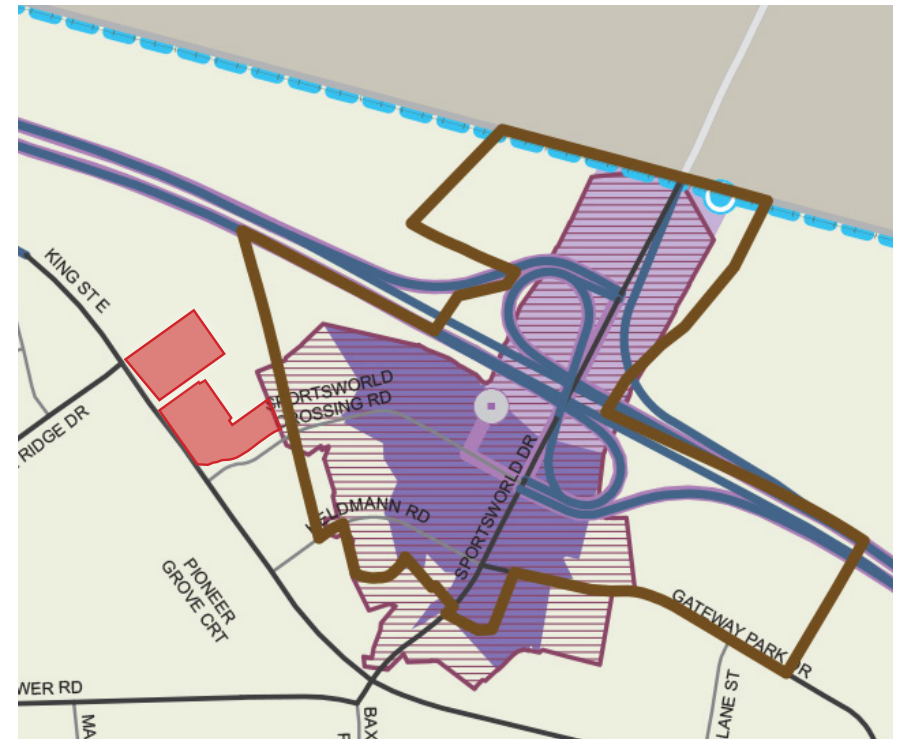
3. NEIGHBOURHOOD CONTEXT AND CHARACTER ANALYSIS

3.1 Surrounding Context

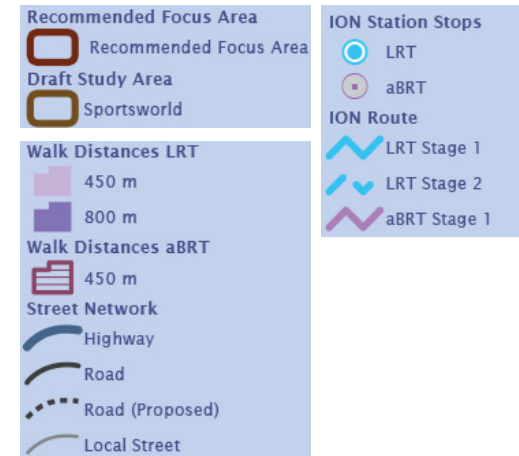
The Site is part of the Sportsworld Draft Station Study Area, included in the Planning Around Rapid Transit Stations (PARTS) study by the City of Kitchener. This area “encompasses approximately 40 hectares of land south of the Sportsworld ION Station Stop and generally extends to Gateway Park Drive and Heldmann Road and is intersected by Highway 8. There are currently no people living within the draft station area and, using the assumptions employed by the Kitchener Growth Management Strategy, it is estimated that there are 512 jobs located within the draft station study area for a calculation of an average of 13 jobs per hectare.” (p.103)

The PARTS Sportsworld Study Area identifies the following existing conditions in the area: 37% of land within the Sportsworld Draft Station Study Area is designated Business Park and 63% of land designated Planned Commercial Campus in the current Official Plan and is generally in consistent with the existing zoning; buildings cover approximately 5% of the land within the focus area which are mainly dominated by low rise, large format commercial and office uses with large areas of surface parking and underutilized retail uses with limited sidewalks that adds little to a quality streetscape; there are no parkland and a City owned community facility (Sportsworld Arena) currently exists within the station focus area; 13% of land within the Sportsworld draft station study area is designated Natural Heritage System; and an increase in transit ridership is anticipated, hence the Sportsworld draft station study area will be served by existing and future transit services.

The Site is generally surrounded by commercial uses to the east, west, north, and south with lower density residential neighbourhood beyond Deer Ridge Centre. The Sportsworld Grand River Transit (“GRT”) Terminal is located approximately 400 metres to the north of the Site, adjacent to the Sportsworld Crossing Plaza. This GRT Terminal features



PARTS Plan: Sportsworld Station Study Area



access to two iXpress routes, providing access to north Waterloo and Downtown Cambridge. The Sportsworld Station also includes access to GO Transit and Greyhound services. The Site is directly north of the proposed 'Sportsworld' Light Rail Transit (LRT) stop on King Street East, to be developed as part of the Stage 2 ION project by the Region of Waterloo.

King Street East is designated as a regional road in the Official Plan and features two travel lanes in each direction. King Street East is a major connective roadway in the City, extending across the Region as it transitions to Weber Street East towards the downtown Kitchener and as Coronation Boulevard into the City of Cambridge. King Street East provides eastbound and westbound access to Highway 401 south of the Site. Sportsworld Crossing Road begins at the intersection of King Street East, transitioning into Sportsworld Drive. Sportsworld Drive provides direct northbound and southbound access to Highway 8.

The proposed building fits into the existing and emerging pattern of high-rise development in the vicinity of the subject site. A planning application was submitted for the property at 4396 King Street East and 25 Sportsworld Drive. The proposal is for a high-density mixed use residential development featuring 30-storey and 18-storey towers at the intersection of King Street East and Sportsworld Drive. The new developments will be well supported by existing infrastructures and community and public services, and active transportation options.

The location of the Site and surrounding land uses are illustrated in the following page.

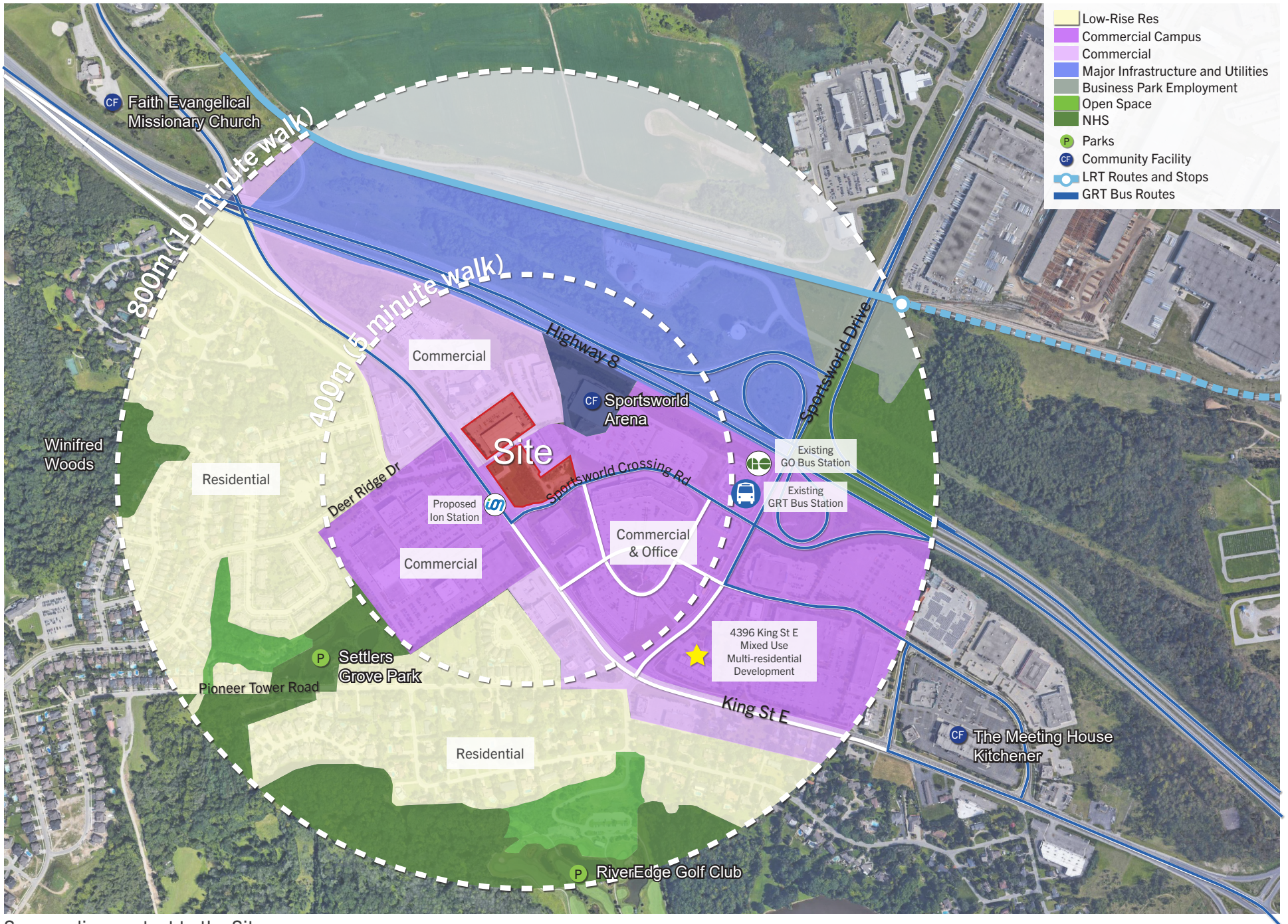
3.2 Immediate Context

EAST: Waste Management Of Canada Corporation (4210 King St E, former Deloitte building) and Tri-City Eye Care (4278 King St E, former Christian Horizons building) sit on the north side of the Site. Waster Management building is accessible from King Street East via Deer Ridge Drive and Tri-City Eye Care building is directly accessible from King Street East. The area beyond to the north is the Kitchener Sportsworld Arena with a large parking lot, accessible from Sportsworld Crossing Road.

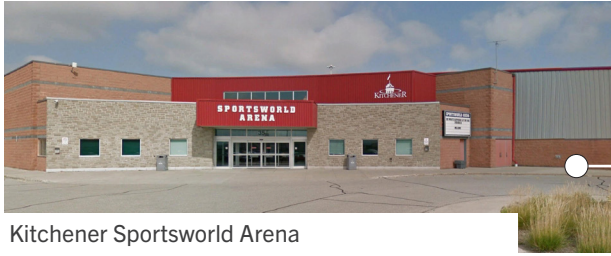
SOUTH: Directly abutting the Site to the east is Sportsworld Crossing Road. The existing cross section of Sportsworld Crossing Road at this location has two lanes with sidewalks on either side. Across Sportsworld Crossing Road to the east is the Sportsworld Crossing Plaza with retail stores, restaurants, commercial and office spaces.

WEST: The Site is adjacent to a larger existing commercial node, located on the south side of King Street East, with a wide variety of commercial uses extended to the east and west along King Street East, including but not limited to large-format retail uses and furniture stores, restaurants and drive-thru restaurants and office uses. Beyond Deer Ridge Centre to the north-west and south are residential neighbourhoods, primarily comprised of single detached houses. These houses do not have frontage along King Street East and are accessed by local streets.

NORTH: Adjacent the Site to the west is a Mazda Car dealership with car repair services to the side. The main entry and exit points to the Site is from King Street E and Deer Ridge Drive, with parking along the perimeter of the property. The west side of the showroom is mainly used for storing used cars.



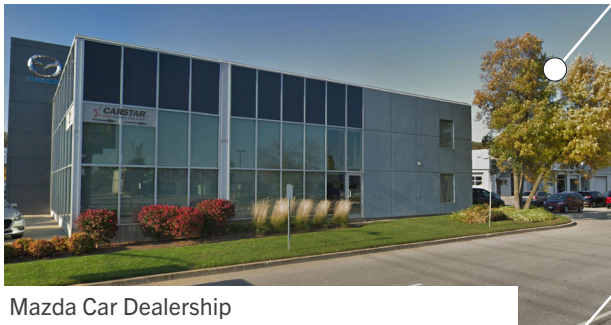
Surrounding context to the Site



Kitchener Sportsworld Arena



Former Deloitte building is now Waste Management of Canada Corporation



Mazda Car Dealership



TD Bank

Immediate Site Context



Former Christian Horizons is now Tri-City Eye Care

4396 King St E
Mixed Use Multi-residential Development



Tim Hortons



Lazboy Furniture Retail Store

4. DESIGN POLICY AND GUIDELINE REFERENCES

4.1 Official Plan

Designation Design Policies

The Site is located within the “Major Transit Station Area” on Map 2 (Urban Structure) of the City of Kitchener Official Plan (the “OP”) and is designated “Commercial Campus” on Map 3 (Land Use). Section 3.C.2.16 of the OP states that the planned function of Major Transit Station Area is to *provide a focus for accommodating growth through development to support existing and planned transit and rapid transit service levels.*

The Site is currently zoned ‘Commercial Campus Zone (COM-4)’ with a site-specific provision (37), according to the City’s Zoning By-Law 2019-051 which permits a range of retail and commercial uses within a City Node. A Zoning By-Law Amendment is proposed to re-zone the Site to a site-specific Mixed-Use zone to permit the proposed residential and commercial uses with zoning provisions to establish the building height, Floor Space Ratio, and percentage of non-residential gross floor area.

The Mixed Use policies are intended with flexibility to permit a broad range of uses at different scales and intensities. The Mixed Use policies (15.D.4) specifically indicate that “development and redevelopment of properties will be encouraged to achieve a high standard of urban design, be compatible with surrounding areas, be transit-supportive and cycling and pedestrian-friendly”.

4.2 General Urban Design Policies

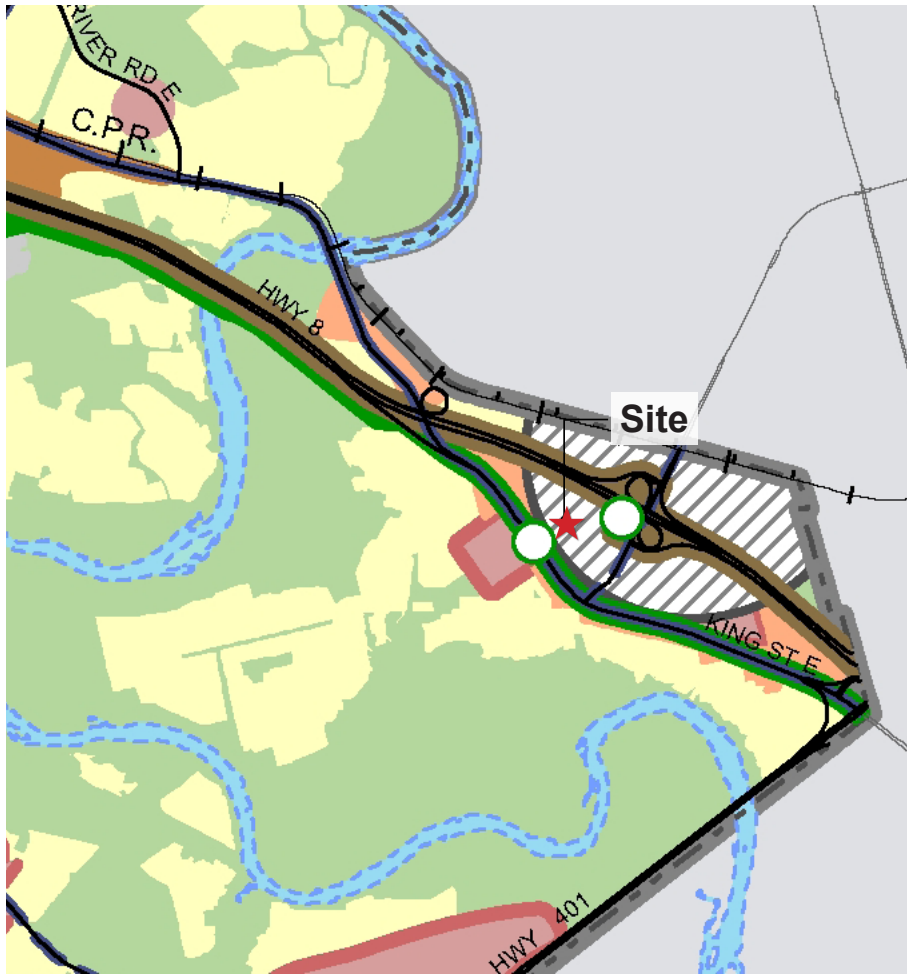
Section 11 of the Official Plan contains general urban design policies that are used to evaluate movement patterns, the relationship between built form and open spaces, integration of natural and cultural resources and development impacts. They include:

- General urban design policies that speak to the city’s skyline, CPTED principles, fire prevention, barrier-free accessibility, and shade.
- Site Design policies speak to the building’s street relationship landscaping to improve the streetscape; developments to improve aesthetic quality and be safe, comfortable, functional and provide circulation for all transportation modes; and Site servicing and utilities to be screened from view from the public realm.
- Building Design, Massing and Scale design policies speak to human-scale proportions to support a comfortable and attractive public realm, including attractive building forms, facades, and roof designs; complementary design of new buildings; and architectural innovation and expression.

