PICKERING DESIGN CENTRE

1755 PICKERING PARKWAY
PICKERING, ON

URBAN DESIGN BRIEF

JANUARY 2025

TURNER
FLEISCHER

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INTRODUCTION

This Urban Design Brief provides an overview of the applicable urban design policies and guidelines for the subject lands municipally known as 1755 Pickering Parkway.

The proposed development encompasses a diverse mix of residential, commercial, and retail elements, complemented by expansive green spaces, vibrant boulevards, and well-connected pedestrian and cycling paths.

This project will unfold in 7 carefully planned phases, each contributing to a cohesive urban environment. Starting from the western edge, demolition will gradually progress to shape a community that prioritizes public spaces, parks, and inviting streetscapes.

Strategically positioned taller buildings along Highway 401 create room for a central public park, a focal point designed to serve the entire development. Moreover, this layout facilitates the creation of a dynamic retail corridor that fosters a live/work atmosphere, supporting local businesses and enhancing community engagement.

Phases 1, 2, 4, 5, and 7 are oriented along Highway 401, while phases 3 and 6 are located north of the site, adjacent to Pickering Parkway.

TURNER FLEISCHER

SECTION 1 - **DESIGN OBJECTIVES & VISION**

1.0 - DESIGN OBJECTIVES & VISION

1.1 - DESIGN VISION

The comprehensive redevelopment of the subject lands is envisioned as a vibrant, sustainable, and inclusive community that seamlessly integrates high-density living, alternative transportation solutions, and pedestrian-friendly design to create a dynamic mixed-use development.

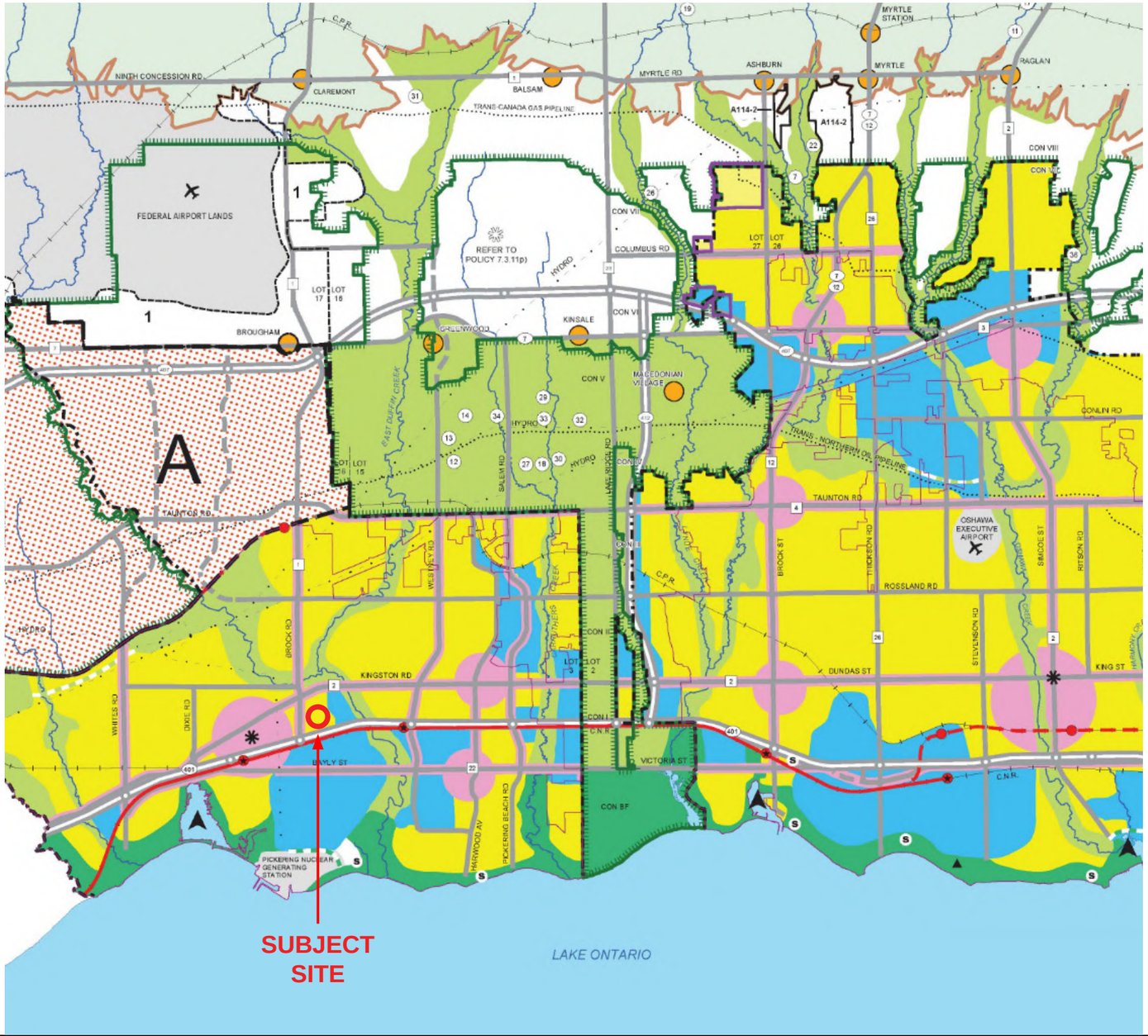
The phased approach aims to transform the commercial lands into a comprehenisve community that meets residents' living, working, and recreational needs.

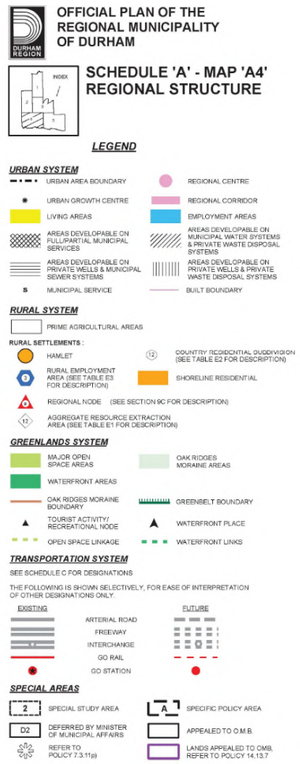
Our design objectives are:

- Establish a sizable public park at the heart of the project to serve the neighborhood's residents.
- Define and enhance the park's boundary with a cedar edge created by strategically arranging residential towers along the southern perimeter, aligned with Highway 401, to maximize public space.
- Develop a boulevard in front of building podiums to support retail spaces within each block, fostering local businesses and cultivating a vibrant atmosphere. This boulevard will act as a transitional space between retail areas and the central public park.
- Create a network of pedestrian and bicycle pathways connecting all open areas, building lobbies, and retail spaces, encouraging physical activity throughout the site. Some ground-floor openings have been designed to enhance these connections.
- Design the facades of residential and mixed-use buildings and podiums to differentiate individual commercial or residential units through diverse materials and distinctive architectural details, including entrance and window designs.
- Include pedestrian amenities, such as walkways connecting entrances, seating areas, landscaping, pedestrian-scale lighting, public art installations, and signage, wherever feasible.
- Use built form massing, setbacks, and terraces to maximize views of proposed open spaces and provide opportunities for outdoor amenity areas.

SECTION 2 - **POLICY FRAMEWORK & DESIGN RESPONSE**

2.0 - POLICY FRAMEWORK & DESIGN RESPONSE



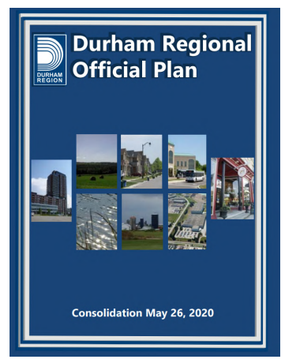


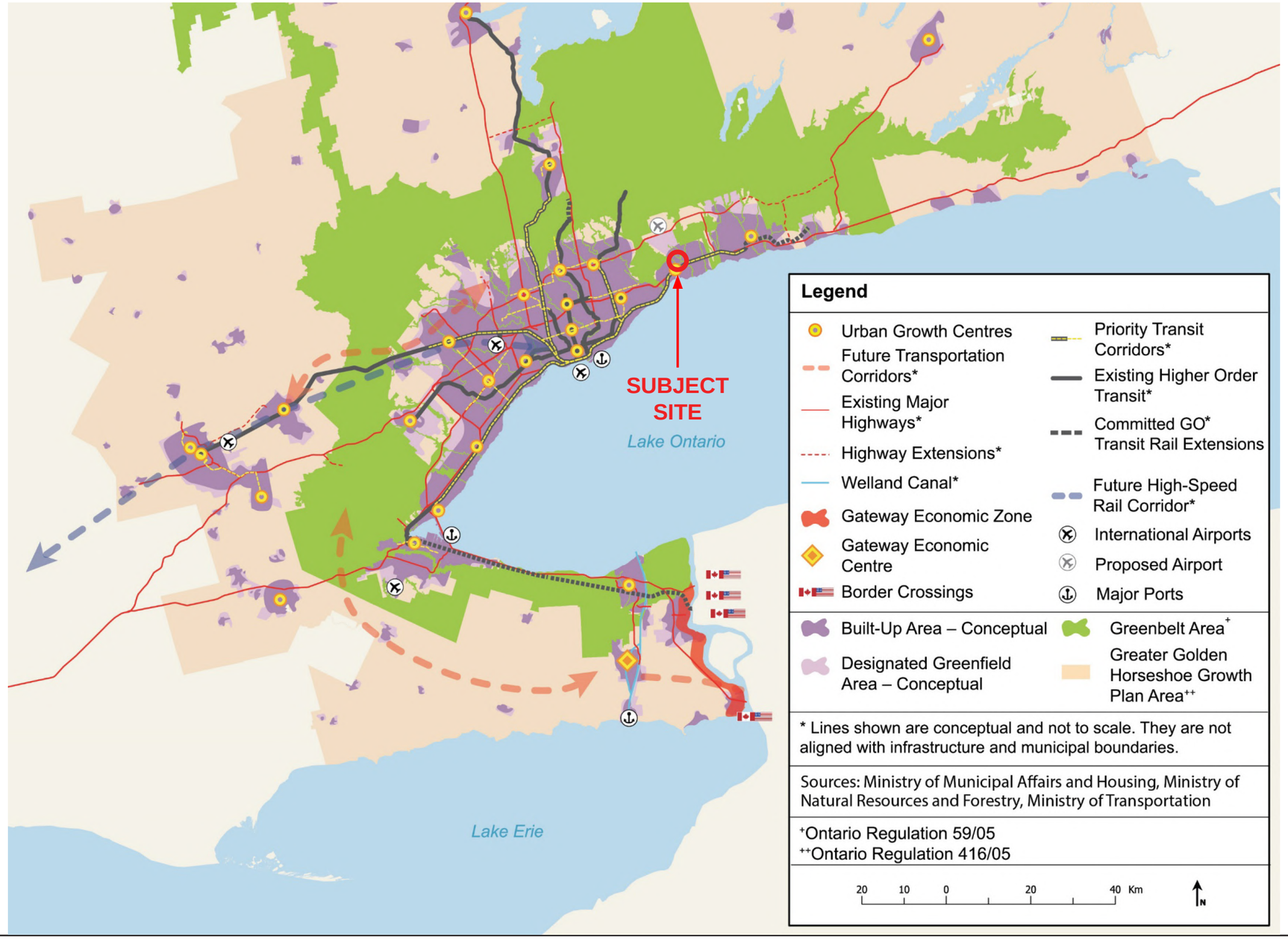
2.1 - DURHAM REGION OFFICIAL PLAN

The proposed Official Plan and Zoning By-law Amendments align with the Region of Durham Official Plan by representing intensification of existing developed lands in an area designated for such redevelopment, in accordance with the Regional Official Plan's encouragement for comprehensive redevelopment of shopping plazas.

The subject lands, located along the Regional Corridor (Brock Road) and identified for growth, conform to the Region's strategy allowing municipalities to direct growth in local centers, and exceeds minimum density requirements.

The transit-supportive nature of the redevelopment, its efficient use of existing and future infrastructure, and its contribution to the housing supply align with Regional housing policies, emphasizing proximity to transit and compatibility with non-residential uses.



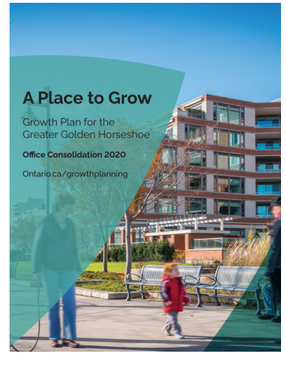


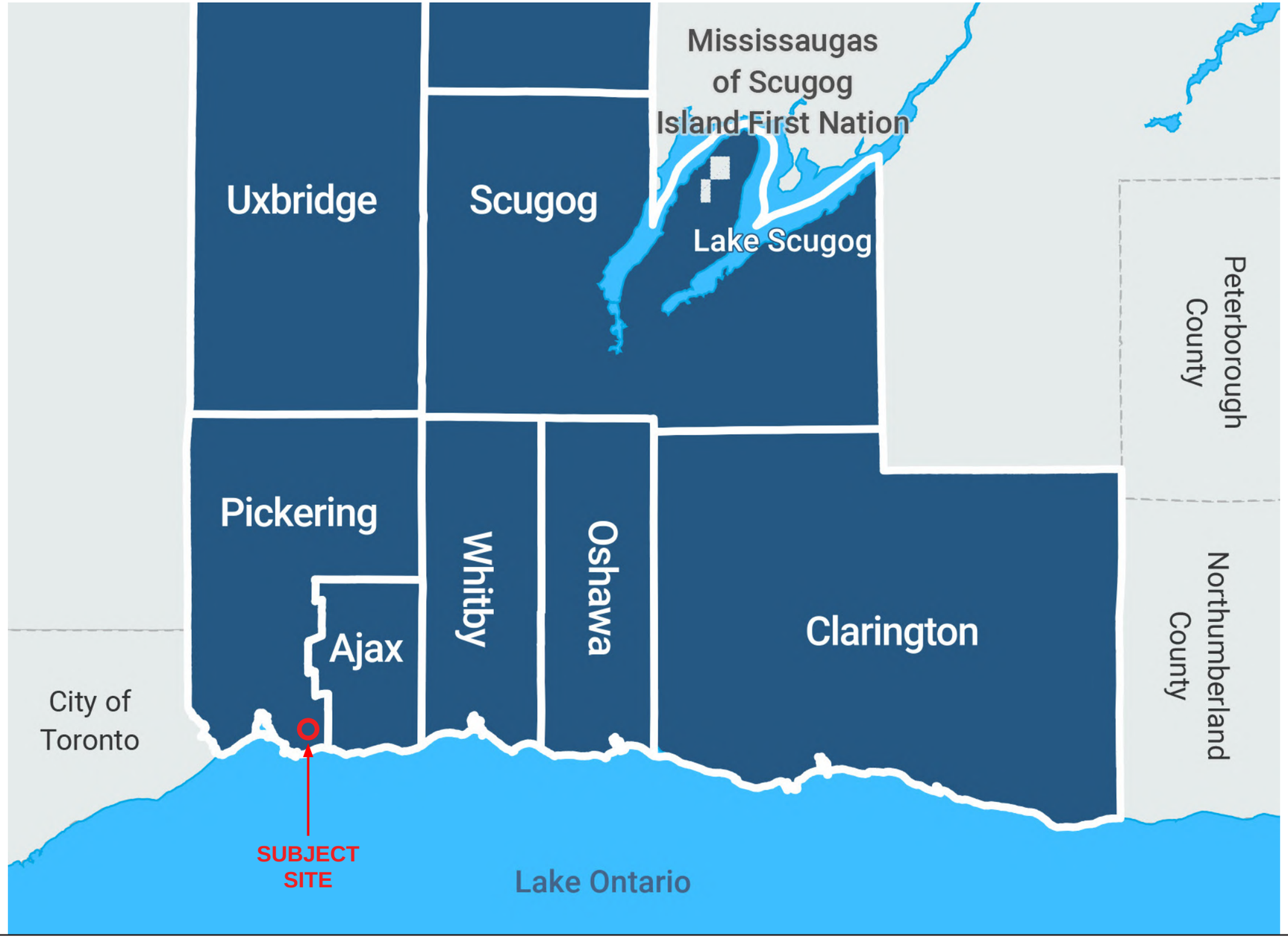
2.2 - A PLACE TO GROW (2020)

The proposed Official Plan Amendment and Zoning By-law Amendment conform with the Growth Plan's objective of developing compact, vibrant, and complete communities. The proposal introduces new residential uses within the Pickering settlement area, creating and supporting active transportation and street activity, contributing to complete communities.

The subject lands' location within a delineated built-up area, specifically in the Brock Node intensification area and close to local transit services, aligns with the Growth Plan's emphasis on intensification in strategic locations.

The proposed built form, in harmony with the existing and planned context, aims to create a diverse mix of land uses, housing options, and transit accessibility, fostering a high-quality, compact built form and an attractive public realm. Additionally, the development is anticipated to contribute to Pickering meeting Provincial growth targets, establishing a municipal policy framework for appropriate intensification in designated growth areas. The proposed mix of residential and commercial uses, strategically positioned to support active transportation, aligns with policies promoting complete communities and supporting the retail sector.



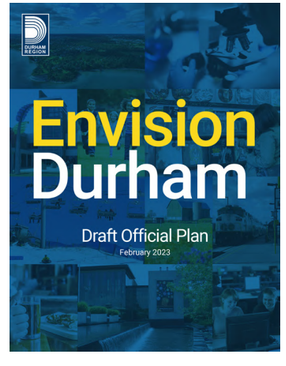


2.3 - ENVISION DURHAM

The Region of Durham Official Plan ('Envision Durham') designates the subject lands as "Rapid Transit Corridor",being at the south of the Brock Road "Regional Corridor" which is identified as part of the "High Frequency Transit Network". This area is considered a "Strategic Growth Area" with a minimum density of 150 people and jobs per hectare. High-density complete communities which are transit-supportive and encouraged.

Developments should include the establishment of high-quality pedestrian-oriented streets and public places and feature a mix of uses, including residential, commercial, and office. More specific matters of urban design are generally delegated to the Pickering Official Plan and its supporting documents.

The proposed development conforms to this policy guidance and will represent a pedestrian-oriented, high-density development.

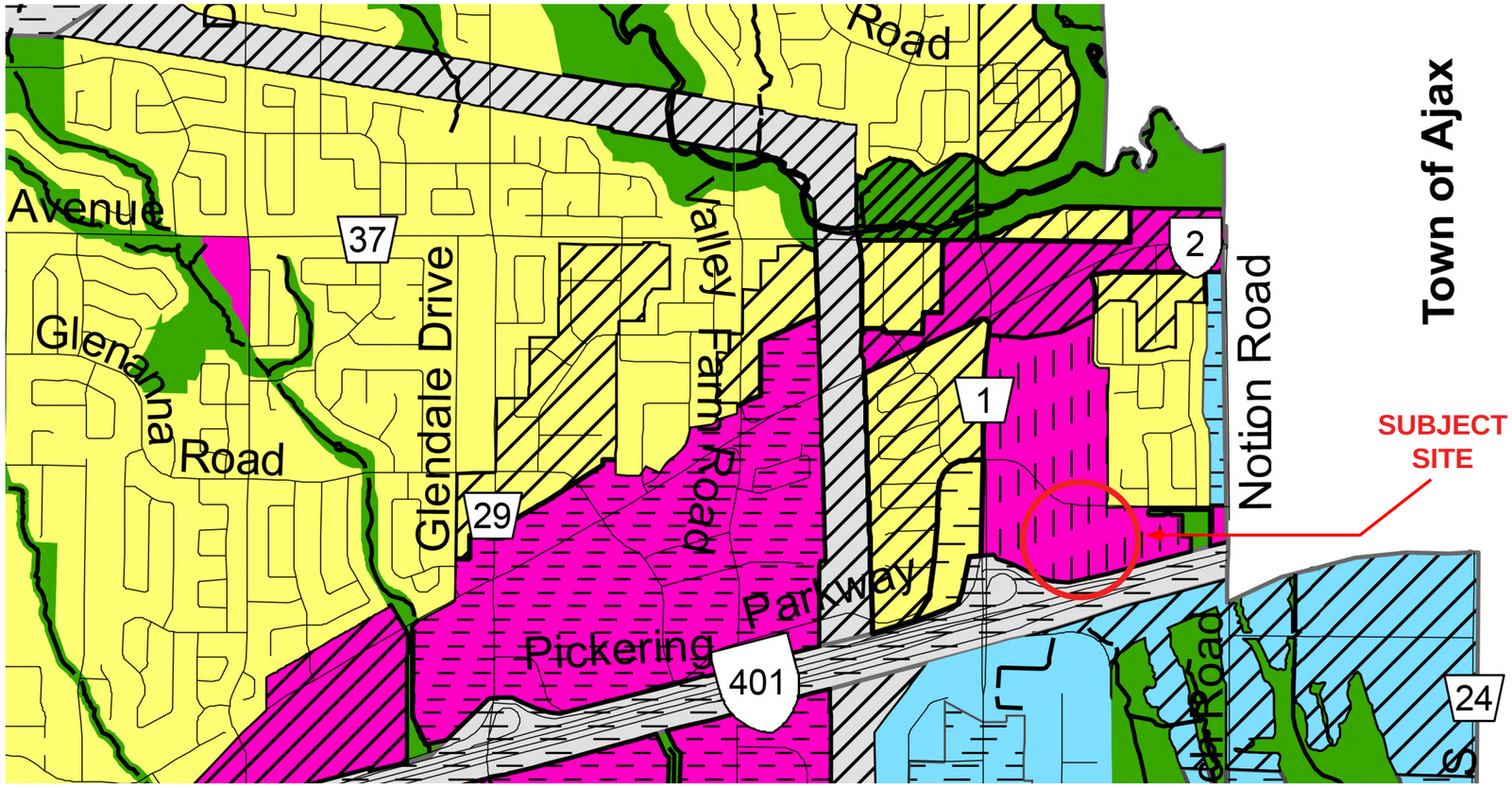


2.4 - PICKERING OFFICIAL PLAN

The proposed development generally aligns with the existing Pickering Official Plan's principles of urban design, facilitating comprehensive redevelopment of subject lands identified for significant intensification.

Located in the Specialty Retailing Node and recognized as Mixed Use Areas, the lands are proposed to be established as a growth node according to OPA 38, reflecting the unique growth potential identified in the City's Intensification Study. The implementing Zoning By-law Amendment is appropriate, supporting redevelopment in a compact mixed-use format in line with municipal directives and the Intensification Study.

The proposal includes a suitable mix of land uses, active ground-floor spaces, a new public road network connecting to arterial roads, and a significant number of new dwelling units, contributing positively to the housing supply. The redevelopment demonstrates consideration for community design principles, and the implementing Amendments facilitate appropriate standards for the various phases of redevelopment.



Schedule I to the

Pickering Official Plan

Edition 9

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- Seaton Natural Heritage System
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- Active Recreational Areas
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- Hamlet Heritage Open Space

Rural Settlements
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- Prime Agricultural Areas
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- Greenbelt Boundary

City of PICKERING

Pickering Official Plan
Edition 9

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Pickering Official Plan Edition 9:

Chapter 3 - Land Use

MIXED USE AREAS

Mixed Use Areas are areas and corridors of development having the highest concentration of activity in the City and the broadest diversity of community services and facilities. Mixed Use Areas permit a wide variety of uses for residents, business-people and visitors, including residential, retail, commercial, business, office, service, recreational, community and cultural uses.

(f) ensure Mixed Use Areas are designed and developed consistent with the community design provisions of this Plan (Chapters 9 and 14), and any development guidelines that may be established in a Part 3 Neighbourhood Plan (Chapter 12);

(g) within the Specialty Retailing Node:

(i) prior to zoning for significant retail floor space, shall require the submission of a retail impact study justifying, to the City's satisfaction in consultation with the Region of Durham, that the addition of such floor space will not adversely affect the planned function of the City Centre, the Community Nodes, and nearby Main Central Areas in other municipalities in the Region;

(iv) shall not permit an enclosed shopping centre or pedestrian mall;

Chapter 9 - Community Design

COMMUNITY DESIGN GOAL

Promote developments at various scales which, through their adherence to principles of good, high quality community design, will produce built and natural environments in Pickering that offer enjoyment, comfort & safety for all users, and evoke a desirable image and sense of place for the City.

COMMUNITY DESIGN OBJECTIVES

(a) encourage the creation of an overall physical form for Pickering that is related to the scale and pace of pedestrians;

(b) encourage private and public developments that offer pedestrians and users a high level of comfort, enjoyment and personal protection;

(c) encourage private and public developments that provide an integrated mix of uses, activities and experiences;

(d) encourage the design of road patterns, buildings and the spaces between them in a manner that supports an efficient public transit system and makes it easy for both pedestrians and vehicles to move about in a variety of directions;

(e) encourage developments that are designed to fit their contexts by considering the mix of uses, and the massing, height, scale, architectural style and details of existing, adjacent buildings;

(f) encourage developments that create spaces between and along buildings that are of high architectural and landscape quality, and contribute to and enhance the overall quality of Pickering's public realm;

(g) encourage, where appropriate, the creation of landmarks and other distinctive elements including buildings, open spaces, landscapes and natural features that make it easy for people to understand where they are, and how they get to the various places, amenities and facilities they require;

(h) encourage the design of buildings and places that can be used for a variety of purposes, and are capable of adapting over time to changing circumstances and opportunities;

(i) encourage the use of colour, decoration and variation in material to create buildings, and the spaces around buildings, that are attractive for people to look at and use; &

(j) encourage developments that establish appropriate relationships between built and natural environments, that ensure sensitive natural systems are protected and where possible enhanced, and celebrate significant aspects of the natural and cultural landscape.

Chapter 14 - Detailed Design Considerations

COMMUNITY IMAGE

(a) require that development at all scales creates, reinforces, and enhances distinctive neighbourhoods, nodes and corridors, and enhances the specific character of existing developments and neighbourhoods;

(b) consider identifying at certain locations in the City, gateways and landmarks and require that these locations be maintained and enhanced through community design measures;

(f) require all new public and private sector development at the Highway 401 and 407 interchanges to exhibit a high standard of architecture and urban design, in order to provide attractive gateways into and exits from the City and to take advantage of these locations with high visibility.

DEVELOPMENT AND SUBDIVISION DESIGN

(a) encourage designs and patterns for streets and major aisles that provide appropriate access for vehicles, public transit, pedestrians and cyclists; create view corridors and vistas where appropriate; and allow adequate space for utilities and services;

(b) encourage designs of streets, major aisles, blocks and lots that create a public realm supporting comfortable and safe pedestrian activity and movement both within and beyond the development;

(d) encourage new subdivision streets and major aisles that generally align on a grid or modified grid pattern in order to create development blocks appropriately sized for their intended use and possible future uses;

(f) encourage the design of local road patterns that provide direct pedestrian access to transit stops and transfer nodes;

(g) introduce public roads into large blocks of developable land.

VIEWS AND VISTAS

(a) recognize significant views of prominent buildings and open spaces at the scales of neighbourhoods, streets, small public spaces and individual development sites;

(c) evaluate new development proposals for their opportunity to maximize, create or enhance views and vistas;

Responses:

Chapter 9 - Community Design

The proposed development aligns with the objectives outlined in Chapter 9, aiming to deliver a high-quality, compact, mixed-use development within Pickering's urban area designated for intensification.

The project aims to foster a lively community by offering diverse housing options, retail and work-live arrangements, varied built forms, and community amenities. Furthermore, it strives to achieve architectural excellence through the use of distinct materials and thoughtful articulation.

Chapter 14 - Detailed Design Considerations

COMMUNITY IMAGE

The proposed development aims to elevate the community's image and character by introducing a large public park. It seeks to enhance both the public and private realms through thoughtful design, including podiums that are actively connected to the public parks, amenities, and open spaces. The design also prioritizes creating a vibrant pedestrian environment along the streetscape and within shared public and private open spaces called retail boulevard.

DELOPMENT AND SUBDIVISION DESIGN

The proposal outlines seven phases of development, each delineated by the introduction of new public and private streets that seamlessly connect with existing ones. This approach creates shorter blocks, fostering a pedestrian-friendly environment conducive to
community interaction.

VIEWS AND VISTAS

The proposed massing and architectural design of the podiums and towers, coupled with enhanced landscaping in both public and private areas, will play a crucial role in defining the new public park as a distinctive community landmark.

(d) endeavour to maintain and enhance views of natural features, including woodlots, topographic features, bodies of water and across open spaces;

(e) endeavour to ensure that the design and layout of streets and pedestrian routes provide vantage points for significant views and vistas along their lengths; and

(f) endeavour to ensure that the design of sidewalks and other portions of buildings adjacent to public spaces provides views from exterior to interior activity areas, including stair-wells, corridors, and entrance and elevator lobbies.

DESIGN OF PUBLIC OPEN SPACES

(a) promote the design, preservation, enhancement and creation of significant public open spaces in both the urban areas that contribute to the City's image;

(b) encourage public open spaces that complement and support the uses and activities generated by surrounding buildings and uses;

(c) promote the provision of public open spaces for community uses and activities such as festivals and other public gatherings in areas that are readily accessible to people, or where demand warrants;

(d) encourage in urban areas the creation of smaller outdoor spaces such as small parks, gardens and courtyards, where appropriate, and endeavour to ensure these spaces are defined and complemented by the architectural and design features and the scale of the buildings that surround them;

(e) encourage within publicly-accessible open spaces, a high quality environment with adequate amenities such as appropriate paving, benches, bicycle racks, refuse con-tainers, lighting and other elements that accommodate the intended users of the space;

(f) consider elevated public open spaces, both natural and built (including rooftops, bridges, hilltops and embankments) as possible vantage points that provide panoramic views of the surrounding landscape from which people may better appreciate and understand Pickering's image;

(g) encourage the design of open spaces to consider the user's sensory experiences of light, sound, smell, colour, water and temperature;

(h) encourage the design of private space adjacent to public streets and open space areas (e.g., outdoor patios) to support the function and enhance the appearance of the adjacent public streets or areas; and

STREETSCAPES

(a) support the creation of specialty treatments including planted boulevards and median strips, theme lighting and street furniture, and other design features, on strategic streets in Pickering;

(b) encourage landscape design along streets to complement adjacent built forms and open spaces, to provide shade in the summer and visual interest throughout all seasons, and to accentuate the special character of particular streets;

(c) support, where appropriate, the use of sidewalks and adjacent publicly-accessible open spaces as outdoor patio restaurants;

(d) promote a unified design of decorative treatment for sidewalks within strategic areas, such as the City Centre, community nodes and other important shopping areas;

HUMAN SCALE

(a) encourage the use of continuous horizontal projections such as cornices, roof overhangs or masonry courses within the first few storeys of buildings adjacent to pedestrian routes to establish human-scaledvisual and physical references;

(b) encourage development at heights that are related to the width of the streets they front in order to establish a sense of enclosure along the public sidewalk, and to ensure reasonable sunlight on the street;

(c) encourage building designs that capitalize on the use of grade level windows and doors to permit visibility of human activities within the public areas of buildings;

(d) encourage the use of trees and shrubs in areas of more intense development or within large open spaces to create human scale; and

(e) promote the design of buildings, spaces, and facilities to accommodate the varied range of human dimensions, levels of mobility and strengths.

