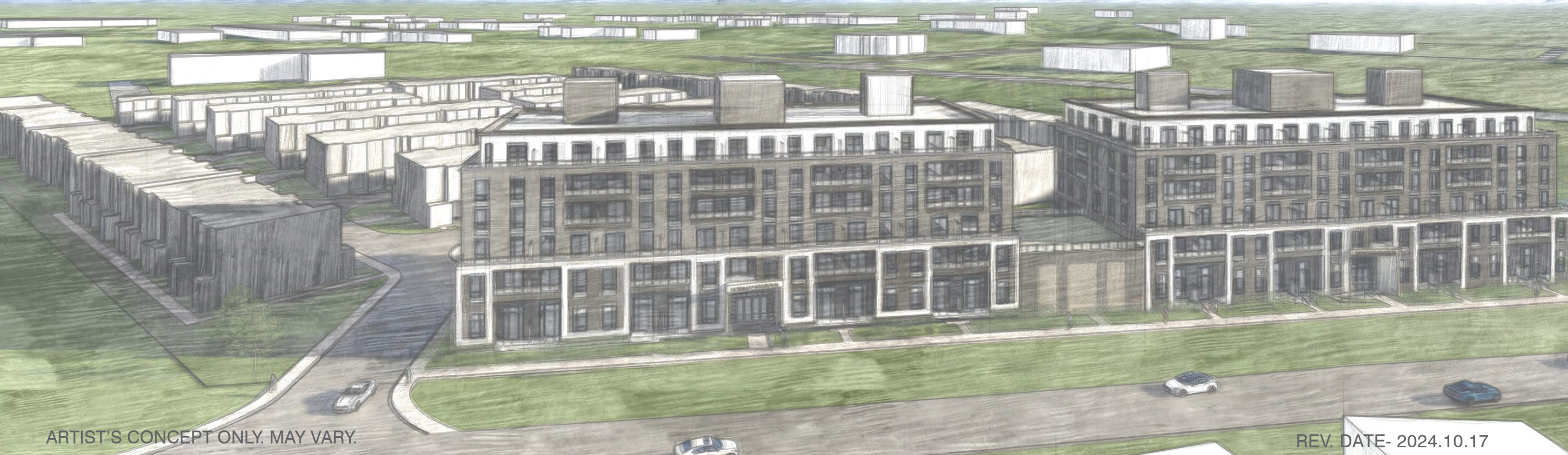


URBAN DESIGN BRIEF & COMMUNITY & SUSTAINABLE DESIGN REPORT

664, 674, 692 ESSA ROAD
320,364 MAPLEVIEW DRIVE WEST
BARRIE, ONTARIO

MAPLEVIEW VILLAGE



ARTIST'S CONCEPT ONLY. MAY VARY.

REV. DATE- 2024.10.17



4 ARCHITECTURE INC.

www.4architecture.ca

8966 Woodbine Avenue, Suite 300, L3R 0J7 Markham, Ontario
Phone: (905) 470-7212 Email: email@4architecture.ca

Pearl
Builders



TABLE OF CONTENTS

SECTION 0.0 - INTRODUCTION	1
0.1 INTRODUCTION	1
PART 1 - MASTERPLAN	2
SECTION 1.1 - VISION & PRINCIPLES	3
1.1.1 DESIGN VISION - MASTERPLAN OVERVIEW	3
1.1.2 DESIGN OBJECTIVES AND VISION	4
1.1.3 PUBLIC REALM GUIDELINES	5
1.1.4 SITE DESIGN	7
SECTION 1.2 - POLICY CONTEXT & SITE ANALYSIS	8
1.2.1 CITY POLICY AND REGULATORY FRAMEWORK	8
1.2.2 SITE AND DEVELOPMENT CONTEXT	10
1.2.3 COMMUNITY SERVICE	12
1.2.4 SITE AND CONTEXT ANALYSIS	13
SECTION 1.3 - DESIGN CONSIDERATIONS	14
1.3.1 MASTERPLAN	14
1.3.2 DESIGN RESPONSE	16
PART 2 - MID-RISE	18
SECTION 2.1 - VISION & PRINCIPLES	19
2.1.1 BUILDING DESIGN (MID-RISE)	19
SECTION 2.2 - POLICY CONTEXT & SITE ANALYSIS	20
2.2.1 CITY POLICY AND REGULATORY FRAMEWORK	20
SECTION 2.3- DESIGN CONSIDERATIONS	21
2.3.1 THE PROPOSED DESIGN - MASTER PLAN (MID-RISE)	21
2.3.2 DESIGN RESPONSE	22



TABLE OF CONTENTS

PART 3 - LOW-RISE	26
SECTION 3.1 - VISION & PRINCIPLES	27
3.1.1 BUILDING DESIGN (LOW-RISE)	27
SECTION 3.2 - DESIGN CONSIDERATIONS	28
3.2.1 THE PROPOSED DESIGN - MASTER PLAN (LOW-RISE)	28
3.2.2 DESIGN RESPONSE	30
PART 4 - OVERVIEW	33
SECTION 4.1 - LANDSCAPE DESIGN	34
4.1.1 LANDSCAPE DESIGN	34
SECTION 4.2 - CONCLUSION	38
4.2.1 PHASING PLAN	38
4.2.2 SUMMARY	39
SECTION 4.3 APPENDIX	40
4.3.1 SHADOW STUDY	40



SECTION 0.0 - INTRODUCTION

0.1 INTRODUCTION

4 Architecture prepared the following Urban Design Brief in support of the City of Barrie's Site Plan Approval submission requirements. This report proposes a Mixed-Use Development by Pearl Builders located at 664,674,692 Essa Road and 320, 364 Mapleview Drive West.

The Urban Design Brief provides details on the development and illustrate its conformance to the City of Barrie's Official Plan, City-Wide Urban Design Guidelines, and the Intensification Area Urban Design Guidelines. The report also illustrates how the proposed development achieves key urban design principles and sustainability initiatives.