Section 17.E.10.5 identifies that urban design briefs/reports together with other design-related are meant to be used to:

- a) demonstrate that a proposed development or redevelopment is compatible;
- b) address the relationship to and the privacy of adjacent residential development; and,
- c) ensure compatibility with the existing built form and the physical

Urban Structure (Map 2) in City of Kitchener Official Plan



Intensification Areas

- Urban Growth Centre (Downtown)
- Major Transit Station Area
- City Node
- Community Node
- Neighbourhood Node
- Urban Corridor
- Arterial Corridor

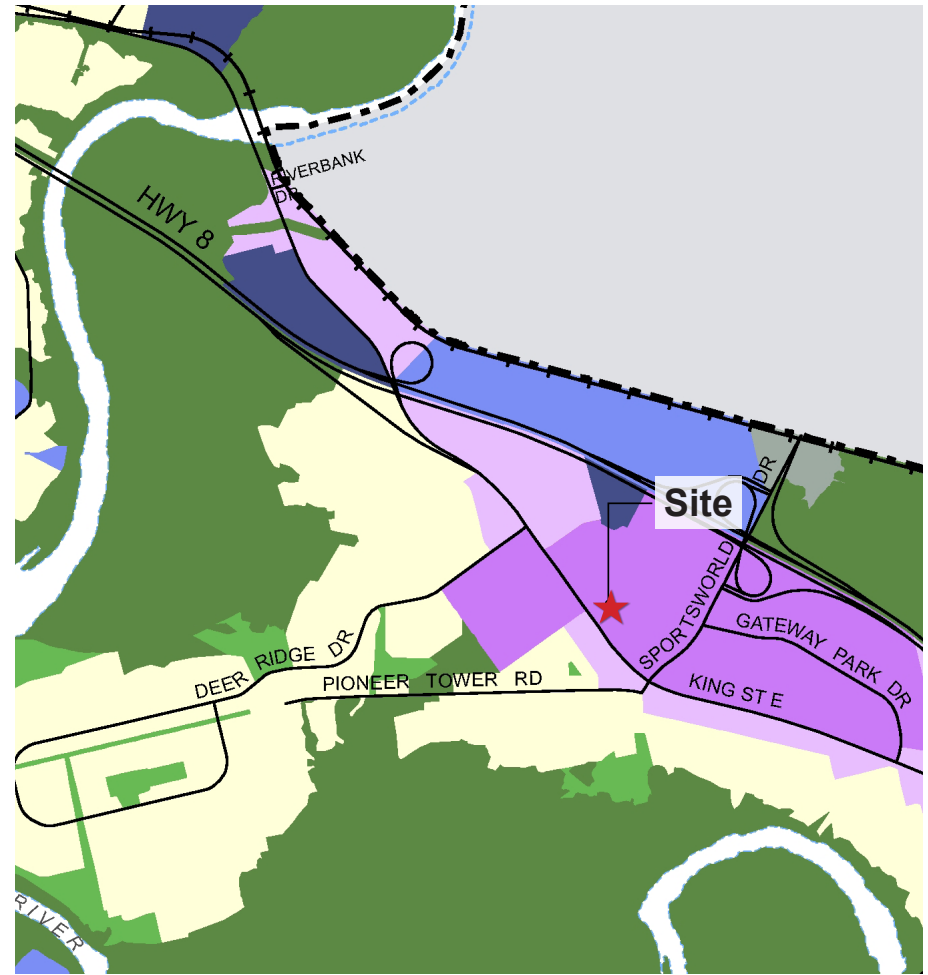
Other Areas

- Community Areas
- Industrial Employment Areas
- Green Areas

Transit

- Existing Transit Corridor
- Planned Transit Corridor
- Light Rail Transit Corridor
- Adapted Bus Rapid Transit Corridor
- Rapid Transit Station

Land Use Plan (Map 3) in City of Kitchener Official Plan



- Low Rise Residential
- Medium Rise Residential
- High Rise Residential
- Mixed Use
- Commercial Campus
- Commercial
- Heavy Industrial Employment
- General Industrial Employment

- Business Park Employment
- Institutional
- Prime Agriculture
- Rural
- Natural Heritage Conservation
- Open Space
- Major Infrastructure and Utilities

character of the established area and/or neighbourhood.

4.3 Urban Design Manual

PART A – Design Guidelines

Part A contains design guidelines on various land uses, built types, geographic areas, and urban structure elements. The following topics of design guidelines are relevant to the Site and the proposed building.

a) City-Wide (CW)

The City-Wide design guidelines apply to Kitchener as a whole. The main objective of these guidelines is to ensure Kitchener is designed as an inclusive, safe, accessible, comfortable and appealing place to live, work and play. Guidelines are divided into Community Design and Site Design. The Community Design guidelines are primarily used by the City in designing the form and structure of communities through the application of design best practices in a range of topics. The Site Design guidelines address built form, open space and site functionality.

b) Major Transit Station Areas (MTSA)

The Major Transit Station Areas guidelines apply generally for areas surrounding ION Stations. The Site is within such an area, being 300 to 400 metres to the Kitchener Market Station. Although the guidelines indicate they do not apply to sites subject to the Downtown guidelines, they are germane to the Proposed Development and inform design.

c) Structured Parking (SP)

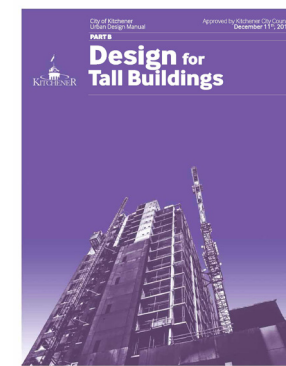
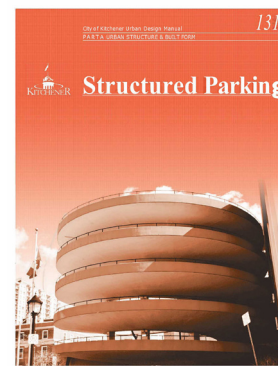
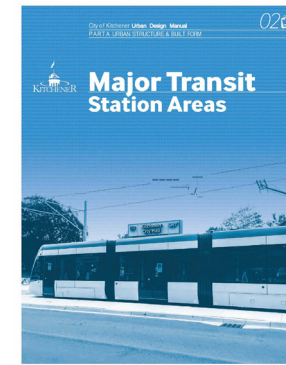
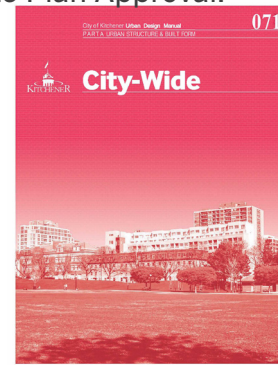
The Structured Parking guidelines apply to the development of above-grade parking structures within Kitchener. The Proposed Development includes two levels of podium parking per building for a total of six. The Guidelines are to ensure promote compatibility with the surrounding built form and address materials, articulation, massing and public realm design.

d) Tall Buildings (TB)

The Tall Buildings guidelines guide the design of tall buildings in the city, which are defined as those greater than 8 storeys in height. These guidelines are meant to be read in conjunction with the policies of the Official Plan and guidelines of the Urban Design Manual and are meant to be applied on a case-by-case basis.

PART C – Design Standards

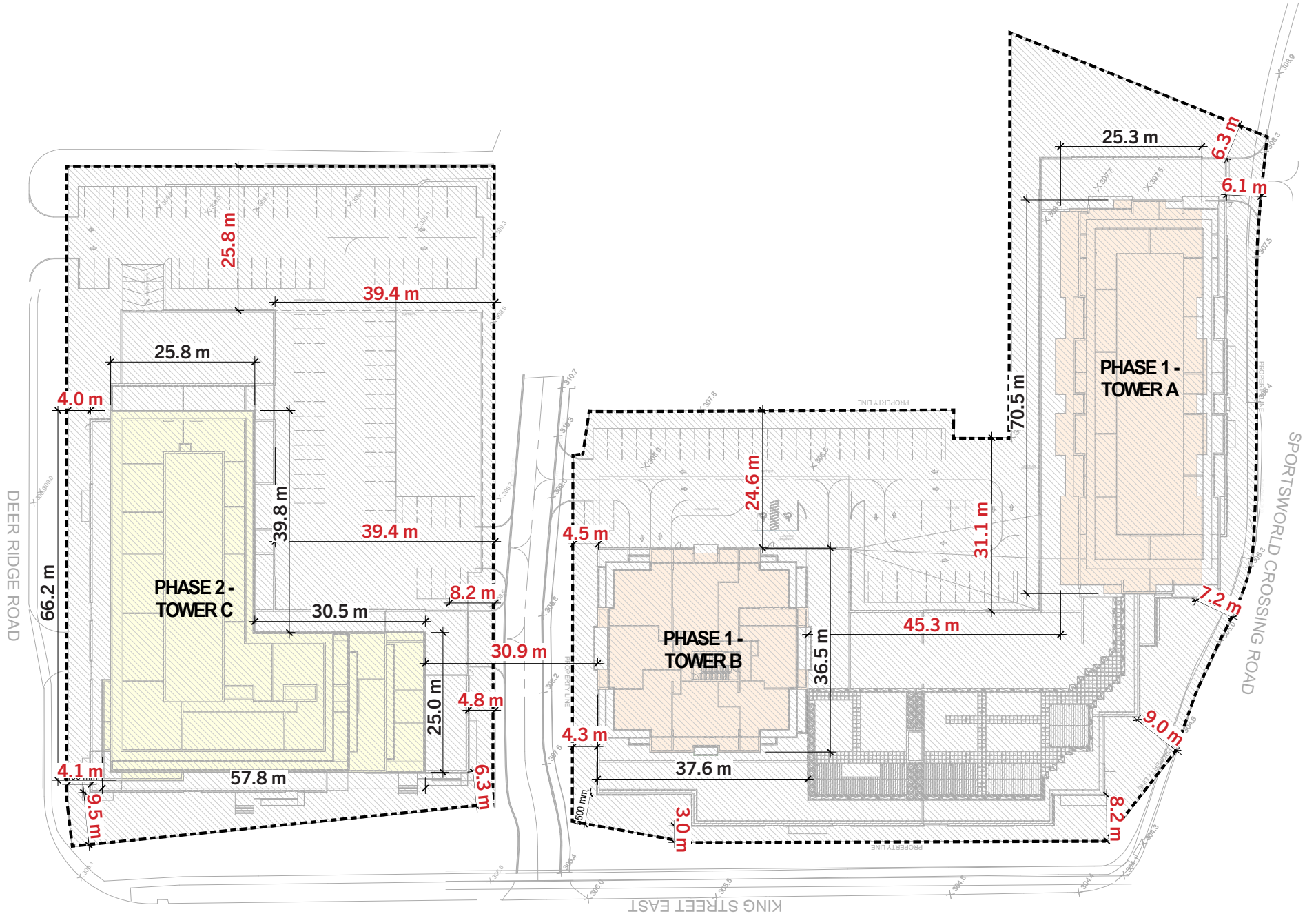
Part C contains design standards with specifications on technical details. Several standards are applicable to the proposed development, including those for access to roads, surface parking, outdoor lighting, barrier-free accessibility, pedestrian and transit supportive development, screening of rooftop mechanical equipment, emergency services, multiple residential, landscaping and natural features, and landscape design. These technical aspects of the detailed design will be evaluated at a later stage of the review process through Site Plan Approval.



5. PROPOSED DEVELOPMENT

The proposed development consist of three residential towers to be constructed in two phases. Phase 1 includes a total of 314 dwelling units proposed within 'Tower A' and 'Tower B' with at-grade amenity spaces and commercial units. There are 445 parking spaces comprising of 43 surface parking spaces and 402 parking spaces with two levels of underground parking plus two storey podium with structured parking

Phase 2 includes a total of 212 dwelling units proposed within 'Tower C' with 2-storey podium containing amenity area, commercial units, and parking. There is a total of 412 parking spaces comprising of 85 surface parking spaces and 327 parking spaces within the structured parking. Barrier-free parking stalls are located in close proximity to building entrances.



Site Plan, prepared by Kaisan Architects

5.1 Phase 1

5.1.1 Building Base Design

Inclusive Design – CW | MTSA

Compatibility – CW | MTSA | TB

Built Form – CW | MTSA | TB | SP

Streets & Open Space – TB

The building's base is situated at the corner of King Street East and Sportsworld Crossing Road to form continuous building edges along the streets while still providing additional space for landscaping and pedestrian walkways. The ground floor pulls back around King and Sportsworld Crossing intersection for a prominent plaza space associated with the ground floor commercial units. The proposed ground floor contains three commercial units at two to three storeys, residential lobbies and two storey amenity functions facing the public streets with structured parking away from street frontages to create vibrant and active streetscape edges. The residential lobby for

Tower A is accessible from Sportsworld Crossing Road whereas the residential lobby for Tower B is situated internal to the Site facing the parking area, accessible from King Street East. The building's base builds into the Site's grades with the building generally appearing as two storeys, and three storeys near the intersection of King and Sportsworld Crossing. The base has a setback of 6.1 metres and 7.2 metres from Sportsworld property line and 3 metres, 5.5 metres and 8.2 metres from King Street property line.

The building base along King Street East frontage, approximately 90 metres at it longest, is longer than the desired 70 metres maximum suggested by the Tall Building Guidelines. The base's mass at the corner of King and Sportsworld is pulled back from the bulk of the building streetwall to reduce this perceived mass to accommodate human scale commercial entrances with overhead canopy, transparent ground floor plane, varied articulation and detailing throughout the base. Towers A and B considerably stepback from the base to ensure an appropriate pedestrian scaled and designed street wall to King Street East.



5.1.2 Building Tower Design

Design Outdoor Comfort – CW | TB | MTSA

Compatibility – CW | MTSA | TB

Built Form – CW | MTSA | TB

The proposed building consists of two residential towers at 14 storeys and 18 storeys atop a two to three storey “L-shaped” podium. Tower A at 14 storeys measures 49.6 metres plus mechanical penthouse and Tower B at 18 storeys, measures 64.7 metres plus mechanical penthouse. Balconies for the residential units are included on all street-facing elevations.

The proposed top portion of the towers are distinguished from the lower tower through the smaller floorplate achieved through setbacks from all sides. These setbacks on the upper most storeys assist in providing additional definition to the rooftop massing of the building. The rooftop mechanical equipment atop the towers is fully enclosed within mechanical penthouses.

The proposed tower design addresses the intent of the Tall Building Guidelines as follows.

Placement

Towers A and B atop of the shared podium base are sited and oriented to face Sportsworld Crossing Road and King Street East, respectively. Tower A footprint is positioned closer to the Sportsworld Crossing podium edge with a significant setback from the property line. Tower B setbacks 7.6 metres and 14.4 metres from King Street podium edge, providing relief to the abutting streetscapes and enhancing pedestrian perception and comfort. The towers are offset to maximize access to sunlight, increase tower separation and to reduce overlap.

Size and Proportion

Tower A is classified as “Large Slab” form with tower floorplate measuring 1,733 square metres and a length-to-width ratio of 2.6 and Tower B is classified as “Large Point” form with tower floorplate measuring 988 square metres and a length-to-width ratio of 1.08.



Overlook

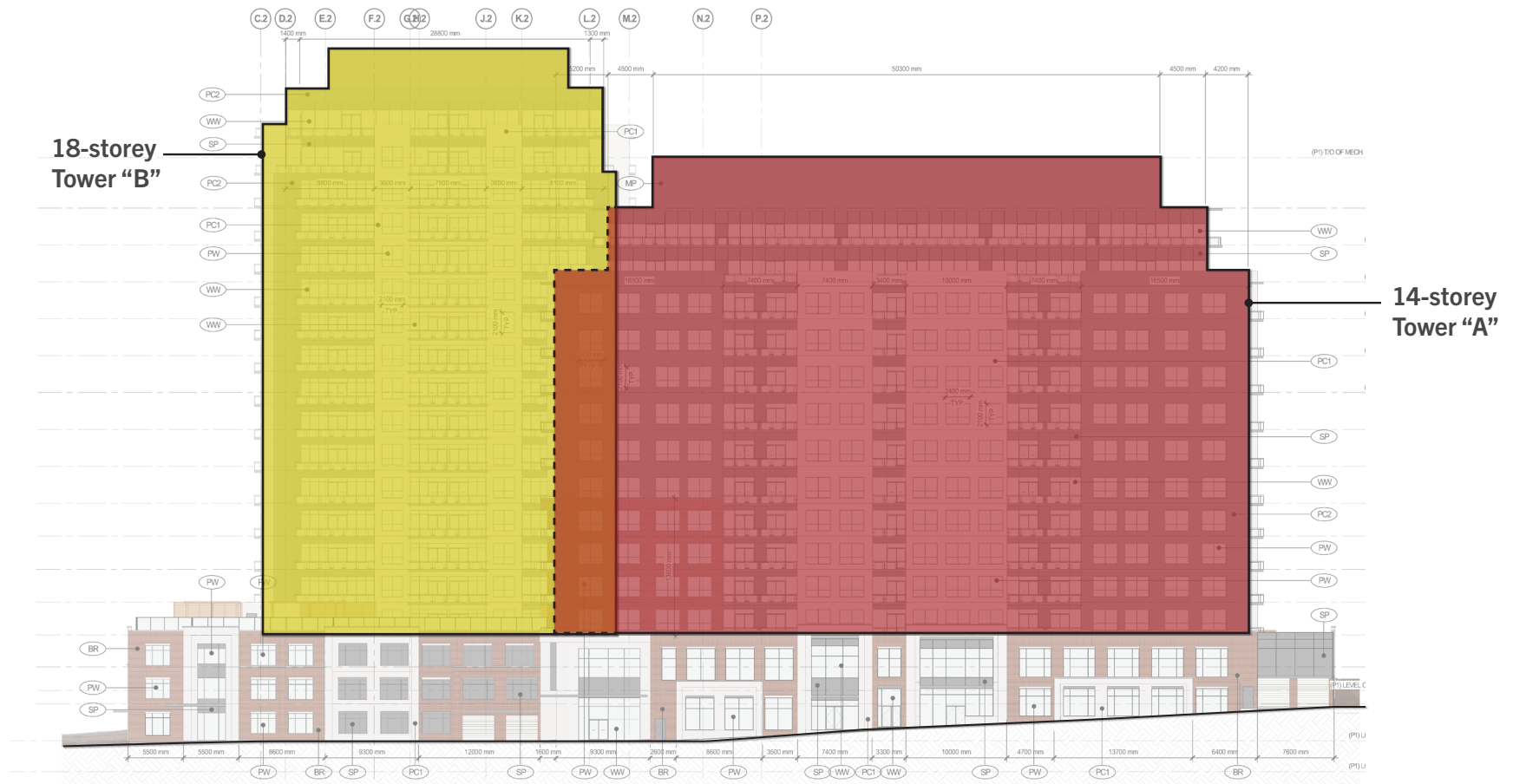
The placement of the towers minimize overlap given the placement. Tower "A" and Tower "B" have less than 30% overlap, generally in keeping with the suggested guidance.