DESIGN OF BUILDINGS

(a) encourage buildings that can be identified and appreciated at various scales, including up close, from the immediate area (including nearby streets that offer direct views of the building), and when appropriate, from locations beyond the immediate area;

(b) where groupings of buildings are proposed, require built forms, massing and architectural treatments that create cohesive and unified developments, and are architecturally compatible with each other and surrounding areas;

(d) require designs that present continuous building façades along major streets and express design elements such as floor and ceiling levels, window heights, columns and internal divisions, to assist in defining human scale and providing visual interest;

(e) discourage the placement of building functions which do not directly support public activities, such as loading bays, utility rooms and other building mechanical features (e.g., exhaust grilles), from being located on building façades adjacent to streets;

(f) require the orientation of the main front entrances to commercial, industrial, apartment and public buildings towards the street whenever possible, and to be visible from main pedestrian routes and vehicular approaches;

(h) require the height, form, massing and articulation of the façade of new buildings to reflect its "position" or significance on the street (e.g., designing a commercial building that

capitalizes on special opportunities provided at street corners or at the end of a view corridor);

(i) endeavour to ensure that building designs provide opportunity for protection from the elements (rain, snow, wind and sun) through the use of features such as awnings, canopies, colonnades or recessed ground floor façades;

(j) require the incorporation of bicycle storage areas in high density residential, commercial and major industrial buildings and sites;

(k) encourage the use of high quality, low maintenance building materials to help ensure an attractive appearance over time;

(l) discourage the use of corporate image building design and promote design which reflects neighbourhood character;

2.4 - PICKERING OFFICIAL PLAN

Responses:

DESIGN OF PUBLIC OPEN SPACES

For public spaces, our entire development revolves around the public park as it is the main focus. In addition to that, we have included several elements such as privately owned public spaces (POPS), a retail boulevard, walkways, and tracks to enhance the public open space experience for the community. These elements will be seamlessly integrated with the building architecture to create a cohesive pedestrian circulation network throughout the community.

STREETSCAPES

The proposal incorporates a pedestrian-friendly scale with an appealing built form and façade, particularly facing the newly created public park and right-of-ways within the site. This approach extends to the Pickering Parkway on the north side of the site and the roads connecting the site to the Pickering Parkway, fostering activity on the street while enhancing pedestrian safety and comfort. The streetscape design will feature barrier-free elements, decorative treatments, plantings, and landscaping features, to enrich the public realm.

HUMAN SCALE

The design, massing, and architecture of the proposed development will significantly influence the urban form of the community, therefore the scale and height of the proposed podiums are carefully tailored to suit the width of the streets and the existing built form. Additionally, the podiums will feature materials with refined textures and details, facilitating visual connections and fostering a warmer interaction with pedestrians. The use of warm colours further enhances this connection, creating an inviting environment for the public.

DESIGN OF BUILDINGS

The proposed development encourages buildings of various scales, arranged to create cohesive and unified developments, with continuous building façades along major streets. The design aims to distribute density across the site appropriately and provides entrances to residential, commercial, and community uses towards the street. Sustainable design measures, such as bird-friendly glazing, building materials, and low-impact development practices, will be utilized where possible.

(o) encourage the implementation of green development standards in the design of buildings, including but not limited to the following:

(i) incorporating energy efficiency and alternative or renewable energy resources (such as solar panels) to reduce energy demand;

(ii) installing green or white roofs to improve energy efficiency in buildings, stormwater absorption and quality, and to reduce urban heat island effects;

(iii) installing bird-friendly glazing, particularly on new tall buildings proposed within established migratory flights paths, to prevent potentially fatal collisions with windows;

(iv) using non-toxic and recycled content building products; and

(v) orienting buildings to maximize the use of natural sunlight;

(p) encourage development to design and certify new buildings to LEED® Silver, Gold or Platinum standards, or alternative equivalent

PERSONAL SECURITY

(a) endeavour to ensure that the design of developments minimize conditions that are potentially dangerous to the public without impeding functional and aesthetic characteristics;

(b) encourage the continuous occupancy and use of public spaces throughout daily, weekly and seasonal cycles by encouraging the mixing of spaces, activities and institutions which enable public presence at varied times;

(c) discourage developments from having public and publicly accessible spaces such as parking facilities, outdoor and indoor walkways, elevators, stairs and lobbies in remote or isolated locations;

(d) endeavour to ensure publicly accessible spaces are located near public roads, transit stops and other high activity spaces to enable public surveillance;

(e) endeavour to ensure landscaping plants and materials are used in a manner that does not obstruct views into lobbies, windows, parking facilities and pathways, or any other views needed to ensure clear surveillance and safety;

(f) endeavour to ensure views are provided into, out of, and through publicly-accessible interior spaces of developments through the use of transparent materials in stairways, lobbies, hallways, elevators and doors;

(g) discourage the creation of long passages or outdoor walks which cannot be adequately watched or monitored;

(h) endeavour to ensure adequate lighting, early detection (e.g., mirrors and transparency), and remote monitoring (e.g., cameras) are used in locations where personal security risks may be present;

(i) endeavour to ensure developments are designed to provide users a choice of routes between parking areas, public streets or walkway systems, and building entrances and exits;

BARRIER-FREE ACCESS

(a) endeavour to ensure barrier-free access is provided to all public buildings, areas and transportation facilities by using features such as level surfaces, ramps, elevators, automatic doors, curb depressions, railings and rest areas;

(b) endeavour to ensure that the main travelled portions of pedestrian routes are kept free of obstructions such as street furniture, signs or building projections; and

(c) endeavour to ensure that barrier-free features are well integrated with the functional and aesthetic design of developments to preclude the perception of segregation.

PUBLIC ART

(a) promote the placement of a range of art in publicly-accessible and visible locations such as parks, prominent street corners, plazas and on buildings;

(b) encourage public art in a broad range of media, themes and formats in order to engage the observer, foster civic identity and promote social interaction; and

(c) consider integrating public art in the early stages of the design and planning of developments.

LIGHTING

(a) promote the use of lighting to enhance and define the aesthetic and functional quality of public places such as promenades, sidewalks, squares and parks;

(b) promote the use of lighting fixtures that are compatible with the scale of pedestrian activity;

(c) promote the lighting of key buildings such as the Civic Complex, historic buildings, landmark buildings and public monuments to accentuate their architectural features and significance;

(d) encourage the use of lighting to reinforce a particular design theme or distinctive character of specific areas of Pickering such as the City Centre and the Whitevale Heritage Conservation District; and

(e) reduce the effects of light pollution on the night-timesky and on adjacent uses by requiring the use of lighting fixtures that are particularly suited to the purpose and setting in which they are to be utilized.

SIGNAGE

(a) require the design of signs to be used to enhance the appeal of developments, and to integrate with the architectural design of buildings, in order to contribute to the overall visual quality of the built environment;

(b) encourage the use of an appropriate variety of signage types, such as fascia signs, canopies and awnings, projecting signs, ground signs, and directory signs, which complement building designs rather than dominate them;

(c) encourage non-business related signs, such as directional signs, public information kiosks, and general identification signs, to be accommodated in the design of buildings that are adjacent to, and incorporate, public or publicly-accessible spaces;and

(d) prohibit the use of portable signs except under specific circumstances and by permit only.

2.4 - PICKERING OFFICIAL PLAN

Responses:

PERSONAL SECURITY

The proposed development promotes building design and placement that enables visual oversight and easy access to adjacent public spaces, with unobstructed views of parks from surrounding streets. The design prioritizes adequate lighting, visibility, and surveillance for walkways, parking areas, and amenity spaces. Public areas are also situated at ground level and oriented towards the public street.

BARRIER-FREE ACCESS

The proposal will adhere to AODA requirements, ensuring barrier-free access for all users.

LIGHTING

The proposal includes lighting to ensure pedestrian safety, enhance the public space, and define key areas such as entrances to residential buildings, retail, and underground parking, in compliance with City of Pickering standards.

SIGNAGE

Signage for both business and non-business activities will be integrated into the building design of the development proposal, with careful consideration given to its placement and design.

OPA 38 (January 2022):
Chapter 11A

CHAPTER 11A: KINGSTON MIXED CORRIDOR AND BROCK MIXED NODE INTENSIFICATION AREAS

(a) the greatest densities and building heights shall be directed to the intersection of Brock Road and Pickering Parkway, with additional concentrations south of Pickering Parkway, along Highway 401;

(c) the greatest mix of uses within the precinct will be encouraged to be located along the east side of Brock Road,, and at the Brock Road and Pickering Parkway intersection, in particular, the development of office and Major Office uses is encouraged in these locations;

(d) support the development of the Brock Precinct as a complete community with transit-supportive densities, and a distinct community character and significant public amenities and facilities;

(e) transportation improvements will be prioritized to provide greater multi-modal connectivity, break up large parcels, create more routes of circulation off Brock Road and Pickering Parkway, and create more opportunities for the development of buildings with street frontages;

(f) consideration shall be given to the interface of retail and office with residential uses and the provision of appropriate transitions between buildings and in height, mass and scale to ensure compatibility with established residential neighbourhoods;

(j) where development or redevelopment is proposed on lands south of Pickering Parkway, north of Highway 401, consideration shall be given through block planning and a transportation study to the provision of an additional private street access to Brock Road.

11A.9.2 MIXED USE TYPE A

The following policies apply to the Mixed Use Type A land use designation as shown on Schedule XIV. Within these areas, City Council:

(a) shall require areas designated as Mixed Use Type A on Schedule XIV to have the greatest density and represent the highest-intensityuses within the intensification areas with a combination of higher density residential, commercial and retail uses including those which serve a broader area, and office uses in mixed use buildings, or in separate buildings on mixed use sites;

(b) encourages office uses, particularly Major Office uses and major community (institutional) uses, to be located in Mixed Use Type A Areas. Accordingly:

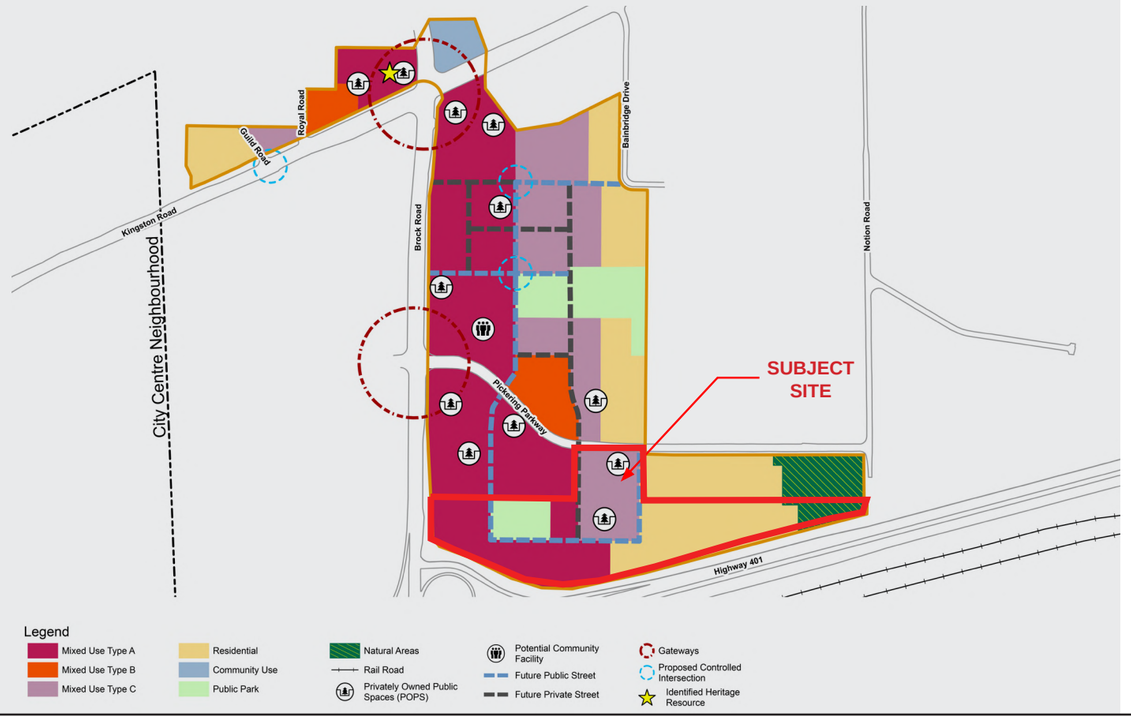
(i) these uses should be predominantly directed to major intersections or gateways where access to existing and planned transportation infrastructure is greatest, including higher order transit facilities;

(ii) Council will seek the accommodation of office space as part of developments within Mixed Use Type A Areas;

(iii) protection for future office space may be met through demonstrating phasing and/or including building types that can be easily converted to office uses over time; and

(iv) in addition to the complete application requirements in Section 16 of this Plan, Council may require the submission of an office demand study, where Major Office uses are not being proposed at major gateway locations.

~~Specialty Retailing~~ Brock Mixed Node	Medium density residential; High density residential; Retailing of goods and services; Offices and restaurants; Hotels; ~~Special Purpose Commercial uses such as: large format retailers (including large format food stores and large format discount stores); retail warehouses; membership clubs; theme and/or specialty retailers; automotive uses; and, ancillary retailing of other goods and services including restaurants;~~ ~~Limited office;~~ Community, cultural and recreational uses; Community gardens; Farmers' markets; ~~Limited residential development at higher densities as an integral part of an overall development scheme.~~



Amendment 38 to the City of Pickering Official Plan brings forward supplemental information directed through Council Resolution #730/21 at the November 22, 2021 Council Meeting, for the Kingston Mixed Corridor and Brock Mixed Node Intensification Areas.
This ammendment designated the site as the Brock Mixed Node instead of Specialty Retailing Node. We acknowledge that OPA 38 is under appeal and not in effect, however, it is indicative of Council's policy direction.

The development is strategically positioned to capitalize on the upcoming amendment, which encourages the greatest mix of uses within the precinct to be located along the east side of Brock Road and at the Brock Road and Pickering Parkway intersection. Specifically, the promotion of office and Major Office uses in these areas aligns perfectly with our development plans.

Furthermore, our project is designed to support transit-supportive densities, in line with the goal of developing the Brock Precinct as a complete community with a distinct character and significant public amenities and facilities.

City of PICKERING

Report to Council

Report Number: PLN 06-22
Date: January 24, 2022

From: Kyle Bentley
Director, City Developments & CBO

Subject: City Initiated Official Plan Amendment 38
Kingston Mixed Corridor and Brock Mixed Node Intensification Areas
Supplemental Information in relation to Council Resolution #730/21
File: OPA 20-004/P

Recommendation:

1. That Council adopt the By-law to enact Official Plan Amendment 38, provided as Exhibit 'A' to Appendix I to Report PLN 06-22, in accordance with Report PLN 41-21 and Council Resolution #730/21;
2. That the City Development Department be directed to provide an annual report to Council on the monitoring program and changes within Strategic Growth Areas in the City, including the Kingston Mixed Corridor and Brock Mixed Node Intensification Areas and the City Centre;
3. That the City Development Department be directed to work with the Economic Development & Strategic Projects Department, and the Public Affairs and Corporate Communications Division, to prepare an engagement strategy, for the City Initiated Zoning By-law Amendment process for the Kingston Mixed Corridor and Brock Node Intensification Areas, and for the City Centre, for endorsement by Council; and
4. That the appropriate officials of the City of Pickering be authorized to take the necessary actions as indicated in this report.

Executive Summary: The purpose of this Report is to bring forward supplemental information directed through Council Resolution #730/21 at the November 22, 2021 Council Meeting, pertaining to Official Plan Amendment 38 (OPA 38) for the Kingston Mixed Corridor and Brock Mixed Node Intensification Areas. The by-law to adopt Council approved Official Plan Amendment 38 is also being brought forward for enactment.

This Report provides a plain language document outlining the reason for the amendment; as well as additional contexts on the process to further review matters such as: maximum heights, measures that will ensure the vision for the area will be secured, how cumulative impacts will be considered, and a work plan for engaging the business community within the intensification areas.

OPA 38 is the latest step in a multi-phased process, which is required to implement the necessary policies and land use regulations for the City of Pickering to comply with the Province's Growth Plan, A Place to Grow. Further engagement opportunities will be provided to the community through the future City initiated zoning by-law amendment.

Urban Design Guidelines (2019):

Chapter 1 - Introduction

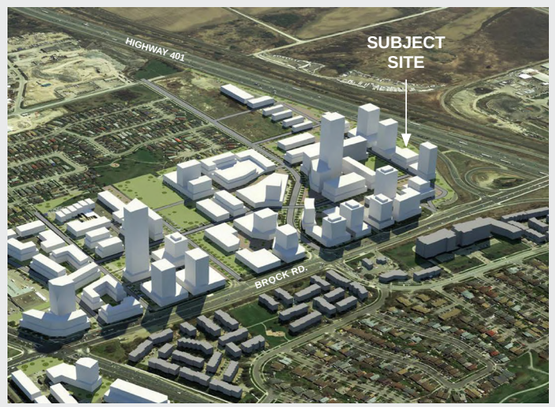
VISION STATEMENT

Throughout the course of this study, a renewed Vision was developed for the Kingston Road Corridor and Specialty Retailing Node.

In addition to the new Vision, a series of guiding goals and objectives for the corridor and node were prepared to guide the development of the Intensification Plan.

These goals and objectives are as follows:

1. *Advance the concept of place-making and create complete communities*
2. *Promote sustainability in the design and full life-cycle of the streetscape, open spaces and buildings*
3. *Stimulate economic growth and vitality*
4. *Promote mixed used development with an emphasis on higher density residential and employment uses integrated within a building or site*
5. *Design all public roads and private connections to be complete streets and emphasize transit and pedestrian oriented development*
6. *Improve access management and connectivity for all transportation modes*
7. *Encourage the optimization of infrastructure*
8. *Support implementation by considering phasing, flexibility and intermediate interventions.*



Chapter 2 - Built Form

KEY OBJECTIVES

• Promote higher-density mixed-use development while respecting the character and scale of established neighbourhoods through proper transitioning, and careful building design and placement.

• Introduce an animated public realm through encouraging active uses at grade & an enjoyable pedestrian experience.

2.2 BLOCK STRUCTURE

i. Block lengths should generally range between 100 and 150 metres to promote permeability within the streetscape, support walkability and increase the ease of pedestrian and cyclist movement.

ii. Where a block is longer than 150 metres and shorter alternatives are not feasible, mid-block connections shall be introduced through pedestrian paths or linear parks. Pedestrian-scale lighting should be implemented along these paths to increase comfort and safety.

iii. A mix of lot sizes, configurations and orientations should be provided to accommodate a variety of uses and enhance visual interest along the streetscape.

iv. Generally, a standard rectilinear lot is preferred to maximize design & siting options. The traditional lot shape may be varied to account for irregular slopes or boundaries.

v. Corner lots may require greater widths to account for increased building setbacks from both the front & side yards.

vi. Block layouts should be designed to maximize views and vistas through development blocks and towards gateways and natural heritage features.

2.3.1 BUILDING ENTRANCES

i. Entrances should be highly visible, front onto the public street, and connect to pedestrian walkways or sidewalks. Entrances should promote visibility and views between interior and exterior spaces

ii. Entrances should be emphasized as focal points in the building façade and be complementary to the building's overall articulation and material palette.

iii. Entrances should be well lit. Natural lighting is encouraged through the use of sidelights, fanlights or door glazing. Wall-mounted down-cast lighting is also appropriate adjacent to building entrances.

iv. Patios associated with building entrances should be consistent and proportionate in scale with the architectural style and massing of the building.

v. Weather protection features such as canopies, awnings, overhangs and recessed entrances should be incorporated, where possible, to provide users shelter from wind, rain, snow and other harsh elements.

2.3.2 BUILDING SEPARATION DISTANCES

v. For tall buildings over 13 storeys in height, a minimum separation distance of 25 metres shall be maintained between towers.

vi. A minimum separation distance of 15 metres shall be provided between facing buildings on sites with multiple buildings. On multi-building sites, it is encouraged that buildings are offset or angled away from each other to maintain privacy between facing units.

vii. A minimum separation distance of 15 metres should be provided between adjacent buildings where windows are proposed within a podium. No side-yardseparation is necessary where a continuous streetwall is desirable.

2.3.3 BUILDING SETBACKS

ii. In all other precincts, buildings fronting Kingston Road, Brock Road and Pickering Parkway shall be setback 5 metres from the front property line.

iv. In all precincts, buildings shall be setback a minimum of 2 metres from new public and private streets that are internal to the development block.

v. In all precincts, buildings shall be setback a minimum of 3 metres from parks and other open spaces.

vi. Where retail and commercial uses are located, setback areas should accommodate spill-out uses from commercial activity (i.e. patios, displays, waiting areas) to improve the pedestrian experience. These areas should be primarily hardscaped to act as an extension of the sidewalk and accommodate for higher levels of foot traffic.

vii. Where residential uses are located, softscape elements such as plantings should be used in setback areas to provide screening and maintain privacy for grade-related residential units. These areas may also include some public amenities (i.e. benches, bicycle racks).

Responses:

Chapter 2 - Built Form

KEY OBJECTIVES

In this development, we strategically positioned the taller towers closer to the highway respecting the lower heights of neighboring and future buildings to the north. This design choice creates a visually appealing gradual decline in tower height towards the north. Additionally, we have incorporated various open and public areas, including a park, retail boulevard, retail spaces, and landscaped areas. These elements aim to animate the public realm, offering engaging spaces for pedestrian and community activities.

2.2 BLOCK STRUCTURE

We have maintained the continuity of pedestrian pathways by incorporating openings on the first floor. To enhance the visual interest along streetscapes, we've employed different lot sizes, forms, shapes, & a variety of use cases. Since the public park is the focal point of the development, we've oriented blocks towards it, creating interconnected community activities.

2.3.1 BUILDING ENTRANCES

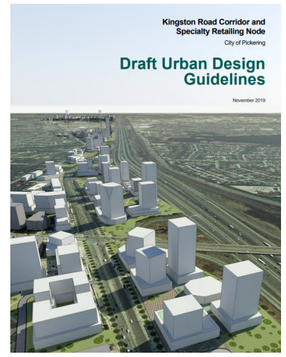
We have ensured that building entrances are easily accessible from pedestrian walkways and drop-offs, emphasizing their visibility and prominence. The entrances feature large glass facades, ensuring they are well-lit and inviting. Additionally, we have incorporated patios, canopies and, in some cases, moved entrances inside to provide weather protection for visitors.

2.3.2 BUILDING SEPARATION DISTANCES

We have carefully adhered to the permitted distances between towers to ensure that all units receive ample daylight while maintaining privacy for residents.

2.3.3 BUILDING SETBACKS

We have incorporated all necessary setbacks from public and private roads, including a 14-meter setback from Highway 401. For units at grade, we have introduced landscape spaces to provide screening from public view. Additionally, commercial setbacks have been transformed into hardscape areas and retail boulevards, aiming to stimulate activities and encourage spill-out uses for commercial establishments.



2.0 - POLICY FRAMEWORK & DESIGN RESPONSE

2.4 GRADING AND ACCESS

i. Grading between adjacent sites shall be considered during site design. Accesses between sites should be provided in the form of internal roadway connections or pedestrian walkways.

iii. Any redevelopment should seek to remove or minimize grade differences between its adjacent lots, including Kingston Road. Where this is not possible due to site topography, measures should be taken to make the transition walkable for pedestrians and accessible for cars.

iv. Site grading shall consider facilities designed to provide access for persons with disabilities, including the provision of ramp access.

v. Entrances and access points should be integrated with at-grade design. Informational signage, pavement markings and soft landscaping can help to orient users, enhance safety and minimize confusion.

vi. Where possible, vehicular entrances and access points shall be located within the centre of the block and below grade with access from local streets/lanes. Vehicular access from main streets shall be limited.

vii. Vehicular entrances and access points should have minimal impact on walkways and the pedestrian realm and where possible should be intergrated with building design.

2.5.2 STRUCTURED PARKING

i. Surface parking is discouraged for main street retail, and high-density residential, office and mixed-use developments. In these areas, parking shall be provided underground, behind or inside a structure on upper floors with appropriate screening, or inside a building.

v. Access points to parking structures should be located at the rear or side of buildings, and away from main streets and intersection corners.

vi. Ground floor frontages may need to be set back adjacent to structured parking ingress/egress ramps to provide visibility at the exit.

vii. Structured underground parking is preferred over surface parking or above-grade structured parking to reduce the urban heat island effect and minimize blank walls.

viii. Consideration should be given to charging stations for electric vehicles and secure indoor bicycle storage space in the design of parking structures.

ix. Parking structure design is encouraged to consider flexible designs, including designs which allow for future conversions into other uses .

2.6 LOADING, SERVICES AND UTILITIES

i. Where possible, on-site loading and servicing areas shall be located internal to the development and below grade with access from local streets and lanes. Access points shall be coordinated to minimize impacts on the pedestrian realm, including minimizing the interruption of sidewalks.

ii. Servicing lanes should be designed to welcome pedestrians with sidewalks on both sides of the lane, where practical, to accommodate safe pedestrian movement.

iii. Service and loading facilities shall be contained within building envelopes and consolidated for each block, when possible. Below-grade loading facilities are encouraged for higher-density, larger-format development. Garbage storage rooms shall be centralized indoors, below grade, and at the rear of buildings.

iv. Vehicular routes shall support goods movement by designing right-of-ways and lanes to safely accommodate truck traffic and turning movement.

v. Utilities and service equipment shall be located within buildings or internal to building sites, where practical, to reduce their visual impact on the streetscape and public view. In outdoor areas, their presence can be minimized through screening, fencing, strategically-positioned landscaping and integration with public art.

vi. In the location and design of loading facilities, consideration should be given to implementation measures to mitigate potential impacts of noise and vibration on residents on the site or in adjacent developments.

2.7 LANDSCAPE DESIGN

i. Landscape shall be an integral piece of the site design and be developed to unify and enhance the overall architectural project. High-quality, durable and diverse landscape elements shall be encouraged.

ii. A minimum of 10% of each lot shall be landscaped, with a significant proportion of that being soft landscaping.

iii. Landscaping shall support and define a consistent and attractive street edge. The selection and spacing of all plantings should relate to the street type and adjacent land use and site conditions.

iv. Within sites, landscaping shall define pedestrian routes and enhance visual imagery of the site. Large tree canopies are encouraged along pedestrian routes to provide shade and comfort.

v. Every effort should be made to retain existing trees and other mature vegetation during redevelopment. Where possible, these should be integrated into the site layout and landscape design for new developments.

2.8 SUSTAINABLE DESIGN

i. Sustainable and Low Impact Development (LID) measures are encouraged for all development in order to reduce stormwater run-off and optimize water infiltration potential. This includes the use of bio-retention areas, rain gardens, grass swales, permeable pavement, & vegetated filter strips.

ii. Development should prioritize plantings of native species that support ecological functions, are drought-tolerant, require minimal maintenance and increase biodiversity in the landscape.

iii. The use of softscapes should be encouraged on flat roofs of all buildings, including residential, commercial and mixed-use buildings. Softscape features can include trees, grass, shrubs, flowers, and soil. The green roofs are encouraged to act as public amenity spaces.

iv. Development is encouraged to seek current Leadership in Energy and Environmental Design (LEED) building design certification, or equivalent.

v. The incorporation of alternative or renewable energy resources (i.e. solar panels) in building design is encouraged. The design and orientation of buildings should seek the maximization of solar gain.

vi. The use of bird-friendly glazing on mid-rise and tall buildings is encouraged.

2.6 - KINGSTON ROAD CORRIDOR

Responses:

2.4 GRADING AND ACCESS

To ensure accessible and continuous access throughout the site, we have minimized changes in grading. Entrances and access points are seamlessly integrated with grade hardscape and landscape areas, facilitating easy access for all users to the buildings at grade level.

2.5.2 STRUCTURED PARKING

Parkings in the development for all phases are designed within underground structures, with access points located in less prominent areas, typically on the sides or backs of the blocks. Despite their location, these access points are designed to be easily identifiable and accessible.

2.6 LOADING, SERVICES AND UTILITIES

Services and loading areas in the development are strategically located within the building footprints, ensuring easy access for trucks and vehicles. These areas are primarily situated at the back or side of the building blocks to minimize impact on the main facade and maintain a pleasant retail pedestrian experience.

2.7 LANDSCAPE DESIGN

Landscape plays a central role in the development, featuring prominently in the public park, private landscape areas, and retail boulevard. It is intricately woven into the design of the blocks, defining both pedestrian and vehicular access routes throughout the site.

2.8 SUSTAINABLE DESIGN

Sustainability is a primary focus of our development, aiming to minimize its environmental impact. This commitment is reflected in our choice of local vegetation species native to Pickering, strategies to reduce stormwater runoff, utilization of renewable energy sources, and the implementation of bird-friendly glazing will adhere to city of Pickering's environmental and sustainable guidelines.

2.9 SIGNAGE AND LIGHTING

i. Signs should be clear, visible, and easy to understand. Signs should be properly lit to ensure safety on the road and walkways at night.

ii. Cohesive signage should be implemented within each precinct to improve neighbourhood character while providing valuable wayfinding information.

iii. The size, design and placement of signs shall be considered in accordance with the City's Sign By-law and through Site Plan Control.

iv. The placement of signage shall not compromise pedestrian movement and vehicular safety. The use of illuminated sign boxes and channelized sign boxes are discouraged.

v. Signage should be integrated with building design, and should be consistent with the overall streetwall and associated building facades .

vii. Pedestrian-scaled lighting shall be used for active public spaces, including inner-block walkways, parks, and courtyards. The use of outdoor LED lighting systems is encouraged for energy efficiency.

viii. Outdoor light shall be aimed and shielded to illuminate areas on site and adjacent sidewalk areas, including inner patios, but shall not illuminate the street or adjacent residential uses.

ix. Where there are architectural, landscape, and decorative features on a building, lighting may be directed upward to illuminate prominent details.

2.10 TRANSITION AND MASSING

i. New buildings should be massed and scaled to establish compatible heights to adjacent streets and open spaces, while retaining a comfortable pedestrian scale.

ii. Where mid and high-rise buildings are adjacent to low-rise buildings, increased setbacks or building setbacks should be employed, in consideration of an appropriate transition.

iii. In cases where buildings have a height of 8 storeys or more proposed adjacent to the streetline, the upper storeys of the building should be sited on podiums having a minimum height of 3 storeys and a maximum height of 6 storeys.

iv. Development shall incorporate building and landscape design which minimizes the extent and duration of shadows and maximizes access to sunlight for adjacent low-rise developments, parks, open space, primary frontages, and other intensively used areas of the public realm.

v. The shadow impact of buildings on adjacent residential buildings, public parks and privately owned publicly-accessible spaces shall be assessed through a shadow impact study, where appropriate, and minimized to the extent possible.

vi. Development shall incorporate building and landscape design which protects and buffers the pedestrian realm from prevailing winds.

vii. The development of large mass buildings within areas that are characterized by a distinct architectural theme should reflect similar architectural features, where practical, to blend in with the character of the particular area.

2.11 MATERIALS AND FACADE TREATMENT

i. Main wall cladding materials should be high-quality, aesthetically pleasing, and durable. Materials such as brick, stone and glass are encouraged.

ii. Building materials that are discouraged include: stucco, vinyl, concrete block, metal siding, highly reflective glass and mirror finishes for glazing.

iii. Materials should be complementary to the character of the precinct. For example, the use of brick may help reinforce the 'urban village' character of Rougemount Precinct, while glass may be more appropriate to support the commercial gateway features of the Whites Precinct.

iv. A variety of building materials, colours, and plane variations should be used to create visual interest along the streetscape and to avoid repetitive or monotonous streetscapes.

v. Building materials for higher floors may differ from base materials, but compatibility, transition and building proportions should be considered. Higher buildings should have a lighter appearance in general to reduce perceived height, weight and bulk.

vii. Original architectural details and features should be restored where appropriate.