PART 1 - MASTERPLAN



4 ARCHITECTURE INC.

WWW.4ARCHITECTURE.CA

**664, 674, 692 ESSA ROAD & 320,364
MAPLEVIEW DRIVE WEST, BARRIE, ON**

PEARL BUILDERS

423010

Page 2 of 40

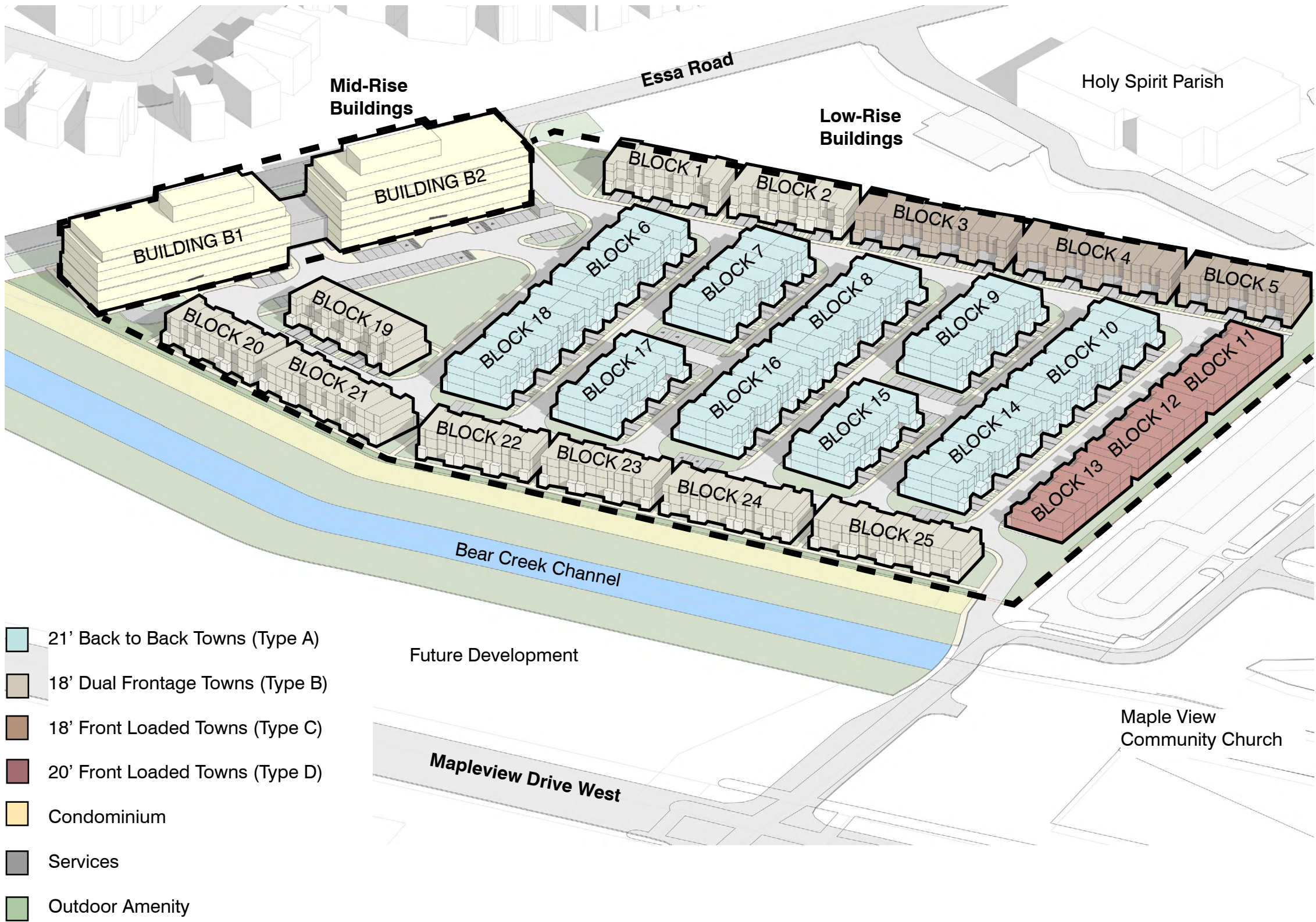
SECTION 1.1 - VISION & PRINCIPLES

1.1.1 DESIGN VISION - MASTERPLAN OVERVIEW

The proposed Mixed-Use Development is located on an irregular shaped site located at the intersection of Essa Road and Mapleview Drive West in the City of Barrie. The site was previously occupied by two single detached houses and a take-out restaurant, which are demolished to have a vacant site now.

The official plan designation for this site is Medium Density and the official zoning designation is MU2 (Mixed Use 2)/ NMR (Neighbourhood Mid-Rise). The proposed development is a combination of Mid-Rise buildings and Low-rise residential blocks.

Total number of residential units: 458



SECTION 1.1 - VISION & PRINCIPLES

1.1.2 DESIGN OBJECTIVES AND VISION

Intensification Corridors are areas planned for higher-density and mixed-use development along arterial streets that connect Barrie's growth centers.

The following objectives to make Barrie a more attractive city are implemented by the urban design policies of this Plan, as well as the separate Urban Design Guidelines:

- a) Design for excellence by:
 - i) Prioritizing people;
 - ii) Elevating standards of sustainability and resilience;
 - iii) Celebrating local culture and place.
- b) Design for human scale by:
 - i) Creating compact, complete, and connected neighbourhoods;
 - ii) Scaling built form appropriately to its context and providing appropriate transitions between different types of built form;
 - iii) Creating a connected and vibrant public realm.
- c) Design for diversity, equity, and inclusivity by:
 - i) Designing with equity as the goal, and breaking through biases;
 - ii) Accommodating all users of public and private space;
 - iii) Creating diversity and choice;
 - iv) Incorporating universal design standards.
- d) Design for climate resiliency, sustainability, mitigation and adaptability by:
 - i) Optimizing resource use and minimizing greenhouse gas emissions;
 - ii) Maximizing energy efficiency through building performance; and,
 - iii) Improving building and landscape performance and resiliency.

Building on the City of Barrie Intensification Strategy (2009), and in consultation with the community, the following describes the vision/goal for the Intensification Areas:

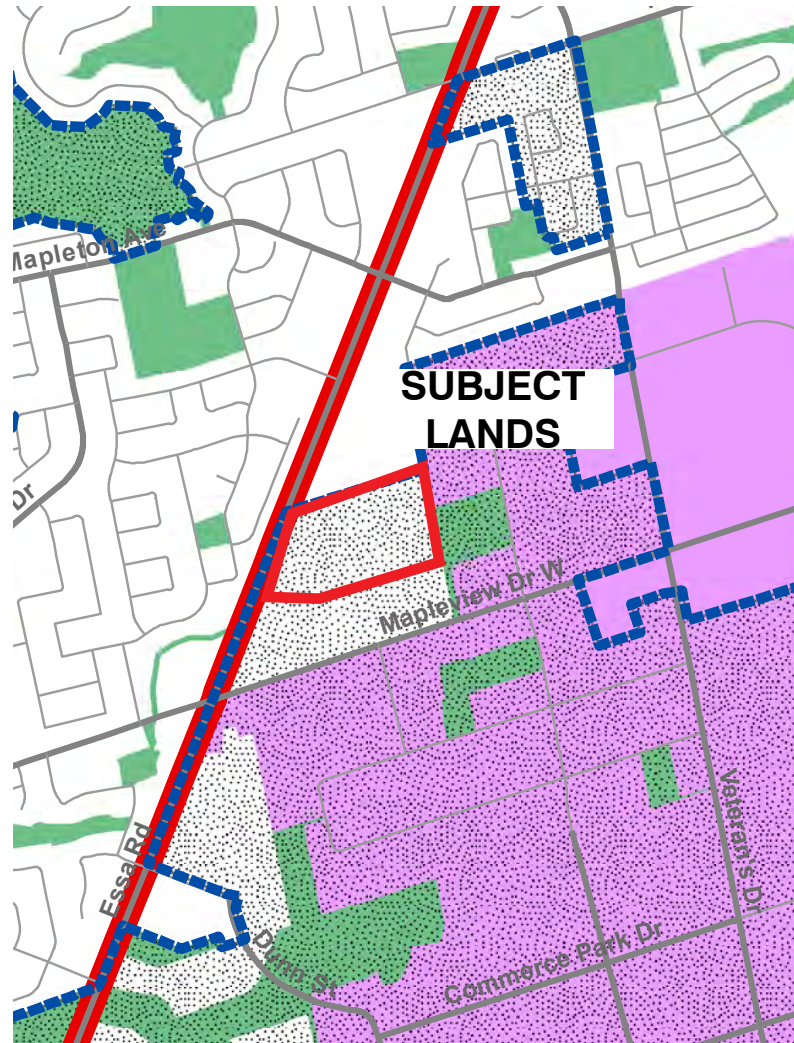
“New development and revitalization within the Intensification Areas will result in active, pedestrian-supportive streets that are compatible with, and enhance, adjacent land uses. Mixed-Use and Residential Avenues, Mixed-Use Main Streets and Established Neighbourhood Streets will be characterized by wide boulevards, abundant landscaping, large, mature street trees, public art, and active at-grade uses.”