Relative Height

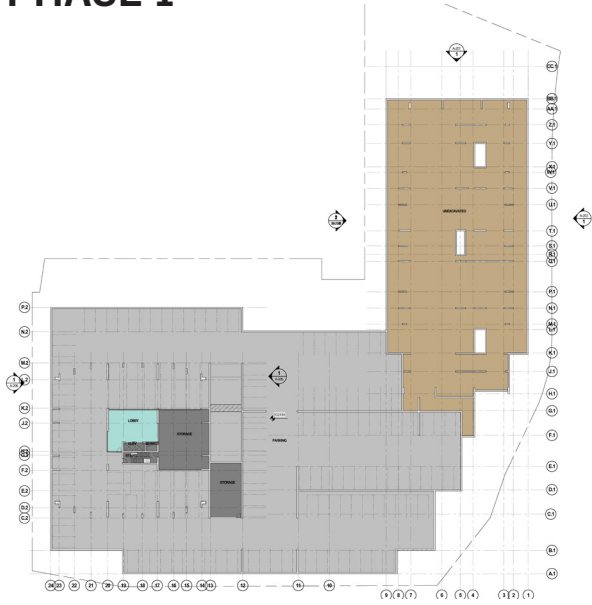
The towers have variation in heights as desired and minimizes any negative impacts to adjacent properties . Tower A is 81% of the height of Tower B in keeping with the intent of the guidelines for variation.

Separation

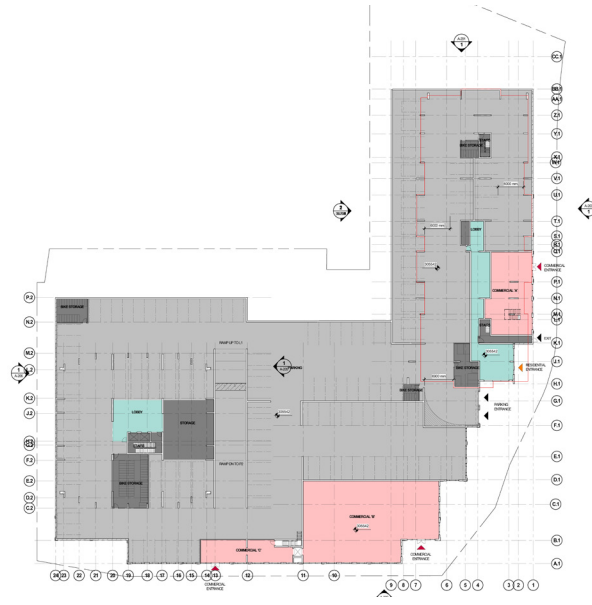
Physical Separation between Tower "A" and Tower "B" determined by building's height and tower length are 15.3 metres for Tower "A" and 11.0 metres for Tower "B" with a combined total of 26.3 metres. The proposed building has provided 45.3 metres tower separation between Tower "A" and Tower "B".



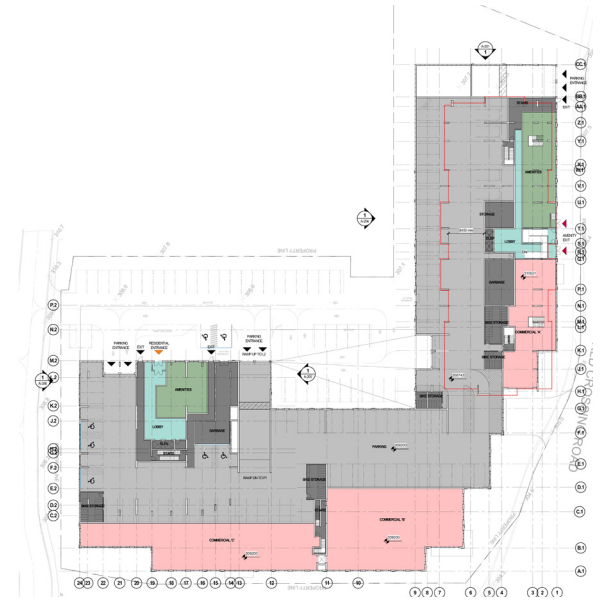
PHASE 1



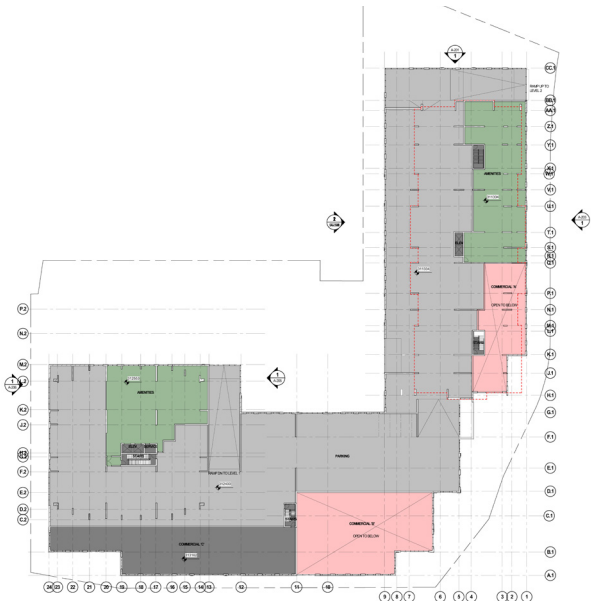
P2 Level Plan



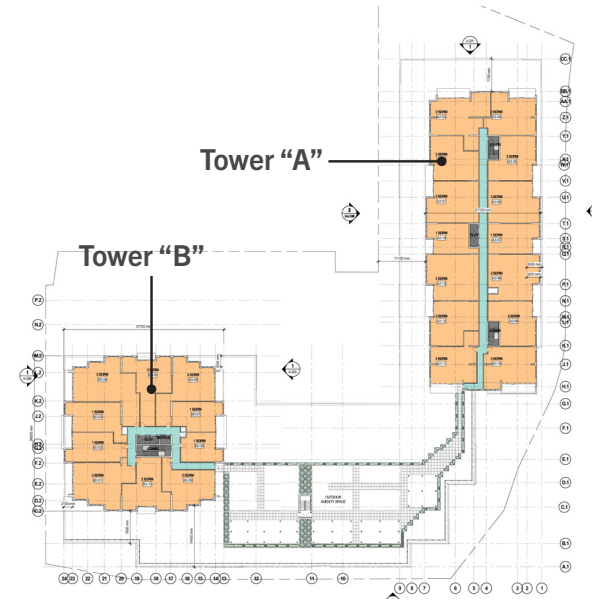
P1 Level Plan



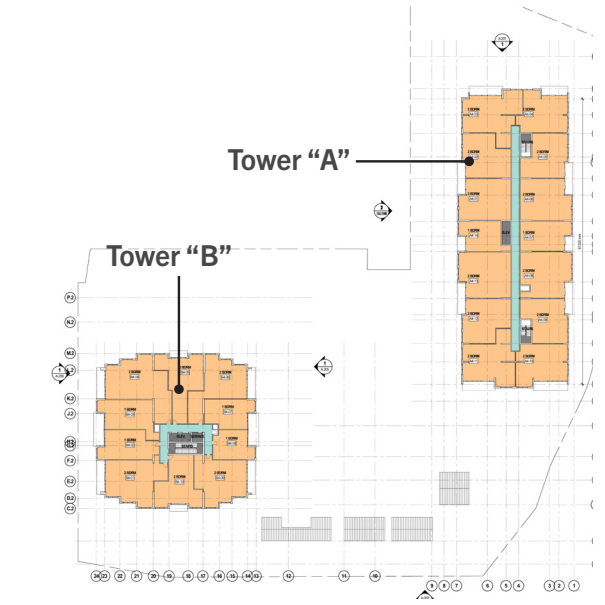
Level 1 Plan



Level 2 Plan



Level 3 Plan

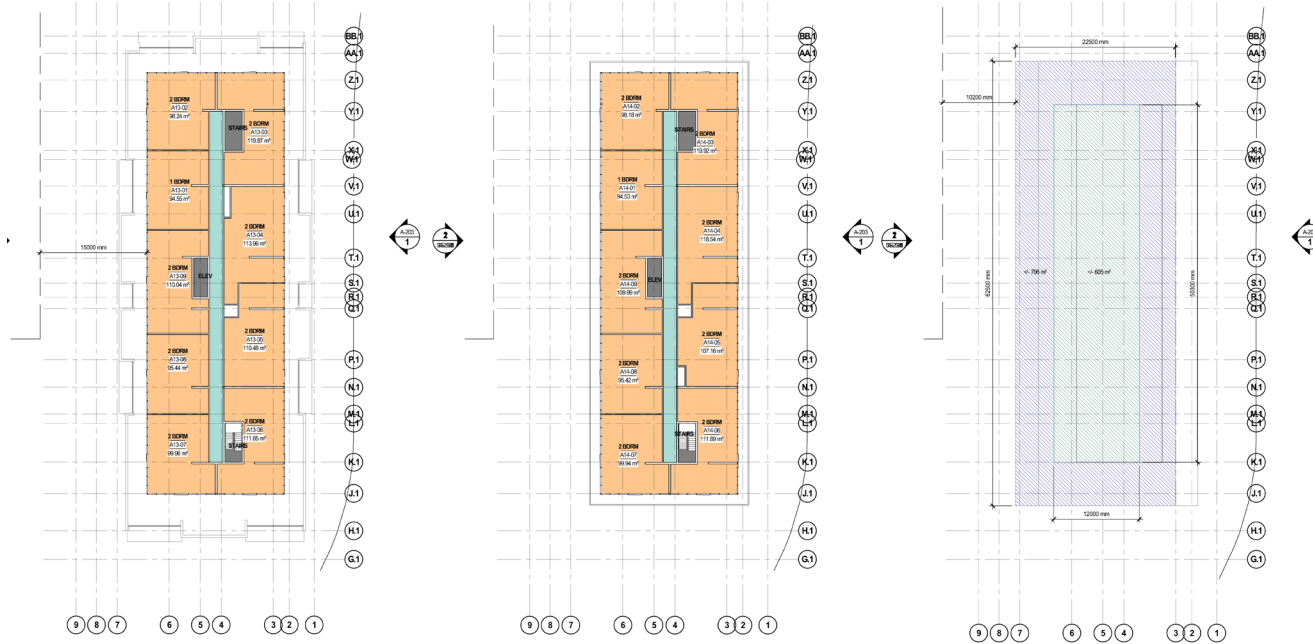


Typical Floor Plan

Floor Plans, prepared by Kaisan Architects

PHASE 1

Tower Top "A"

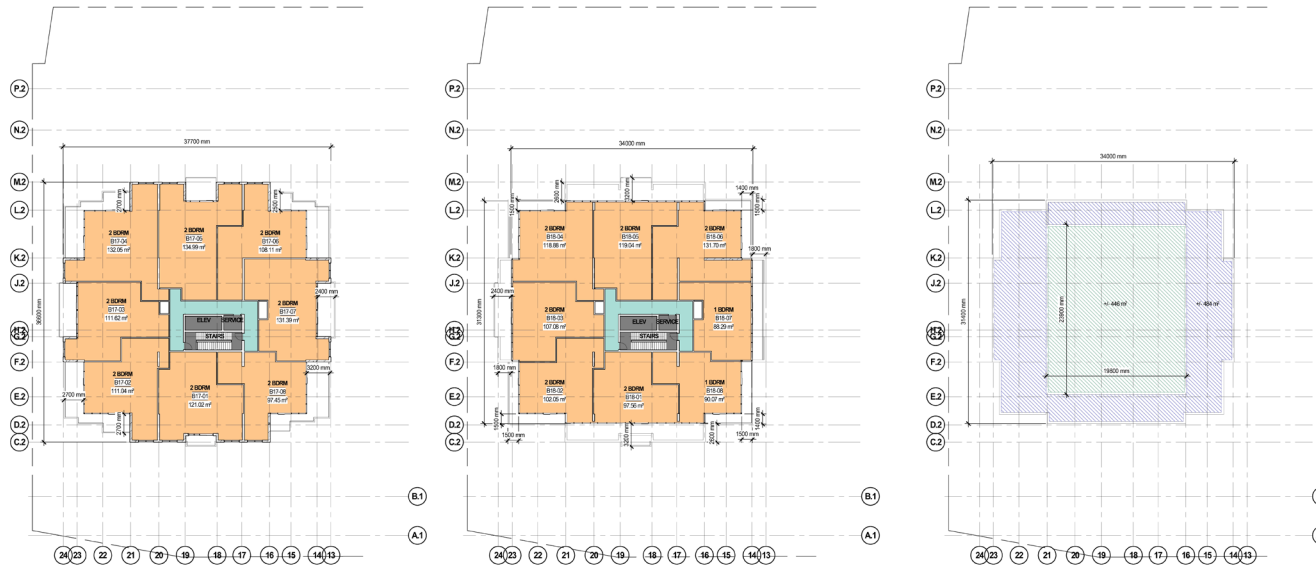


Level 13A

Level 14A

Roof A

Tower Top "B"



Level 17B

Level 18B

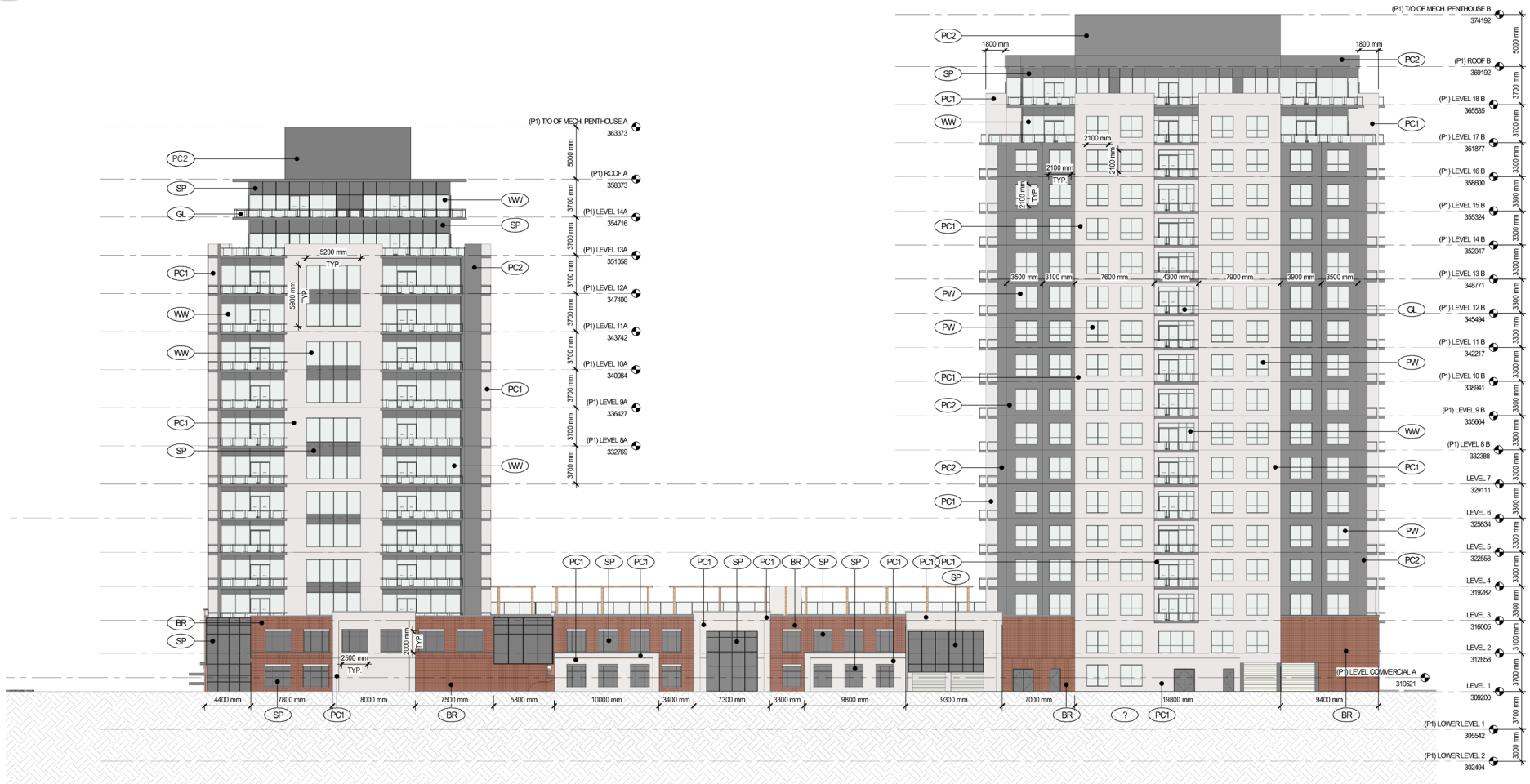
Roof B

Floor Plans, prepared by Kaisan Architects

PHASE 1

Legend

- BR Brick
- GL Glazing
- PC1 Precast Concrete, White
- PC2 Precast Concrete, Charcoal
- PW Punched Window
- SP Spandrel
- WW Window Wall