2.12 STREETWALL

i. A consistent streetwall should be maintained along Kingston Road and all Primary Frontages.

ii. The minimum streetwall height along all streets shall be 3 storeys, with a minimum ground floor height of 4.5 metres to accommodate for retail uses.

iv. All street-related uses should have primary entrances fronting onto the public street and feature transparent windows and doors to provide outlook and animation onto the street edge.

v. Generally, buildings shall have a podium of at least 3 storeys before any building stepbacks are introduced. The first stepback for any building, shall not occur higher than the sixth floor of a building.

vi. Building stepbacks should be a minimum of 2.5 metres.

vii. A fine-grain pattern of retail units and/or residential entrances is encouraged to provide variety and variation in the streetwall. Variation in frontage width is encouraged to flexibly accommodate a range of street-related uses, including multiple internal formats and layouts for commercial/retail units.

viii. To introduce further variety and visual distinction within the streetwall, the establishment of façade articulation, differentiation and rhythm through building projections, recessions, and the use of distinct building materials is encouraged.

2.13 ACTIVE FRONTAGE NETWORK

i. Primary Frontages shall contain predominantly street-related active retail or commercial service uses at grade, with primary entrances oriented towards the street to encourage a vibrant public realm. Other street-related active uses, including community & institutional uses, are also permitted.

ii. Secondary Frontages should contain street-related active retail or other commercial service uses at grade, with primary entrances oriented towards the street to encourage a vibrant public realm. Other street-related active uses, such as community and institutional uses, are also encouraged.

iv. Elevated main front entrances & large concentrations of steps along frontages should be avoided. Entrances should be ground-relatedand provide barrier-free access.

2.6 - KINGSTON ROAD CORRIDOR

Responses:

2.9 SIGNAGE AND LIGHTING

In our design, we've allocated ample space for signage and commercial logos on the facade and/or within canopies. Additionally, we've ensured adequate lighting for both public spaces and the retail boulevard at grade to follow city standards.

2.10 TRANSITION AND MASSING

Our design strategy involved careful placement of buildings and sculpting of massing and heights to suit the site conditions. We positioned taller towers to the south, adjacent to the highway, gradually decreasing heights towards neighboring low-rise developments. Additionally, we opted for point towers to minimize the impact on daylight access for residents and shadowing of park and public spaces at grade. To enhance pedestrian comfort, we will incorporate building and landscape features to mitigate the effects of uncomfortable winds.

2.11 MATERIALS AND FACADE TREATMENT

To enhance the exterior facade design, we differentiated the materials used for the towers and blocks from those of the podiums and first floor. This approach creates a visual contrast that adds interest to the overall appearance of the development.

Additionally, by using different materials for the lower parts of the buildings, such as the podiums and first floor, we aimed to create a more human-scale design that is inviting and engaging for pedestrians.

2.12 STREETWALL

Throughout the development, we've implemented an active streetwall spanning 5 to 7 floors. This streetwall is distinctively designed from the main building block to introduce excitement and variation. Its purpose is to engage pedestrians and create an appealing frontage facing the roads.

2.13 ACTIVE FRONTAGE NETWORK

To create a lively and engaging environment, we've strategically positioned retail spaces, lobbies, amenities, and active areas at the front of the building. This layout promotes a vibrant frontage network across the site.

Despite being constructed in different phases, we've ensured connectivity among these functions and activities. By opting for smaller retail spaces instead of larger ones, we've diversified the range of activities available, enhancing the overall experience.

Additionally, all these spaces are located at ground level, ensuring

v. A reasonable proportion of frontages shall have transparent windows at street level. Clear glass is preferred for all glazing in order to promote a high level of visibility.

vi. Large format retail development may negatively impact the pedestrian realm due to the scale of the uses. To fit into the surrounding urban character, large format retail shall be developed in a compact and integrated form. Location within a multi-storey building or in the podium portion of a mixed-use building is strongly encouraged.

2.15.1 TALL BUILDINGS

i. Tall buildings should generally be located within gateways, including at the intersection of transit spines, major arterials, along the highway and proximate to highway access

iii. Tall buildings should appropriately transition in height, particularly where high-rise development is directly adjacent to existing low-rise neighbourhoods, parks and open spaces, and POPS.

iv. Tall buildings should be designed and sited to minimize shadows, maximize sky views, and reduce negative micro-climate impacts, particularly where high-rise development is directly adjacent to low-rise neighbourhoods, parks and open spaces.

v. Building towers shall be subject to a minimum 25 metre separation distance, measured between the exterior edge of the building face. Buildings shall have a maximum tower floor plate of 750m2.

vi. Upper floors should terminate the tower with distinctive crowning features and accent materials compatible with the overall building design.

vii. Building tops should incorporate screening for rooftop mechanical equipment to minimize their visual impact.

Chapter 3 - Place-Making

KEY OBJECTIVES

• Enhance and restore natural heritage features to strengthen their relation to adjacent uses

• Promote sustainability in the design and full life-cycle of the streetscape, open spaces and buildings

• Create a unique sense of place and distinct feeling of arrival for each precinct and throughout the overall corridor and node

• Include high-quality urban environments with a diversity of public spaces and community amenities

• Contribute to overall placemaking goals in support of creating complete communities

BROCK PRECINCT

A number of publicly-accessible spaces of various shapes and sizes are proposed for the Brock Precinct to ensure a sufficient amount of open space for the increased resident population. This includes Public Parks, POPS and Gateway Plazas.

3.5 PUBLIC PARKS

i. Public Parks shall front onto public streets, be accessible from adjacent public streets where possible, and be of a shape, topography and size that reflects their intended use. Park design should incorporate a measure of flexibility to enable the potential for multi-use spaces throughout all seasons.

ii. Public parks should be a minimum of 0.3 hectares in size, although larger parks are preferred. The siting and sizing of new Public Parks should take into account planned residential and employment intensification to ensure adequate provision.

iii. Public Parks should contain multiple access points. Entrances should be highly visible, aesthetically-pleasing, accessible for users with physical disabilities, and incorporate signage that assists in wayfinding and orientation.

iv. Public Parks should be physically and visually connected to the public street. New buildings should be positioned to define the shape and function of the public park and to create the impression of a cohesive public realm.

v. Public Parks should have a minimum of one public street frontage and one private street frontage, although greater street frontages are encouraged.

vi. Developments adjacent to a Public Park will be setback a minimum of 3 metres and will provide an appropriate interface between public and private lands, promote animated uses at grade and avoid locating loading and service areas adjacent to parks.

vii. Public Parks shall serve a community function and incorporate an appropriate range and variety of active and passive recreational uses, subject to the size and shape of the park (Fig. 55).

viii. Public Parks which are 0.3 ha or larger in size should include a playground with junior and senior children's play equipment, seating areas, pathways, open unprogrammed turf areas and tree canopy. Larger parks should accommodate water play features, multi-use courts or one-on-one basketball facilities.

ix. Public Parks also should incorporate pedestrian-scaled-lighting, bicycle racks, appropriate signage and public art, where appropriate.

x. Amenity areas within Public Parks should be located and oriented to maximize sunlight and be sheltered from the noise and traffic of adjacent streets and uses to increase user comfort.

xi. Development should seek to adequately limit shadows on parks as necessary to preserve their utility. Development should adequately limit net-new shadow as measured from March 21st to September 21st from 10:18 a.m. – 4:18 p.m. on parks.

xii. Where Public Parks are located adjacent to school sites or community facilities, the design of both entities should be coordinated in order to capitalize on opportunities for shared facilities and amenities.

xiii. On-street parking on streets adjacent to Public Parks should be situated on the same side of the street as the park to facilitate convenient, direct and safe access.

xiv. Public Parks and Green Spaces should connect to neighbouring natural heritage features through enhanced boulevards to contribute to a green, interconnected pedestrian network.

Responses:

2.15.1 TALL BUILDINGS

In our design, we've positioned tall towers along the southern edge adjacent to the 401 highway. To harmonize with the surrounding area, these towers gradually decrease in height, blending seamlessly with existing and future developments in neighboring lots. Our towers boast captivating designs, featuring innovative screenings for rooftop mechanical equipment, ensuring a visually appealing skyline.

Chapter 3 - Place-Making

KEY OBJECTIVES

From the start, we identified the public park as the focal point of the project, arranging the buildings and blocks around it. This central public space then inspired smaller open areas, which were tailored to create spaces such as retail alfresco patios and plazas. The arrangement of these spaces alongside each other forms a boulevard, which we refer to as the retail boulevard.

This approach aims to promote sustainability in both the design and usage of the buildings overall. These spaces, including the large public park, the retail boulevard, and even the smaller private landscape areas, create pockets of space that encourage community activities and foster a sense of a complete community where all needs are met, including the need for outdoor amenities and greenery. This fosters a strong sense of space and belonging for the residents of the neighborhood, ultimately leading to an overall sustainable community.

3.5 PUBLIC PARKS

As previously mentioned, the central public park stands as the focal point of our project, serving as a community hub for various activities, gatherings, and leisure for the entire neighborhood. Designed for accessibility, the park will be easily reachable from all sides via public streets.

To minimize shadow impacts, we've strategically placed point towers instead of long blocks towers.

Additionally, the park harmonizes with the landscape and hardscape areas on each block, creating a continuous green path for pedestrians and ensuring a seamless design for the entire development.

3.8 PRIVATELY OWNED PUBLICLY-ACCESSIBLE SPACES (POPS)

i. POPS shall be publicly accessible, with signage to properly identify the space and indicate access for public use.

ii. The locations of POPS will be identified in the implementing zoning by-law and their exact size, location and design shall be addressed through detailed block planning, to include matters such as connectivity and cost sharing between multiple landowners.

iii. The size, shape and configuration of POPS will vary based on the existing and planned context and specific characteristics of the site and the building program.

iv. POPS shall provide public easements as necessary over privately-owned open spaces to provide access for public.

v. Private landowners shall be responsible for ongoing maintenance to ensure that POPS remain in a state of good repair through all seasons.

vi. The location and design of POPS should seek to physically and visually connect to the public street.

vii. POPS should be framed by and relate to surrounding buildings; at-grade active uses shall support the programming of the open space and offer a surveillance element to promote safety.

viii. All POPS should incorporate soft landscape and planting; trees shall have sufficient soil volumes to enable large mature growth and a significant tree canopy.

ix. POPS should maximize sun exposure and strive to achieve 5 consecutive hours of sun as measured on March 21 and September 21.

x. POPS should provide amenities including seating areas, pedestrian-scale lighting, bicycle racks, garbage cans, and public art to create a positive walking and cycling environment. Amenities should compliment the character of the surrounding public realm and active ground floor uses.

• POPS designed as Parks should:

xi. Be located to provide areas of open green space where intensified development is expected or planned to occur.

xii. Have a dimension of a minimum of 0.2 ha, with larger spaces preferred.

xiii. Include seating areas, walkways, a playground with junior children's play equipment, an open turf area, and tree canopy.

• POPS designed as Linear Parks should:

xiv. Be located where they are able to link several larger green spaces in close proximity, for example to connect Brock Road and Beechlawn Park to the newly proposed internal park on the development block east of Brock Road.

xv. Have a dimension which is based on local site conditions; however, generally the minimum width should be 6.5 metres or greater to provide adequate spacing for the park to act as a movement corridor as well as a landscaped activity space.

xvi. Provide a clear pathway with high-quality, durable paving materials.

• POPS designed as Urban Squares should:

xvii. Be located in commercial and areas and be designed to accommodate relatively higher levels of pedestrian foot traffic, with more hardscaped areas relative to softscape

xviii. Incorporate high-quality paving treatments, with distinct paving materials used to delineate between separated activity zones within larger squares.

xix. Have a dimension which is based on local site conditions; they could be as small as 100m² but should be large enough to allow for active programming and public events.

xx. Provide seating areas in the form of benches or seat walls, plant material (preferably in raised planters) and higher branching trees for shade. If located near dining establishments, tables with seats may be appropriate.

3.9 PUBLIC ART

i. Public art should be located in or with close proximity to community-oriented spaces, such as parks, open spaces, public squares, plazas, and gateways, to maximize visibility. It should be exhibited along streets and laneways that support a continuous flow of high pedestrian volumes.

ii. Public art should be durable and low-maintenance.

iii. Public art should explore opportunities to celebrate local history and culture, including notable events and figures.

iv. Opportunities to incorporate public art into building design as an architectural element are encouraged.

v. Public art installations may be publicly or privately owned, and private developers are strongly encouraged to incorporate public art elements within their developments.

Chapter 4 - Connectivity

KEY OBJECTIVES

• Design all public roads and private connections to be complete streets and emphasize transit and pedestrian-oriented development.

• Improve access management and connectivity for all transportation modes.

• Ensure that all users of have distinct and delineated spaces to separate modes of travel moving at different speeds.

• Support current and future transit services through building and site design and public streetscape treatments.

• Encourage the optimization of existing and planned infrastructure, including transit facilities.

BROCK

The Brock Precinct is typified by a mixture in size of parcels along Kingston Road and very large parcels off Pickering Parkway and Brock Road.

There are three main landowners within the Specialty Retailing Node Area within the Brock Precinct, and as a result, a number of opportunities for new connections and public roads within and through these very large parcels are encouraged.

4.2.1 SIDEWALKS

i. Sidewalks should provide a network of accessible and inter-connected pedestrian routes which relate directly to surrounding buildings and destinations.

ii. Sidewalks should provide a clear, unobstructed pathway and be a minimum width of 2 metres to ensure a comfortable walking environment (Fig. 70).

iii. Sidewalks should be designed to serve all users, including children, older people, parents with strollers, the visually impaired, and those using wheelchairs and other assistive devices. Barrier-free surfaces should be in compliance with Accessibility for Ontarians with Disabilities Act (AODA) standards.

iv. Sunlight exposure along sidewalks should be achieved and protected to maintain an inviting pedestrian realm, particularly at retail spill-out zones.

Responses:

3.8 PRIVATELY OWNED PUBLICLY-ACCESSIBLE SPACES (POPS)

We have integrated various types of Privately Owned Public Spaces (POPS) throughout the development to enhance the public realm.Alongside the retail spaces, we've created a vibrant retail boulevard. Behind the southern row of blocks, a running and cycling track has been introduced, accessible through breaks on the first floor for convenience. Positioned on the far-east corner of the site, an open landscape space features a playground and green open area.

These diverse POPS areas are all connected to public streets, ensuring easy access from all building blocks and promoting community engagement.

Chapter 4 - Connectivity

KEY OBJECTIVES

Our design approach for this development prioritizes maximum accessibility for all pedestrians. We have introduced a network of public roads, right-of-ways, and private roads to ensure easy and seamless vehicular access to all blocks. Additionally, we have implemented multi-path and bicycle lanes throughout the site, connecting these paths to the municipal network to encourage cycling.

Furthermore, we have established a comprehensive pedestrian network that links each building, block, and at-grade space to one another and to the municipal network. This network includes public walkways, multi-use paths, park paths, trails, hard scapes, urban plazas, retail boulevards, and more. Our goal is to make accessibility a priority, creating an attractive destination for living, working, and leisure activities.

4.2.1 SIDEWALKS

The sidewalks are meticulously designed to provide a seamless pedestrian experience, seamlessly connecting main streets to landscape, hardscape, and park areas for pedestrians.

v. Where appropriate, curb extensions/bump-outs may be incorporated at the street intersections or mid-block locations to expand the pedestrian path, provide additional queuing space, shorten roadway crossings and calm motorized traffic. Where on-road facilities exist, the bump-outs should not disrupt a continuous bike lane through the intersection.

vi. Adequate space should be provided within the public right-of-way to allow for landscape and furniture zones adjacent to sidewalks.

vii. Street furniture may include benches, tables, fountains, and newspaper boxes. These should be placed in high-traffic areas, particularly where public amenities or active frontages exist.

viii. Where appropriate, street trees which provide significant canopy shading should be planted to soften the built form, reduce the heat island effect and maximize the urban tree canopy. Trees should be incorporated at intervals of 6 to 9 metres.

4.2.2 PEDESTRIAN PATHS

i. Pedestrian paths are reserved for the exclusive use of pedestrians, and should be implemented to provide additional connections and routes of circulation within blocks and to open spaces and destinations.

ii. Pedestrian paths should be designed with a minimum width of 2.5 metres to provide for a comfortable walking environment.

iii. Pedestrian paths should be well-designed and inviting to users, with features such as soft landscaping, plantings, public art, wayfinding signage and pedestrian-scaled lighting implemented where appropriate. Where possible, a generous urban tree canopy is encouraged.

iv. The placement of street furniture should ensure that pedestrian routes are free of obstruction and enable proper circulation and sight lines.

v. Pedestrian paths should utilize high-quality and durable paving material. The paving treatment is encouraged to have a distinctive colour, texture or pattern to assist with wayfinding. Permeable paving materials should be used for pedestrian paths in areas intersecting with green space or natural heritage features.

vi. Pedestrian paths should be designed to encourage strolling and gathering of people, and include spill-out spaces and other elements to keep the public realm active.

4.3.1 MULTI-USE PATHS

i. MUPs are encouraged as connectors between neighbouring communities, transit corridors and nodes.

ii. Where space or other considerations do not permit provision of desired separate facilities for cyclists from pedestrians, MUP can be used in areas that are less travelled by pedestrians and cyclists. They should be implemented on key connector streets with lower vehicle traffic volume.

iii. To ensure adequate space for all users, the minimum width of in-boulevard MUP is 3 m, desired width is 4 m.

iv. MUP should be separated from vehicle traffic and located within the boulevard, with a 1 m wide splash strip.

v. Within MUP, segregation of cyclists and pedestrians should be avoided where possible. Instead, a directional dividing line may be marked on the pathway.

vi. When appropriate, multiple access points should be provided to all MUP, with connections to a variety of transportation options including public transit routes, other separate cycling facilities & MUP, sidewalks & parking areas.

vii. MUP should include adequate amenities, such as seating, waste receptacles, lighting, signage, wayfinding features, educational & historic information. These features should be located at accessible key points along path routes.

viii. Roadside infrastructure should have a smooth surface and a minimum 0.6 metre lateral clearance from the MUP.

4.3.2 BICYCLE LANES AND CYCLE TRACKS

i. Cycle tracks are exclusive cycling facilities which are physically separated from vehicular traffic. Cycle tracks should be designed with a minimum width of 2 metres. They should be raised or vertically separated from the street at an intermediate or sidewalk level to create a safety buffer between cyclists and other road users. Where appropriate, they may also incorporate barrier features.

ii. Bicycle lanes are cycling facilities which are located at-grade, alongside vehicular traffic. Bicycle lanes should have a minimum width of 1.5 metres plus 0.5 metres of buffer, with a desired width of 1.8 m plus 1.2 m of buffer.

iii. Cycle tracks are preferred over bicycle lanes due to the safety and security that they provide for cyclists.

iv. Bicycle lanes and cycle tracks should include clear pavement markings. Signs should be placed at intersections & access points, & are required to be appropriately spaced.

v. Cycle tracks should connect through bike boxes and crossrides to increase cyclist safety at intersections.

vi. Bicycle lanes on streets with on-street parking are recommended to be located between the parking lane and adjacent live traffic lane and with sufficient space to mitigate conflicts between cyclist and opening car doors.

vii. From a traffic safety standpoint, and as the introduction of two-way cycling facilities leads to greater conflict with turning motor vehicles at intersections and driveways, one-way facilities are generally preferred over two-way facilities.

viii. Bicycle lanes should be designed with consideration of landscape and furniture zone buffers which separate cycling lanes from sidewalks.

4.5.1 PRIMARY STREETS

i. Primary streets have a distinctively urban character, and should be designed as complete streets with consideration given to the needs, safety and comfort of pedestrians, cyclists, transit users and drivers.

ii. Travel lanes should be designed with a minimum width of 3.5 metres & should be provided in both directions of travel.

iii. Primary streets should be designed to prioritize public transit facilities, such as stops, shelters and dedicated lanes.

iv. Sidewalks should be provided on both sides of the road. They should be designed to accommodate all user groups and be a minimum width of 2 metres.

v. Where appropriate, dedicated raised cycle tracks should be provided on primary streets.

vi. Landscaping and street furniture zones should be provided on both sides of the street to provide a comfortable public realm. They should be wide enough to accommodate a continuous row of street trees, typically a width of 2 metres.

vii. On-street lay-by parking lanes should be provided, where practical, having a minimum width of 2.5 metres. They may be provided on one or both sides of the road.

viii. Individual access driveways to multiple properties should be discouraged in favour of shared driveways.

ix. Where appropriate, road and right-of-way widths should be reduced in favour of providing active transportation connections, improved transit, and wider boulevards.

2.6 - KINGSTON ROAD CORRIDOR

Responses:

4.2.2 PEDESTRIAN PATHS

Pedestrian paths traverse the entire site, linking various nodes, buildings, and open spaces. These paths are thoughtfully designed with a mix of hardscape and landscape features, abundant urban furniture, and lighting, creating an inviting environment to enhance public activities within the community.

A key pedestrian pathway is the expansive retail boulevard that stretches along the front of the retail spaces, offering a wide expanse that encourages a diverse range of activities.

4.3.1 MULTI-USE PATHS

A central multi-use path, running east-west along the main right-of-way (street A), serves as the backbone linking all pedestrian access points. This path ensures accessible connections to all phases, buildings, activities, and open spaces throughout the site.

4.3.2 BICYCLE LANES AND TRACKS

Cycling lanes and tracks are integrated throughout the site, connecting main roads to all buildings. A track has been introduced on the back side of the southern cluster of buildings, utilizing the 14m setback from the 401 highway.

4.5.1 PRIMARY STREETS

Our approach integrates the design of the northern phases with the streetscape and urban design of each street. Additionally, we value our internal Right of Ways (ROWs) as primary elements in the development, ensuring that all buildings are well-integrated with the surrounding urban fabric. The facades of the podium areas are designed to increase activity and create a vibrant, lively main street, regardless of the street frontage.

4.5.2 SECONDARY STREETS

i. Secondary streets are medium or low-capacity roads that act as local connectors, taking on a more neighbourhood-oriented scale and character while creating links between local destinations and surrounding neighbourhood areas.

ii. Travel lanes should be designed with a minimum width of 3.5 m and may be provided in one or both directions.

iii. Where appropriate, dedicated bicycle lanes or shared cycling facilities should be provided on secondary streets.

iv. Where appropriate, landscaping and street furniture They should be wide enough to accommodate a continuous row of street trees, typically a width of 2 metres.

v. Sidewalks should be provided on both sides of the road on secondary streets. They should be designed to accommodate all user groups & be a minimum width of 2 m.

vii. Traffic calming measures, including road width reductions and bump-outs, may be considered where appropriate.

viii. Where appropriate, road and right-of-way widths should be reduced in favour of providing active transportation connections and wider boulevards.

4.5.4 NEW PUBLIC STREETS

A number of new public streets are proposed within the Kingston Road Corridor and Specialty Retailing Node. All new proposed public streets are primary streets.

These will provide greater circulation throughout the precincts by developing new connections, forming new block patterns, consolidating access on Kingston Road, providing alternative access off Kingston Road, providing permeability within larger sites, and creating new development frontages.

Development sites will identify lands to be conveyed as public streets in identified locations as shown conceptually through the Intensification Plan. The location of new public streets is flexible provided the overall block pattern is achieved, the achievement of minimum and maximum block sizes on the development site and adjacent sites is not compromised, & appropriate intersection spacing maintained.

In line with existing public streets, these new streets should provide strong public amenities and opportunities for active transportation. This includes the provision of sidewalks, cycle paths or bicycle lanes, landscape and furniture zones, and enhanced boulevards.

4.5.5 NEW PRIVATE STREETS

As with new public streets, the development of new private streets is key to enabling higher-density intensification and increasing multi-modal access for pedestrians, cyclists, transit users and drivers. New proposed private streets include both primary, secondary and service streets. They are identified on the Street Type Plans as 'Primary Streets (Private)', 'Secondary Streets', and 'Service Streets'.

Private streets are designed to similar municipal standards as public streets, but remain in private ownership. Private streets must provide the same high-quality public realm and streetscape experience as public streets, are expected to adopt similar treatments & aesthetics to ensure that uniform streetscape character is maintained across the precinct.

This includes soft landscaping, street furniture, active transportation infrastructure, and other public amenities.

Development sites will provide lands for the development of private roads. The location of these roads is flexible as the overall block pattern is achieved, the achievement of minimum and maximum block sizes on the development site and adjacent sites is not compromised, and appropriate intersection spacing is maintained.

Private landowners shall be responsible for ongoing maintenance to ensure that publicly accessible spaces re-main in a state of good repair.

4.5.6 EXISTING STREETS

Brock Road

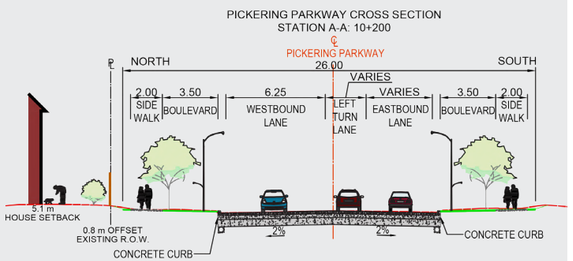
Brock Road is a significant street which carries pedestrian, cyclist and vehicular traffic. The streetscape is recommended to be improved to create a more enjoyable experience for users travelling south from Kingston Road towards the Specialty Retailing Node. Additional street trees should be incorporated on the east side of Brock Road to provide shade and comfort for pedestrians.

Pickering Parkway

Within the Brock Precinct, enhanced active transportation infrastructure is recommended for Pickering Parkway. This can be implemented through three proposed options. The first option is a raised cycle tracks and a landscape and furniture zone on both sides of the road, the second option is a single-lane MUPfacility on both sides of the road, and the third option is a two-way MUP on one side.

Cross Section - Brock Precinct Streetscape

Cross Section - New Private Streets

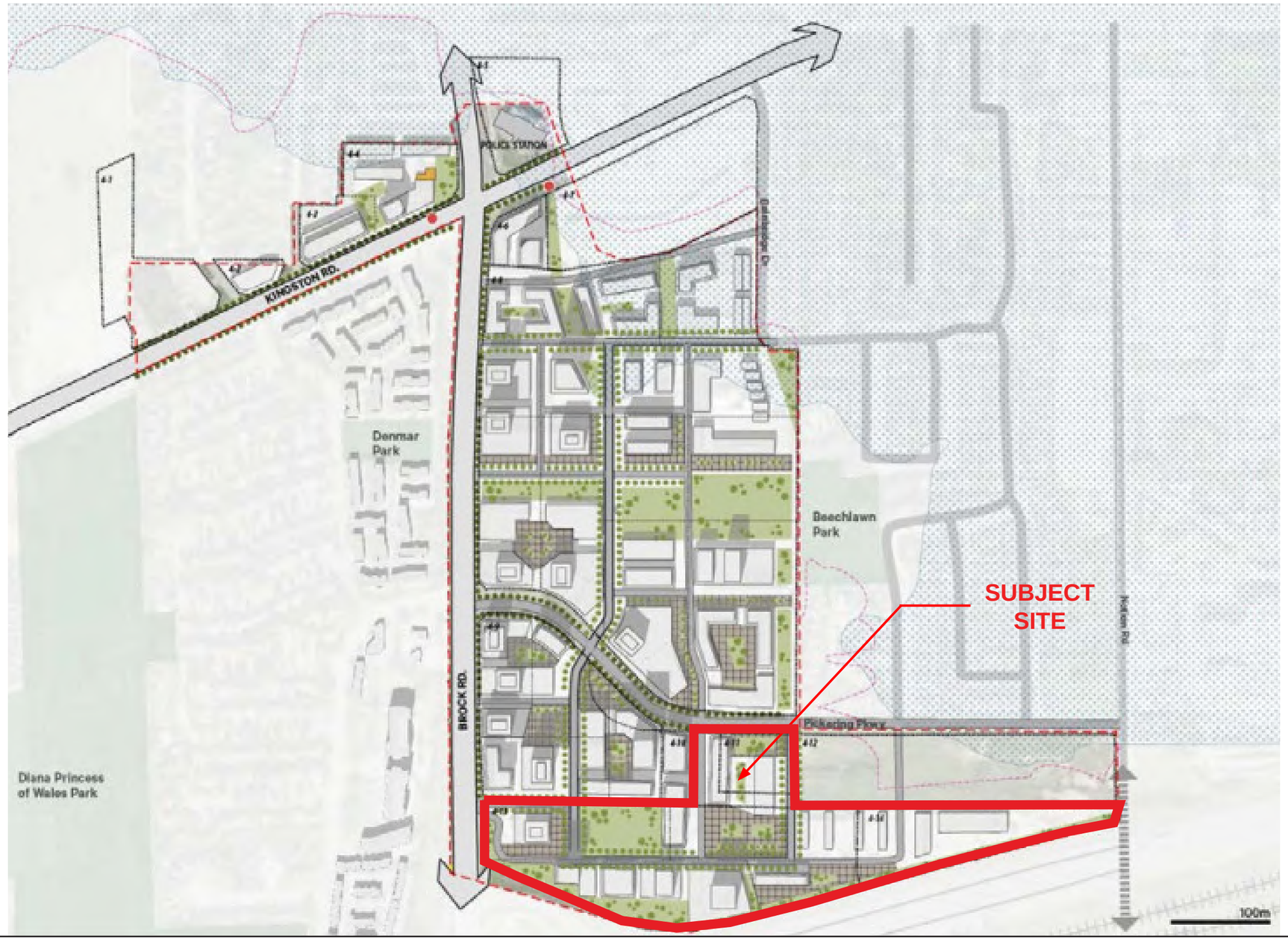


Cross Section - Pickering Parkway

Responses:

4.5.2 SECONDARY STREETS

Within our site, we have introduced several streets that connect the blocks to Brock Road and Pickering Parkway. These streets are designed with pedestrian and, landscape features, urban furniture, lighting, and other amenities to enhance the pedestrian experience.

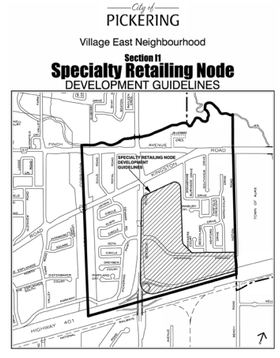


2.7 - SPECIALITY RETAILING NODE

The subject lands are currently occupied by the Shops at Pickering Ridge, an auto-oriented commerical retail plaza receognized in the Specialty Retailing Node Development Guidelines. The existing development generally conforms to these guidelines, with respect to building design/location, parking facilities, and vehicle accessibility etc.

The proposed redevelopment of the subject lands would involve the phased demolition of the existing retail facilitites, and the construction of high-density mixed-use development throughout the site over time.

These development guidelines contemplate such residential development through amending applications. Accordingly, the proposed phasing plan considers the preservation of these design considerations throughout the redevelopment, integrating the principles of redevelopment established in the Kingston Road Corridor Design Guidelines and Official Plan.



SECTION 3 - **CONTEXT ANALYSIS**

3.0 - CONTEXT

3.1 - THE SITE

The total site area is 9.48 hectares (23.43 acres). The property has approximately 171 metres of frontage along Pickering Parkway to the north and is entirely facing the 401 highway from the south.

The site is intended to be developed as a mixed-use development.

The OPA and ZBA applications are required in order to facilitate the proposed redevelopment.