The site falls under the Mixed-Use and Residential Avenue typology. Key opportunities include:

- 1) Redevelopment of underutilized parcels for street-oriented mixed-use development in low to mid-rise buildings.
- 2) Subdivision of large blocks into smaller, walkable blocks through walkways, drive-aisles, and where feasible, new roads.
- 3) Opportunities to redefine the existing street and boulevard within the right-of-way.

Key recommendations include:

- 1) In the short-term, redevelopment should be focused at the Intensification Nodes.
- 2) Ultimately, the Intensification Corridors should transition to major transportation streets, balancing functional requirements with the provision of an active, pedestrian-supportive streetscape.
- 3) Human-scaled, mixed-use buildings should line the street, providing “eyes on the street,” and enhancing safety and activity at all hours.
- 4) Wide boulevards should accommodate street trees, landscaping, continuous sidewalks, seating, signage and public art.
- 5) Spill-out retail uses at grade (i.e. restaurants, cafe), and open spaces (i.e. small parks/plazas on infill sites, or within the building set-back), will offer opportunities for pedestrians to gather and socialize.



* The built-up area was released on April 2, 2008 and corresponds to any area within the settlement area boundary that is not designated greenfield area.
 * Certain features like roads, parks and trails within the undeveloped designated greenfield area are conceptual and subject to change.

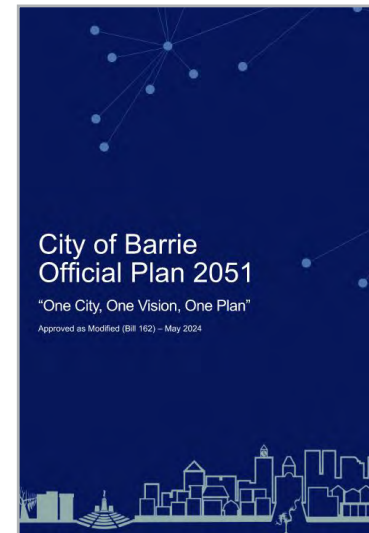
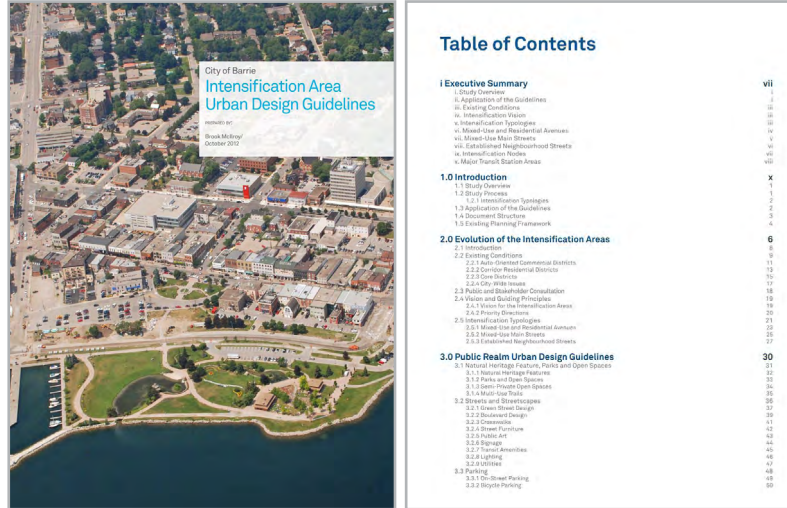


Table of Contents	
Preamble	1
The Important Purpose of the Barrie Official Plan	1
The Foundation of this Plan	1
How to Read and Understand the Plan	1
A Unified City	1
1.1 One City, One Vision, One Plan	1
1.2 Community Vision	1
1.3 Founding Principles	1
Planning an Urban and Complete City	1
2.1 Becoming a Medium-Sized City	1
2.2 Maps and Appendices	1
2.3 Becoming a Complete City and Elements of Barrie's Community Structure	1
2.3.1 Natural Heritage System and Greenspace	1
2.3.2 Urban Growth Centre (UGC)	1
2.3.3 Strategic Growth Areas (SGAs)	1
2.3.4 Major Transit Station Areas (MTSAs)	1
2.3.5 Employment Areas	1
2.3.6 Intensification Corridors	2
2.3.7 Neighbourhoods	2
2.4 Growth Management	2
2.4.1 Objectives	2
2.4.2 Growth Management Strategy	2
2.5 General Land Use Policies	2

SECTION 1.1 - VISION & PRINCIPLES

1.1.3 PUBLIC REALM GUIDELINES

A summary of significant guidelines from the 'Intensification Area - Urban Design Guidelines' for the City of Barrie that inform the proposed development.



.1 NATURAL HERITAGE FEATURES

Principle: To provide strong visual and physical links to these features as part of an overall system of parks, open spaces and natural heritage features.

Guidelines:

1. Environmental features, open spaces, and parks must be preserved, enhanced, and restored.
2. Design must aim to maximize views and spread awareness of the landscape.
3. Sensitive natural heritage features must be adequately buffered and linked to other features.
4. Natural drainage networks must be maintained to retain functional drainage and watercourses and to support storm water management infrastructure.
5. Streets, cycling infrastructure, and multi-use trails should be used to connect adjacent natural heritage features, parks and open spaces.

.2 SEMI-PRIVATE AMENITY AREAS

Principle: To function as gathering spaces and have a balance of privacy and security in the areas.

Guidelines:

1. Spaces should be directly accessible from sidewalks and should be in view of occupied indoor areas.
2. Where easy internal access can be provided, buildings are encouraged to include semi-private open space in the form of rooftop amenity space.
3. High quality, low maintenance furnishing and plant species should be used in these areas for ease of maintenance.