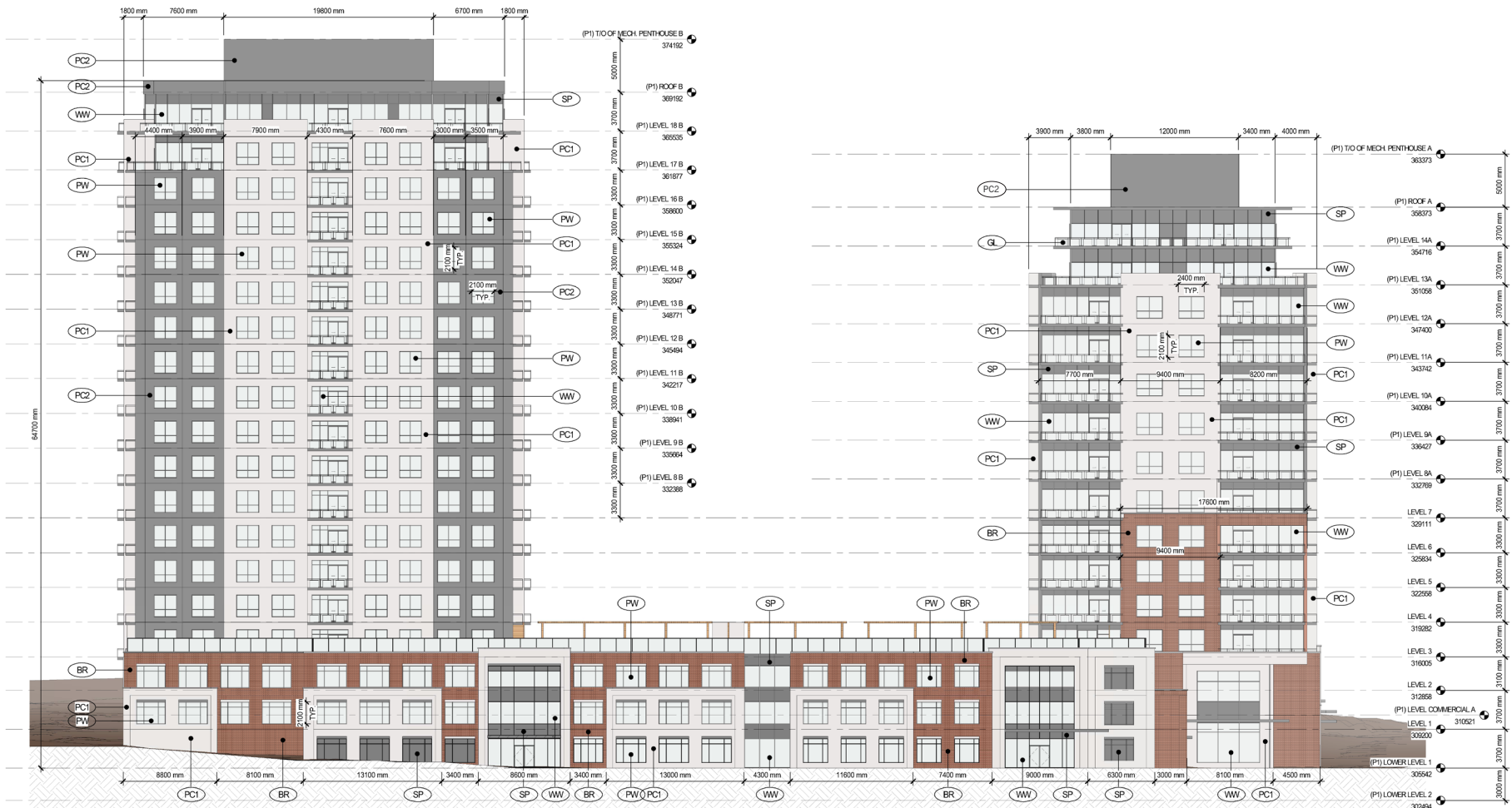


North Elevation, prepared by Kaisan Architects

PHASE 1

Legend

- BR Brick
- GL Glazing
- PC1 Precast Concrete, White
- PC2 Precast Concrete, Charcoal
- PW Punched Window
- SP Spandrel
- WW Window Wall

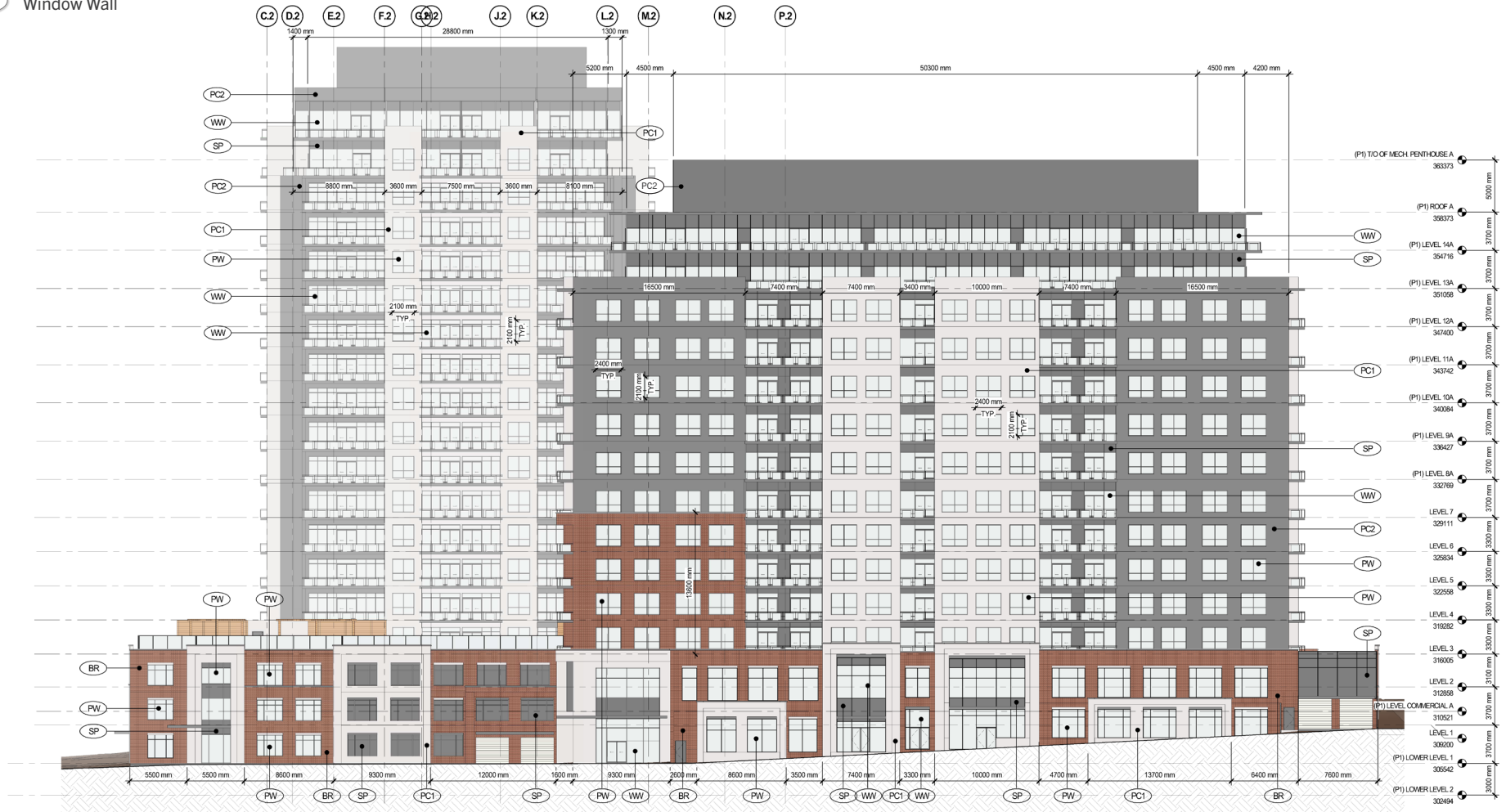


South Elevation, prepared by Kaisan Architects

PHASE 1

Legend

- BR Brick
- GL Glazing
- PC1 Precast Concrete, White
- PC2 Precast Concrete, Charcoal
- PW Punched Window
- SP Spandrel
- WW Window Wall

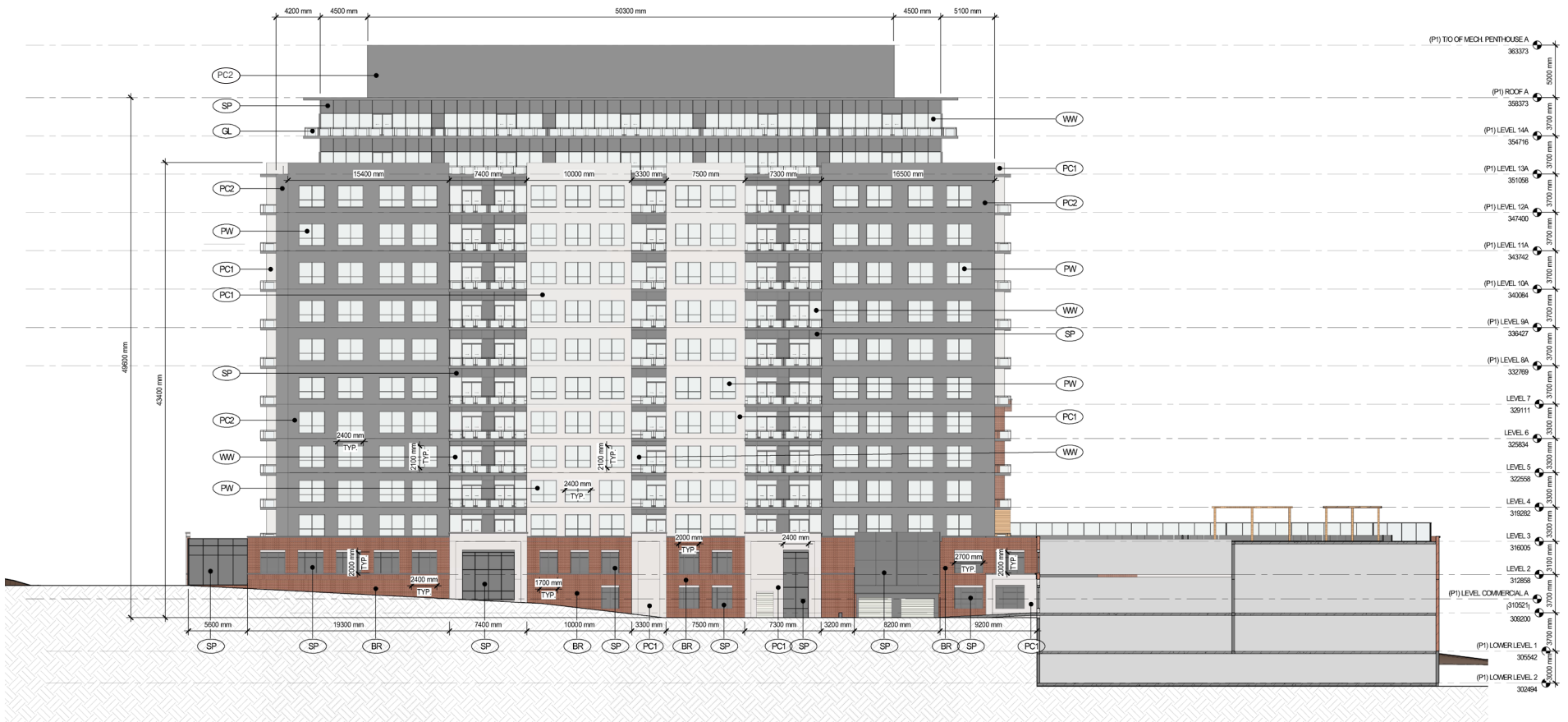


East Elevation, prepared by Kaisan Architects

PHASE 1

Legend

- BR Brick
- GL Glazing
- PC1 Precast Concrete, White
- PC2 Precast Concrete, Charcoal
- PW Punched Window
- SP Spandrel
- WW Window Wall



West Elevation, prepared by Kaisan Architects

5.2 Phase 2

5.2.1 Building Base Design

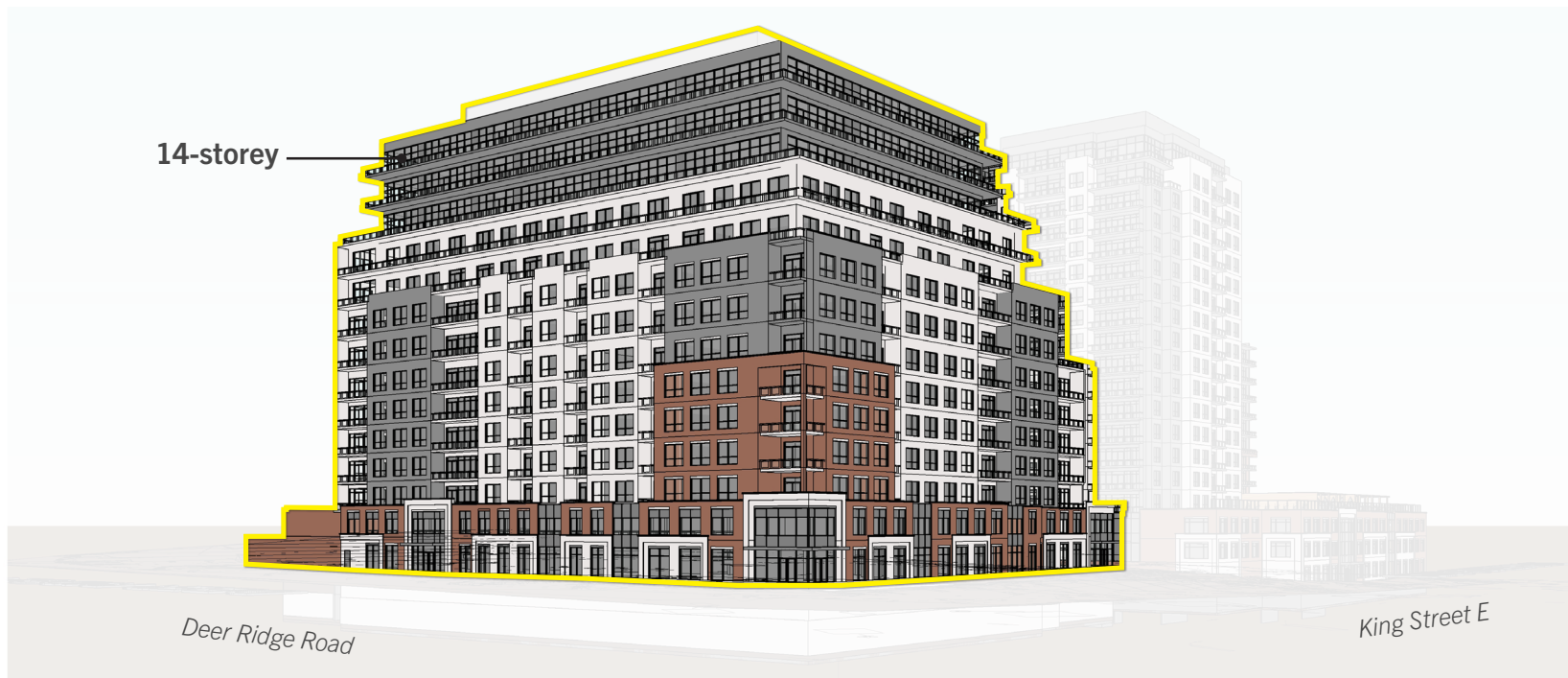
Inclusive Design – CW | MTSA

Compatibility – CW | MTSA | TB

Built Form – CW | MTSA | TB | SP

Streets & Open Space –TB

Similar to Phase 1, the building's base is positioned close to the street edge to reinforce activity and interest along the bounding streetscapes (King Street and Deer Ridge Road). The two storey "L-shaped" podium consists of two commercial units at two storeys, at-grade residential lobby and two storey amenity functions facing the public streets with parking structure tucked away from the street frontages. The commercial units are proposed at the corner of King Street and the shared driveway on the east side and also on the west side of the building with entrance from Deer Ridge. The base of the building is designed to animate the street, and incorporates a high level of transparency and balconies above the ground storey to promote "eyes on the street" and contribute to a more pedestrian-friendly public realm. The residential entrance located at the corner of King and Deer Ridge is clearly visible with overhead canopy creating comfortable pedestrian experience. A secondary entrance to the residential lobby is accessible from the north side of the building facing the internal driveway. The building's base is setback 6.3 metres and 9.5 metres from King Street property line, 4.1 metres from Deer Ridge property line and 4.8 metres from the internal shared driveway.