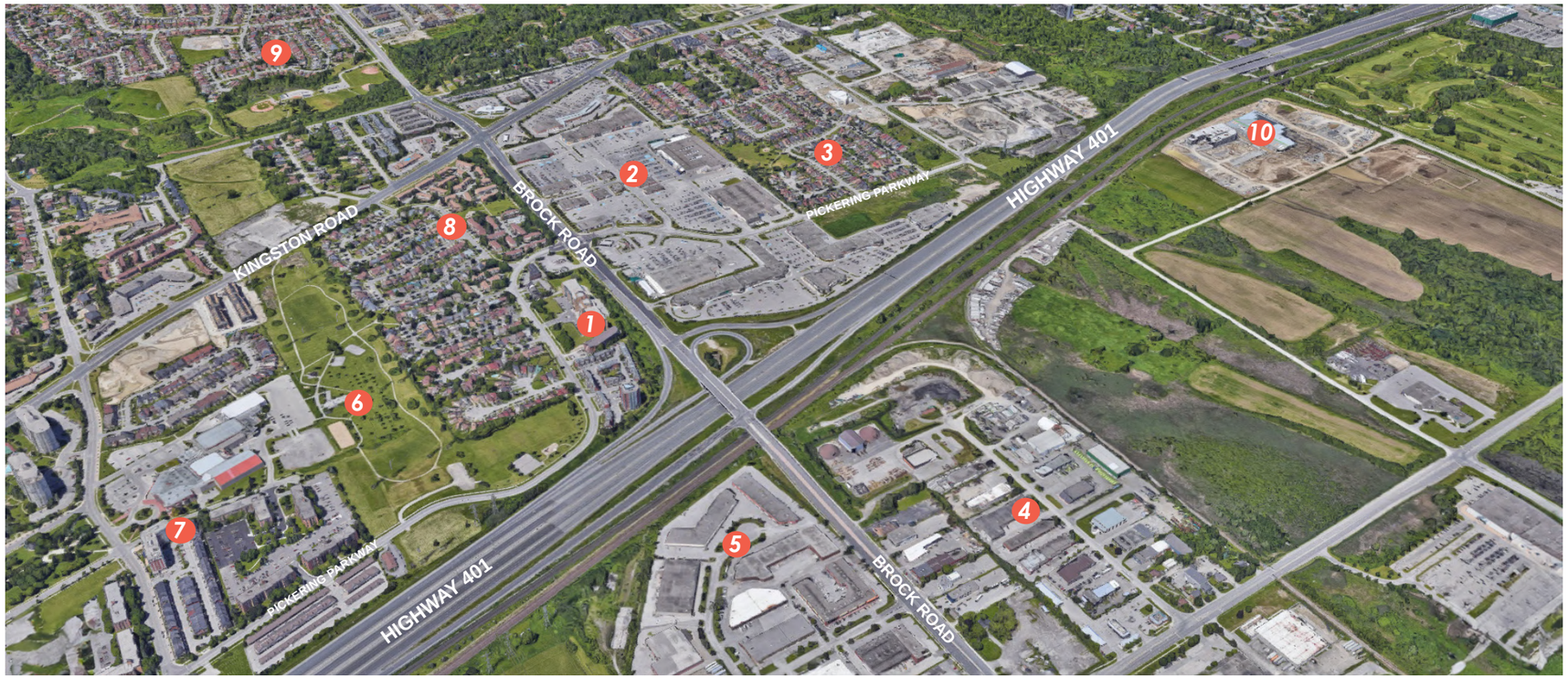
The subject lands are located within the Village East neighborhood and are designated as Mixed Use Areas, as per Schedule 1 of the Official Plan of the City of Pickering.

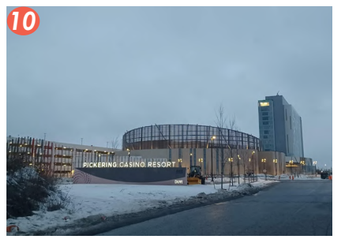
Currently, the site is characterized by four main building clusters of shops. The largest cluster is situated on the northwest side (1), housing a medical center, F&B outlets, furniture and home décor stores, and some miscellaneous shops. The second-largest cluster, located on the northeast side (2), includes furniture and home décor shops, a gym, a pet store, and smaller restaurants and cafes.

In the center of the site, to the south, there is a smaller cluster that accommodates the Pickering Event Centre (3). Additionally, there is a stand-alone supermarket on the east side of the site (4). The remainder of the site is open vehicle parking that serves the four commercial buildings.

1. NORTHWEST BUILDING
2. NORTHEAST BUILDING
3. SOUTHERN CENTRAL BUILDING
4. EAST STANDALONE BUILDING

3.0 - CONTEXT





3.2 - IMMEDIATE CONTEXT

To the northwest of the site, facing Pickering Parkway, is a Canadian Tire store. Across Pickering Parkway are a Walmart superstore and a Rona+ (2). Nearby retail buildings house Sobey's, LCBO, and PetSmart (2). North of these retail spaces, facing Kingston Road, is a NoFrills supermarket (2).

Residential developments include low-rise buildings to the northeast (3), and condo blocks, townhouses, and low-rise units west of Brock Road (1)(8). The site is within the Village East Neighborhood, bounded by the hydro transmission corridor, West Duffins Creek, the Ajax-Pickering boundary, and Highway 401. Village East includes diverse housing options and several parks, including a section of the Diana Princess of Wales Park (6).

The neighborhood features Pickering's Specialty Retailing Node along Kingston Road and Brock Road, with commercial plazas, big box stores, restaurants, supermarkets, and gas stations. Kingston Road and Pickering Parkway are the main east-west routes. Access to Highway 401 is available via Brock Road, which also connects to the Brock Industrial area and the GO station south of the highway.

1. MID-RISE RESIDENTIAL
2. COMMERCIAL
3. RESIDENTIAL LOW RISE
4. COMMERCIAL / WAREHOUSE
5. COMMERCIAL / WAREHOUSE
6. HIGH-TENSION WIRES / PARK
7. RESIDENTIAL MID RISE
8. RESIDENTIAL LOW RISE
9. RESIDENTIAL LOW RISE
10. PICKERING CASINO RESORT

8
CITY CENTRE

4
BROCK INDUSTRIAL

13
BROCK RIDGE

3.3 - PICKERING CONTEXT

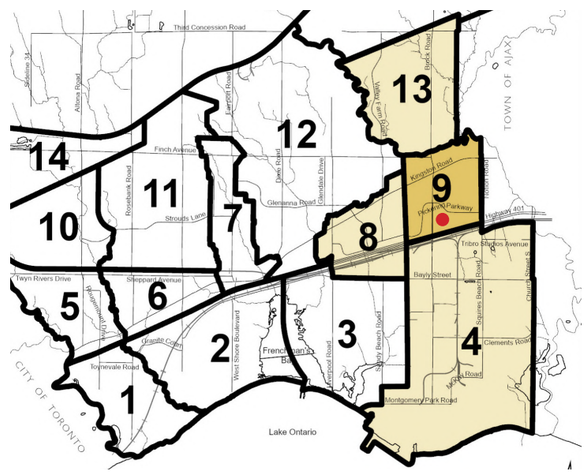
The neighbourhoods adjacent to the Village East neighborhood are Brock Industrial to the south of Highway 401, City Centre to the west, Brock Ridge to the north, and the town of Ajax to the east.

The City Centre is currently undergoing redevelopment, with plans to transform the east side of the Pickering Town Centre mall into new public spaces, civic buildings (including a performance arts center, youth & seniors center, and central library), and high-rise residential developments. This redevelopment will become the new focus of Pickering City Centre. East of the mall, the Civic Complex, consisting of City Hall, the central library, and Esplanade Park, is also located.

South of Highway 401 is the Pickering GO Train station, and to the east is a mixture of single-story commercial and light industrial uses earmarked for redevelopment into a primarily high-density residential community.

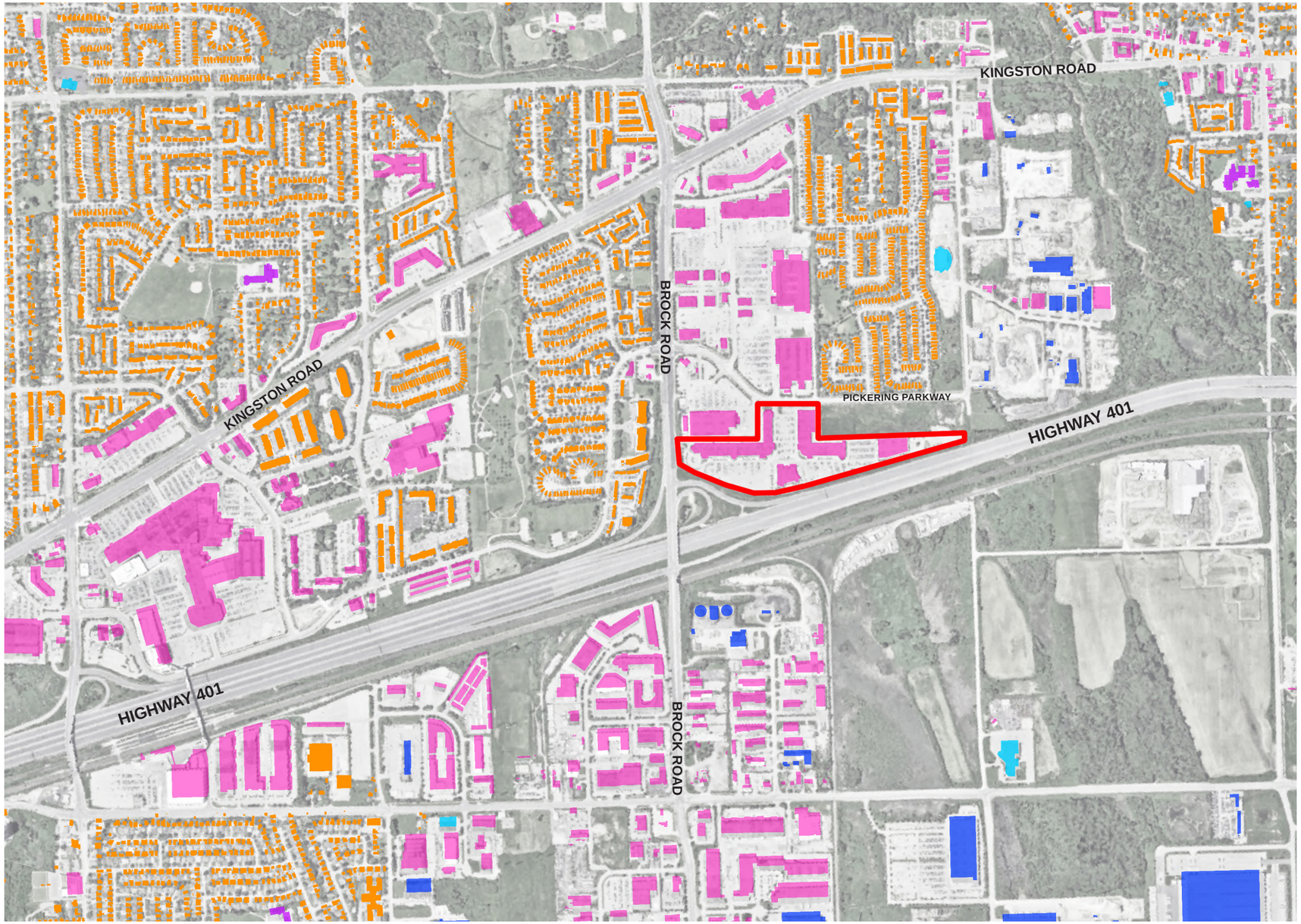
Brock Industrial is the city's main industrial district, accommodating both the Pickering Nuclear Generation Station and the Duffins Creek Water Pollution Control Plant. It boasts over 808,000 square meters of industrial floor space dedicated to manufacturing, warehousing, research and development, offices, and supportive personal service and retail uses. Brock Industrial also includes places of worship, an indoor skating arena on Dillingham Road, and an indoor soccer dome on Clements Road.

Brock Ridge is primarily residential, consisting primarily of detached and semi-detached dwellings, with a few townhouses along Clearside Court. The neighborhood west of Brock Road, as well as the northeastern portion east of Brock Road, has been largely built out. In recent years, several new developments on the east side of Brock Road have been established, accommodating a range of housing.



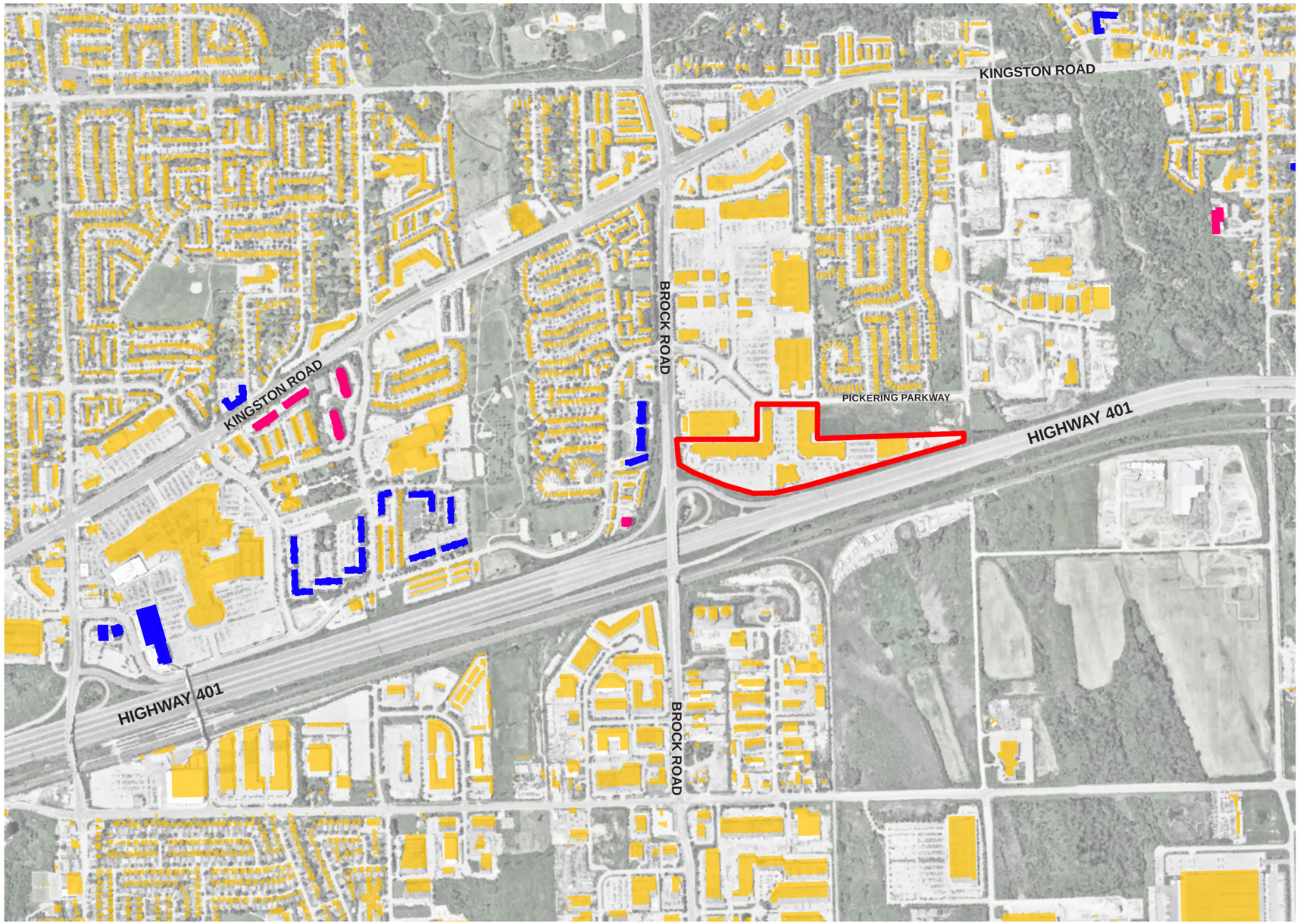
3.4 - TYPES OF USES

The diagram provided on this page illustrates the types of uses of adjacent lots and neighbourhoods.



LEGEND

- RESIDENTIAL
- COMMERCIAL & RETAIL
- INDUSTRIAL
- RELIGIOUS
- EDUCATIONAL

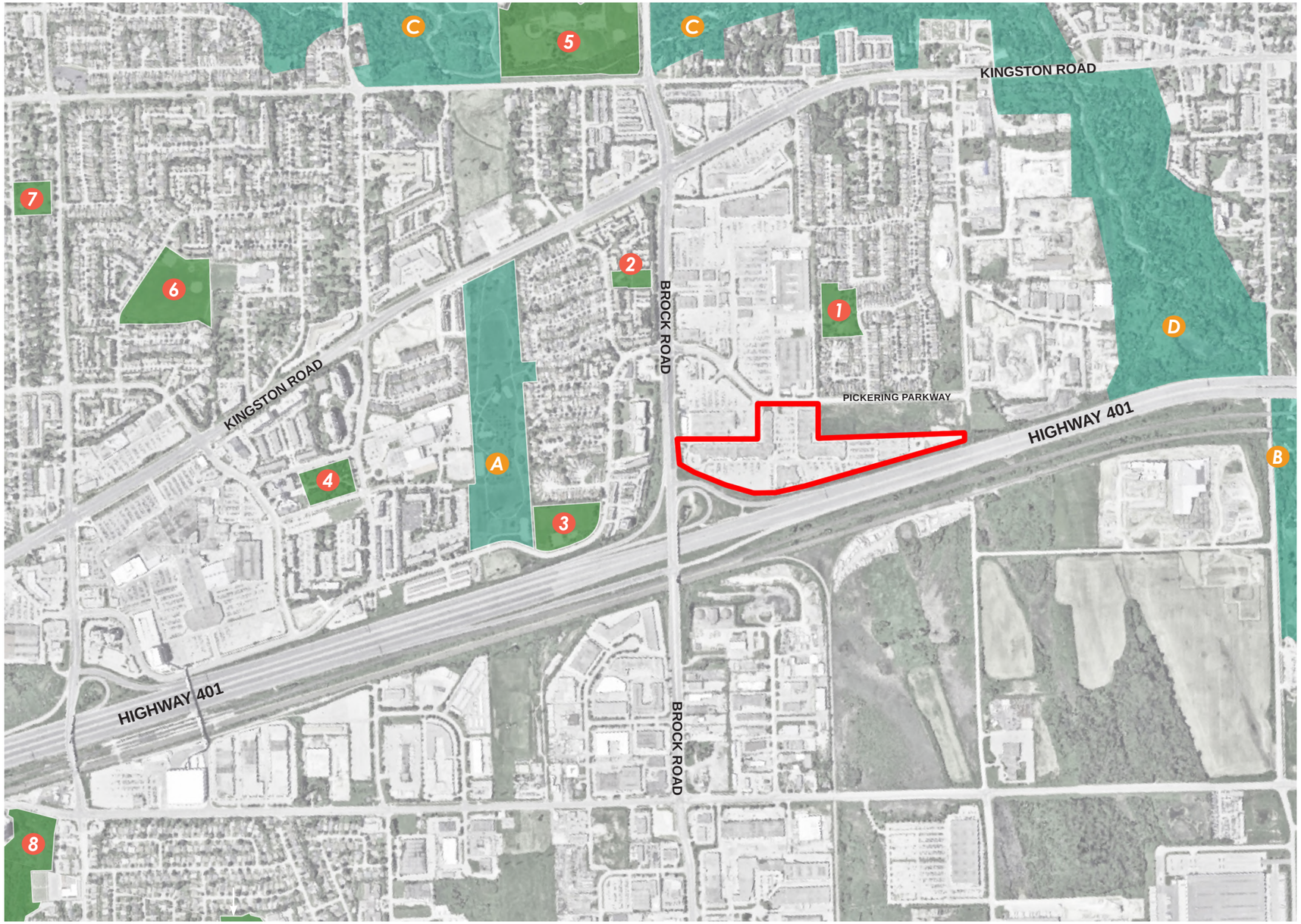


3.5 - HEIGHTS

The diagram provided on this page illustrates the building heights of adjacent lots and neighbourhoods.

LEGEND

- LOW-RISE
- MID-RISE
- HIGH-RISE



3.6 - OPEN SPACES AND PARKS

LEGEND

EXISTING PARKS

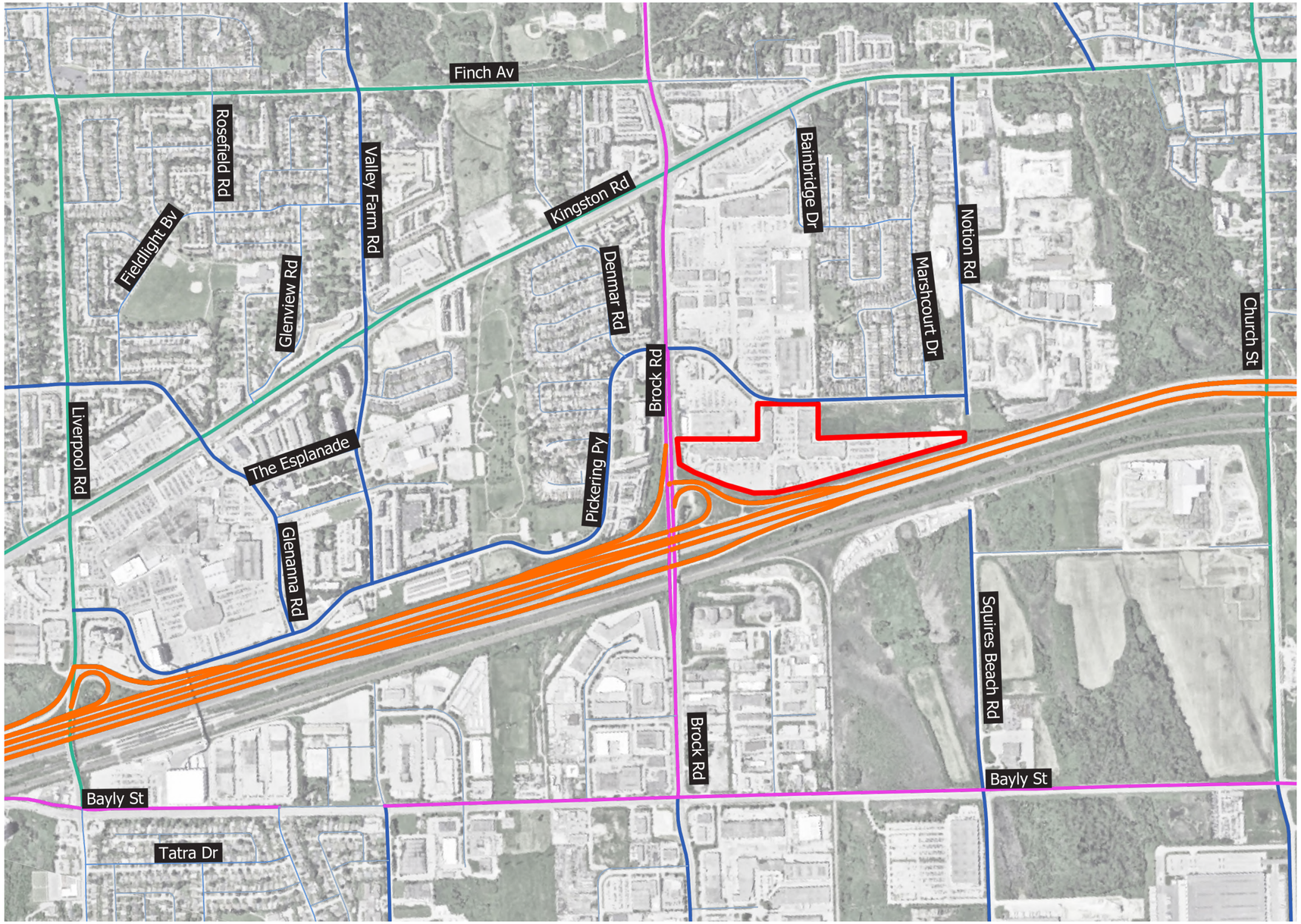
1. BEECHLAWN PARK
2. DENMAR PARK
3. VILLAGE EAST PARK
4. ESPLANADE PARK
5. BROCKRIDGE COMMUNITY PARK
6. GLENGROVE PARK
7. GLENDALE PARK
8. DOUGLAS RAVINE

GREEN ZONES

- A DIANA PRINCESS OF WALES PARK
- B DUFFINS CREEK
- C WEST DUFFINS CREEK
- D WEST DUFFINS CREEK SOUTH

3.7 - STREET NETWORK

The diagram provided on this page illustrates the street network leading to the project site.

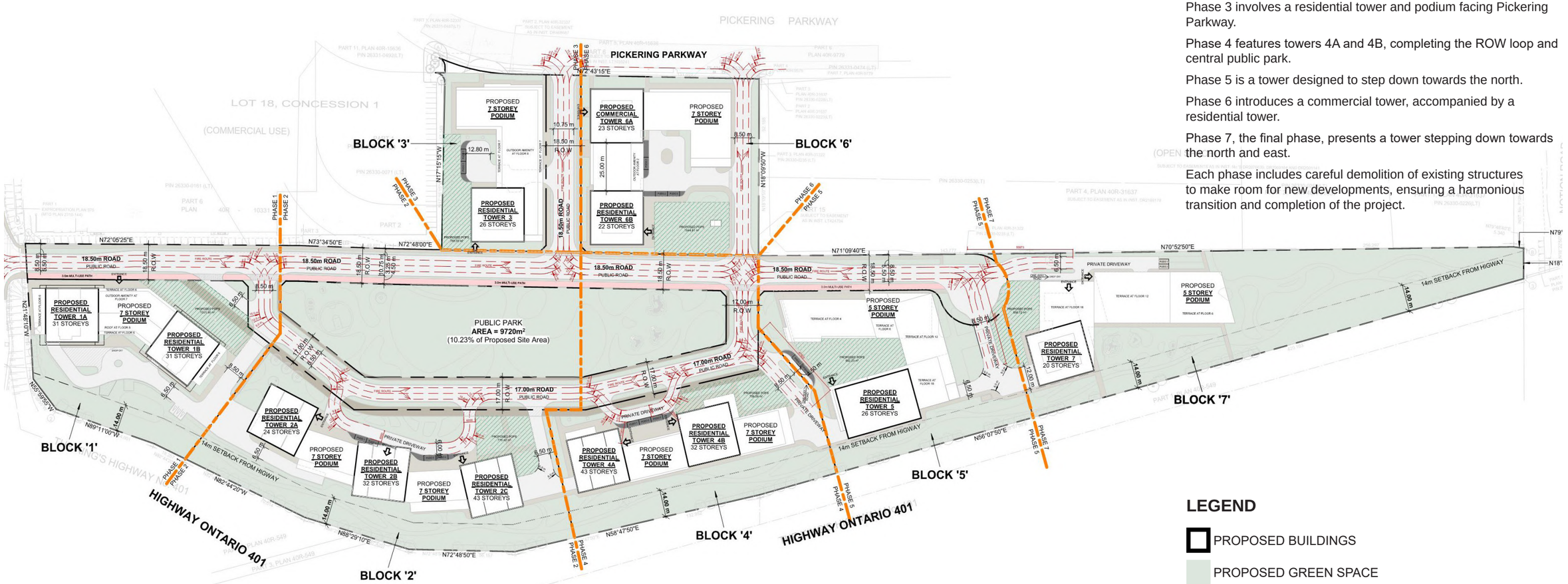


LEGEND

- FREEWAY
- A ARTERIAL
- B ARTERIAL
- C ARTERIAL
- LOCAL

SECTION 4 - **DEVELOPMENT CONCEPT**

4.0 - DEVELOPMENT CONCEPT



4.1 - SITE PLAN

The proposed development will unfold in 7 phases, each strategically designed to integrate new structures with existing ones.

Phase 1 will see the introduction of towers 1A and 1B, alongside a Right of Way (ROW) connection from Brock Road.

Phase 2 includes towers 2A, 2B, and 2C, along with an extension of the east-west ROW and significant park enhancements.

Phase 3 involves a residential tower and podium facing Pickering Parkway.

Phase 4 features towers 4A and 4B, completing the ROW loop and central public park.

Phase 5 is a tower designed to step down towards the north.

Phase 6 introduces a commercial tower, accompanied by a residential tower.

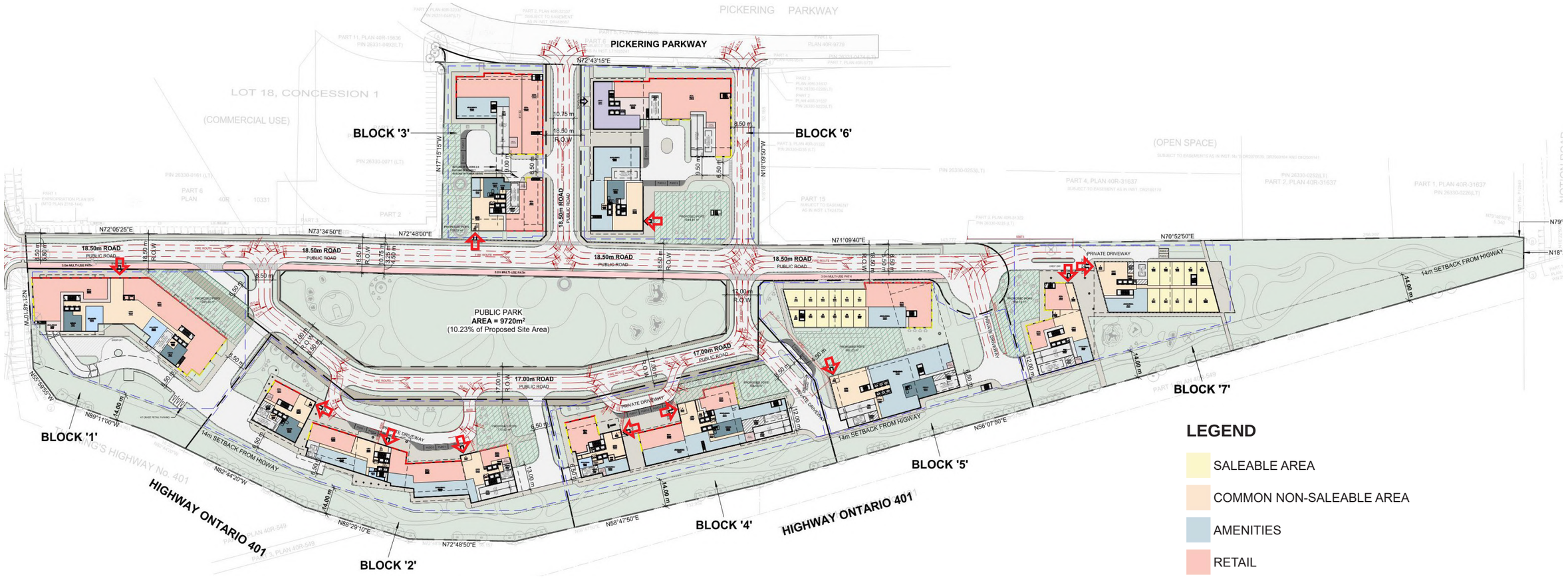
Phase 7, the final phase, presents a tower stepping down towards the north and east.

Each phase includes careful demolition of existing structures to make room for new developments, ensuring a harmonious transition and completion of the project.