.3 STREETSCAPES

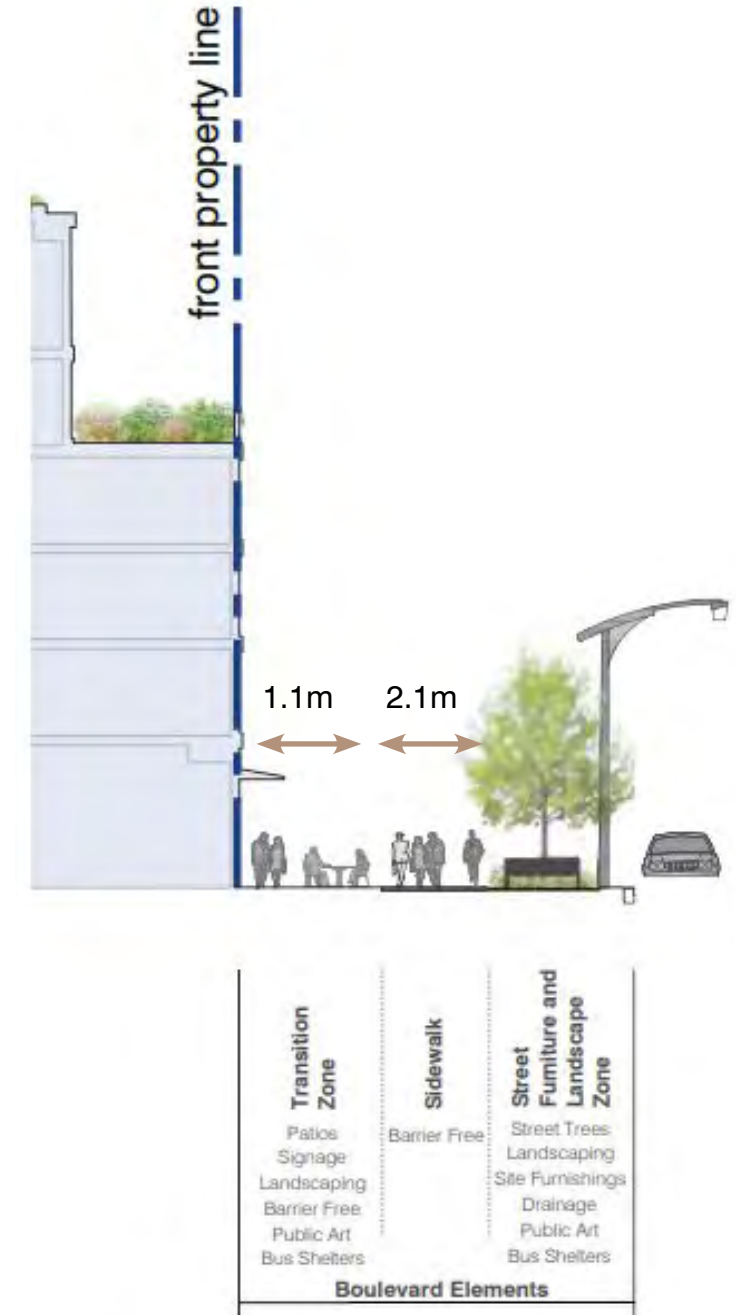
Principle: To be pedestrian-supportive, including large, mature street trees, ample landscaping, and wide boulevards that accommodate opportunities for active uses at grade, including spill-out retail, etc.

Green street Design

1. All streets should include green street design through tree planting and landscaping in the public and private right-of-way.
2. Street trees should generally be located within the boulevard and should be offset a minimum of 1.5 metres from the curb to accommodate snow storage and minimize salt damage.

Boulevard Design

1. Ensure that the streetscape design reflects the directions for the Boulevard design - landscape zone, sidewalk zone, and transition zone.
2. Wide pedestrian-supportive boulevards are encouraged for areas with retail uses at grade.
3. Sidewalks should be at least 2.1m wide.
4. In areas with retail at grade, a 1.1 metre wide transition zone should be situated between the sidewalk and the private property boundary to accommodate opportunities for spill-out retail and active at-grade uses.



SECTION 1.1 - VISION & PRINCIPLES

1.1.3 PUBLIC REALM GUIDELINES

.4 SIGNAGE

Guidelines:

1. A hierarchy of signage should be implemented to reduce the overall amount of street clutter, and to ensure safe and simple way finding techniques, while ensuring that way finding signage is highly visible and easy to understand.

.5 LIGHTING

1. The design and location of lighting should consider sustainability and the impacts of light pollution, like energy efficiency and directional lighting that reduces wasted energy.

2. Downcast pedestrian-scale lighting should be provided in high traffic pedestrian areas.

3. All lighting should be located within the Street Furniture and Landscape Zone. New lights should comply with the City's Dark Sky Policy.

.6 UTILITIES

Guidelines:

1. Utilities should be either buried below grade or grouped together in a separate location screened from public view.

.7 SAFETY AND SECURITY

Principle: Community design should emphasize safety and visibility in all public spaces and developments

Guidelines:

1. Adhere to the principles of Crime Prevention through Environmental Design (CPTED), including: Natural Surveillance; Natural Access Control; Territorial Reinforcement; and Maintenance.

2. Ensure adequate lighting and visibility in public areas.

3. Buildings and main entrances should front onto the public street to encourage a pedestrian-orientated streetscape and maximize public surveillance of the street.

.8 PARKING

On-street Parking

Guidelines:

1. On-street parking to animate the street, reduce vehicle speeds and serve as a buffer between pedestrians and vehicles particularly on streets with at-grade retail.

2. Parallel on-street parking is preferred over perpendicular or angled parking to minimize the overall width of the roadway and optimize sightlines.

3. Bump-outs should be landscaped with street trees or low level ground cover and be designed to accommodate snow loading.

4. Permeable paving should be considered to promote drainage and enhance the street edge.



Bicycle Parking

Guidelines:

1. Short term and sheltered long term bicycle parking space to be provided at regular intervals.

2. Bicycle storage facilities should be provided at public parks and open spaces to encourage alternative modes of transport.

3. Post-and-ring bicycle parking, constructed of aluminium or galvanized steel, is preferred as larger units can impede pedestrian movement and snow clearing.

4. The placement of bicycle posts within the pedestrian realm should not impede pedestrian movement.



SECTION 1.1 - VISION & PRINCIPLES

1.1.4 SITE DESIGN

.1 SITE PLAN (5.1.1)

Principle: To site buildings to respond sensitively to topography and environmental features; to enhance privacy, liveability, safety and accessibility.

Guidelines:

1. Site should be designed to respond to the unique site conditions, promote social interaction, create community areas, and use elements in streetscape that create architectural interest.
2. Limit the maximum grade on development sites to 30% (3:1).

.2 SITE CIRCULATION

Principle: Encourage a viable and well-used active transportation network, prioritizing pedestrian and cyclist comfort and safety.

Pedestrian Connections

Guidelines:

1. Sidewalks should generally be provided on both sides of the street in accordance with policies in the Secondary Plans.
2. All sidewalks should be barrier-free.
3. Sidewalks should be located adjacent to building frontages or the property line, or following a transition zone or street furniture and landscape zone where present. The sidewalk should remain clear of obstructions, horizontally and vertically, at all times.
4. The design of driveways and private pedestrian walkways should be coordinated with sidewalks to promote pedestrian safety.

Pedestrian Drop-Off Areas

Guidelines:

1. Design pedestrian drop-off areas to minimize conflicts with pedestrian routes. Pedestrian connections should lead directly from drop-off areas to the front entry of the building.
2. Design drop-off areas to be pedestrian-oriented, and to include decorative paving material, textures or colors to emphasize pedestrian connections.

.3 SURFACE PARKING AREAS

Principle: Design and location of all facilities should reduce the overall visibility and dominance of parking facilities as part of the streetscape.