5.2.2 Building Tower Design

Design Outdoor Comfort – CW | TB | MTSA

Compatibility – CW | MTSA | TB

Built Form – CW | MTSA | TB

A 14-storey Tower “C” extends from the two storey podium (a total height of 49.7 metres plus mechanical penthouse. The proposed placement of the “L-shaped” built form and transition in heights at the east side from lower tower (third to eleventh storey) to upper tower (twelfth to fourteenth storey) with stepbacks, provides relief and minimizes shadow impacts on the abutting 18-storey Tower “B” (Phase 1).

The lower tower (third to eleventh storey) positioned atop the podium stepbacks 2.2 metres and 3.7 metres from the south side (facing King Street E), 3.7 metres from the west side (facing Deer Ridge Road), 3.7 metres and 4 metres from the building’s edges facing internal to the Site and 7.8 metres from the east side (facing the abutting 18 storey building) at the third storey. The east side of the building further step backs 7 metres from the building’s edge at the eighth storey and 6.6 metres at the tenth storey.

The upper tower (twelfth to fourteenth storey) stepbacks from all sides of the building’s edge, stepping back at 1.6 metres to 1.9 metres and 4.2 metres from the east side and 5.9 metres from the north side. Private terraces are proposed atop each of these stepbacks for the building’s occupants. The top is defined with a mechanical penthouse defining the roofline, stepped back again from the edges of the building.

Individual residential units have balconies on all sides of the building with comparatively fewer balconies on the closest east elevation facing the abutting Phase 1 podium tower development (Tower “B”).

Size and Proportion

Tower is classified as “Large Slab” form with tower floorplate measuring 1,613 square metres and a length-to-width ratio of 1.64.

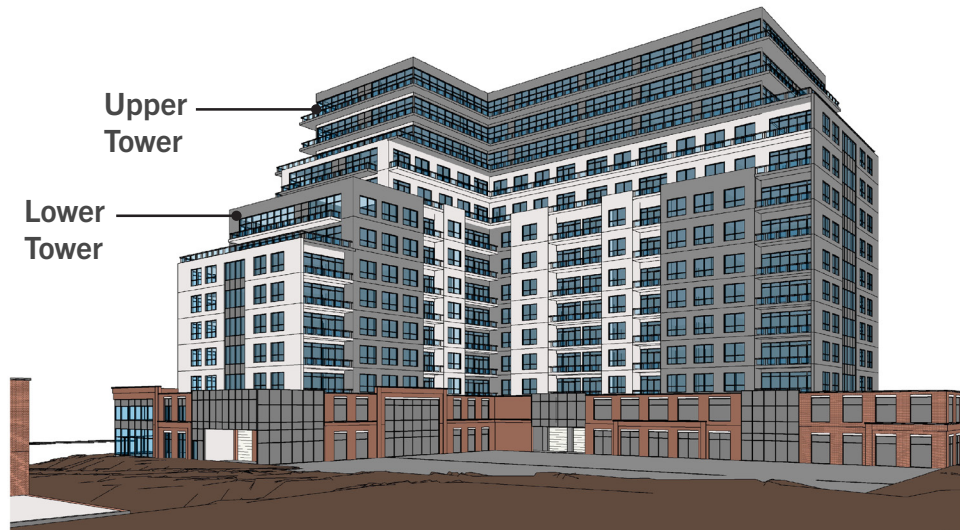
Overlook

A combination of tower stepbacks and a shared driveway located between the two towers with a separation distance of 30.9 metres between two towers will aid in minimizing overlook and privacy concerns. In addition, the shorter sides of Tower “C” and Tower “B” face each other with fewer windows and balconies to limit overlook.

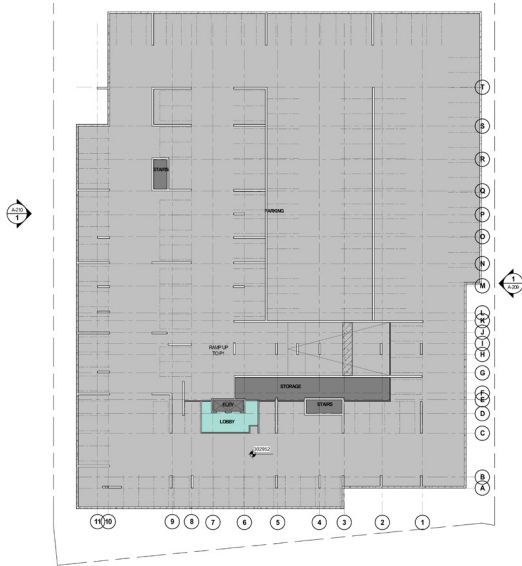
Separation

The “L-shaped” tower built form is positioned closer to the Deer Ridge Road to respect the tower separation considerations to the abutting 18-storey Tower “B”.

Physical Separation calculation per guidelines for Tower “C” is 14.6 metres. The proposed tower arrangement incorporates several stepbacks along the east elevation and a shared driveway between Phase 1 and Phase 2 further provides additional separation distance between Tower “C” and Tower “B”. Physical tower separation of 30.9 metres is provided between Tower “C” and Tower “B”. This positioning satisfies and meets the recommended design guidance for Tall Buildings.



PHASE 2



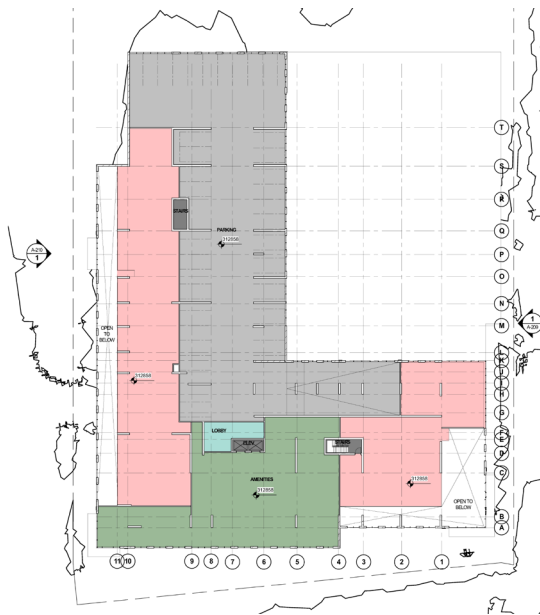
P2 Parking



P1 Parking



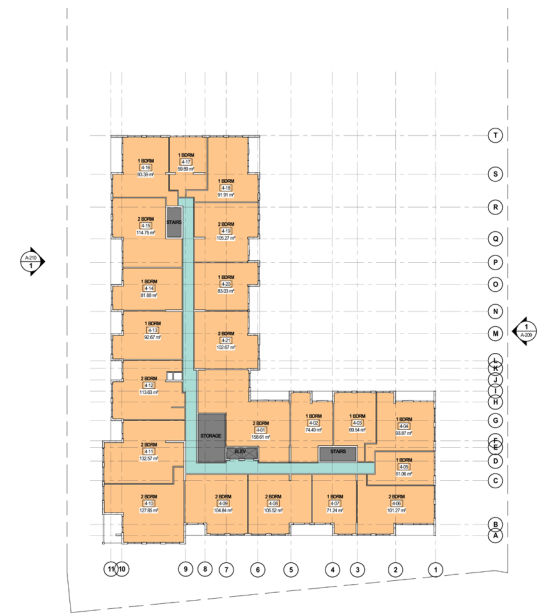
Level 1 Plan



Level 2 Plan

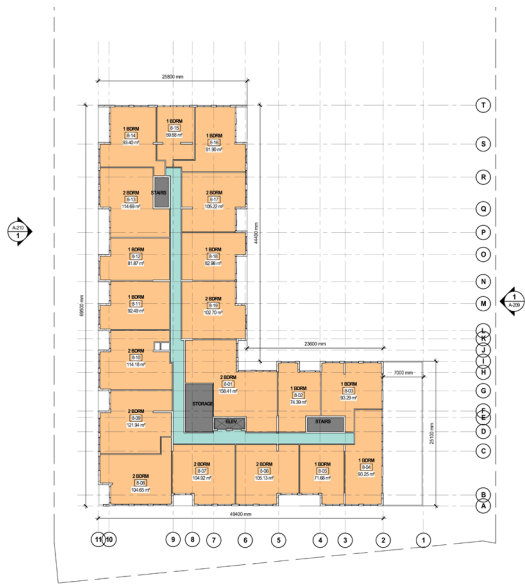


Level 3 Plan

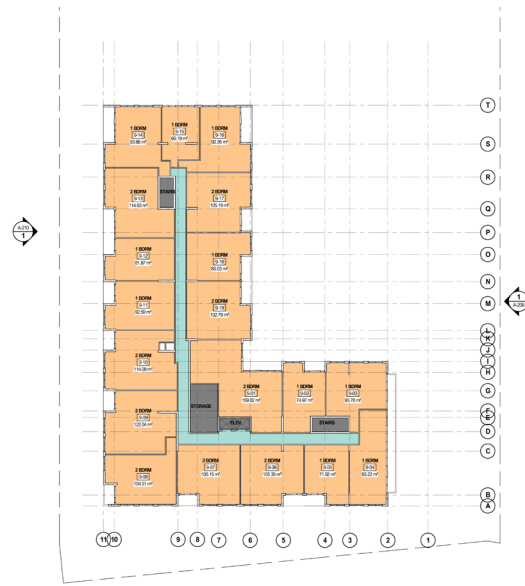


Level 4-7 Plan

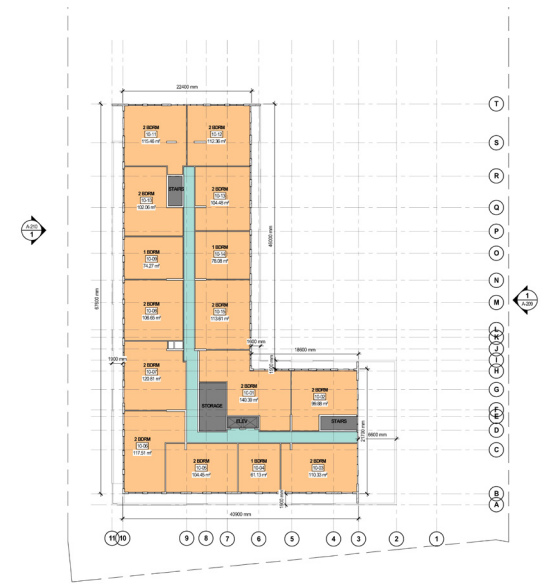
Floor Plans, prepared by Kaisan Architects



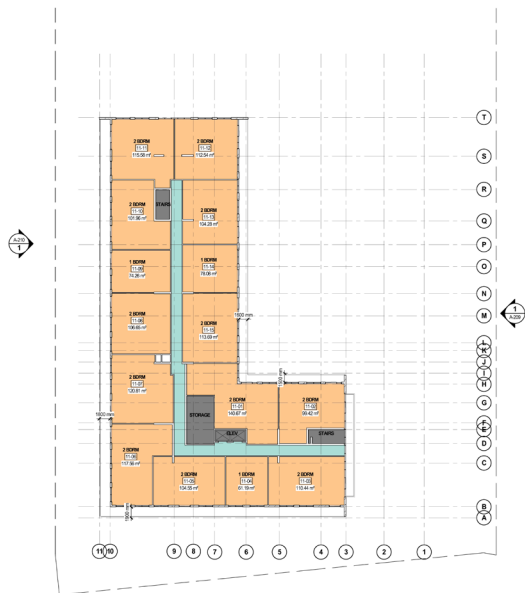
Level 8 Plan



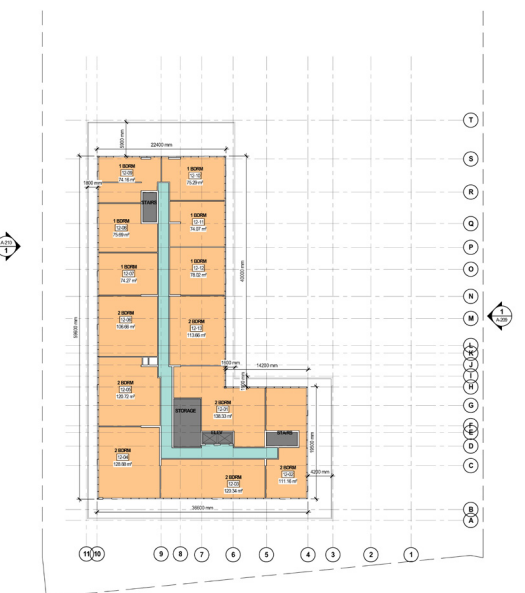
Level 9 Plan



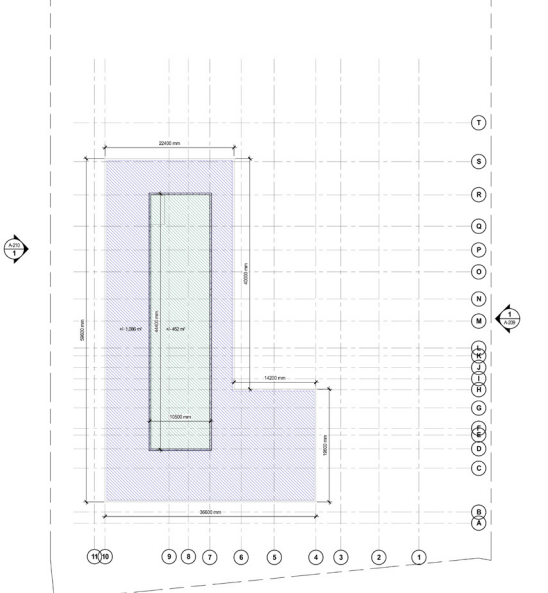
Level 10 Plan



Level 11 Plan



Level 12 - 14 Plan



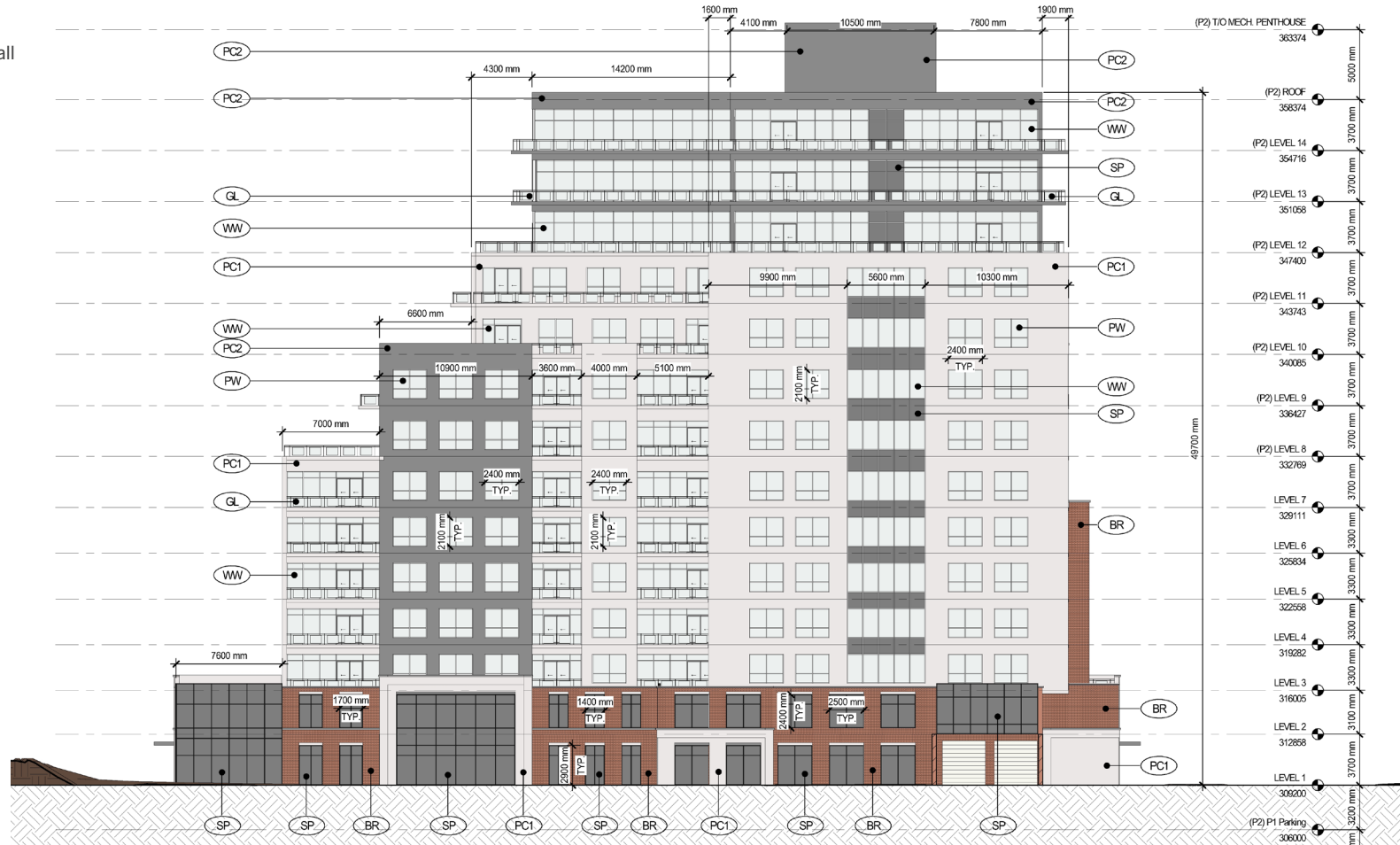
Roof

Floor Plans, prepared by Kaisan Architects

PHASE 2

Legend

- BR Brick
- GL Glazing
- MP Metal Panel
- PC1 Precast Concrete, White
- PC2 Precast Concrete, Charcoal
- PW Punched Window
- SP Spandrel
- WW Window Wall