LEGEND

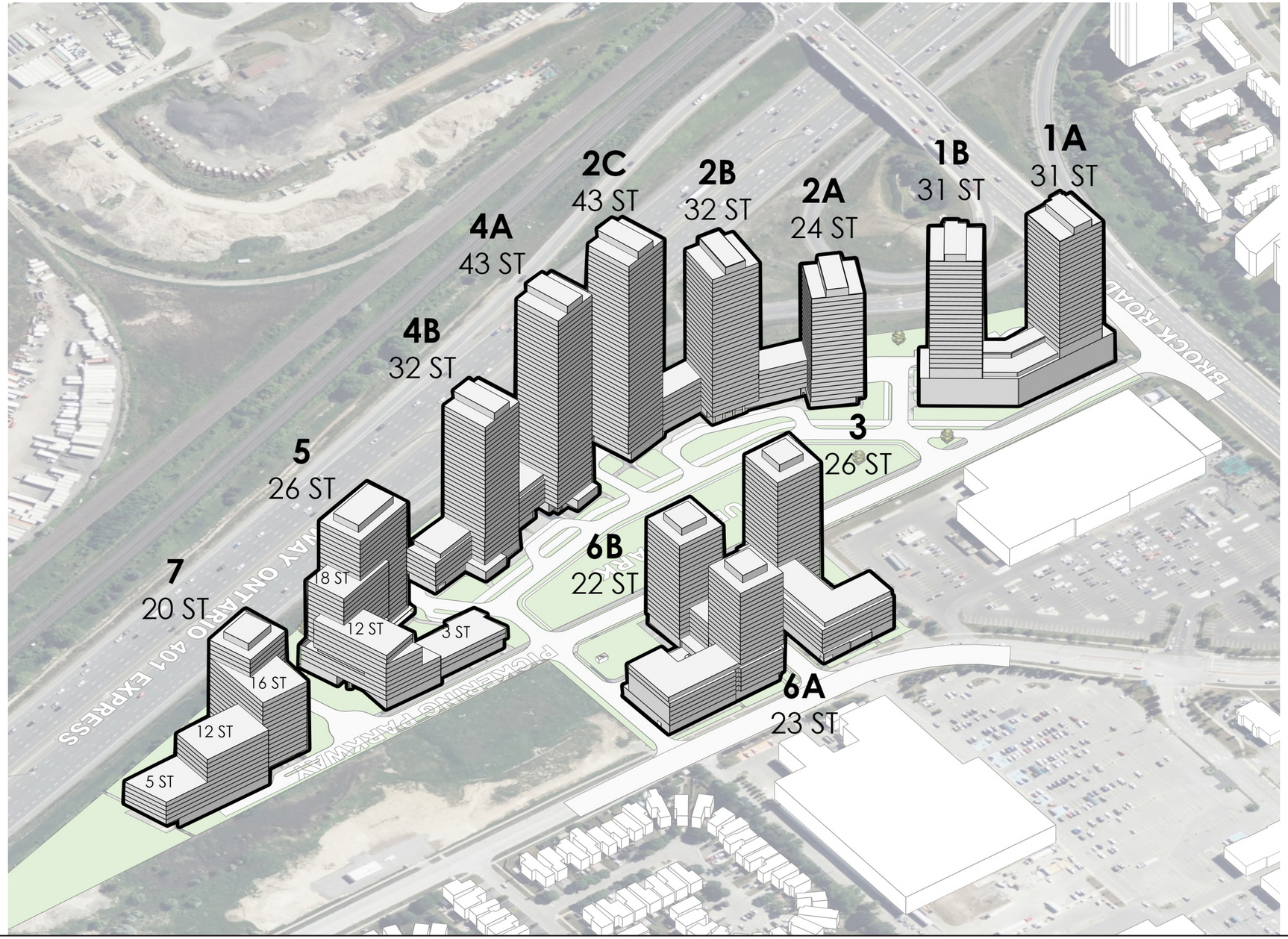
- PROPOSED BUILDINGS
- PROPOSED GREEN SPACE
- MULTI-USE PATH
- PROPOSED WALKWAYS
- ROAD

4.2 - FIRST FLOOR PLAN



LEGEND

- SALEABLE AREA
- COMMON NON-SALEABLE AREA
- AMENITIES
- RETAIL
- COMMERCIAL LOBBY
- GARBAGE
- PRIMARY RESIDENTIAL ENTRANCE



4.3 - MASSING

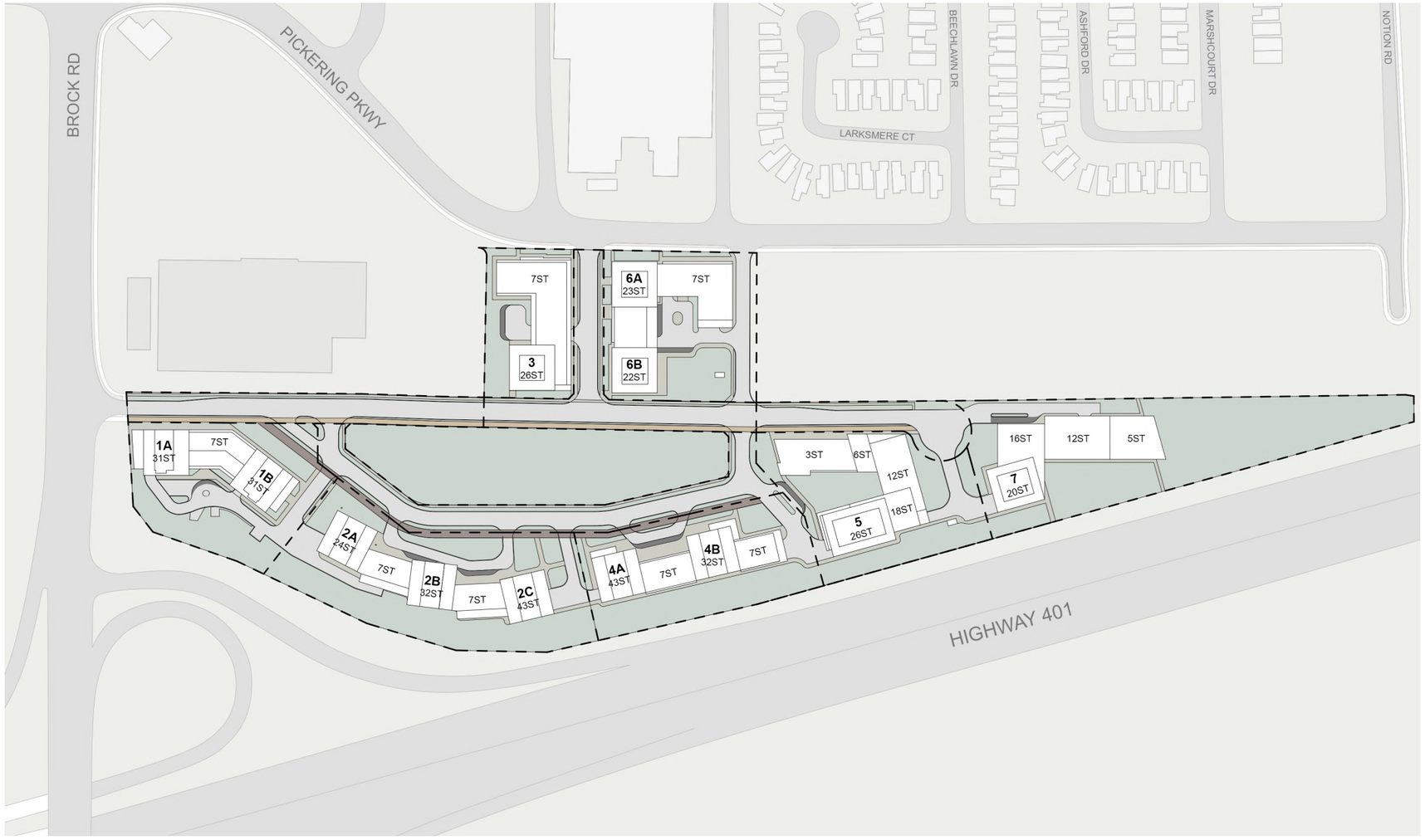
The development comprises a total of twelve towers atop seven podium buildings. The proposed tower heights range from 31 to 43 stories along Highway 401, with Phase 5 and 7 stepping down from 26 and 20 stories respectively to match the adjacent low-rise developments. Phase 3 and 6, situated on the north side of the site facing Pickering Parkway, reach 26 and 22 stories for the residential towers, and 23 stories for the commercial tower.

The proposed podiums are generally 7 storeys in height, except for the podium of Phase 5 & 7, which varies in height due to the buildings stepping down rather than having a conventional tower-podium form. All roofs of the proposed podiums are utilized to provide outdoor amenities and landscape areas for residents' use.

The towers are positioned as close as possible to Highway 401 on the south side of the development to create a large central public park in the center of the development. This arrangement results in two main mass clusters, one along the highway and the other next to Pickering Parkway, with the central space left empty.

To avoid creating a massive separation alongside the highway and to prevent isolation of the building, the heights of the towers are arranged in a wavy form that ascends and descends as one drives by on the 401 highway. Geometric breaks in the facade of the blocks facing the highway add visual interest and prevent the face from appearing flat and bland.

The proposed towers have generous separation distances to minimize shadow, wind, and privacy impacts. Their height, depth, and built-form provide for an appropriate transition in massing and scale to the adjacent existing and future developments surrounding the site.



4.4 - SITE DESIGN

The proposed land use plan includes residential, commercial, and retail components, along with a large central public park, open boulevards, community amenities, and a comprehensive network of sidewalks, bike paths, and circulation trails.

The project will be developed in 7 phases, with demolition occurring in phases starting from the west side of the site. These phases are arranged to maximize the use of open public space and promote the usage of parks, urban streetscapes, and public spaces.

Taller buildings are strategically placed alongside Highway 401, freeing up significant space for a central public park to serve the entire development. This placement has also allowed for the creation of a retail corridor/boulevard that promotes a live/work concept along the central public park, while supporting local businesses.

Phases 1, 2, 4, 5, and 7 are all aligned with Highway 401, while phases 3 and 6 are situated on the north side of the site next to Pickering Parkway.

4.5 - ACCESS & CIRCULATION

The proposed development introduces a network of public and private roads designed to create comfortable, safe, and attractive streetscapes. The site is adjacent to the existing freeway (Highway 401) to the south, directly connected to Pickering Parkway to the north, and accessible from the existing public road (Brock Road) to the west.

Three vehicular access points are proposed: the first is through an east-west 18.5m Right of Way (ROW) from Brock Road, and the second is through two north-south roads connecting the site to Pickering Parkway on the north side.

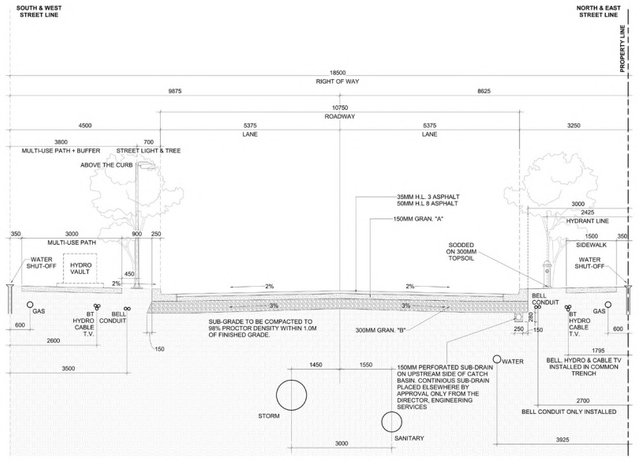
Within the site, the east-west ROW connecting the site to Brock Road extends to the east side of the site, serving as the main access spine. An additional ROW wraps around the central public park and reaches south towards the buildings along Highway 401. This establishes a functional street network that promotes efficient circulation and creates multiple access points and connections with surrounding communities.

The road layout creates a convenient loop connecting all phases and blocks within the development, providing easy vehicular access for residents. Phase 3 and 6 also have direct access to Pickering Parkway, making them attractive properties for ease of access and seamless connectivity to neighboring regions.

The proposed vehicular circulation also includes a series of underground parking access points, carefully screened by built form from the most prominent streetscapes, with priorotized pedestrian entrances and commercial activity at grade.

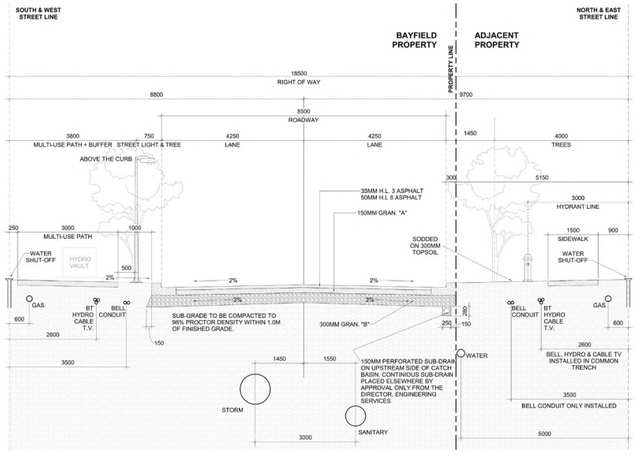
LEGEND

- PRIVATE ROAD
- PUBLIC ROAD
- UNDERGROUND PARKING ACCESS
- VEHICLE ACCESS TO THE DEVELOPMENT

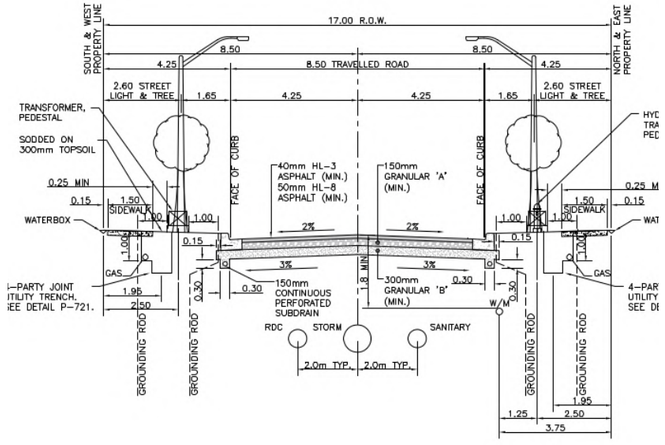


18.5M RIGHT OF WAY PROFILE (A1)

18.5M RIGHT OF WAY PROFILE (B)



18.5M RIGHT OF WAY PROFILE (A2)



17.00 M RIGHT OF WAY PROFILE (C)

The site presents four distinct right-of-way profiles to accommodate various transportation and infrastructure needs.

Type A is divided into two options:

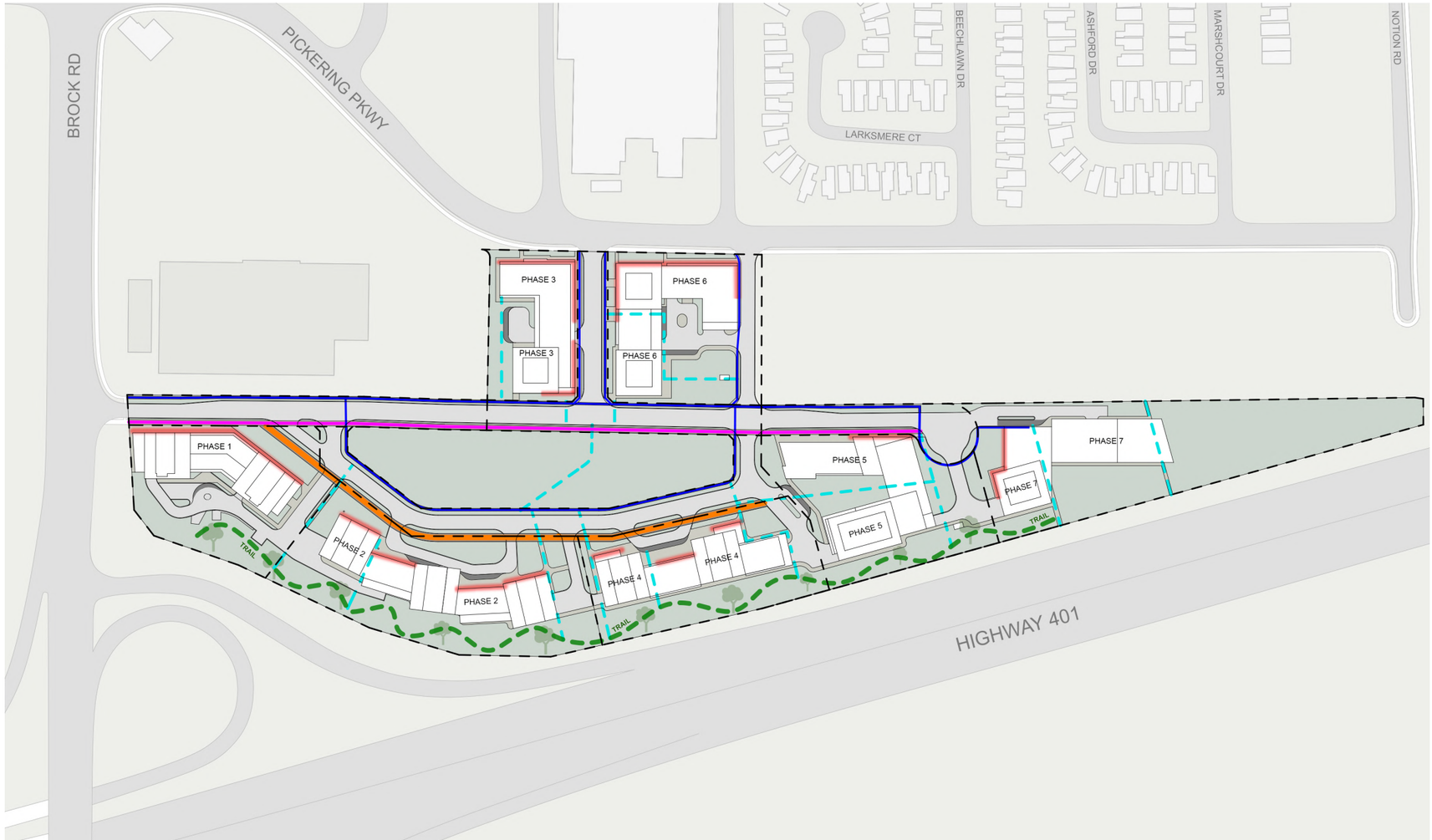
A1: This profile features an 18.5-meter right-of-way with a 10.75-meter drive lane and a 3.00-meter multiuse path.

A2: This option also has an 18.5-meter right-of-way, with a 8.5-meter drive lane and a 3.00-meter multiuse path.

Type B: This profile, with an 18.5-meter right-of-way, provides 8.5-meter drive lane.

Type C: This profile has a 17-meter right-of-way, providing 8.5-meter drive lane.

These profiles are designed to address varying traffic flow and pedestrian needs, optimizing space for both vehicular movement and public access where applicable.



4.6 - PEDESTRIAN & BICYCLE

An active pedestrian and bicycle network is designed to promote a healthy lifestyle and reduce vehicle use. This network consists of interconnected sidewalks, pedestrian pathways, and multi-use paths integrated along proposed roads and within proposed parks and open spaces. It provides access to a variety of outdoor amenities, open spaces, non-residential uses (such as indoor amenities and retail components at grade), and all main residential building entrances. It also connects to existing surrounding open spaces, transit stations, future parks, and the existing pedestrian network along adjacent roads.

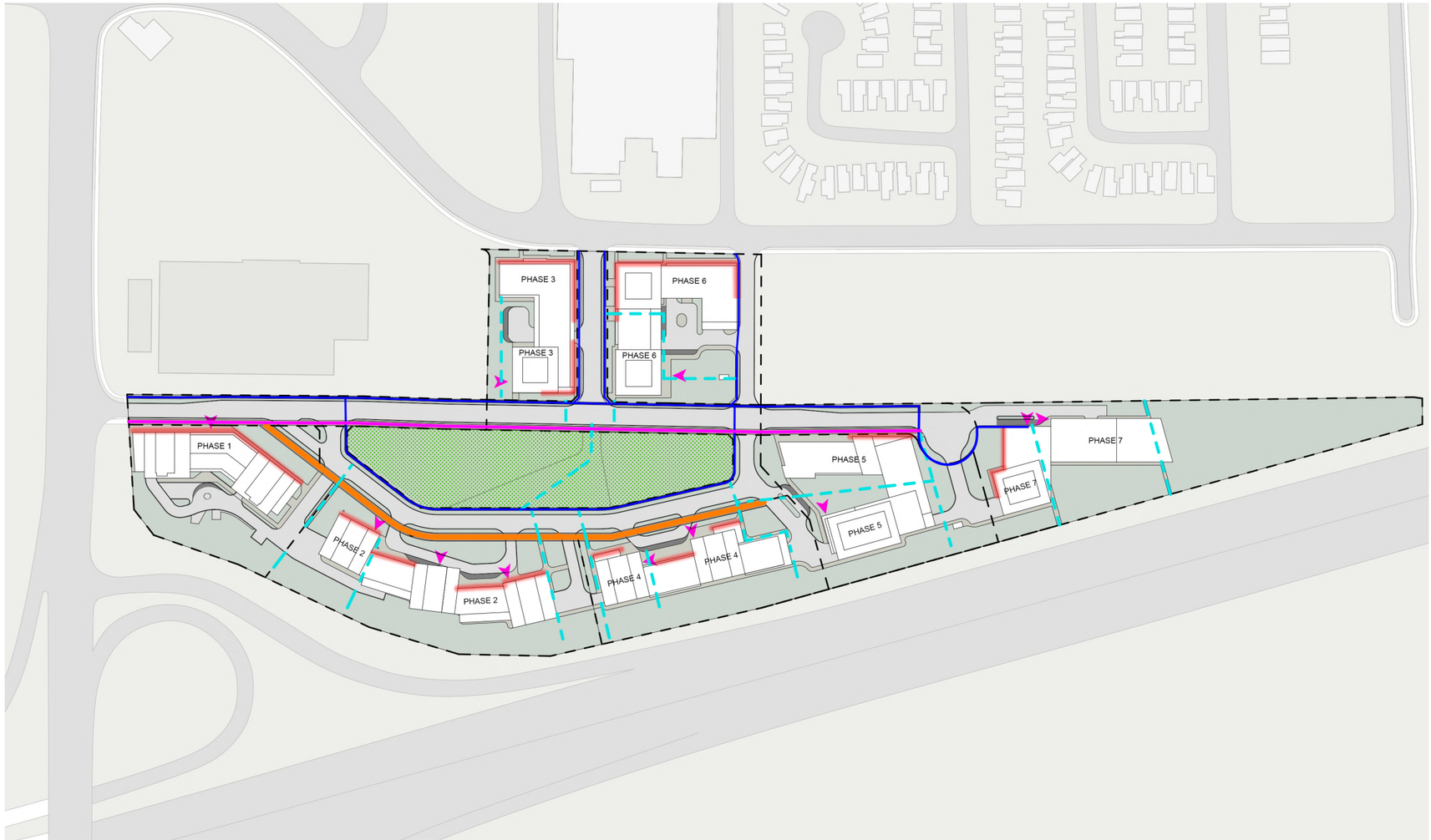
The proposed sidewalks will be lined with street trees and present a consistent street edge through the front facade of all buildings. They are intended to have a human scale and be well-connected, comfortable, safe, and active.

Along the east-west ROW, a multi use path has been introduced to provide pedestrian and bicycle access from Brock Road to the east side of the development. This creates a pedestrian-friendly environment with increased connectivity, branching out into shorter paths that connect to individual blocks.

To take advantage of the 14m setback from Highway 401, a path has been introduced to connect the east side triangular landscape area to individual blocks alongside the highway. Breaks on the first floor of the block allow for the flow of pedestrian access from the back trail to the front and central public areas, facilitating circulation and creating a pleasant experience for residents.

LEGEND

- SIDEWALK
- RETAIL BOULEVARD
- MULTI-USE PATH
- TRAIL
- PEDESTRIAN CONNECTION



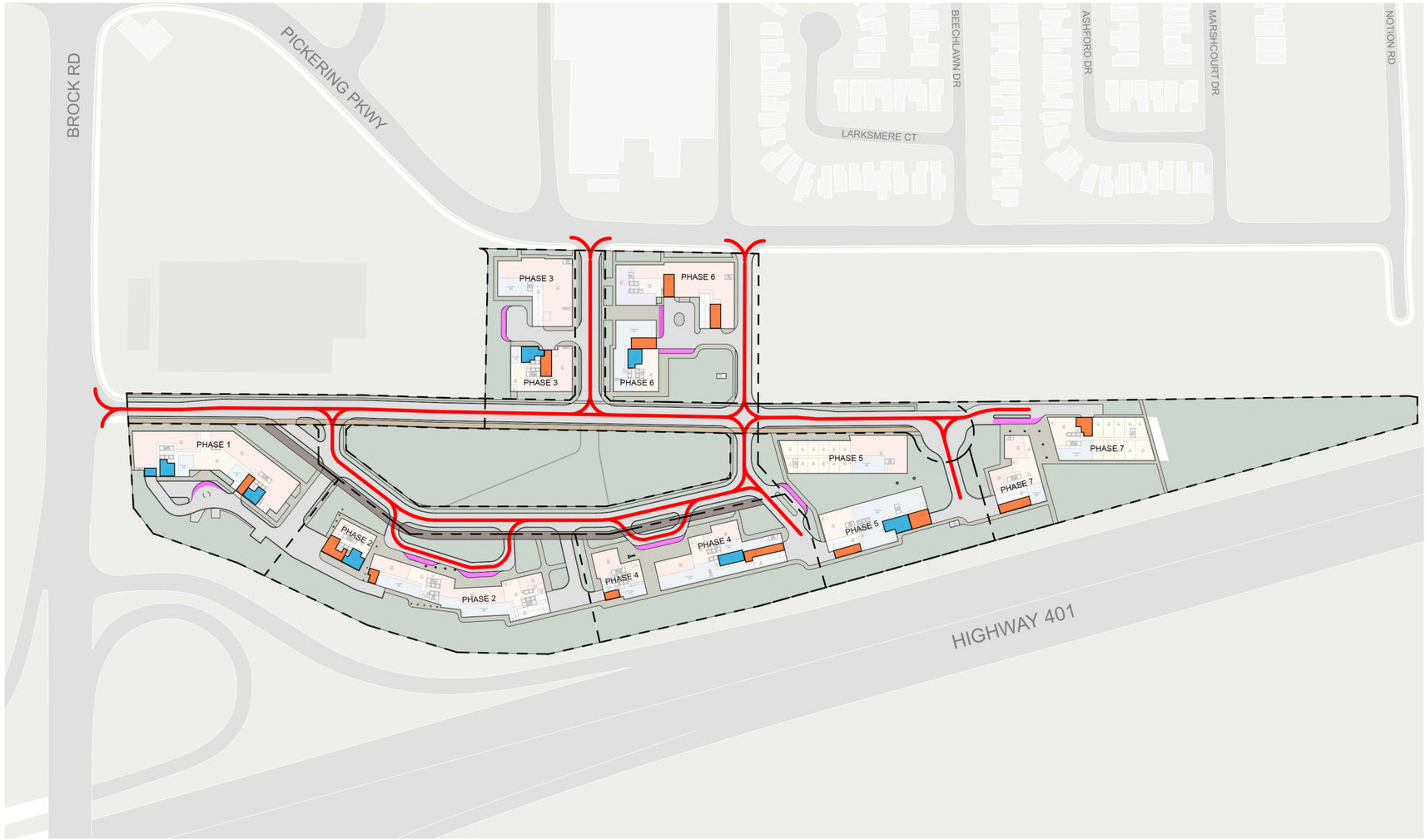
4.7 - RETAIL BOULEVARD

A retail boulevard has also been introduced in front of the southern blocks facing the public park, serving as a secondary pedestrian access. This boulevard promotes retail small businesses and creates an active, lively, and safe environment that acts as a buffer between the public park and the buildings.

LEGEND

- PEDESTRIAN WALKWAY
- RETAIL BOULEVARD
- RETAIL FACADE
- RESIDENTIAL ENTRANCE
- PEDESTRIAN CONNECTION
- PUBLIC PARK

4.0 - DEVELOPMENT CONCEPT



4.8 - SERVICE POINTS

LEGEND

- DROP OFF
- LOADING
- GARBAGE
- FIRE ROUTE

We have integrated multiple layers of public spaces within the development, all interconnected through a network of walkways, paths, and trails. Our objective is to ensure that all spaces on the first floor, including lobbies, parks, amenities, and retail stores, are well-connected and easily accessible.

Furthermore, we aimed to establish a hierarchy in the public realm, with open spaces varying in design and function based on their adjacent activities. Whether transitioning from the public park to the retail boulevard, facing the retail spaces, or from the public park to the civic square facing the commercial tower, these public spaces create a hierarchy that guides pedestrians and introduces the character of the adjacent spaces.

Moving the towers southward and aligning them with the 401 highway, our primary objective was to create a large public park that would serve as the focal point of the community. This park, surrounded by all the blocks, is an open space with abundant landscaping and green areas.

To the south of the public park lies the retail boulevard, positioned in front of the podium space. This boulevard acts as a buffer between the park and the building blocks, providing additional hardscape spaces to enhance the vibrancy of the community. The lobby spaces for the southern condos also open up to this boulevard.

On the southern end of the development, behind the blocks facing the 401 highway, a walking and cycling trail has been created. This trail is connected to the retail boulevards through breaks introduced on the first floor of the building, creating a seamless connection around the building.

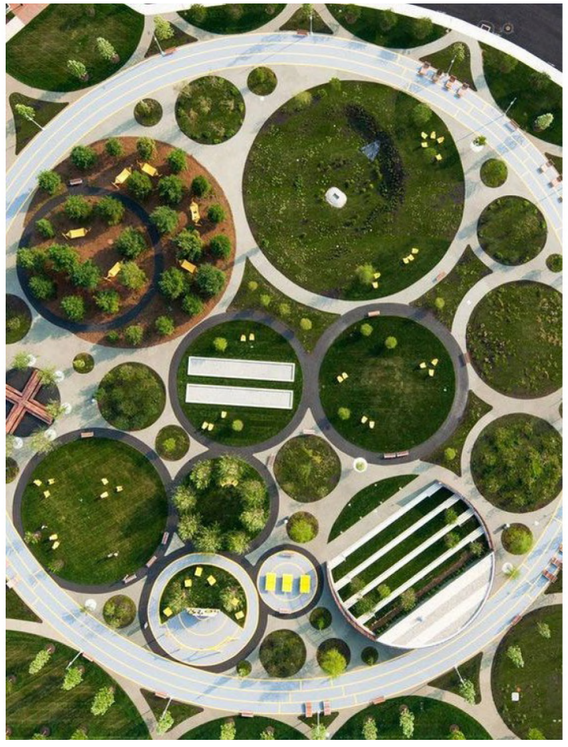
To the east, a large landscape area is connected to all phases through pedestrian walkways.

Furthermore, we aimed to establish a hierarchy in the public realm, with open spaces varying in design and function based on their adjacent activities. Whether transitioning from the public park to the retail boulevard, facing the retail spaces, or from the public park to POPS located in each block, these public spaces create a hierarchy that guides pedestrians and introduces the character of the adjacent spaces.