Guidelines:

1. Surface parking should be located at the rear or side of buildings.
2. Planting strips, landscaped traffic islands and/or paving articulation should be used to define vehicle routes and smaller parking courts that provide pedestrian walkways, improve edge conditions and minimize the aesthetic impact of surface parking.
3. Distinctive pavement and/or markings may be used to indicate pedestrian crossings. Pedestrian-scaled lighting should be provided along pathways to enhance visibility and security.
4. Where appropriate, permeable paving should be considered to promote drainage



.4 LANEWAYS

Guidelines:

1. Laneways are required to service the commercial areas and parking to reduce curb cuts.
2. Paved area of laneways should be enough for emergency vehicles.
3. Areas at the end of laneways should be reserved for snow storage.
4. Where laneways are required to provide access to residential parking facilities, the primary facade of the building should not face the laneway, nor should at-grade access be provided.

.5 STORAGE, SERVICING AND LOADING

Principle: To minimize the visual impact of service and delivery areas.

Guidelines:

1. Service, outdoor storage and loading facilities are encouraged to be incorporated into the main building. Else, they should be located at the side or rear of lots. Alternative waste storage systems will be encouraged.
2. Service and outside storage enclosures should be constructed of materials to match or complement the main building material.
3. Service areas should be separated from pedestrian amenity areas and walkways. Service and refuse areas should be paved with an impervious surface of asphalt or concrete.
4. Service driveways should be coordinated with those of parking areas to reduce curb cuts along the streetscape.

.6 LANDSCAPE DESIGN

Principle: Landscape treatments to provide comfort and amenity spaces for residents, employee and visitors.

Guidelines:

1. Landscaping should be encouraged on all sites. It should contribute to the enhancement of pedestrian comfort.
2. Use water efficient, drought resistant landscaping including the use of native plants and xeriscaping.
3. Landscaping should mitigate expansive or blank building facades in the form of clustered trees or other forms of planting, which can have a softening effect.



SECTION 1.2 - POLICY CONTEXT & SITE ANALYSIS

1.2.1 CITY POLICY AND REGULATORY FRAMEWORK

(Refer to the planning justification report prepared by The Jones Consulting Group Ltd.)

The following urban design policies apply to all new development in Barrie:

.1 HUMAN SCALE DESIGN

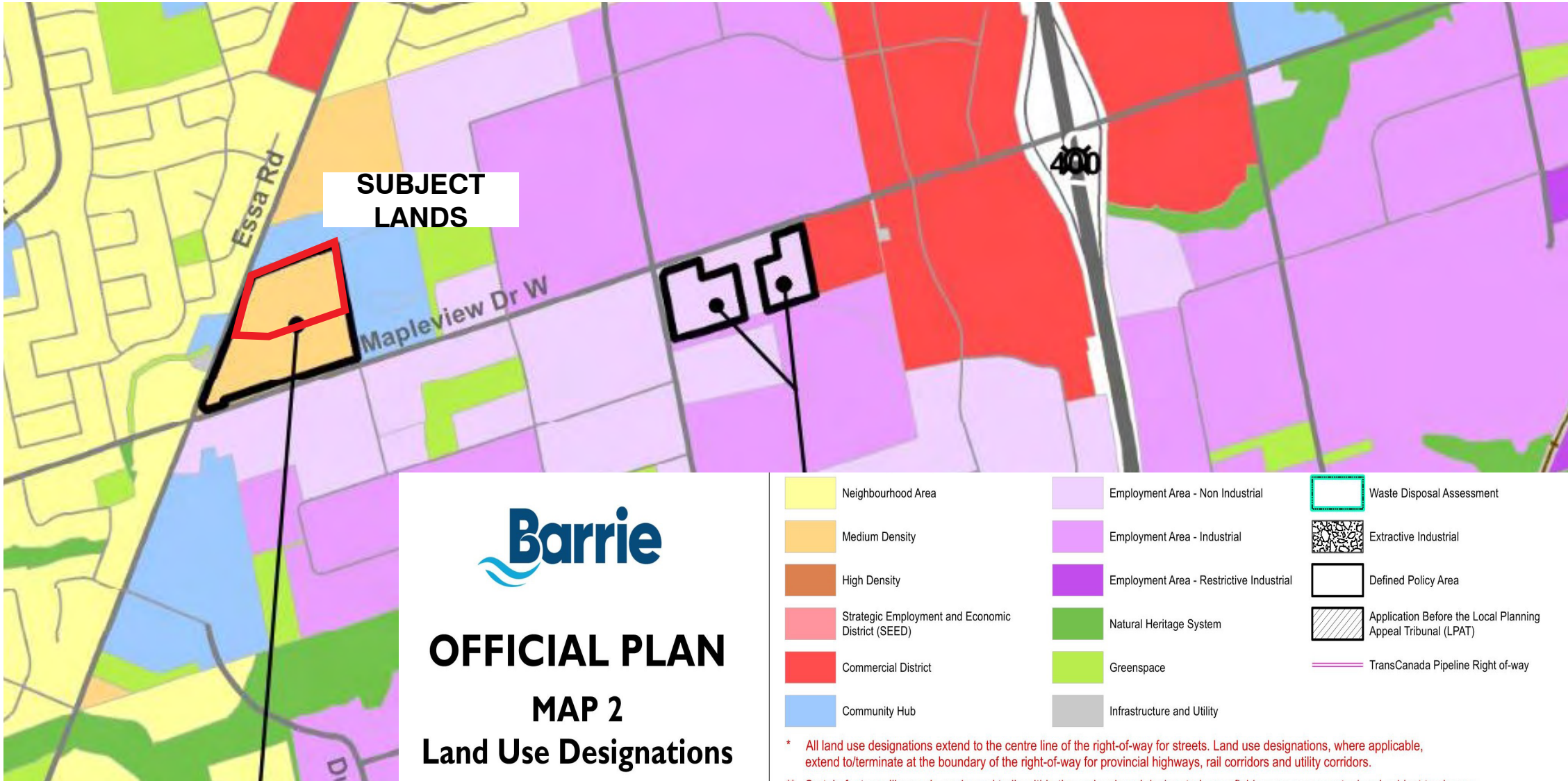
Human scale neighborhoods should demonstrate the following policies:

1. A compact and walkable pattern of streets and blocks, which responds to the existing and planned community structure including how streets, blocks, and open spaces are used.
2. A context-appropriate continuous built form and street frontage which engages with and animates adjacent streets and open spaces
3. Architectural design that contributes to a rich pedestrian environment and experience through the location of building entrances along public streets and open spaces, the use of high-quality materials, increased glazing and transparency at the ground level, and pedestrian protection from the elements.
4. Appropriate transitions between the private and public realm. This should be achieved using setbacks, landscaping and materials, signage, lighting and/or other design techniques that create visual and physical transition between public and private spaces, as identified in the City-Wide Urban Design Guidelines.

.2 COMPLETE NEIGHBOURHOOD DESIGN

To ensure the development of a complete neighbourhood, the design should contribute to:

1. The diversity of land uses, housing types and options in the neighbourhood.
2. Connectivity to transit facilities, active transportation networks, amenities, parks, and open spaces in the neighborhood.
3. Activation of public streets and open spaces through the co-ordination of adjacent land uses and design of the built form.
4. Integration of safety and crime prevention principles.



SECTION 1.2 - POLICY CONTEXT & SITE ANALYSIS

1.2.1 CITY POLICY AND REGULATORY FRAMEWORK

.3 SUSTAINABLE AND RESILIENT DESIGN

The development should address the City's sustainable and resilient design priorities which are:

1. Use of environmentally-friendly products and durable materials.
2. Protection and conservation of water.
3. Enhancement of natural environment.
4. Resource conservation through operational and maintenance practices.
5. Green standards of the City.