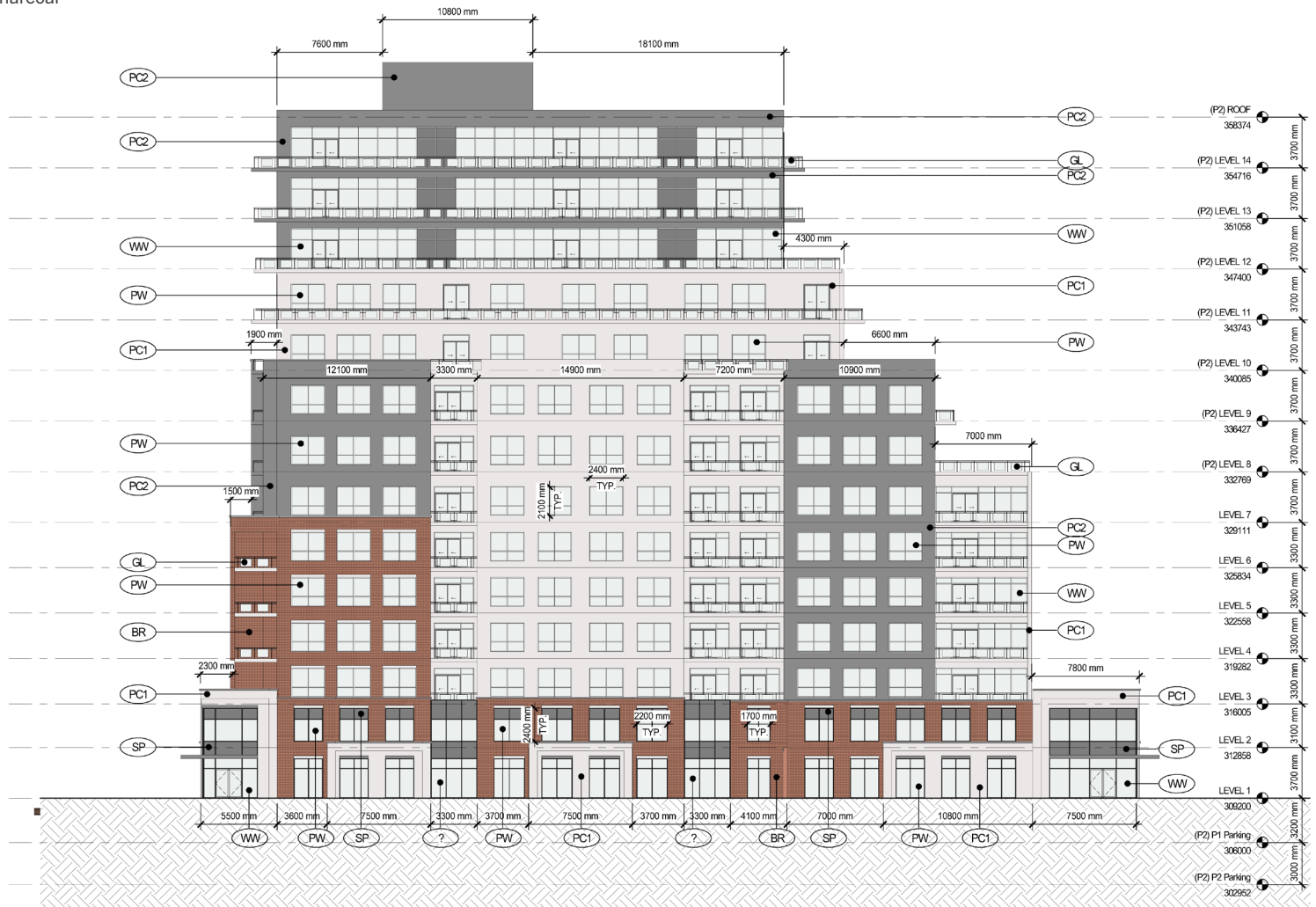


North Elevation, prepared by Kaisan Architects

PHASE 2

Legend

- BR Brick
- GL Glazing
- MP Metal Panel
- PC1 Precast Concrete, White
- PC2 Precast Concrete, Charcoal
- PW Punched Window
- SP Spandrel
- WW Window Wall

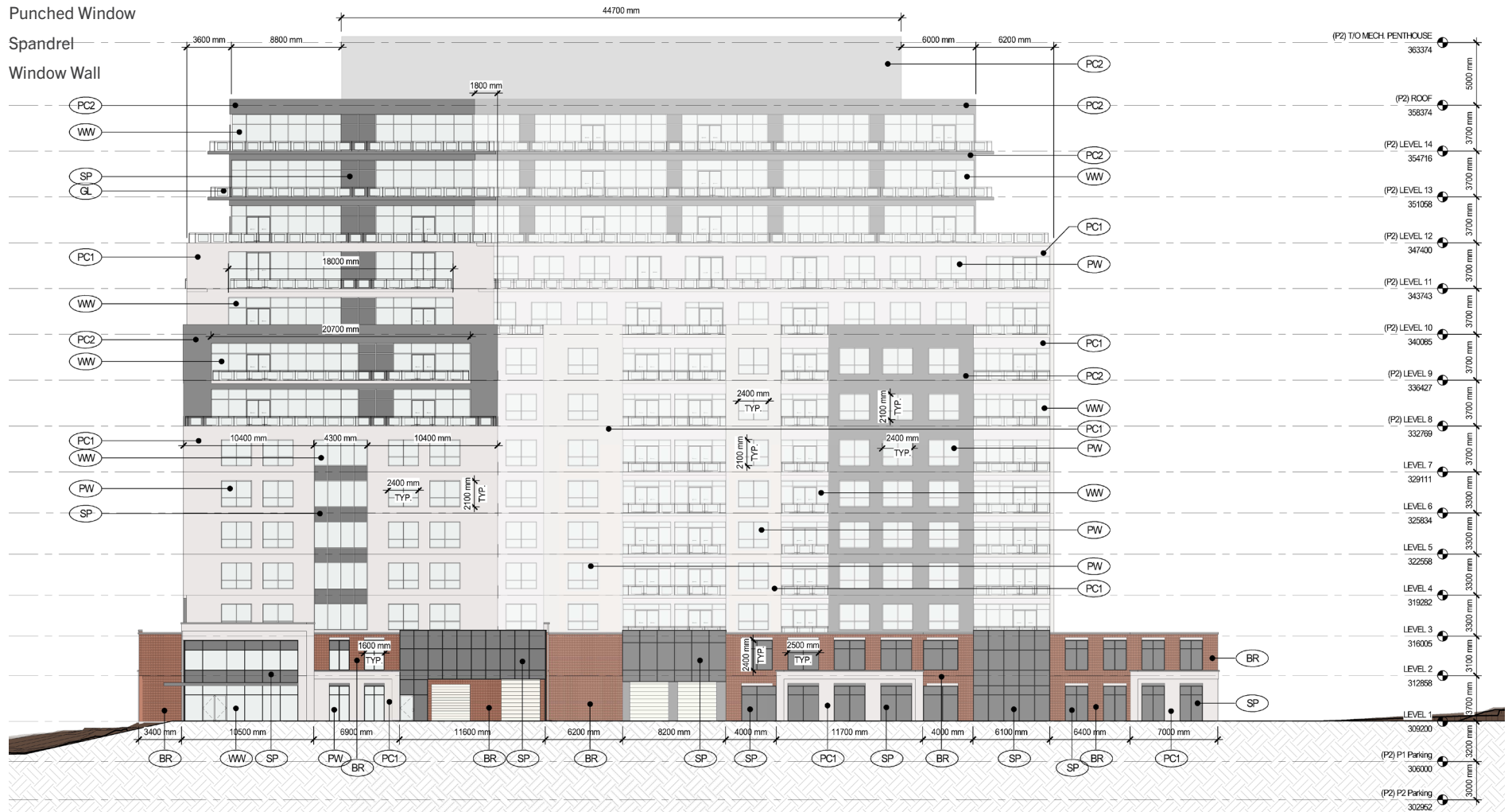


South Elevation, prepared by Kaisan Architects

PHASE 2

Legend

- BR Brick
- GL Glazing
- MP Metal Panel
- PC1 Precast Concrete, White
- PC2 Precast Concrete, Charcoal
- PW Punched Window
- SP Spandrel
- WW Window Wall

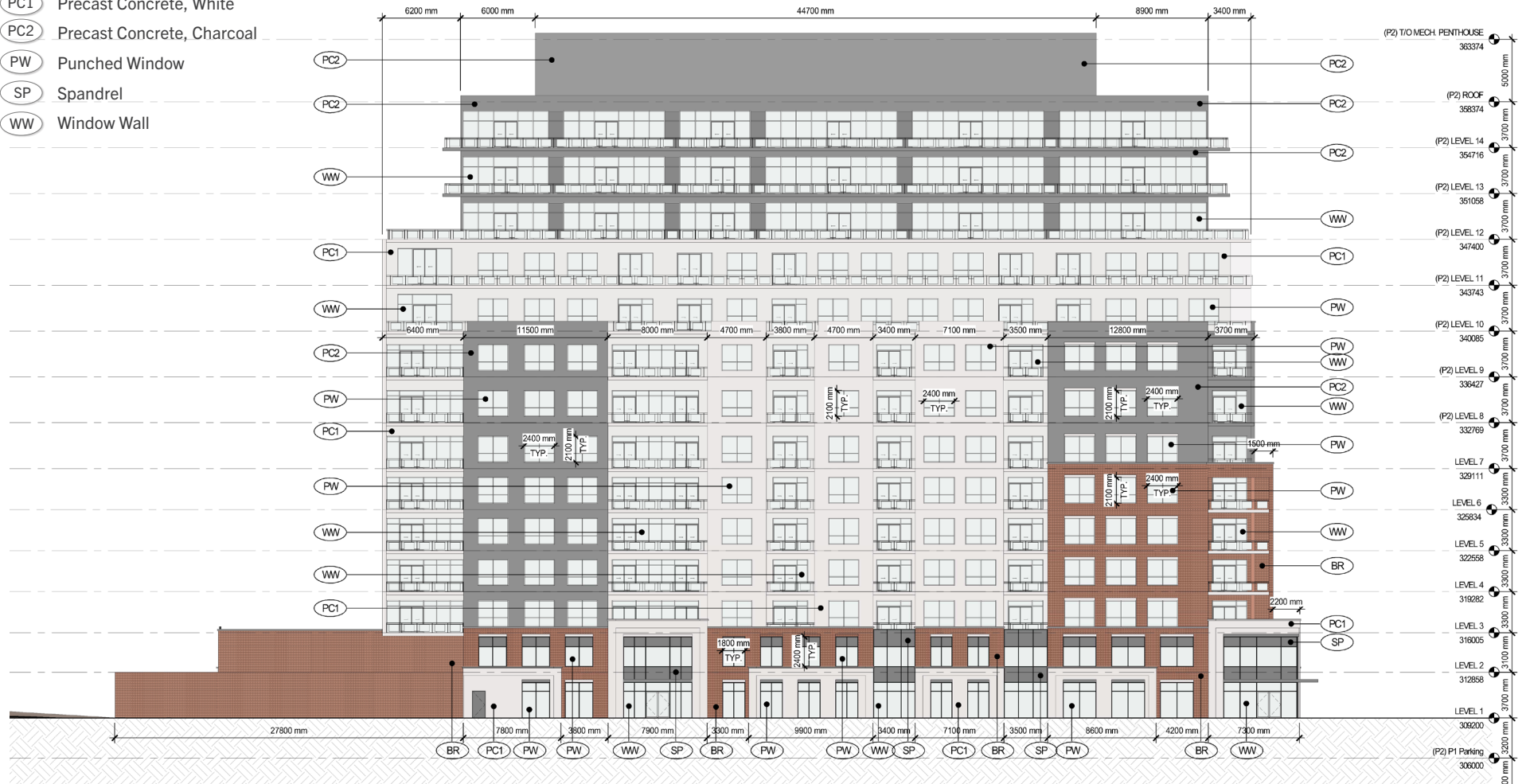


East Elevation, prepared by Kaisan Architects

PHASE 2

Legend

- BR Brick
- GL Glazing
- MP Metal Panel
- PC1 Precast Concrete, White
- PC2 Precast Concrete, Charcoal
- PW Punched Window
- SP Spandrel
- WW Window Wall



West Elevation, prepared by Kaisan Architects

5.3 Vehicular Access and Circulation

Inclusive Design – CW | MTSA | TB

Site Function – CW | MTSA | TB

Street Design – CW | MTSA | TB

Street & Open Space – TB

The vehicular accesses to Phase 1 and Phase 2 have one access from each of the public street frontages. The principal driveways for both Phase 1 and Phase 2 are provided by the shared driveway between the two phases of the proposed developments, accessible from King Street East and a secondary access for Phase 2 from Deer Ridge Road. Each of the driveway entrances to the sites are situated on the northerly portion of both sites, maintaining street frontages and balancing separation to street intersections with the site design and efficiency. The driveway circulation patterns for Phase 1 and Phase 2, provide easy and direct access for vehicular and emergency service circulation through both sites.

There are four accesses to the structured parking garage provided within Phase 1 of the proposed development. Three accessible internal to the Site and one from Sportsworld Crossing Road. Phase 2 of the proposed development contains two accesses to the structured parking garage, one internal to the Site and other from shared driveway between the two proposed developments. Phase 1 of the proposed development has one drop-off area situated close to the residential entrance of Tower B, facing the internal driveway. Similarly, Phase 2 has one drop-off area, situated adjacent to the residential entrance interior to the Site.

5.4 Pedestrian Access and Circulation

Inclusive Design – CW | MTSA | TB

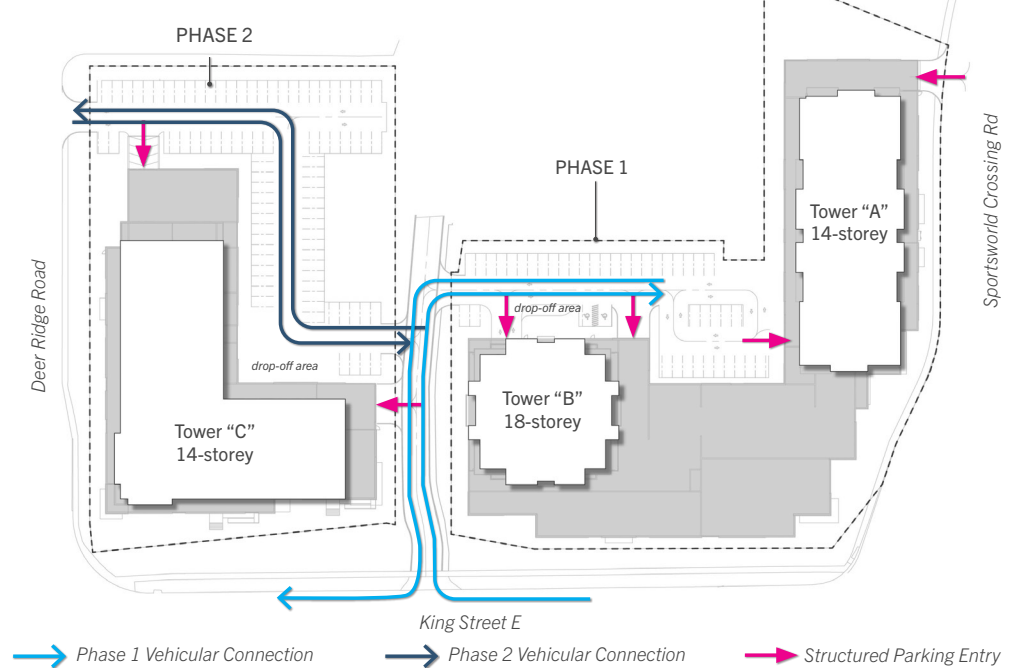
Site Function – CW | MTSA | TB

Street Design – CW | MTSA | TB

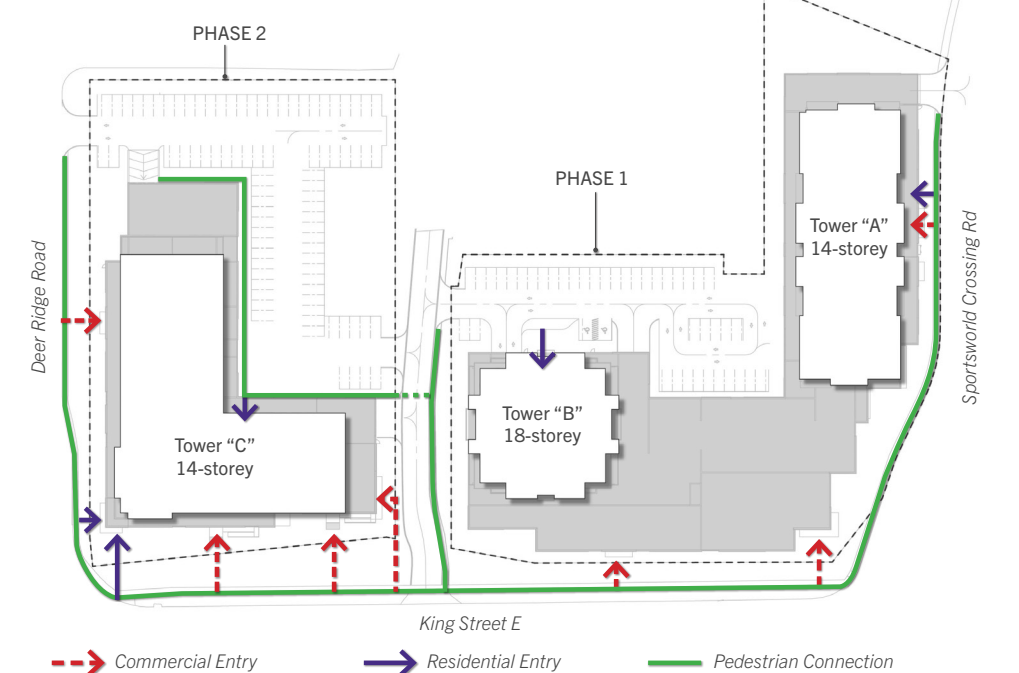
Street & Open Space – TB

Pedestrian circulation within the Site is efficient and minimizes conflicts between pedestrians and automobiles by providing clear movement throughout all parking areas. Ground floor commercial

Vehicular Access and Circulation



Pedestrian Access and Circulation



units entrances facing King Street East, Sportsworld Crossing Road, Deer Ridge Road and shared driveway are accessed directly from the public sidewalks. Servicing access is efficient, and the Site will be designed to meet all fire and emergency circulation standards. Barrier-free spaces are proposed to be located near main building entrances.