LEGEND

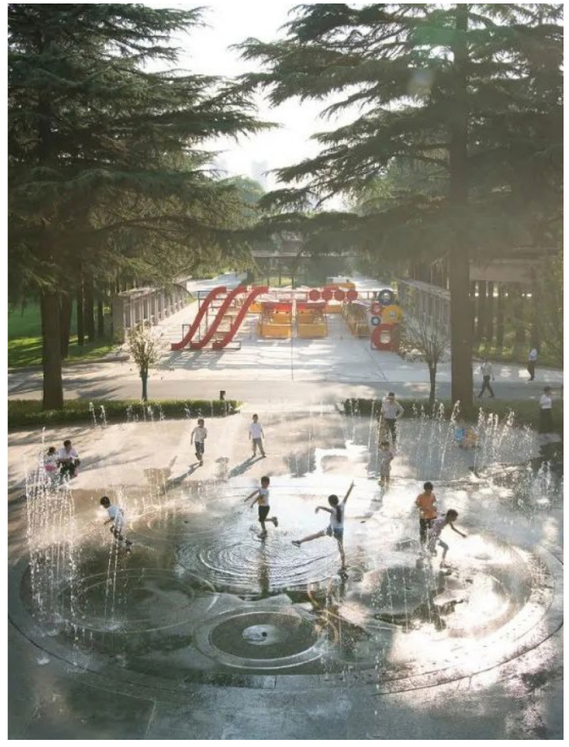
- PUBLIC PARK
- POPS
- GREEN SPACE
- INDOOR AMENITIES

A SENSE OF PLACE



DIVERSITY OF PUBLIC SPACES

A SENSE OF COMMUNITY

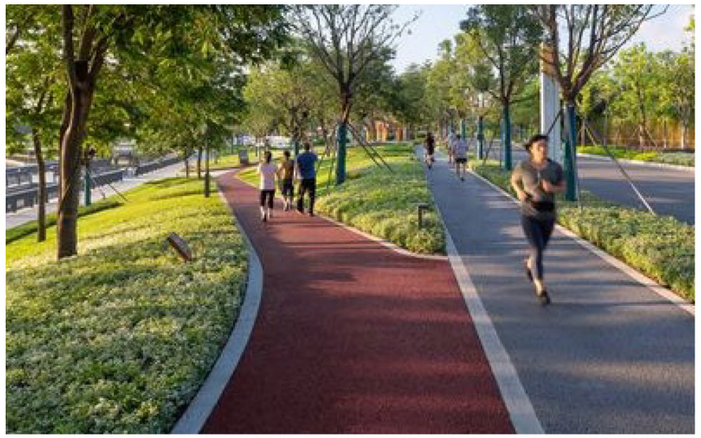
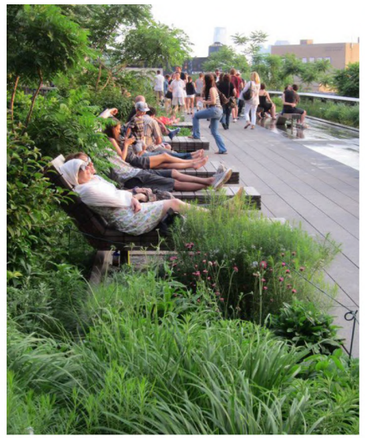
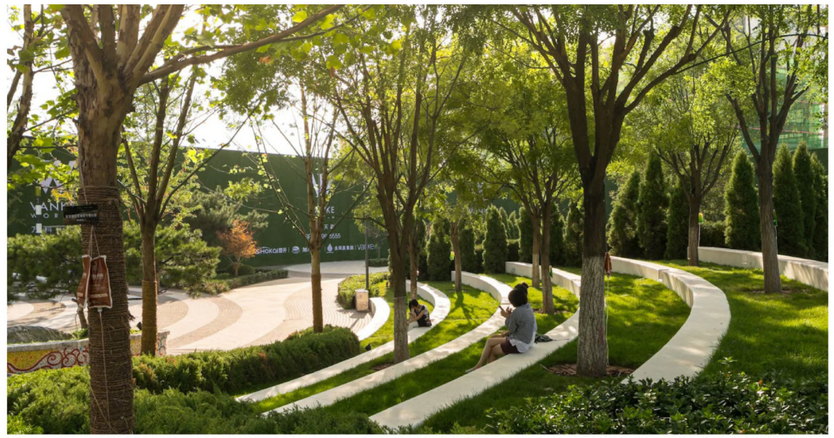
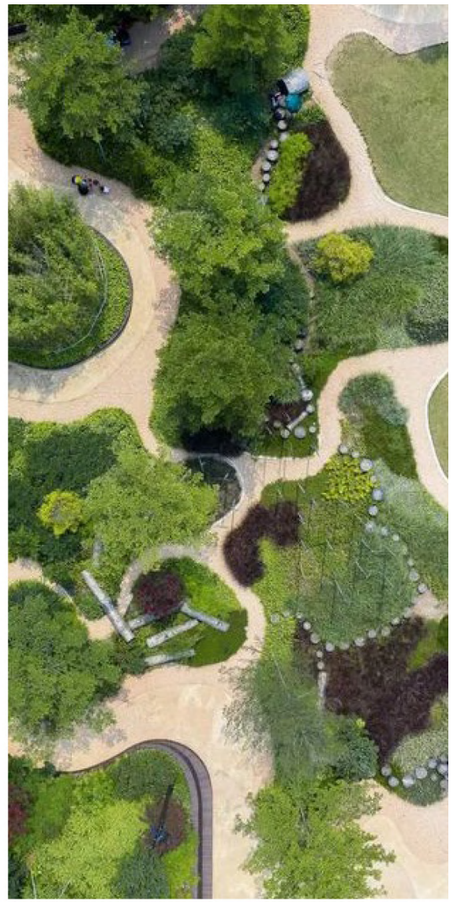
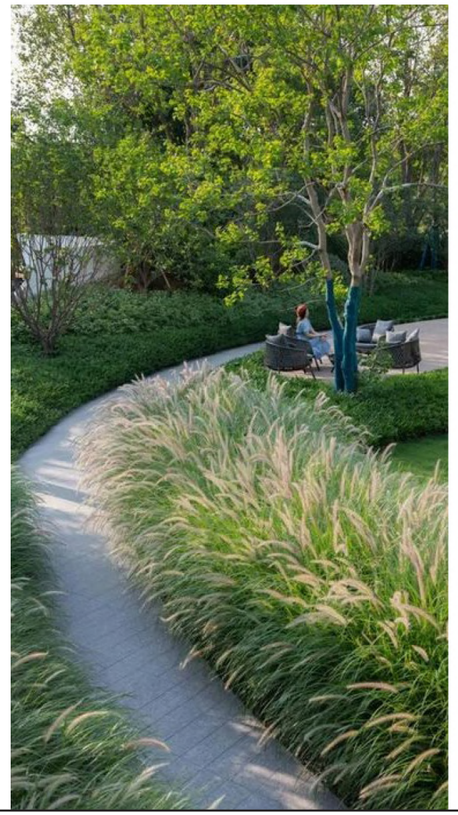


INCLUSIVE SPACES

4.11 - LANDSCAPE MASTERPLAN

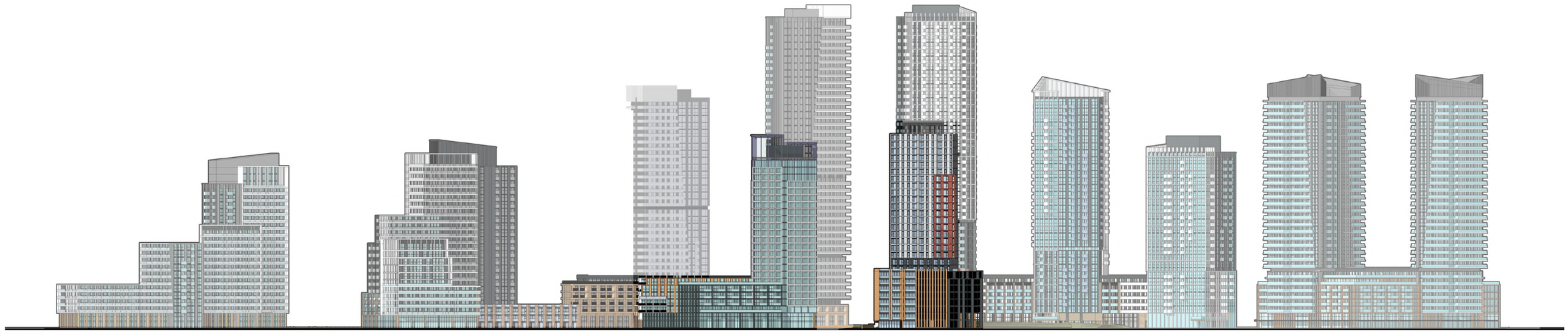
LEGEND

- LANDSCAPE
- HARDSCAPE / WALKWAYS / PATHS
- ACTIVITY NODES
- DROP OFF / POTENTIAL WOONERF

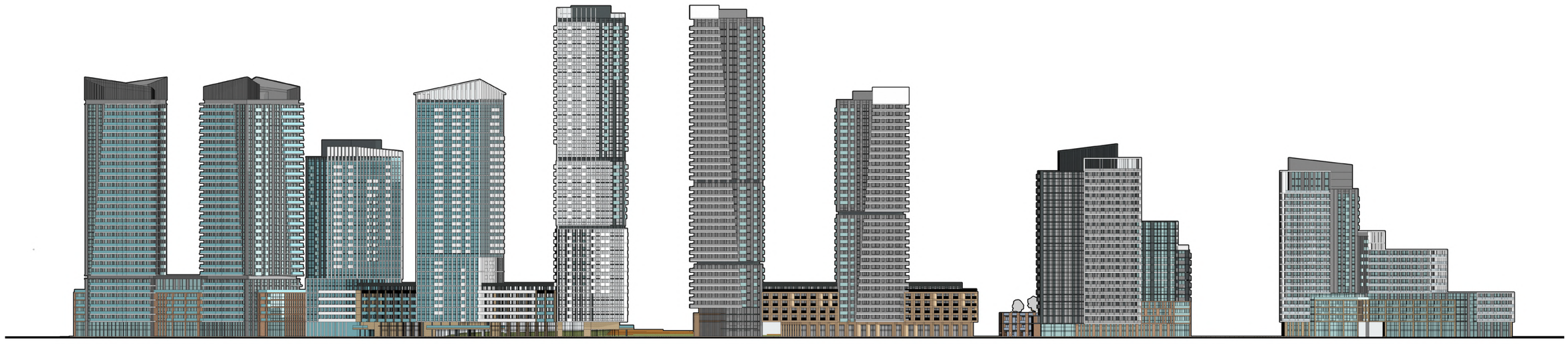








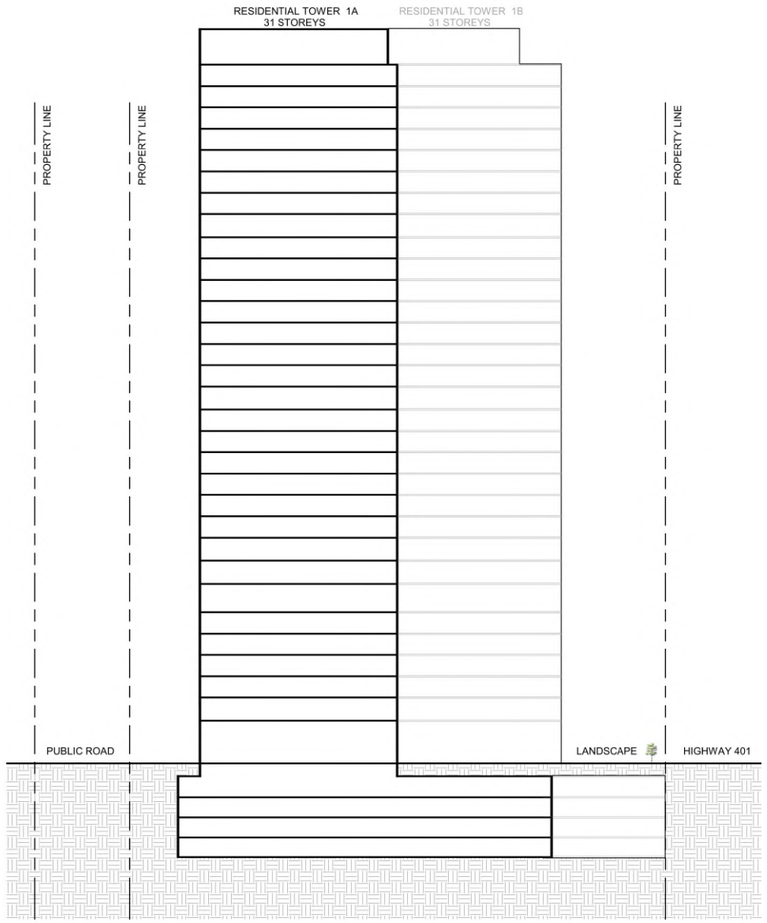


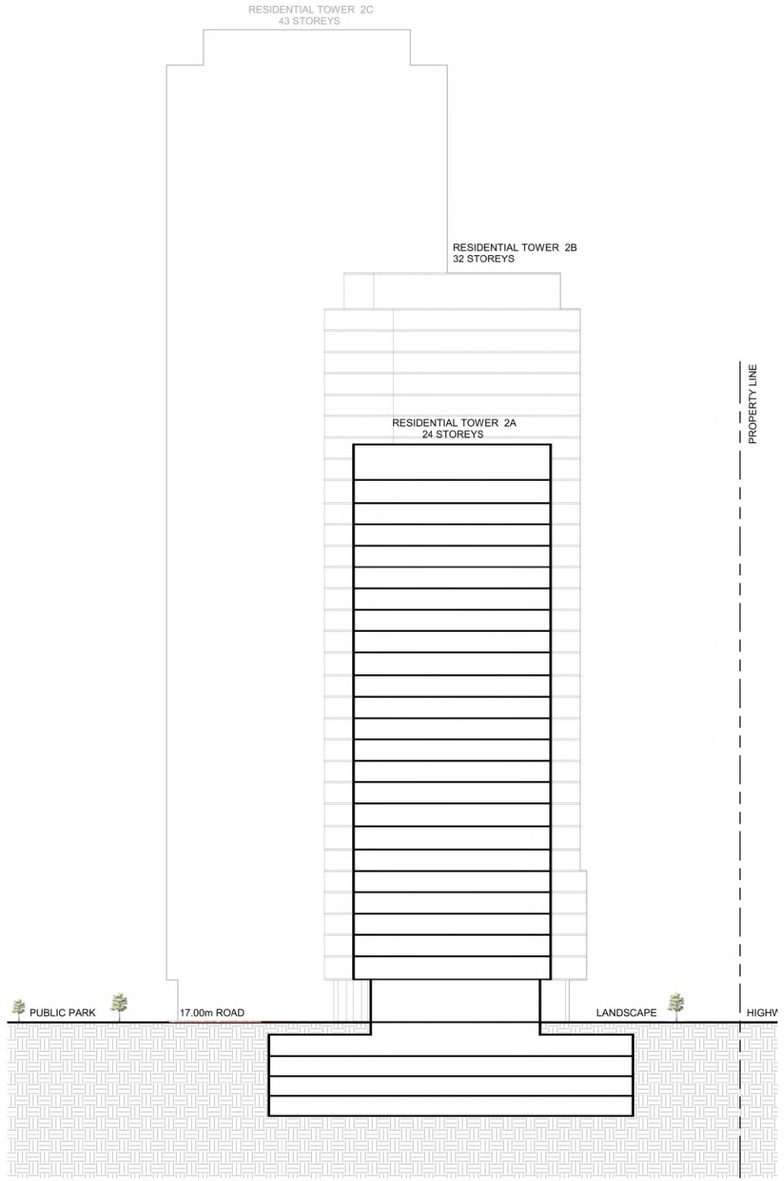
NORTH ELEVATION



SOUTH ELEVATION



BLOCK 1



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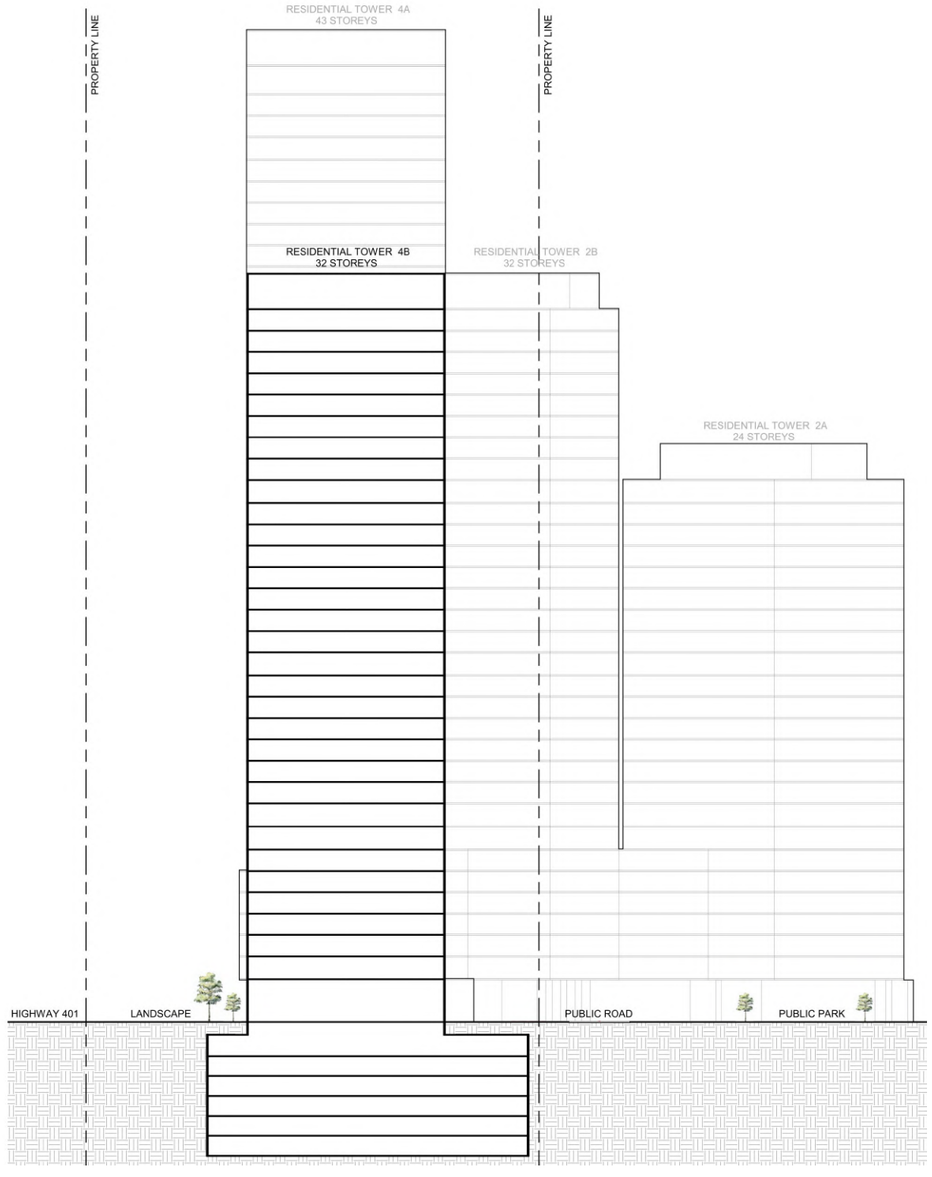

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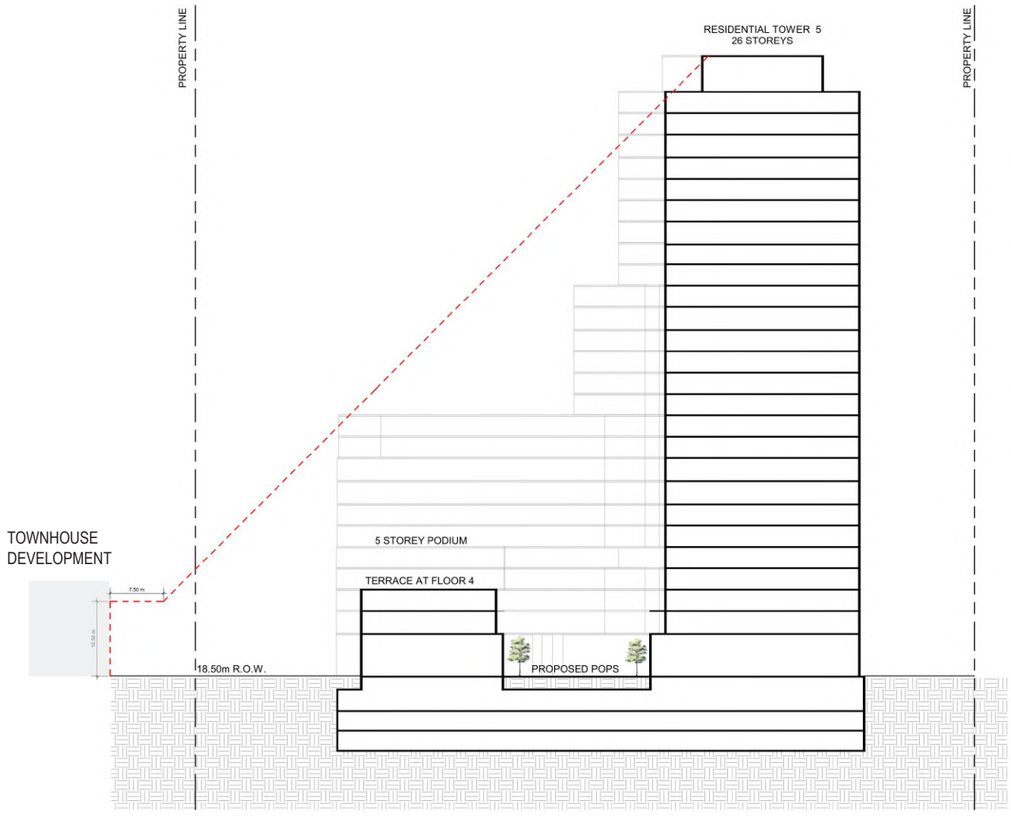
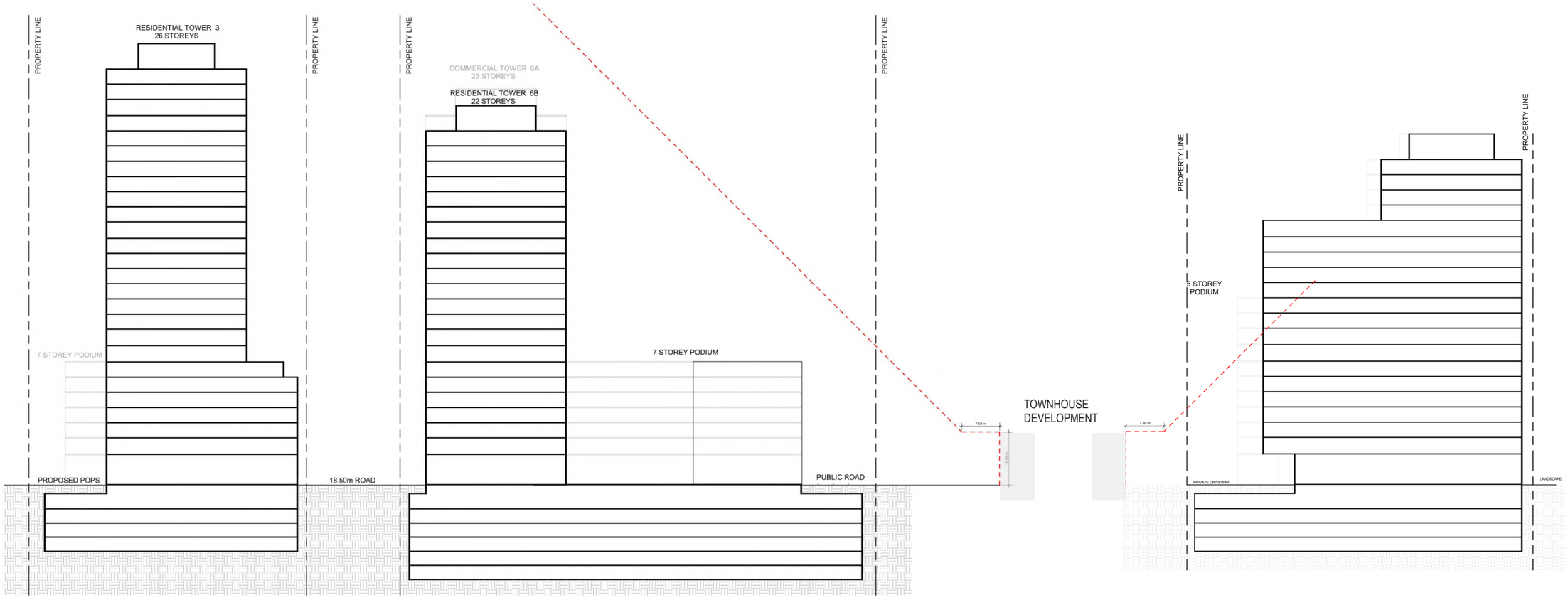
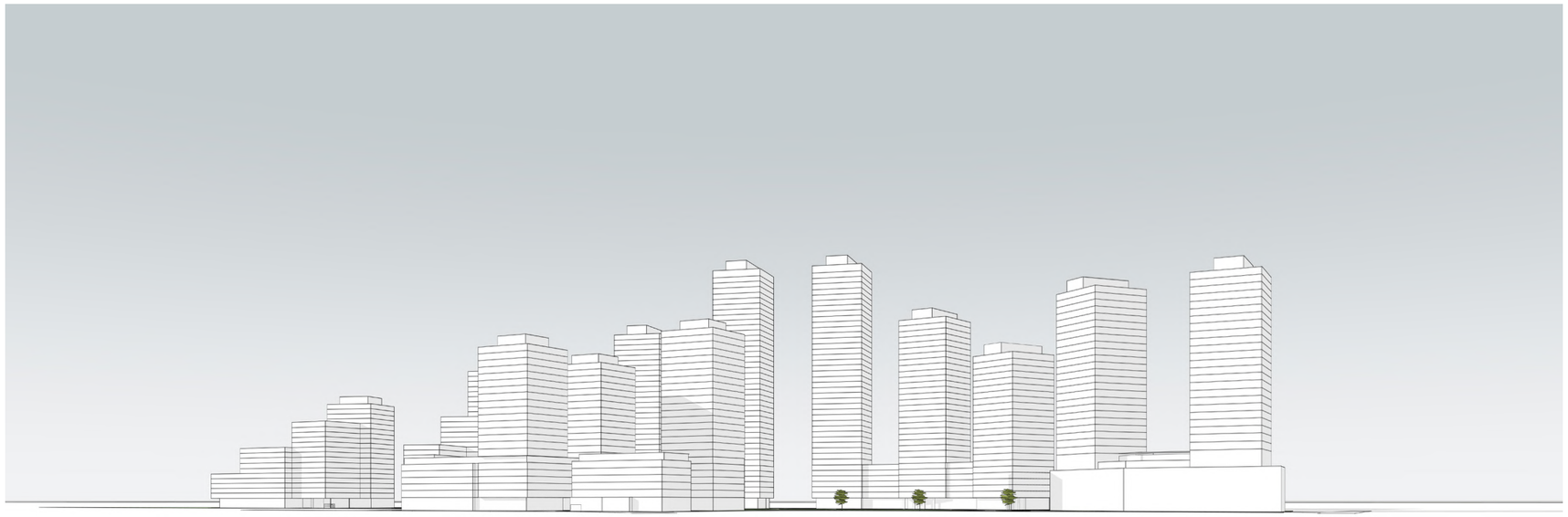


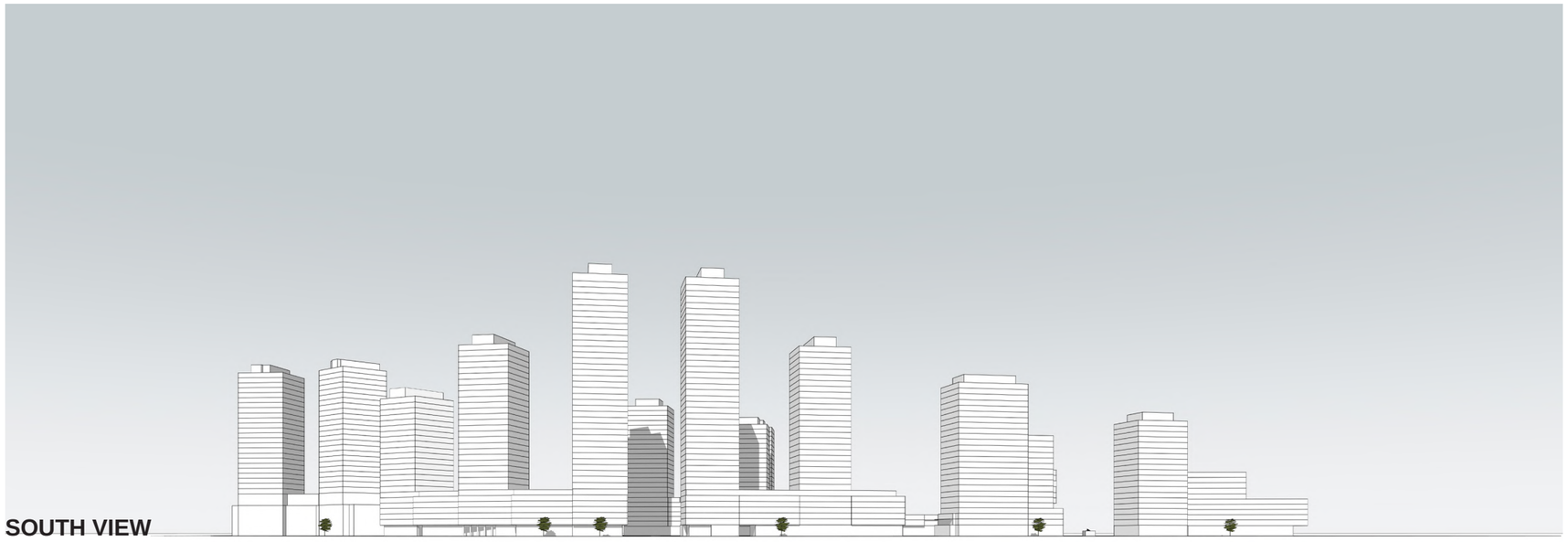
BLOCK 5



BLOCK 3 **BLOCK 6** **BLOCK 7**



NORTH VIEW



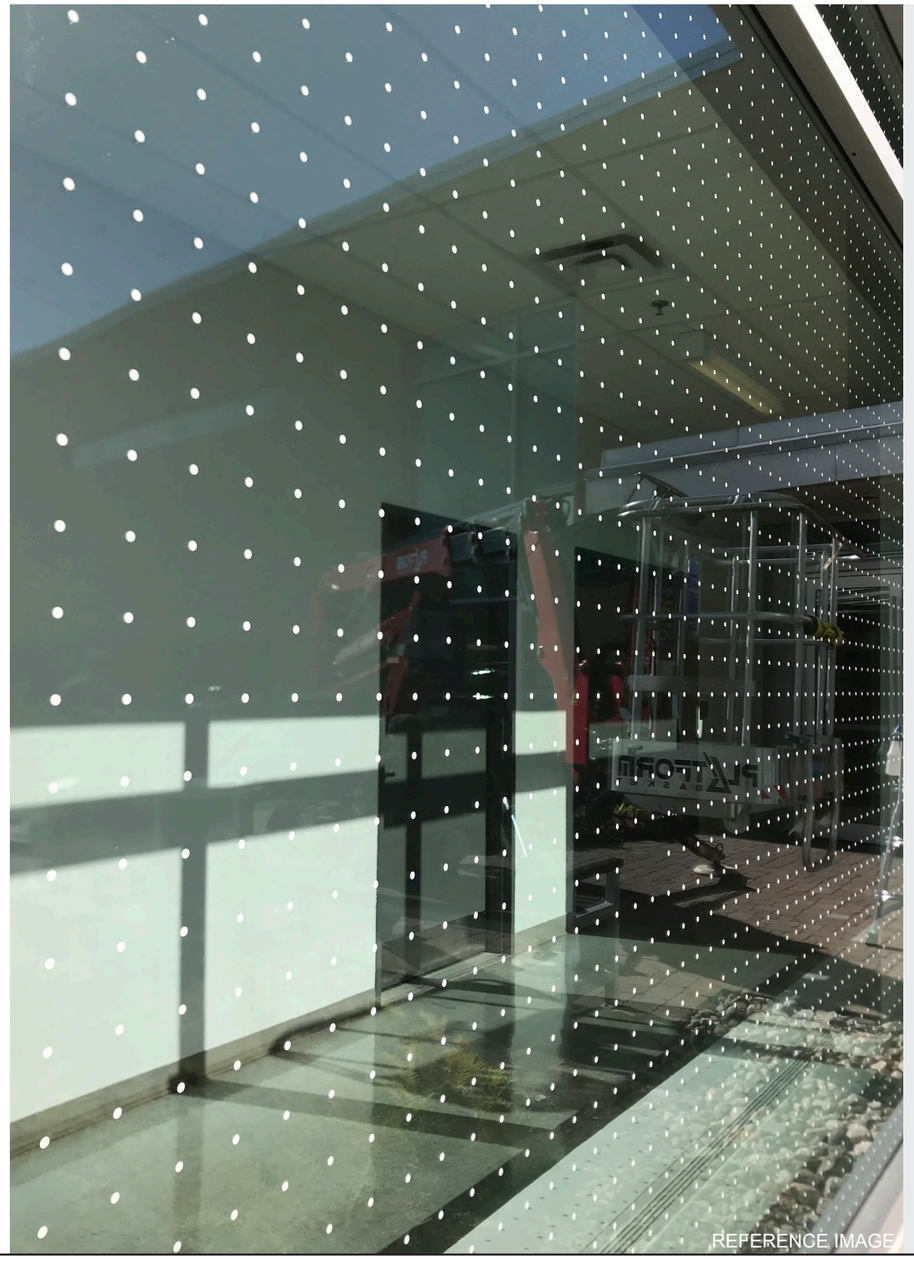
SOUTH VIEW

4.15 - SUN/SHADOW STUDY

A Sun/Shadow Study conducted by Turner Fleischer in February 2024 analyzed the potential impacts of the proposed development. The study provides a visual analysis of the proposed high-rise buildings' shadows at specific test dates and times in March, June, September, and December, considering the general massing of all the proposed built forms on the site.