.4 PUBLIC REALM DESIGN

To pursue design excellence in the development of a high quality, sustainable and attractive public realm, the streets, squares, parks, and other public places that comprise the public realm should not be seen in isolation, but within the wider network of public and private spaces, as well as the context of adjacent buildings and their uses.

Development supports public spaces that create a "sense of place" and foster a pedestrian-friendly environment that encourages walkability, and activation and animation of public spaces.

Gateways

1. Gateways establish a sense of arrival and contribute to a sense of place and unique community identity.
2. Gateways should create a sense of entrance by enhanced landscaping, higher order of streetscaping, and buildings with high quality design.

Accessible Design

1. Design in accordance with Ontarians with Disabilities Act, Ontario Building Code, and any City policies or guidelines.
2. Barrier-free access to the ground level of all publicly accessible buildings.
3. Curb ramps should provide barrier-free connections between the street and pedestrian walkways. All public sidewalks should be barrier-free.
4. In high activity areas, the use of multi-sensory visual and audio queues as well as textured paving should be considered to assist in orientation and warning of the existence of potential hazards to persons with disabilities.

Lighting

1. Lighting should be compatible in scale and intensity to the proposed activity and tailored to the size, type, and character of the development.
2. All building and site lighting should be oriented and shielded to minimize the infringement of light and the creation of glare on adjacent properties or public streets.
3. Outdoor lighting should follow industry standards and incorporate energy efficiencies, such as sensors and timers, and direct light away from the night sky.
4. Adequate pedestrian-scaled lighting to accent walkways, steps, ramps, transit stops, and other features should be provided.

Public Amenity Areas

1. Amenity areas are strongly encouraged to be consolidated and centrally located, and indoor/outdoor amenity areas should be co-located wherever possible.
2. Tree planting is strongly encouraged as trees are considered an essential part of the neighbourhood fabric.

Access, Circulation, Loading and Storage

1. Private streets required for site circulation should be designed to be comfortable for pedestrians, cyclists, and vehicles. They should provide high-quality landscape treatments that contribute to pedestrian comfort and safety, and to a sense of place and the character of the development.
2. Where appropriate, internal private streets may be used to divide large sites into a grid of blocks and roadways to facilitate safe pedestrian and vehicular movement and that frame appropriately sized development parcels. Internal private streets will be designed to interconnect with adjacent properties to create an overall cohesive and integrated circulation network wherever possible.
3. Well-articulated and distinct pedestrian walkways should be placed along a building street frontage and linked to public boulevards, public sidewalks, transit stops, trail systems and other pedestrian systems, as well as to Greenspace.
4. Loading bays, waste service areas and building utilities/mechanical equipment should be located within a building. If permitted outside a building, they should not be located immediately adjacent to an intersection, and will be directed away from a public street, park, river, public open space or residential area. If this is not possible, they will be adequately screened.

Bird-Friendly Design

1. The city will develop bird-friendly design guidelines.
2. All windows should be constructed of proper material and oriented to reduce bird collisions.
3. Lighting should be oriented with consideration of bird migratory patterns, behavior, and habitat.



SECTION 1.2 - POLICY CONTEXT & SITE ANALYSIS

1.2.2 SITE AND DEVELOPMENT CONTEXT

.1 SITE

The subject site is located at the intersection of Essa Road and Mapleview Drive West and is municipally known as 664, 674, 692 Essa Road, 320,364 Mapleview Drive West in the City of Barrie.

The site is designated a Medium Density land use designation and is situated on an intensification corridor hence the proposed development is intended to support transit-oriented development and enhance the streetscape of the fronting street.

.2 TOPOGRAPHY AND NATURAL FEATURES

The topographic survey of the parcel indicates that the site is relatively flat throughout with a slight grade change of approximately 3m. The high point is located in the center and the site slopes downward towards the South and the East. Accordingly, the site is considered flat within the design exercise.



OVERALL CONTEXT MAP



AERIAL VIEW 1



SITE PLAN



AERIAL VIEW 2



SECTION 1.2 - POLICY CONTEXT & SITE ANALYSIS

1.2.2 SITE AND DEVELOPMENT CONTEXT

.3 SURROUNDING CONTEXT

The following provides a detailed description of the surrounding sites' uses:

North:

The Holy Spirit Parish is located abutting the North property line. An expanse of open space is present towards the farther North.

West side of Essa Road:

Existing low-rise residential communities.

South side of Bear Creek Channel:

Vacant land owned by applicant which will be proposed as mid-rise development.

South side of Maplevue Drive:

Existing car dealerships and auto retailers.

East side of Site:

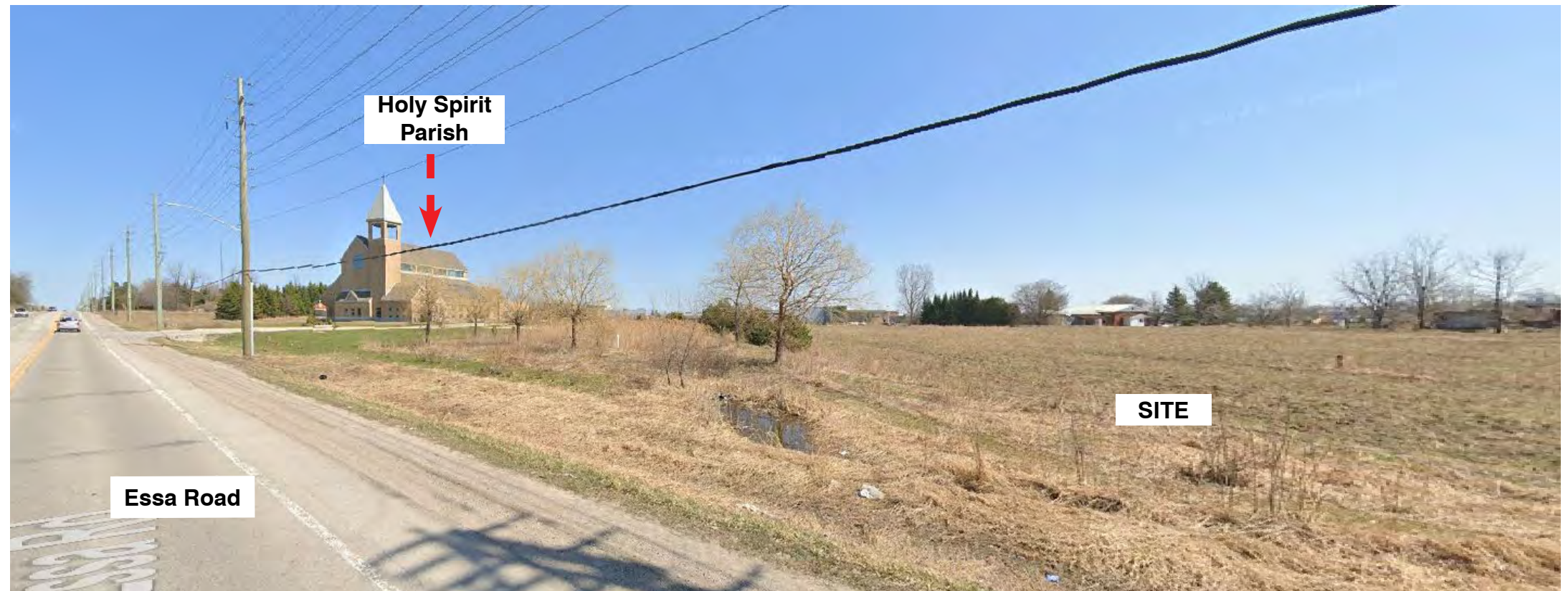
Maplevue Community Church along with a large parking lot is located along the East side. The church shares the main vehicular entrance off Maplevue Drive with the site.