5.5 Loading and Service Areas

Site Function – CW | MTSA | TB

Environment – TB

Loading and service functions are internalized in the proposed developments, away from the bounding public streets. Each of the towers are served by a dedicated loading space for residents within the building base accessed from the internal site driveways. Each of the towers has an individual garage/recycling storage room in the Level 1 floor plan, conveniently surrounding the elevators of each tower. A garbage/recycling collection area is provided for each of the towers, located close to the garage/recycling storage room. Mechanical equipment and utility rooms are incorporated into the parking garage levels and rooftop spaces. All truck turning and maneuvering for loading and service functions is accommodated on the site and do not impact municipal streets. Emergency service vehicles are accommodated through the surface parking area.

5.6 Parking

Inclusive Design – CW | MTSA | TB

Site Function – CW | MTSA | TB | SP

Phase 1

The proposed development consists of 445 parking spaces on two underground parking levels (P1 and P2) and two above-grade parking levels within the building base (Level 1 to Level 2), and 43 surface parking spaces inclusive of barrier-free spaces that are generally distributed throughout all garage levels, situated close to the elevator bays on the respective floors for convenient access and near the main residential entrances. All car parking is internalized

within an integrated parking garage shared between the two towers. Within the parking structures there are secure bicycle storage rooms and lockers room for the building's occupants, containing a total of 163 bicycling parking spaces.

Phase 2

The proposed development includes 412 parking spaces on two underground parking levels (P1 and P2) and two above-grade parking levels within the building base (Level 1 to Level 2), as well as 85 surface parking spaces situated internal to the Site, away from the public street frontages. There are 106 bicycling parking spaces provided with a combination of indoor, long-term bicycle parking facilities as well as outdoor, short-term parking facilities as part of the development.

Location of the outdoor bicycle parking spaces will be determined through the site plan process.

5.7 Building Materials and Articulation

Design Outdoor Comfort – CW | MTSA | TB

Compatibility – CW | MTSA | TB

Built Form – CW | MTSA | TB

The placement of buildings in the proposed development is carefully considered for appropriate orientation and distances with respect to other buildings on the Site and on adjacent sites. The proposed development massing and design is intended to define the surrounding public realm and establish a sense of enclosure along public sidewalks by virtue of building heights related to the width of surrounding streets. Site grading and building foundations are proposed to facilitate access for people of all levels of mobility. Street edges on the Site are defined through use of street-oriented buildings with grade level windows as well as retail and residential entrances that allow interaction between the public realm and activities within proposed buildings. Street frontages along King Street East and Sportsworld Crossing Road predominantly feature a high degree of transparency and weather protection for pedestrians is provided at points of entry to the residential lobby and commercial units at-grade with overhead canopies.

The architectural design for the proposed development will be of contemporary design that includes masonry cladding materials, metal siding, punched windows and cantilevered balconies and assorted variations in glazing that are compatible with surrounding buildings. Angular planes, limited shadow impacts, and the articulation of distinctive base, middle and top sections of taller buildings are all employed to provide an appropriate transition.

The images to the right illustrate the design inspiration that will guide the detailed design at the Site Plan Approval stage. The architectural style is intended to show brick masonry for the building base and the tower design uses lighter concrete-based cladding accented with spandrel panels in emphasis area and glass balcony guards throughout.



5.8 Streetscape and Landscape Design

Inclusive Design – CW | MTSA | TB

Street Design – CW | MTSA | TB

Street & Open Space – TB

A detailed landscape design plan has not been prepared at the time of the OPA/ZBA submission. The proposed building base positioning and arrangement supports a strong urban edge along both the Site's King Street East, Sportsworld Crossing and Deer Ridge frontages. The proposed development provides opportunities for comprehensive landscape treatments that contribute to an attractive, pedestrian-oriented environment. A high degree of transparency is proposed on the buildings' ground floor planes with at-grade commercial spaces and indoor amenity areas to support a vibrant and animated streetscape. Decorative pavement to complement the building materials will be considered to highlight significant pedestrian connections, amenity spaces, and enhance the public realm. Smaller landscaped areas within the internal driveway providing opportunities for soft landscaping and integrated seating fixtures.

The ground floor of the building base for Phase 1 provides for a more open plaza space at the corner of King Street East and Sportsworld Crossing Road. Surface treatment with an assortment of sitting, patio and/or café areas associated with the ground floor commercial activities may be considered for this space. Detailed design will further explore and illustrate these public and public/private spaces. Lighting elements at the time of detailed Site Plan Approval design will address appropriate lighting levels for safety in these higher pedestrian activity areas. Opportunities for incorporating landscaping elements and surface treatment that promotes stormwater infiltration will be explored at detailed design.

5.9 Amenity Area

Shared Spaces – CW | MTSA | TB

Phase 1

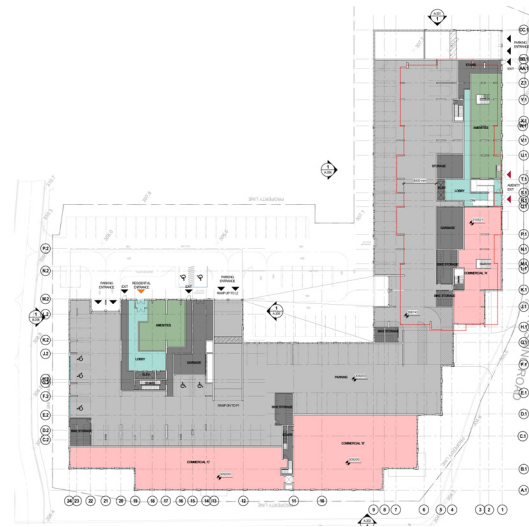
The proposed development plan contains a suite of different indoor and outdoor common amenity areas for residents. There are two double storey amenity areas at grade for each tower; one accessed from Sportsworld Crossing and other from the internal driveway. The podium rooftop terrace between Tower “A” and Tower “B” situated on the third floor is a large outdoor amenity area for a multitude of social and amenity functions for residents. A detailed landscape design plan for the rooftop terrace have not been explored at this time. Conceptually, this terrace design is principally a hard surface treatment of deck pavers for durability and ease of maintenance. Soft landscape treatments are added through raised massed planted beds, including deciduous canopy trees within the beds and standalone, together with removable planters around the perimeter of the terrace. A pergola structure is proposed, to promote the dispersment and deflection of wind and create a suitable microclimate within that area.

The outdoor function of the rooftop terrace is complemented by the individual unit balconies throughout the tower mass. The size and configuration of these balconies varies depending on the context, including smaller recessed balconies and longer balconies that wrap building corners.

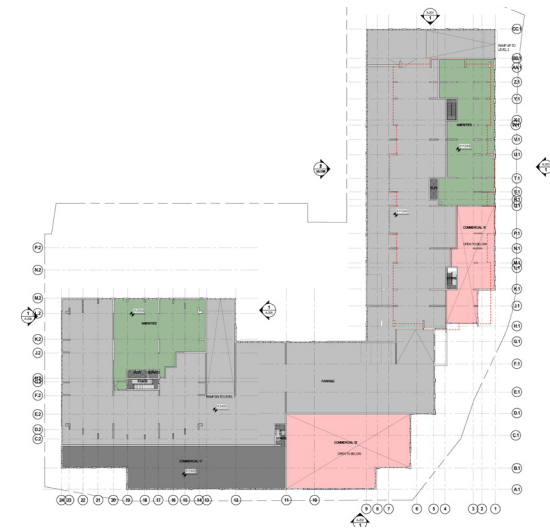
Phase 2

The proposed development will include indoor amenity spaces located on the ground floor and second floor. They are placed in close proximity to the lobby and commercial units, to encourage community integration and social gathering. These areas will function as multi-use common areas that can be programmed for different events/functions.

Phase 1

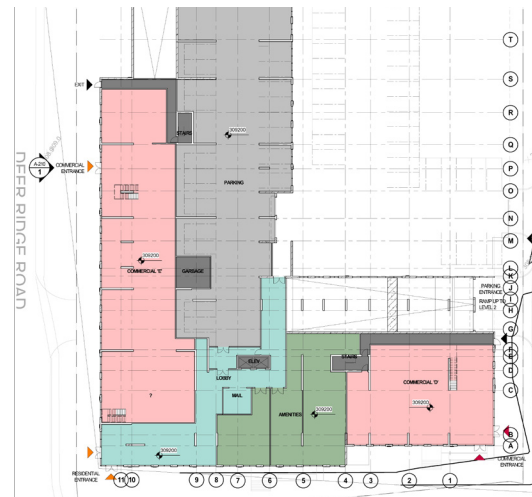


Level 1 Floor Plan

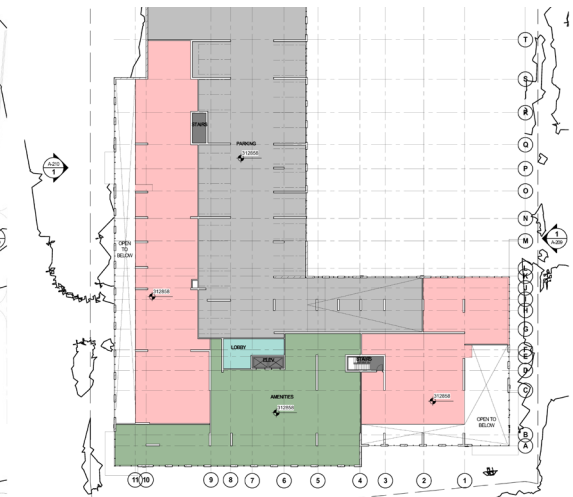


Level 2 Floor Plan

Phase 2



Level 1 Floor Plan



Level 2 Floor Plan

 Indoor Amenity Areas

6.0 Microclimate Analysis

Design for Sustainability – CW | MTSA | TB
Environment – TB

Shadow Impact

Shadow Analysis is a complete application submission requirement per the Record of Pre-Submission Consultation. For private properties, generally the common municipal criterion is 4 hours of sunlight on private amenity areas. For the public realm, the Tall Building Guidelines specifically identify that shadow analysis should demonstrate how a proposed building maintains “daily access to at least 5 hours of cumulative direct sunlight under equinox conditions” on nearby open spaces and sidewalks. To demonstrate this, shadow impact graphics are provided in Appendix A for March 21, June 21, September 21 and December 21 from 10am to 4pm at 2-hour intervals.

The below analysis of equinox conditions (and solstice conditions for reference) demonstrate the impacts are acceptable and provide sufficient sun exposure per the Tall Building Guidelines guidance. In summary:

- The proposed development generally maintains five hours of sunlight on abutting properties.
- King Street Sidewalk: The sidewalks along King Street are not impacted by shadows from the proposed development during any season.
- Sportsworld Sidewalk: The sidewalks along Sportsworld Crossing generally receives more than four hours of sunlight during all seasons.
- Deer Ridge Drive Sidewalk and Adjacent Building: Service area of the Mazda Showroom and sidewalks are partially shaded and there are no shadows impacts from 4pm onwards under equinox condition.
- Rooftop terraces: The proposed rooftop terrace on Level 3 of Phase 1 receives more than five hours of sunlight during equinox conditions.

Pedestrian Wind Analysis

RWDI prepared the Pedestrian Wind Study that assessed the potential wind comfort and safety conditions on and surrounding the Subject Site resulting from the proposed development. The Study was based on computer-based modelling of the proposed development under existing and proposed conditions. Although much of the Subject Site would have satisfactory conditions, the Study recommends wind control features through detailed design to improve pedestrian comfort in locations with higher than desired wind conditions. The Study makes the following conclusions:

- Wind conditions are satisfactory for intended use at all areas around the Existing site.
- With the introduction of proposed development (Phase 1 and Phase 2), conditions at grade level areas, including all main entrances and sidewalks, are predicted to be suitable for the intended use in the summer.
- Due to the westerly winds downwashing at the west façade of Tower B, wind conditions are expected to be less than ideal near the northwest corner of Tower B during the winter.
- The outdoor amenity area on Level 3 is expected to be suitable for siting, standing or strolling in the summer.
- In the summer, wind conditions at most above-grade amenity areas are expected to be suitable for siting, standing or strolling. Increased wind speeds are predicted on the terrace. However, this is taking into account that there is limited use of outdoor activities during colder months.
- Wind control measures are recommended in the report to achieve lower wind speeds on the terraces and to improve pedestrian comfort near the entrances of Tower B and Tower C. Mitigation measures include recessed entrance and/or windscreen/landscaping near Tower B and Tower C entrances and installation of tall guardrails, trellis/canopy features at the base of Tower B and hardscaping/landscaping elements strategically placed around seating spaces.

Table 1: Shadow Impact Analysis Summary

Building Impacts On	Adjacent Buildings (north)	Sportsworld Crossing Road Sidewalk (east)	King Street East Sidewalk (south)	Adjacent Building and Deer Ridge Drive Sidewalk (west)
March 21	No impacts from sunrise to 10am (3 hours). Parking lots of adjacent buildings partially shaded from 10 am to 2pm (4+ hours); one of the building partially shaded at 12pm.	No impacts between 10am and 2pm (4+ hours); partially shaded at 4pm.	No impacts (6+ hours)	Mazda Showroom partially shaded at 10am; service area of the adjacent Mazda Showroom partially shaded at 12noon; sidewalk partially shaded between 10am and 2pm (4+ hours); no impacts from 4pm onwards.
June 21	Parking lots of adjacent buildings partially shaded between 10am and 4pm (6+ hours)	No impacts between 10am and 2pm (4+ hours); partially shaded at 4pm	No impacts (6+ hours)	Service area of the adjacent Mazda Showroom partially shaded at 10am; sidewalk partially shaded at 12 noon; no impacts from 2pm onwards.
September 21	Parking lots of adjacent buildings partially shaded from sunrise to 10am (3 hours); adjacent buildings partially shaded from 12pm.	No impacts between 10am and 2pm (4+ hours); partially shaded at 4pm	No impacts (6+ hours)	Mazda Showroom partially shaded at 10am; service area of the adjacent Mazda Showroom partially shaded at 12noon; sidewalk partially shaded between 10am and 2pm (4+ hours); no impacts from 4pm onwards.
December 21	Parking lots of adjacent buildings partially shaded from sunrise to 10am (3 hours); adjacent buildings partially shaded from 12pm.	No impacts (6+ hours)	No impacts (6+ hours)	Adjacent building partially shaded between 10am and 2pm (4+ hours); no impacts from 4pm onwards.

7. SUMMARY

The proposed building form is a multi-tower, mixed-use development sitting atop a two to three storey podium containing integrated parking garages. An Urban Design Brief is a requirement of the complete application submission for the proposed Official Plan Amendment and Zoning By-law Amendment to implement the proposed development. This Brief responds to the applicable Kitchener Urban Design Manual guidance, implementing the general site and building design policy direction of the Kitchener Official Plan.

In summary, the design of the proposed development:

- Embraces the Site's context of excellent transit proximity to core ION Stations and local bus routes through a street-oriented building form with bicycle parking facilities.
- Adds shopping and living opportunities to a developing mixed-use community in the Sportsworld Draft Station Study Area.
- Intimately positions the building to the King Street and Sportsworld Crossing street edges with active commercial ground floor uses features large expanses of ground floor transparency animating the public streetscapes.
- Provides a connected circulation pattern between building/garage entrances and the three public street connections for pedestrians, cyclists and drivers.
- Internalizes all loading, servicing, and parking garage functions away from abutting public streets.
- Arranges the towers to address separation and overlap considerations both on the Site and to any future off-site developments.
- Provides refined architectural approach to the three towers that distinguished each within an overall unifying aesthetic.

Based on the preceding assessment, the conclusion of this Urban Design Brief is that proposed design is appropriate and reflects good urban design. It respects the design policy and guideline direction of the Kitchener Official Plan and the multiple layers of the Kitchener Urban Design Manual. Specifically, the proposed building massing and tower arrangement was iteratively designed to satisfy the intent and objectives of the Tall Building Guidelines.