The study concludes that the massing of the proposed development has limited impact on the surrounding uses for an extended period. As the tallest buildings are envisioned along Highway 401, the study illustrates that the proposed massing of the development casts somewhat limited shadows on the existing residential neighborhoods to the north, sidewalks along Pickering Parkway, and the new neighborhood public park.

More information about the buildings massing and design considerations, can be found in Appendix A.2.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4.16 - BIRD STRIKE STUDY

We conducted a bird strike study to mitigate bird mortality, particularly due to the site's proximity to Lake Ontario, where bird fatalities are prevalent. Our aim is to address this issue while maintaining high architectural standards.

The design will focuse on reducing the risk to birds posed by extensive glass surfaces on the building facade, a key element of bird-friendly design.

Measures include treating exterior glazing within the first 16 meters of the building and incorporating visual markers on balcony railings. Additionally, the first 4 meters of glazing above the rooftop vegetation will be treated with bird-friendly glass.

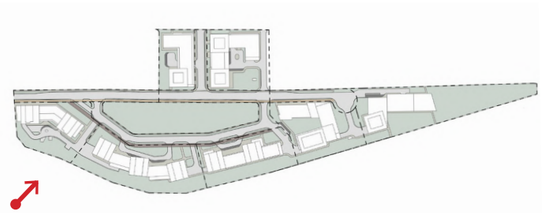
For further details, please refer to the complete report in Appendix A.5.

4.17 - ARCHITECTURAL DESIGN

The proposed development integrates urban design principles, blending contemporary architectural elements to create a cohesive and distinctive addition to Pickering's urban landscape. This multifaceted project consists of several buildings and phases, yet it is unified by two primary components: the Podium and the Tower.

The Podium, spanning approximately seven stories, establishes a direct relationship with the street life and public realm. Its consistent design throughout the development enhances the neighborhood fabric, creating an intimate character. In contrast, the Towers, set in the background, embody a contemporary nature through their composition and materiality.

The Podiums, standing prominently at the forefront, interact closely with pedestrians, portraying a down-to-earth character. In contrast, the Towers are designed with time-resistant materials such as metal, glass, and pre-cast concrete, aiming to set a benchmark in innovative building design for the city.



Phase 1

Phase 2

Phase 3

Phase 4

Phase 5

Phase 7

4.18 - PODIUM DESIGN

Throughout the site, the podium typically comprises 6-7 storeys. The ground level accommodates the residential lobby, parking and parking access, commercial space, and a portion of the allocated indoor amenities. Retail areas are strategically located on the front of the podiums, offering full frontage to the Right of Way (ROW) that stretches towards the south. This design choice creates a vibrant environment facing the retail boulevard, which is situated in front of the southern towers of the development.

For phases 3 and 6, situated on the north side of the development, retail spaces face Pickering Parkway, benefiting from the busy street. In phases 5 and 7, where retail spaces are limited, they are oriented towards the north to face future developments and benefit from those future units as well.

Residential lobbies are integrated into the first floor, placed between the retail spaces to create a mix of activities facing the retail boulevard. Parking entrances and loading bays are situated away from busy pedestrian spaces, placed on the side and hidden from public view.

Indoor amenities on the first floor mainly face the bicycle and running trail at the back of the buildings, blending outdoor activities with indoor amenities. The additional floors are predominantly residential, with some units connecting to their lower retail counterparts, creating a live/work situation.

Each phase has its own distinctive podium design, yet they are well connected with the correct proportion, material selection, and colour. Warm-colored masonry is primarily used on the podium to connect with neighboring residential developments while creating a familiar outlook for the residents. Despite the unique designs in each phase, they are all designed with human scale in mind to create a unique yet cohesive experience for pedestrians.

4.0 - DEVELOPMENT CONCEPT

Phase 1

Phase 2

Phase 3

Phase 4

Phase 5

Phase 7

4.19 - TOWER DESIGN

The Tower builds upon the contemporary character established by the Podium, employing modern and time-resistant materials for its facade. The majority of the tower features subdued colours and textures, contrasting with and emphasizing the warmth of the masonry materials used for the Podium. When colours are incorporated into the facade, they extend the tones of the podium and existing buildings onto a vertical space, characterizing the neighborhood.

In addition, our concept for the towers was to arrange them to the south, aligned with the 401 Highway, and position them closely together, resembling cedar trees with varying heights, shapes, and sizes. This arrangement creates a cohesive neighborhood development, symbolizing Pickering. The Northern white cedar (Thuja occidentalis), the most popular evergreen tree in Pickering, inspired this concept.

Each tower block has its own identity while contributing to a community of “trees” placed beside each other. We achieved this by designing a simplified inner core that is uniform across all towers, and then adding a unique outer skin or cover resembling a cedar tree for each phase. This approach creates a variety of interpretations of a single form when the towers are viewed together, particularly from the 401 Highway, offering a visually appealing and artistic impression.

4.20 - RENDERINGS

VIEW OF THE SOUTHERN BLOCKS ALONG HIGHWAY 401

4.20 - RENDERINGS

VIEW OF THE CENTREAL PUBLIC PARK

4.20 - RENDERINGS

VIEW OF THE COMMUNITY ACTIVITIES AT THE CENTREAL PUBLIC PARK

4.20 - RENDERINGS

VIEW OF PHASE 1 & 2 FROM BROCK ROAD

4.20 - RENDERINGS

VIEW OF PHASE 5 & 7 FROM THE MAIN STREET

4.20 - RENDERINGS

VIEW OF PHASE 5 ENTRANCE AND DROP OFF

VIEW OF PHASE 1 FACING THE MAIN STREET

4.20 - RENDERINGS

VIEW OF PHASE 4, 5 & 7 FROM HIGHWAY 401

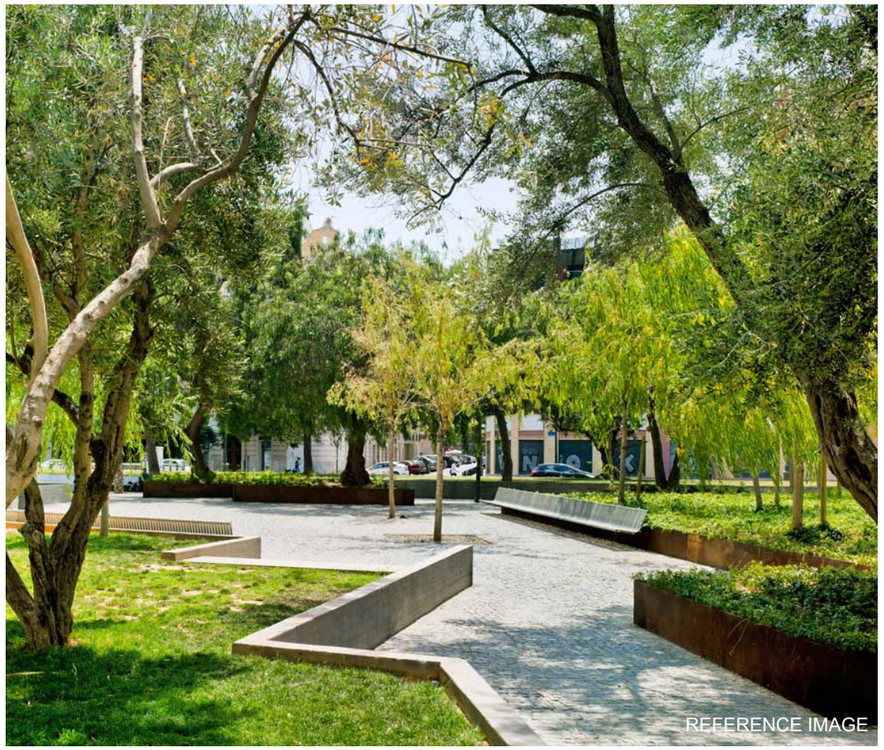
4.20 - RENDERINGS

VIEW OF SOUTHERN BLOCKS AND CENTRAL PUBLIC PARK LOOKING SOUTHEAST

4.20 - RENDERINGS

VIEW OF SOUTHERN BLOCKS AND CENTRAL PUBLIC PARK LOOKING SOUTHWEST

4.0 - DEVELOPMENT CONCEPT



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4.21 - SUSTAINABILITY

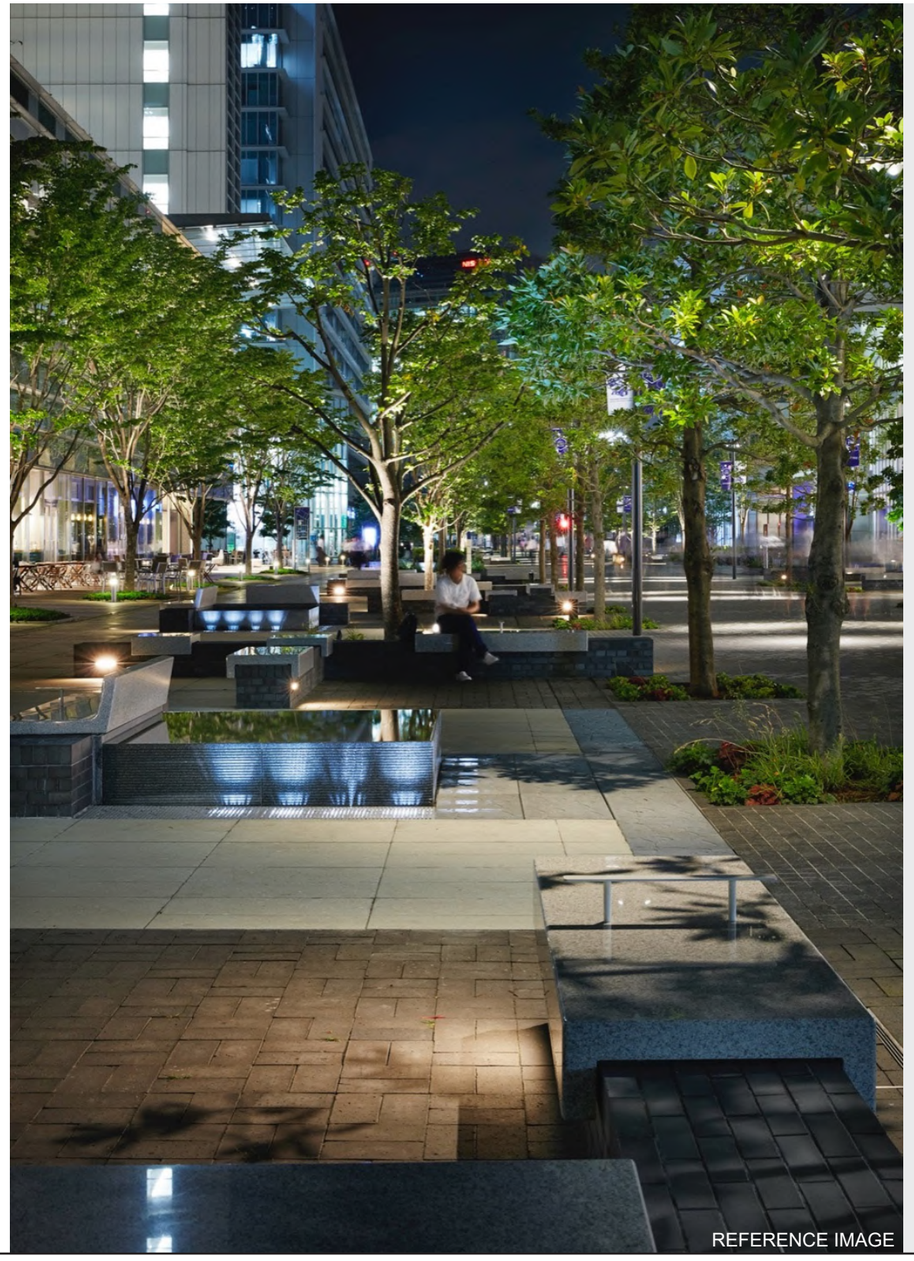
Sustainability encompasses a holistic approach that integrates environmental, social, economic, and cultural considerations to ensure a community's long-term balance and productivity. By managing and protecting valuable resources through thoughtful design and construction practices, we aim to conserve these resources throughout the lifespan of the community.

Our design objective is to create a sustainable urban form that promotes compact development, enhances walkability and transit use, ensures site and building adaptability, prioritizes intensification over sprawl, conserves natural areas, harmonizes with the surrounding environment, and maximizes the use of existing infrastructure.

The proposed development is a compact mixed-use community designed to complement and support the existing and planned infrastructure in the surrounding area. By introducing a mix of residential, community, and retail uses, residents will have convenient access to services and amenities within walking distance. The development also promotes active transportation through accessible sidewalks, multi-use paths, and pedestrian walkways integrated with the built form and open spaces, enhancing ease of movement and efficiency in accessing various amenities.

To mitigate the heat island effect, the development will incorporate tree-planting and a combination of hard and soft landscaping. Further sustainability measures will be explored during the detailed design process to ensure the project's long-term environmental, social, and economic viability.

4.0 - DEVELOPMENT CONCEPT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4.22 - DEVELOPMENT CONSIDERATIONS

• Mixed-Use Environment: Combining living, working, and recreational spaces in close proximity promotes a more sustainable lifestyle by reducing the need for extensive commuting.

• Compact Development: The development is designed for compact development on a street-grid road system, encouraging the use of alternative transportation modes and reducing urban sprawl.

• Walkability and Cycling: The design emphasizes walkability and cycling by providing pedestrian-friendly streetscapes and a well-connected active transportation network linked to existing landmarks, parks, and transit facilities.

• Stormwater Management: Innovative solutions for on-site stormwater collection and management are integrated into the design, including the use of green roofs and urban agriculture to reduce runoff and improve water quality.

• Outdoor Amenities: Outdoor amenities at grade and green roofs are provided to encourage socializing and community engagement, enhancing the overall community feel.

• Visual Connection to Natural Spaces: Building massing and orientation are optimized to enhance visual connections to natural spaces such as the waterfront area, existing parks, and green spaces.

• Urban Tree Canopy: Landscaping is designed to increase the urban tree canopy, providing environmental benefits such as shade, air purification, and habitat for wildlife.

• Energy Efficiency: The development incorporates energy-efficient and sustainable building materials wherever possible, reducing energy consumption and greenhouse gas emissions.

• Stormwater Mitigation: Stormwater flow is mitigated through the integration of landscape buffers and low-impact development techniques, reducing the impact of urban development on the local water system.

• Passive Solar Gain: Street and block alignments are designed to maximize overall site passive solar gain, with an east/west alignment typically serving this purpose.

• Compliance with Green Standards: Higher density residential and mixed-use buildings will comply with Pickering's Green Standards, ensuring sustainability and environmental responsibility at the site plan application stage for each development.

APPENDIX

Education

Educating homeowners about the use and maintenance of sustainable building features and sustainable lifestyle practices.

Energy & Resilience

Designing and constructing resilient, energy efficient buildings and encouraging on-site renewable energy systems.

Neighbourhood

Creating accessible and safe places to live for all.

Land Use & Nature

Protecting, conserving and enhancing the natural environment.

Transportation

Providing opportunities for sustainable modes of transportation.

Waste Management

Providing opportunities to recycle and divert materials in order to reduce waste.

Water

Using water efficiently and supporting sustainable stormwater management practices.

A.1 - PICKERING ISDS

The Pickering Integrated Sustainable Design Standards (ISDS) are born out of the City of Pickering's commitment to becoming one of the most sustainable cities in Canada.

Sustainable Place-Making is a corporate priority for the City that aims to improve the long-term social, environmental, economic and cultural health of the community.

Performance Measures		Performance Criteria		
Number	Development Feature	Tier 1 Mandatory	Met	Tier 2 Optional
E1	**Resident Education**	For residential buildings, provide a **Resident Education Information Package** (hardcopy or digital through website link) to residents that explains the use and maintenance of sustainable building features as well as sustainable lifestyle practices.	☑	Meet Tier 1 and post signage and other education materials onsite to educate residents and visitors of sustainability features.

Performance Measures		Performance Criteria		
Number	Development Feature	Tier 1 Mandatory	Met	Tier 2 Optional
ER1	**Urban Heat Island Reduction**	Roof: For flat roofs (low slope ≤2:12) over 500 m², buildings must provide. 1. Green roof for at least 50% of available roof space; • Where possible, green roof area should be incorporated into visible or accessible locations such as podiums. • Where the green roof is accessible, the common outdoor amenity space may be reduced by no more than 25%. • Where green roof is edible landscaping, the whole garden area including pathways and adjacent terraces, may be counted as common outdoor amenity space. **or** 2. Cool roof installed for 90% of available roof space and if the roof is over 2,500 m² a minimum of 1,000 m² will be designated **solar ready**.	☑	
		or 3. A combination of a green roof, cool roof and solar PV installed for at least 75% of available roof space.		
		Non-Roof: Treat 50% of the hardscapes (i.e., roads, sidewalks, and driveways) with heat island reduction measures such as: • High-albedo paving materials with an initial solar reflectance of at least 0.33 or **Solar Reflectance Index (SRI)** of 29; • Open grid pavement with at least 50% perviousness; • Shade from existing tree canopy or new tree canopy within 10 years of landscape installation; • Shade from architectural structures that are vegetated or have an initial solar reflectance of at least 0.33 at installation or an SRI of 29; and • Shade from structures with energy generation.	☑	Non-Roof: Treat 75% of the hardscapes (i.e., roads, sidewalks, and driveways) with heat island reduction measures.

Performance Measures		Performance Criteria		
Number	Development Feature	Tier 1 Mandatory	Met	Tier 2 Optional
ER2	**Building Energy Performance and Emissions**	Design and construct all buildings to meet or exceed the **Energy Performance Emissions' Total Energy Use Intensity (TEUI)**, **Thermal Energy Demand Intensity (TEDI)** and **GHG Emission Intensity (GHGI)** targets.	☑	Design and construct all buildings to meet or exceed the **Energy Performance Emissions' Total Energy Use Intensity (TEUI)**, **Thermal Energy Demand Intensity (TEDI)** and **GHG Emission Intensity (GHGI)** targets.
ER3	**Energy**			Incorporate on-site **renewable energy** of power generation to meet 5% or more of the building energy needs. **or** Incorporate **peak shaving devices** like battery storage.
ER4	**Building Resilience**			For high-rise residential buildings greater than 12 storeys, provide: • A 72 hour minimum back-up power system, preferably using a non-fossil fuel source, to ensure power is provided to the refuge area, and to the ground floor or the first two floors as applicable to the building use, to supply power to: building security systems, domestic water pumps, sump pumps, at least one elevator, boilers and hot water pumps to enable access and egress and essential building functions during a prolonged power outage.

Performance Measures		Performance Criteria		
Number	Development Feature	Tier 1 Mandatory	Met	Tier 2 Optional
N1	**Private Pedestrian Walkways**	Provide on-site private pedestrian walkways from buildings to features outside of the development site, such as public sidewalks, multi-use trails, transit stops and adjacent buildings. All connections must be AODA compliant.	☑	
N2	**Private Play Area & Structures**	All private play areas and play structures must be **AODA** compliant.	☑	
N3	**Building Access**	Provide the same means of entrance for all users to public entrances of buildings on site, or provide equivalent access when access by the same means is not possible.	☑	
N4	**Wayfinding Signage**	Install **AODA** compliant wayfinding signage (e.g., braille and/or tactile signage) in all buildings and public spaces.	☑	
N5	**Community Safety**	Design the project using **CPTED** principles to create a safe space.	☑	

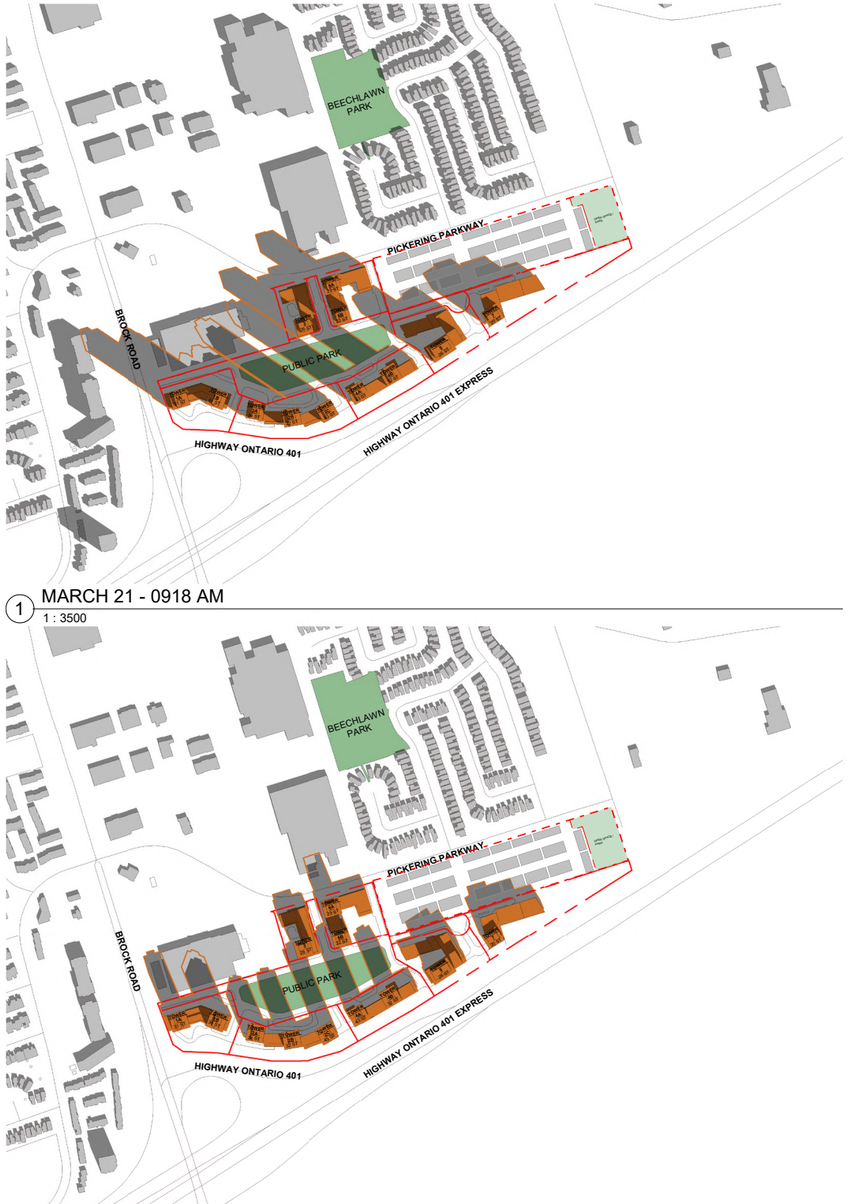
Performance Measures		Performance Criteria		
Number	Development Feature	Tier 1 Mandatory	Met	Tier 2 Optional
LN1	**Topsoil**	The topsoil layer should have a minimum depth of 30 cm for all turf areas, and a minimum depth of 45 cm of high quality topsoil for all planting beds and scarify hard packed subsoil in all soft landscape areas prior to placement of topsoil.	☑	Meet Tier 1 and a minimum depth of 60 cm of high-quality topsoil for all planting beds.
LN2	**Light Pollution Reduction**	Require all exterior lighting to be **Dark Sky Compliant** with the exemption of street lighting which is governed by the City's Street Lighting Requirements If a Dark Sky Fixture Seal of Approval is not available, fixtures must be full-cutoff and with a colour temperature rating of 3000K or less.	☑	Meet Tier 1 and use motion sensors or timers for outdoor lights to maintain security without excessively lighting the building's exterior.
LN3	**Native and Non-Invasive Species**	Plant 50% **native plant species,** including trees, shrubs and herbaceous plants preferably drought-tolerant and pollinator-friendly outside of the buffer area and within the development limit. Remaining non-native species must be non-invasive.	☑	Plant 75% or greater with **native plant species**.
LN4	**Vegetated Buffers**	The disturbed buffer area between the development limit and a **key natural heritage feature** shall be restored with 100% **native plant species**, including trees, shrubs and herbaceous plants, preferably drought-tolerant.	☑	
LN5	**Tree Preservation and Removal Compensation**	Plant 60 mm **caliper** deciduous trees and 1.8 m high coniferous trees in accordance with the **tree compensation requirements** to ensure no net loss. This applies to the removal of any existing trees that are 15 cm or more in diameter at breast height.	☑	Provide a site design solution that includes the preservation and protection of existing mature trees and a net gain of tree canopy through additional tree plantings in accordance with the **tree compensation requirements**.
LN6	**Healthy Street Trees**	Plant 60 mm **caliper** deciduous trees on both sides of private streets and in public boulevards at an interval rate of 1 tree per 8 m of street frontage or spaced appropriately having regard to site conditions; **and** Design, implement, and pay for a watering and fertilizing program for at least the first 2 years of planting.	☑	Meet Tier 1 and provide 30 m³ high quality soil for street trees with a minimum top soil depth of 75 cm.
LN7	**Common Outdoor Amenity Space**	For residential buildings with 20 or more dwelling units, provide 4.0 square metres of common outdoor amenity space per dwelling unit (a minimum contiguous area of 40.0 square metres must be provided in a common location). Where lot areas are constrained in some cases, flexibility on providing the common outdoor amenity space requirement may be provided at the discretion of the Director, City Development. **and** Where a green roof functions as an amenity space, no more than 25% of the outdoor component may be on the green roof.	☑	For residential buildings with 20 or more dwelling units, provide 6.0 square metres of common outdoor amenity space per dwelling unit (a minimum contiguous area of 40.0 square metres must be provided in a common location).

Performance Measures		Performance Criteria		
Number	Development Feature	Tier 1 Mandatory	Met	Tier 2 Optional
LN8	**Natural Heritage Features and Open Space Enhancement**	Protect **key natural heritage features** and **key hydrologic features** on site. **or** Where all alternatives to protect and enhance **key natural heritage features** and open spaces on site have been evaluated and determined to not be feasible, provide compensation for the loss of ecosystem functions due to development impacts.	☑	Maintain and enhance **key natural heritage features** and **key natural hydrologic features** on site and • Create new natural heritage features on or off-site. **or** • Restore and enhance connectivity among natural heritage features on or off-site.
LN9	**Bird-Friendly Design**	For residential and non residential buildings, use a combination of **bird-friendly** design treatments for a minimum of 90% of all exterior glazing within the first 16 m of the building above grade or the height of the mature tree canopy (including all balcony railings, clear glass corners, parallel glass and glazing surrounding interior courtyards and other glass surfaces).	☑	
		Where green roof is constructed with adjacent glass surfaces, glass is to be treated within 12 metres above green roof surface.	☑	

Performance Measures		Performance Criteria		
Number	Development Feature	Tier 1 Mandatory	Met	Tier 2 Optional
T1	**Electric Vehicles including plug in hybrid vehicles**	For multi residential buildings, require 40% **EV Rough-in** & 10% **EV Ready** charging infrastructure or equivalent **electric vehicle energy management systems** (load sharing/circuit sharing) capable of providing Level 2 or higher charging for the resident parking spaces; **or** Require **EV Ready** charging infrastructure capable of providing Level 2 charging or higher for 50% of the resident parking spaces.	☑	For multi-residential buildings, require **EV Ready** charging infrastructure capable of providing Level 2 charging or higher for 100% of the parking spaces excluding visitor parking.
T2		For non-residential buildings, require **EV Rough-in** charging infrastructure for 20% of the parking spaces.		For non-residential buildings, require **EV Ready** charging infrastructure for 20% of the parking spaces.
T3	**Bicycle Parking and Storage Facilities**	For residential buildings, provide 0.5 long-term bicycle parking spaces (includes adaptive bikes, trikes, and scooters for people with disabilities) in weather protected areas located within a secure area of the building or common garage for each dwelling unit. **and** At least 15% of the required long-term bicycle parking spaces, or one parking space, whichever is greater, shall include an Energized Outlet (120 V) adjacent to the bicycle rack or parking space.	☑	For residential buildings, provide 0.75 long-term bicycle parking spaces (includes adaptive bikes, trikes, and scooters for people with disabilities) in weather protected areas located within a secure area of the building or common garage for each dwelling unit. **and** At least 15% of the required long-term bicycle parking spaces, or one parking space, whichever is greater, shall include an Energized Outlet (120 V) adjacent to the bicycle rack or parking space.
		For residential buildings, provide 0.1 short-term bicycle parking spaces per dwelling unit in locations that are highly visible and in close proximity to primary entrances.	☑	
		For non-residential buildings and mixed use buildings, provide long-term bicycle parking spaces at a rate of 1.0 bicycle parking space for each 1,000 square metres of gross leasable floor area and at least one bicycle rack shall be installed for short-term bicycle parking.	☑	
		For non-residential buildings and mixed use buildings, provide two trip-end facilities (i.e., showers and a change room) for every 60 long term bicycle parking spaces (minimum of 1 facility when more than 5 bicycle parking spaces are provided).	☑	

Performance Measures		Performance Criteria		
Number	Development Feature	Tier 1 Mandatory	Met	Tier 2 Optional
WM1	**Construction Waste Reduction**	Divert 50% or more of all non-hazardous construction, demolition, and land clearing waste from landfill.	☑	Divert 75% or more of all non-hazardous construction, demolition, and land clearing waste from landfill.
WM2	**On-Site Storage**	For multi-storey residential buildings, provide a tri-sorter or separate chutes to direct and separate materials into either recyclables, organics or waste. Ensure there is adequate storage space for accumulated recyclables, waste and organics generated between collection days and be designed to minimize litter and pests.	☑	Meet Tier 1 and include a dedicated space for materials such as textiles, batteries and electronics is provided.
		For non-residential development, provide a dedicated area or area attached to the building for the separate collection and storage for accumulated recyclables, waste and organics.	☑	

Performance Measures		Performance Criteria		
Number	Development Feature	Tier 1 Mandatory Requirement	Met	Tier 2 Optional Requirement
W1	**Stormwater Management**	Achieve a level one/enhanced stormwater treatment for all stormwater, and achieve runoff reduction of a minimum 5 mm of rainfall depth; **and** Demonstrate that the applicable groundwater recharge targets are met based on site-specific water balance/budget studies, in accordance with the **CTC Source Protection Plan**; **and** Provide an enhanced level of protection for water quality through the long-term average removal of 80% of Total Suspended Solids (TSS) on an annual loading basis from all runoff leaving the site, in accordance with the **City of Pickering Stormwater Management Design Guidelines.**	☑	In a manner best replicating natural site hydrology processes, manage on-site runoff using at least two of the following low-impact development (LID) and green infrastructure: • permeable pavement • bioswales • soakaways • rain gardens • filtered strips • infiltration trenches **or** Achieve post-development runoff reductions to no more than 50% of annual precipitation (approx. 10 mm of rainfall event retention from all site surfaces) through infiltration, evapotranspiration, water harvesting and reuse.
W2	**Building Water Efficiency**	Install **WaterSense®** labeled water fixtures.	☑	All buildings reduce indoor aggregate potable water consumption (not including irrigation) by 30% better than the **Ontario Building Code** baseline.
W3	**Rainwater Harvesting**			For mid to high-rise residential development, each building includes a separate, non-potable subsurface watering system for irrigation and outdoor–reuse purposes.