.4 TRANSPORTATION SERVICES

Essa Road is a major collector (arterial) road with access to Allandale Waterfront Go Train Station on one end and Highway 27 on the other.

Maplevue Drive is a major collector (arterial) road with access to Highway 400 and the Barrie South Go Train Station at Yonge Street beyond.

Both Maplevue and Essa are serviced by transit and a multi-use path system



VIEW FROM ESSA ROAD DRIVE FACING NORTH



VIEW FROM ESSA ROAD FACING SOUTH

SECTION 1.2 - POLICY CONTEXT & SITE ANALYSIS

1.2.3 COMMUNITY SERVICE

The site is well served in terms of available social and community facilities located in the surrounding area. The facilities include multiple retail and grocery stores, pharmacies, schools, places of worship, and parks. Access to most of the municipal services is also within a reasonable travel distance. Some of these are:

- **Holy Spirit Parish**
- **Mapleview Community Church**
These places of worship are located within 500m walking distance of the site
- **Wessenger Park**
- **Shoppers's Drug Mart**
Facilities located within 500m walking distance
- **The West Creek Trail**
A city park located within 1000m distance
- **Commercial Complex at 555 Essa Road**
A commercial development with multiple retail shops like Rexall drugstore, food basics, fitness gyms, and cafe like Tim Hortons. The complex also consists of Barrie Public Library.
- **St. Bernadette Elementary School**
An elementary school located alongside the Marsellus Park
- **Royal Bank RBC**
Located at 2km driving distance of the site along with a few retail and food shops
- **Mapleview Healthcare Clinic**
Located at 2km driving distance of the site along with another clinic and Circle K
- **Go Train Stations**
Allandale Waterfront Go station is located at 6km and Barrie Go Station is located at 8km (15 min) driving distance from the site



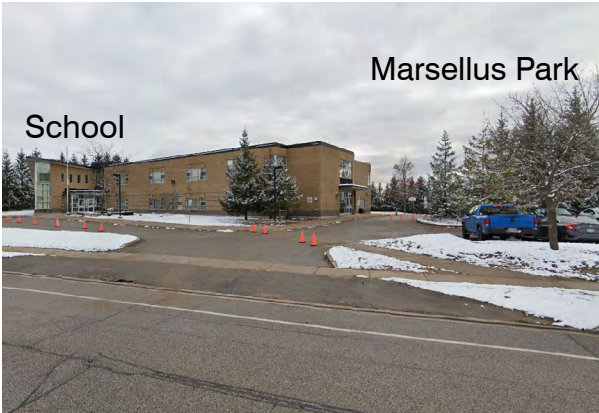
■ Mapleview Community Church



■ Commercial Complex at 555 Essa



■ Shopper's Drug Mart



■ St. Bernadette Elementary School

SECTION 1.2 - POLICY CONTEXT & SITE ANALYSIS

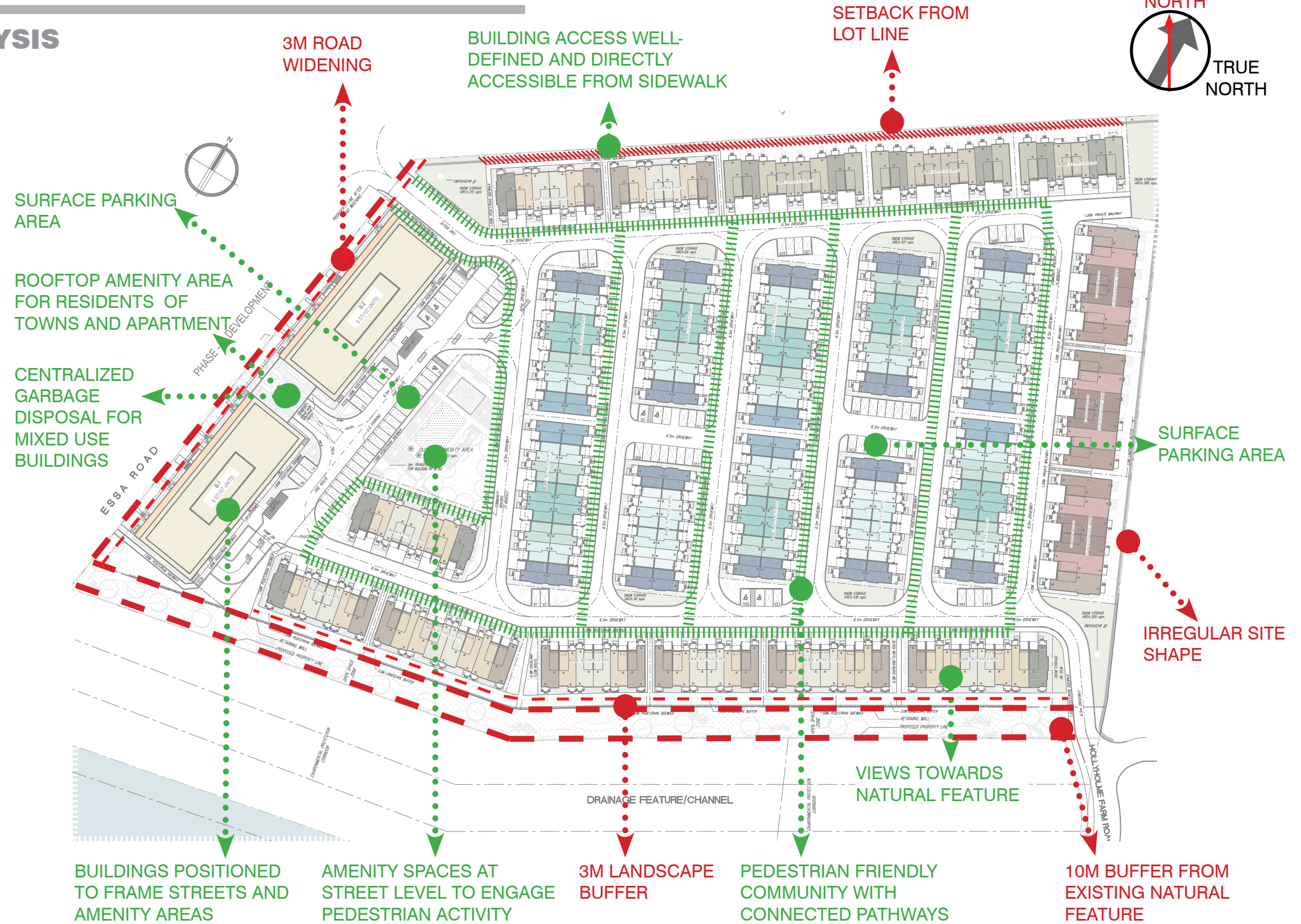
1.2.4 SITE AND CONTEXT ANALYSIS

.1 SITE DESIGN CONSTRAINTS

- Irregular site shape
- 3m road widening at Essa Road
- 3m landscape buffers for interior property lines
- 10m buffer from natural heritage

.2 SITE DESIGN OPPORTUNITIES

- New housing opportunity
- Pedestrian Friendly Community – Well-connected pathways and access points to transit system
- Building structured and placed to enhance pedestrian experience
- Centralized garbage disposal system for mixed-use buildings
- Rooftop amenity area for all residents



SECTION 1.3 - DESIGN CONSIDERATIONS



1.3.1 MASTERPLAN

The proposed development comprises of two types of built forms - mid-rise apartment buildings and low-rise residential townhouses.