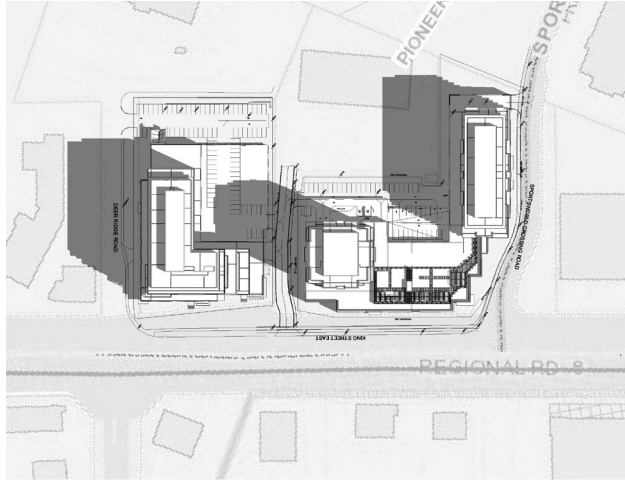
APPENDIX A

Spring Equinox

March 21



10:00 am



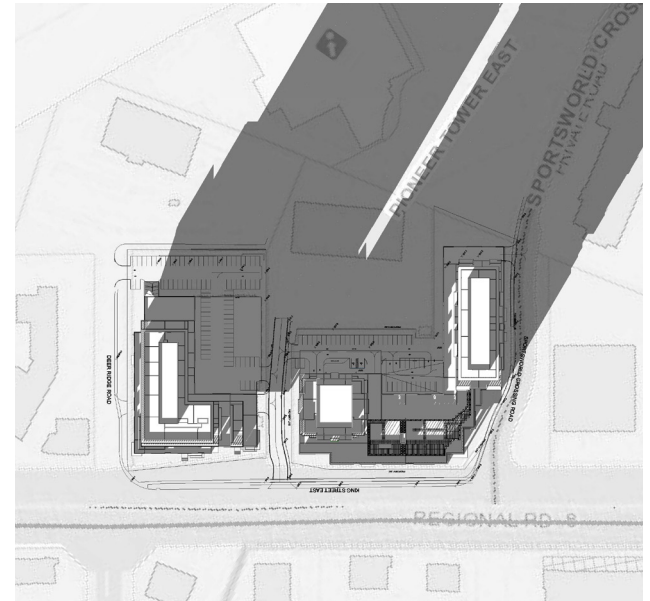
12:00 noon



2:00 pm



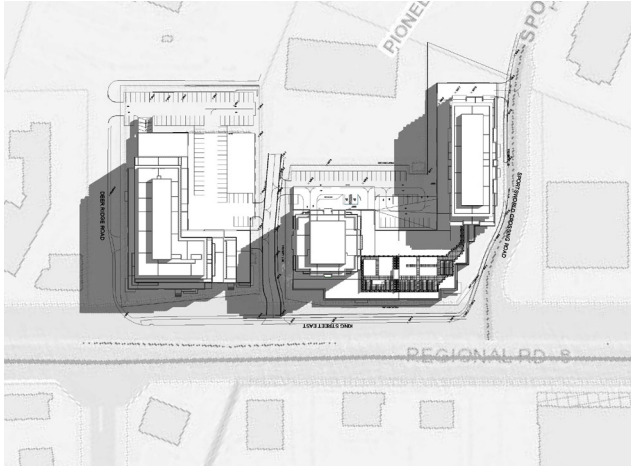
4:00 pm



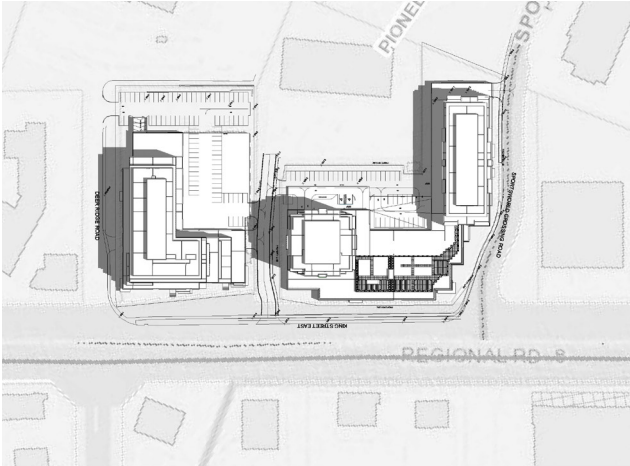
6:00 pm

Summer Solstice

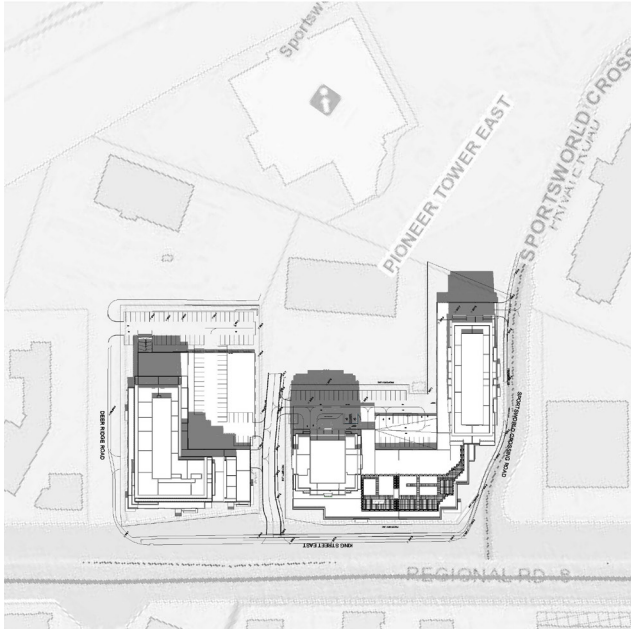
June 21



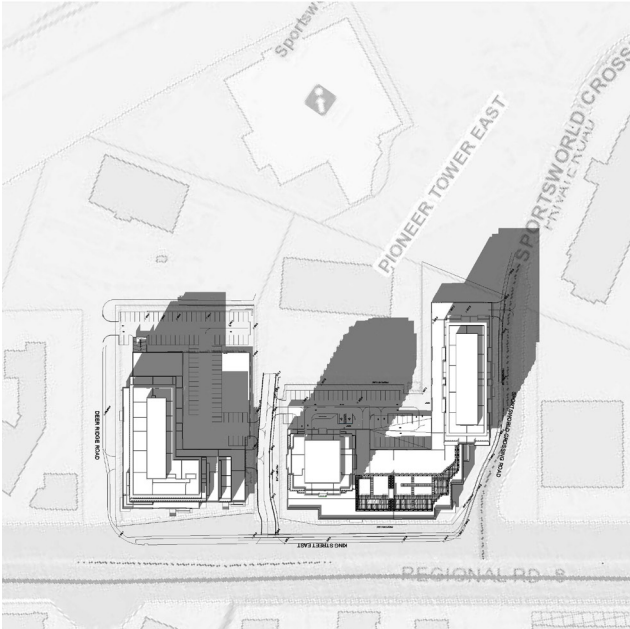
10:00 am



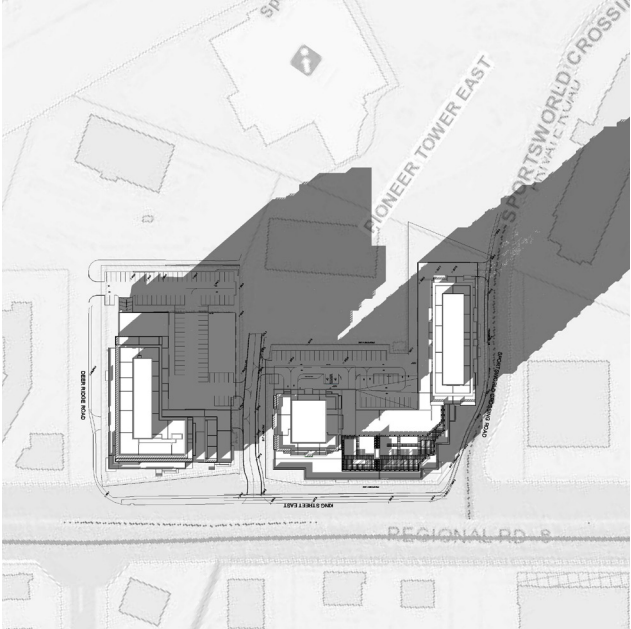
12:00 noon



2:00 pm



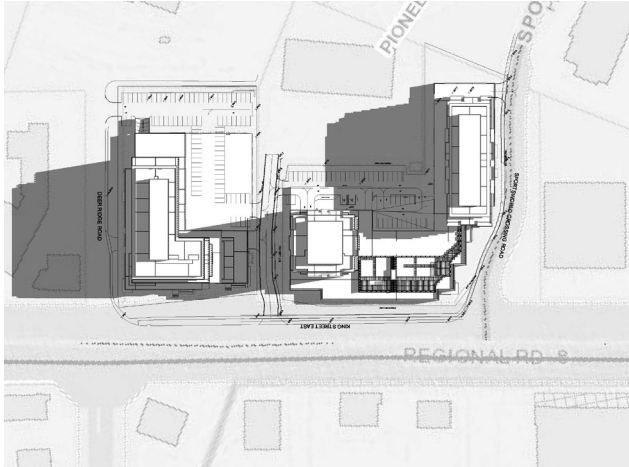
4:00 pm



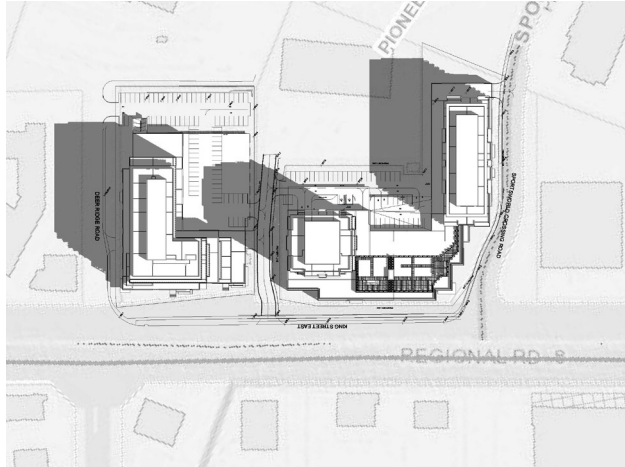
6:00 pm

Fall Equinox

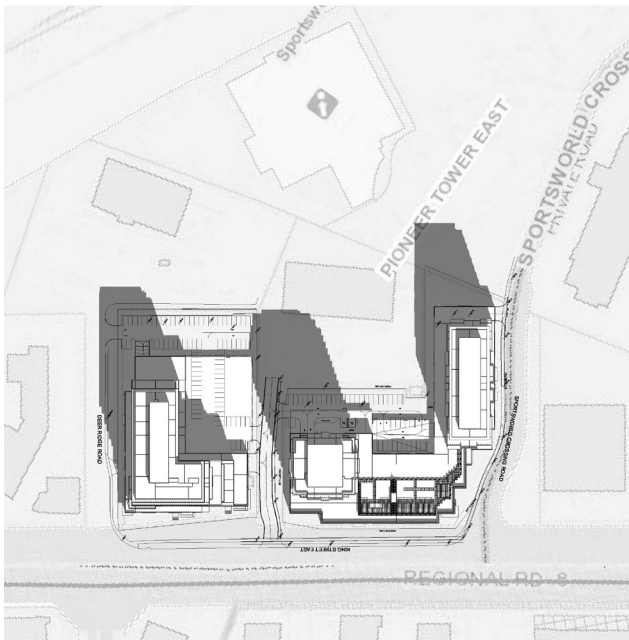
September 21



10:00 am



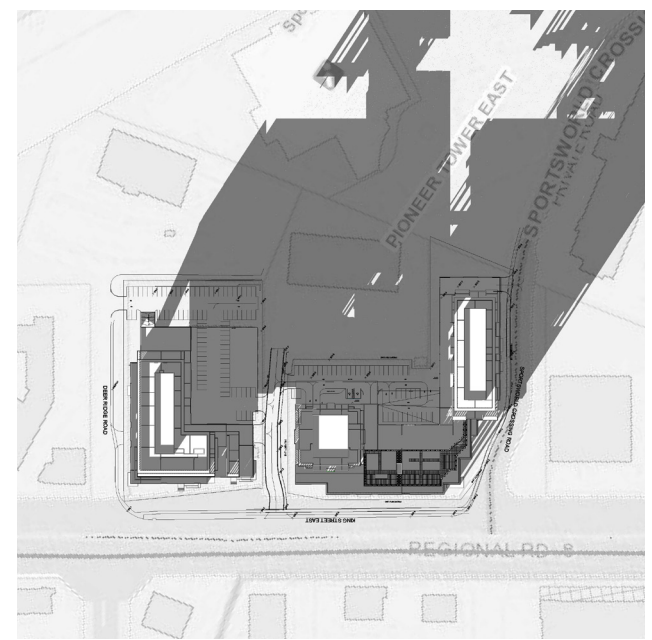
12:00 noon



2:00 pm



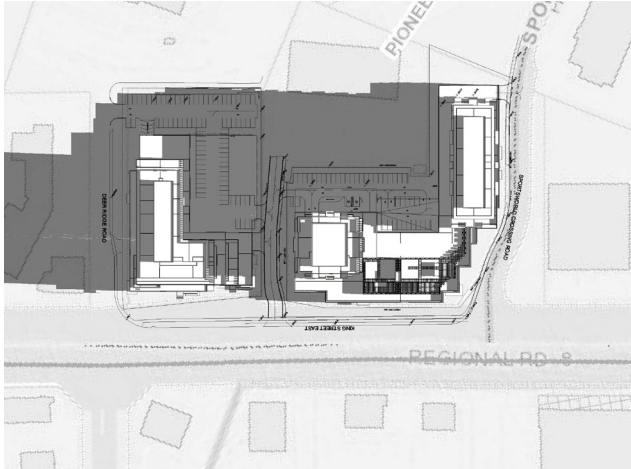
4:00 pm



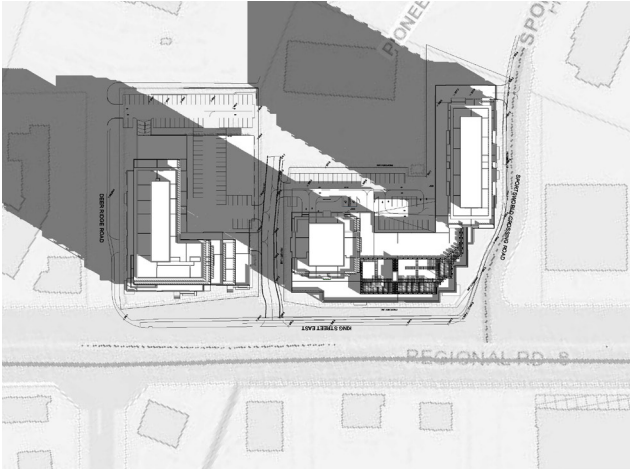
6:00 pm

Winter Solstice

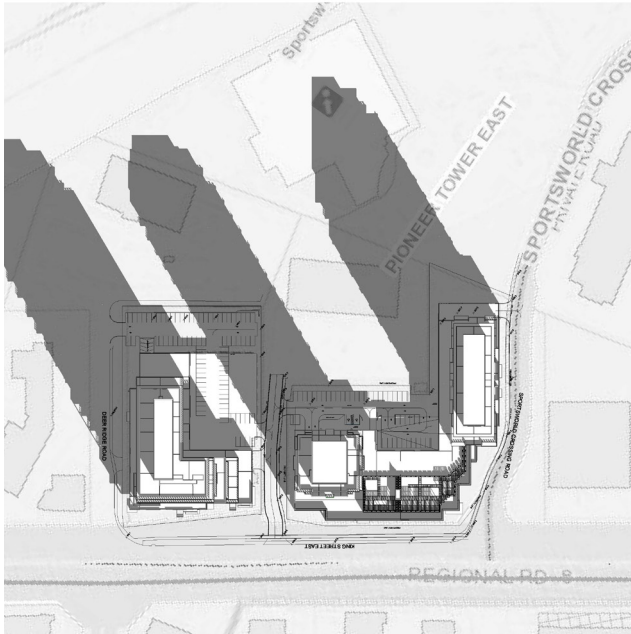
December 21



10:00 am



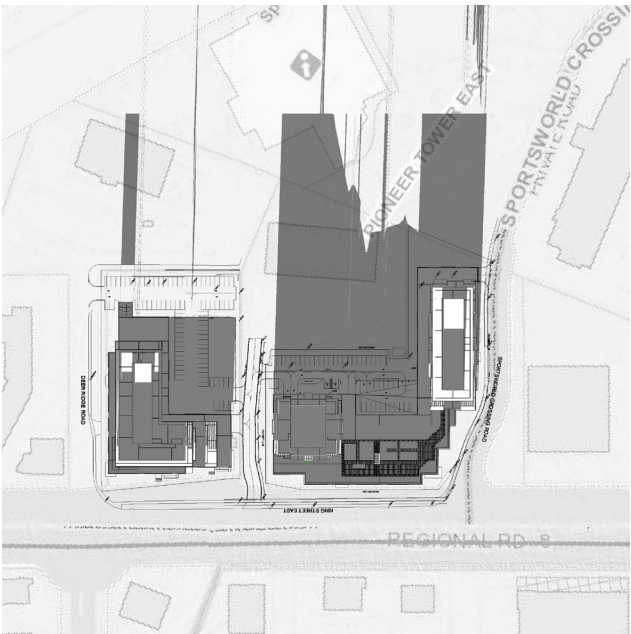
12:00 noon



2:00 pm



4:00 pm



6:00 pm