1 MARCH 21 - 0918 AM
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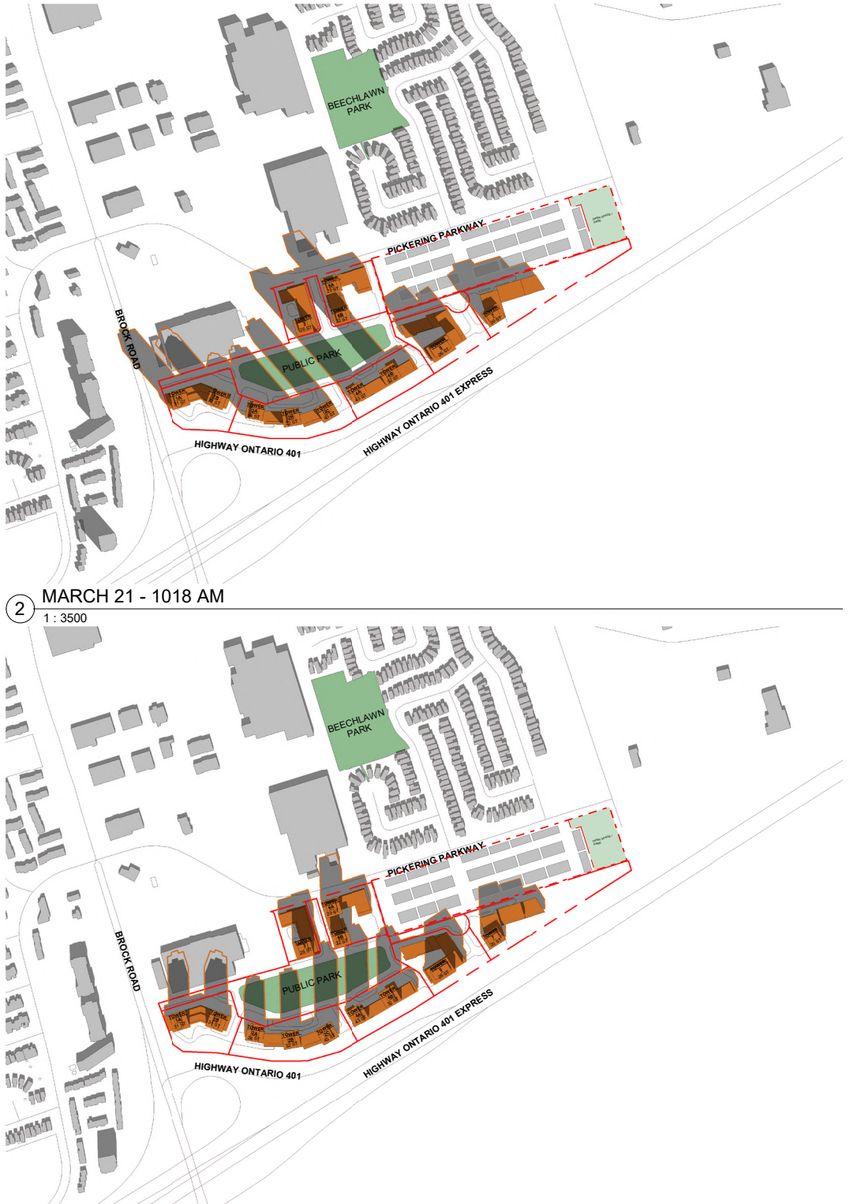

2 MARCH 21 - 1018 AM
1 : 3500

3 MARCH 21 - 1118 AM
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4 MARCH 21 - 1218 PM
1 : 3500

A.2 - SUN/SHADOW STUDY

The proposed development consists of 7 buildings including 11 towers and a tall mid-rise building along highway 401. A total of 4,208 dwelling units are to be provided as well as 4,139 square meters, 20,375 square meters and 1,584 square meters of Retail, commercial space and live/work units, respectively. A total of 5,863 parking spaces are provided in underground levels. A central public park is proposed within the development. (Area A)

The subject site is located within an area characterized by a mix of commercial and residential uses. To the north, the immediate vicinity consists primarily of large-format retail establishments and standalone restaurant buildings (Area B). Adjacent to the site on the northeast, a new development is planned, featuring back-to-back townhouses and an open space/park (Park=Area C). Notably, this townhouse development does not provide at-grade outdoor amenities or shared common outdoor spaces for residents hence our focus is mainly on the public realm and open space proposed in the development. Further north, beyond Pickering Parkway on north east of the subject site, the area is predominantly residential, comprising existing single-family homes that are generally two stories in height and feature private front and backyards (Area D)

The provided shadow study includes:

- all streets, lots, blocks, parks, schools, open spaces, and buildings within a sufficient range to illustrate shadow impacts at the specified times.
- Accounts for shadow conditions cast by adjacent buildings.

Test Times include: March 21st, June 21st, September 21st and December
21st at the following hours:
9:18 am, 10:18 am, 11:18 am, 12:18 pm, 1:18 pm, 2:18 pm, 3:18 pm, 4:18 pm, 5:18 pm, 6:18 pm and 7:18 pm .

Format of the Study:
-The Study was conducted using a geolocated 3D Revit model, and the context was generated using city of Pickering GIS model.

SUMMARY OF IMPACT

Based on our assessment, the shadow impacts of the proposed development on surrounding residential properties and the public realm are deemed acceptable. This conclusion is supported by the following:
The majority of cumulative shadowing effects are moderate, with the impact concentrated away from residences.
Shadowing of public spaces is minimal and of short duration.

1 MARCH 21 - 1318 PM
1 : 3500

2 MARCH 21 - 1418 PM
1 : 3500

3 MARCH 21 - 1518 PM
1 : 3500

4 MARCH 21 - 1618 PM
1 : 3500

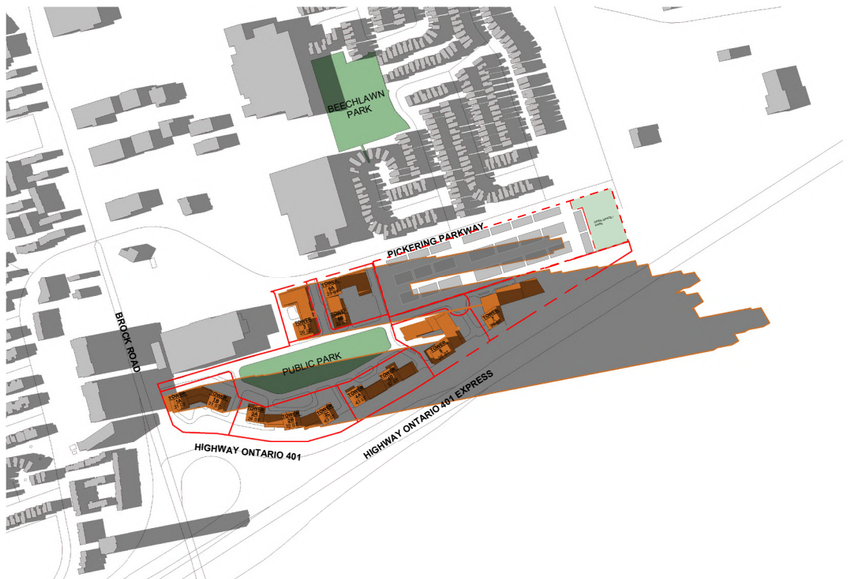
A.2 - SUN/SHADOW STUDY

Shadow impact analysis

A2.1 - MARCH 21
9:18 am to 2:18 pm : shadow impacts on areas B-D are minimal, there is minor impact on area D's south west rear yards on 2 properties. Area A (public park) is impacted by the shadow periodically ,however due to well thought out placement of towers and their ample separation distances, within each of the test times majority of the park is not impacted and a high percentage of the area of park is not shaded.

3:18 pm : Area A (Park) is impacted however close to 50% of the park is not shaded. Areas B and C are not impacted. Three residential rear yards in area D are impacted however this impact only last for this time period.

4:18 pm : Area A (the park) experiences peak shadow impact during this test period, particularly at 4:18 pm. Shadow impact diminishes significantly afterward.



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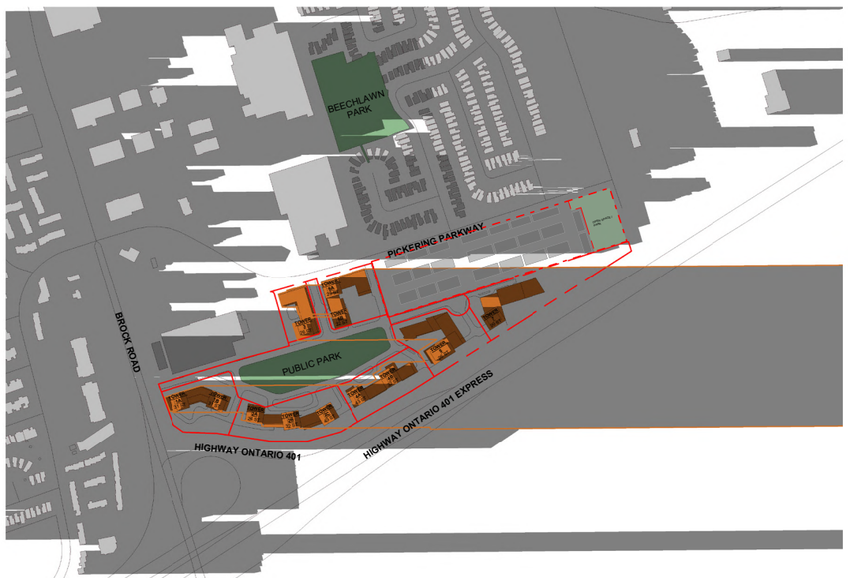


2 MARCH 21 - 1818 PM
1 : 3500

3 MARCH 21 - 1918 PM
1 : 3500

1 JUNE 21 - 0918 AM
1 : 3500

2 JUNE 21 - 1018 AM
1 : 3500

3 JUNE 21 - 1118 AM
1 : 3500

4 JUNE 21 - 1218 PM
1 : 3500

A.2 - SUN/SHADOW STUDY

Shadow impact analysis

A2.1 - JUNE 21
9:18 am to 11:18 am : light impact on area A within this timeframe, all the other areas are either not impacted or have minor impact.

12:18 pm - 4:18 pm : no adverse impact can be seen on any of the Areas A-D

4:18 pm : Area A (the park) experiences peak shadow impact during this test period, particularly at 4:18 pm. Shadow impact diminishes significantly afterward.

5:18 pm onwards : north east corner of the Public park (Area A) is impacted by the proposed development however, 70-80% of the park is not within this impacted area.

1 JUNE 21 - 1318 PM
1 : 3500

2 JUNE 21 - 1418 PM
1 : 3500

3 JUNE 21 - 1518 PM
1 : 3500

4 JUNE 21 - 1618 PM
1 : 3500

1 JUNE 21 - 1718 PM
1 : 3500

2 JUNE 21 - 1818 PM
1 : 3500

3 JUNE 21 - 1918 PM
1 : 3500

1 SEPTEMBER 21 - 0918 AM
1 : 3500

2 SEPTEMBER 21 - 1018 AM
1 : 3500

3 SEPTEMBER 21 - 1118 AM
1 : 3500

4 SEPTEMBER 21 - 1218 PM
1 : 3500

A.2 - SUN/SHADOW STUDY

Shadow impact analysis

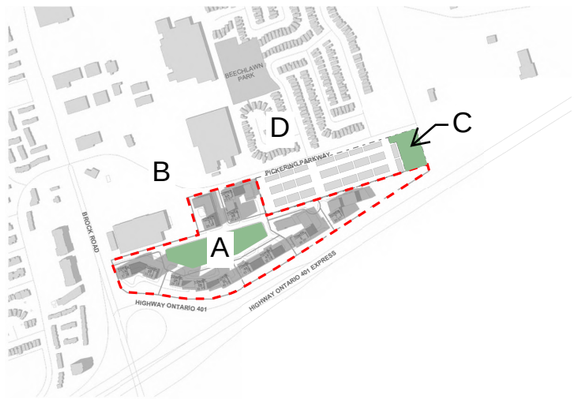
A2.1 - SEPTEMBER 21

9:18 am to 13:18 pm : minor impact on commercial area on the north of Pickering Parkway (Area B), Proposed park within the development is impacted however the separation between the towers allow for reduced impact. Areas C and D are not impacted.

2:18 pm - 3:18 pm : there is minor impact on area D's south west rear yards on 5 properties shadow impact diminishes significantly afterward. 40% of the proposed public park (Area A) is impacted.

4:18 pm : Area A (the park) experiences peak shadow impact during this test period, particularly at 4:18 pm. Shadow impact diminishes significantly afterward.

5:18 pm : open area/Park proposed in North east property is lightly impacted.



1 SEPTEMBER 21 - 1318 PM
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3 SEPTEMBER 21 - 1518 PM
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4 SEPTEMBER 21 - 1618 PM
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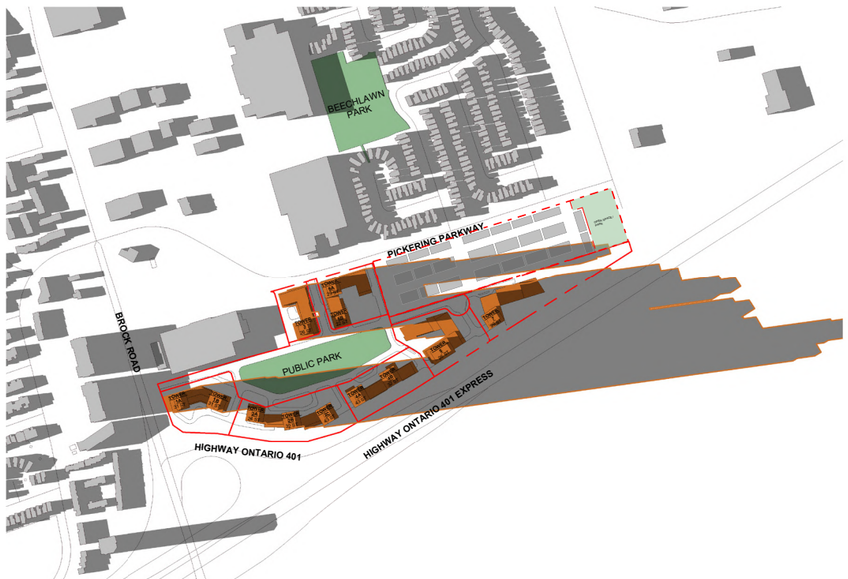

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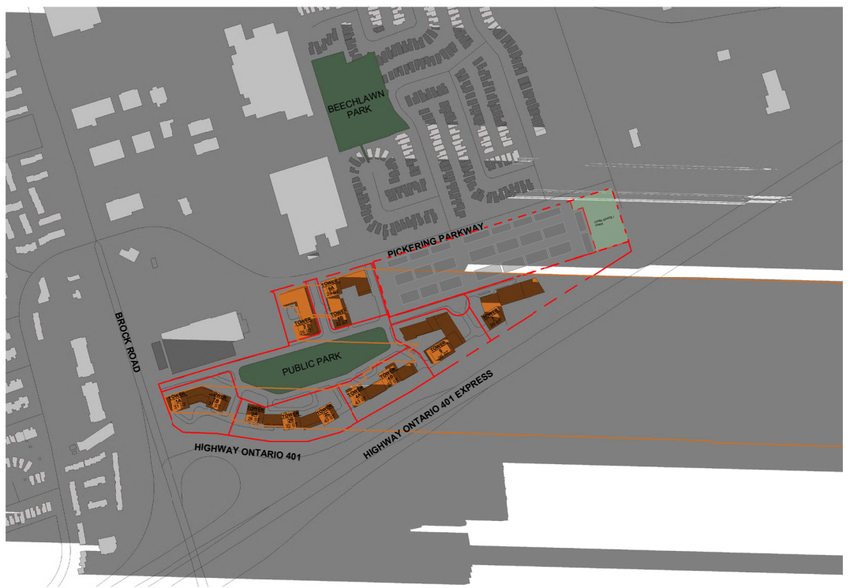

2 SEPTEMBER 21 - 1818 PM
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3 SEPTEMBER 21 - 1918 PM
1 : 3500

1 DECEMBER 21 - 0918 AM
1 : 3500

2 DECEMBER 21 - 1018 AM
1 : 3500

3 DECEMBER 21 - 1118 AM
1 : 3500

4 DECEMBER 21 - 1218 PM
1 : 3500

A.2 - SUN/SHADOW STUDY

Shadow impact analysis

A2.1 - DECEMBER 21

9:18 am to 11:18 am : shadows briefly impact the residential area on north east of Pickering parkway (area D). Although public park (Area A) is impacted by the December inherent shadows we can still see areas where park is not impacted.
the commercial/retail area on the north (Area B) is impacted.

2:18 pm - 3:18 pm : there is minor impact on area D's south west rear yards on 5 properties, shadow impact diminishes significantly afterward. 40% of the proposed public park (Area A) is impacted.

12:18 pm - 2:18 pm : Area A (the park) experiences peak shadow impact during this test period. The open space/park in the development on the north (Area C) is lightly impacted at 2pm.

3:18 pm - 5:18 pm : due to the nature of December sun's elevation during these hours just before the sunset, the shadow impact on all the areas are significant.

1 DECEMBER 21 - 1318 PM
1 : 3500

2 DECEMBER 21 - 1418 PM
1 : 3500

3 DECEMBER 21 - 1518 PM
1 : 3500

4 DECEMBER 21 - 1618 PM
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1 DECEMBER 21 - 1718 PM
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2 DECEMBER 21 - 1818 PM
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3 DECEMBER 21 - 1918 PM
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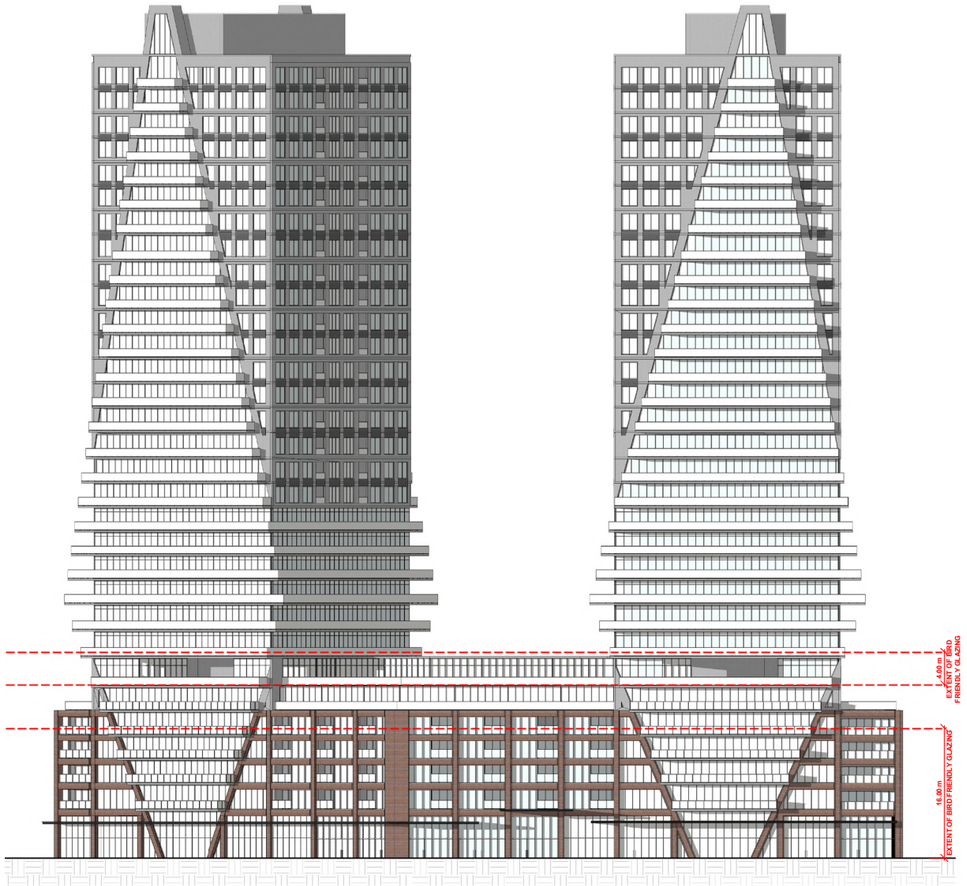

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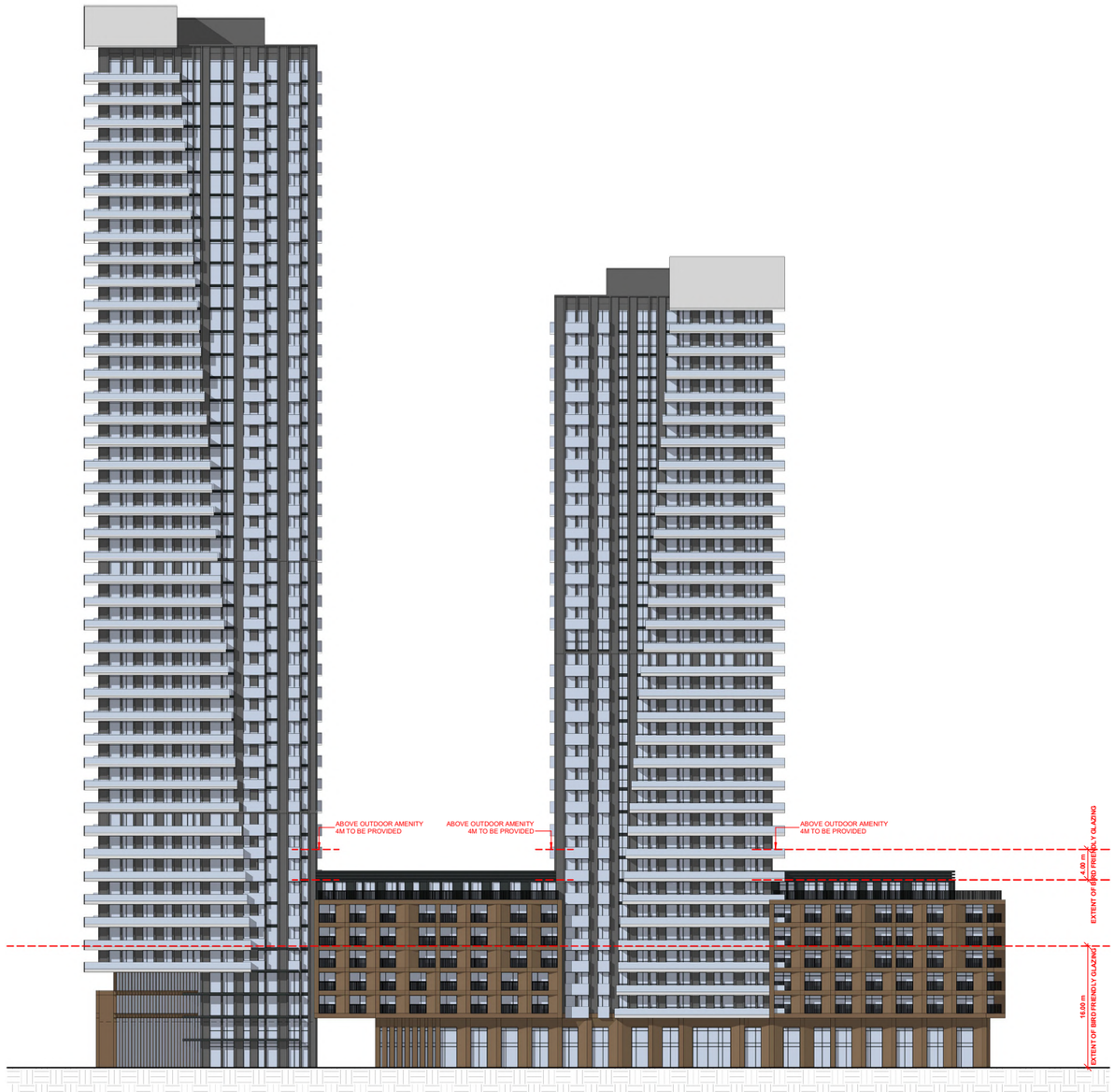

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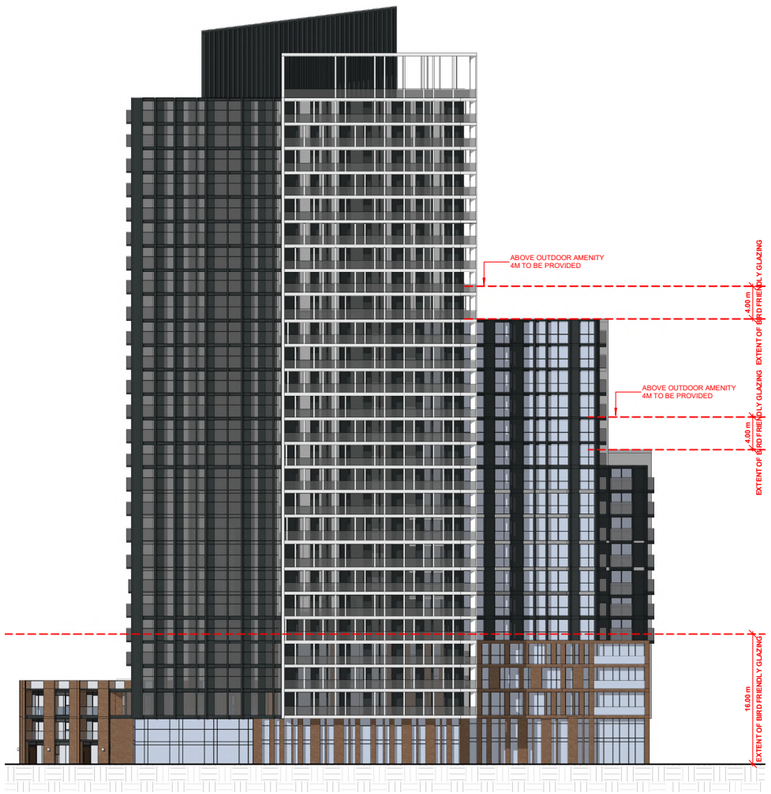

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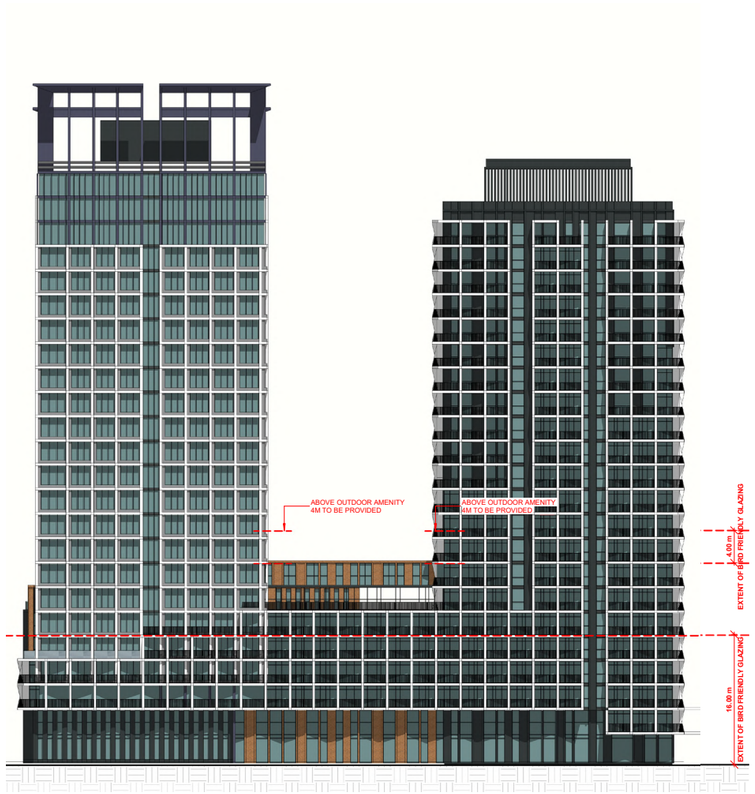

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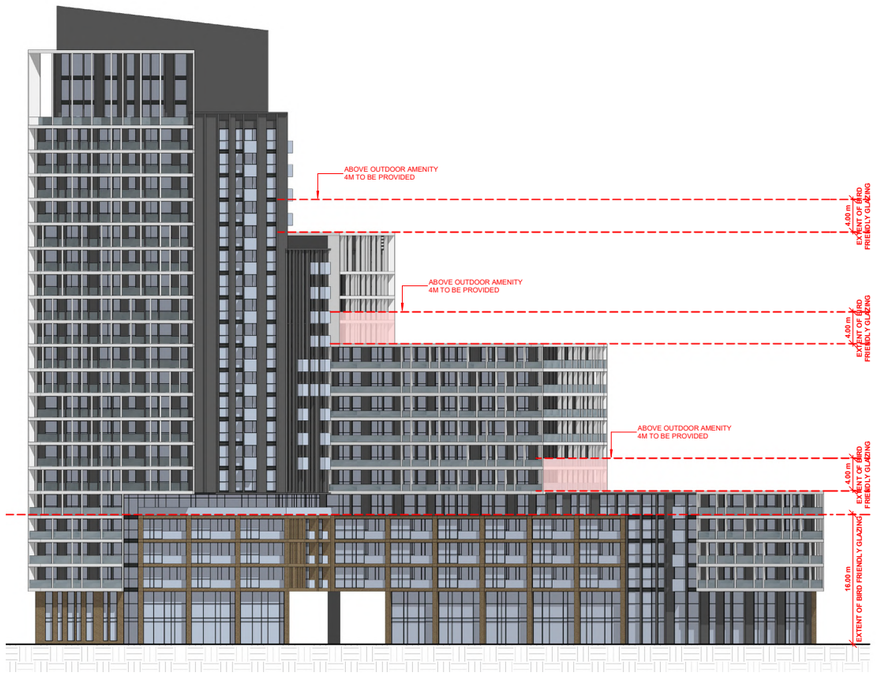

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