The development is divided in two phases. Phase 1 consists of low-rise townhouse units and Phase 2 consists of mid-rise apartment buildings. The total gross floor area of the development is approximately 51,350 sq.m with an FSI 0.97.

Phase 1 : Low-Rise Residential Townhouses Block 1 - 25

The low-rise component of the development consists of 25 blocks with a total of 244 dwelling units. The blocks are made up of 3-storey townhouses - Type A, Type B, Type C and a 2-storey townhouse - Type D. The townhouse development has a total GFA of +/- 36,600 sq.m.

Phase 2 : Mid-Rise Apartment Buildings B1 & B2

The mid-rise condominium buildings address Essa Road and form the mid-rise component of the proposed development. Each building is six-storey and consists of +/- 107 units. The buildings have an overall gross floor area of +/- 14,750 sq.m.

CONDOMINIUM SERVICES OUTDOOR AMENITY

21' BACK TO BACK - TYPE A

2101 2102 2103 2104 2105-END 2105-COR

18' DUAL FRONTAGE TOWNS - TYPE B

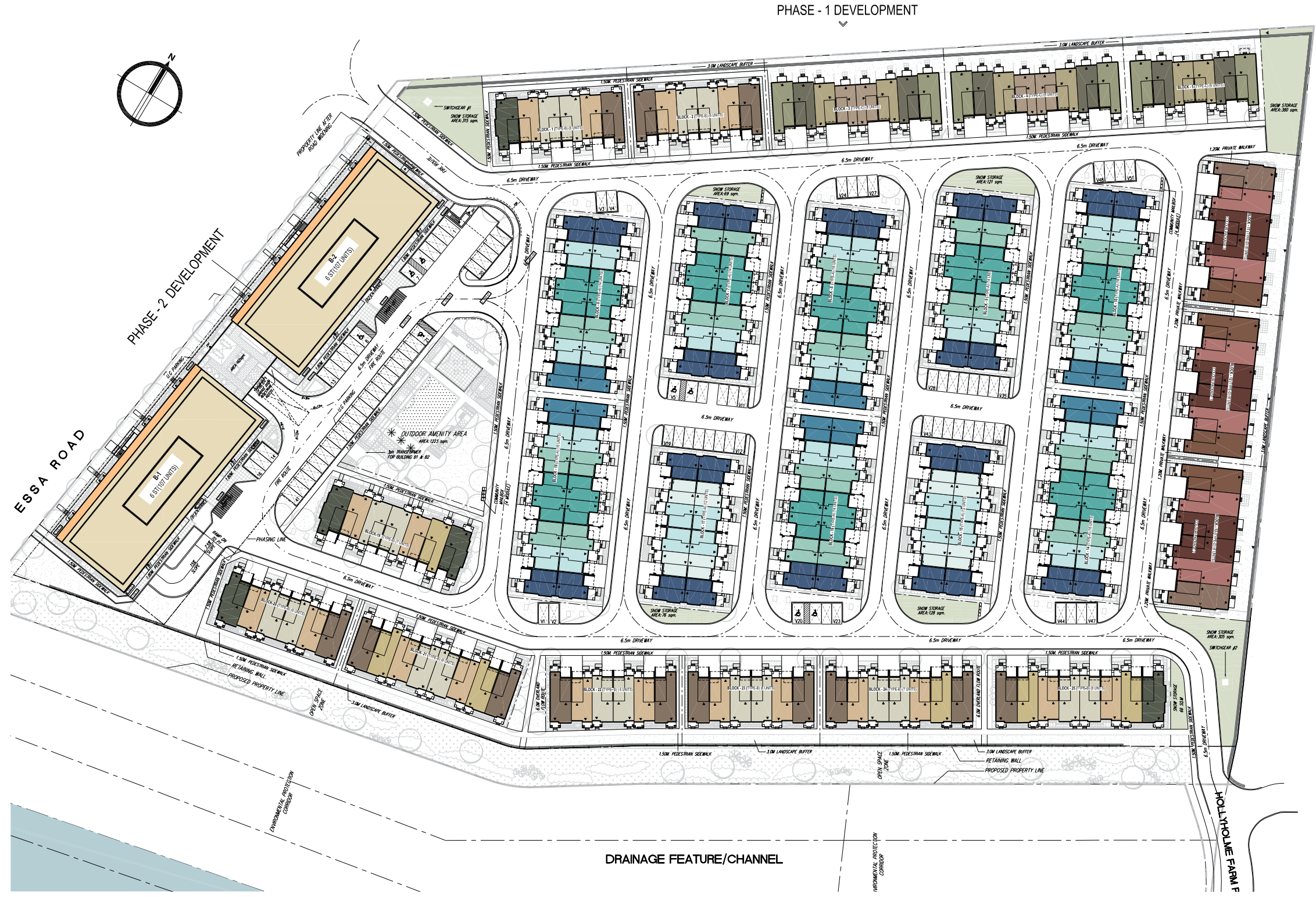
1811 1812 1813 1813-END 1813-COR

18' FRONT LOADED TOWNS - TYPE C

1801 1802 1803 1804-END

20' FRONT LOADED TOWNS - TYPE D

2001 2002 2002-END 2002-COR



SECTION 1.3 - DESIGN CONSIDERATIONS

SITE STATISTICS

STANDARDS REFLECT PARENT BY-LAW REQUIREMENTS UNLESS DENOTED OTHERWISE. NUMBERS IN SQUARE BRACKETS INDICATES ZONING BY-LAW ASSOCIATED WITH SPECIFIED STANDARD.

1.0 SITE STANDARDS FOR PHASE 1 AND 2

ZONING BY-LAW	CITY OF BARRIE, BY-LAW 2009-141 / NEW BY-LAW
ZONING	PROPOSED: MU2 / NMR
TOTAL SITE AREA	102,743.71 sqm ; 10.27 ha. (25.39ac)
NORTH BLOCK AREA	53,245.80 sqm ; 5.32 ha. (13.15ac)
PROPOSED DENSITY	
PHASE -1	244 UNITS / 5.32 ha. = 45.86 UNITS/ ha
PHASE -2	214 UNITS / 5.32 ha = 40.23 UNITS/ ha
TOTAL	458 UNITS / 5.32 ha = 86.09 UNITS/ ha
AFFORDABLE HOUSING - OPTIONAL SECONDARY SUITES	
PHASE -1	66 UNITS / 5.32 ha. = 12.41 UNITS/ ha
TOTAL	66 UNITS / 5.32 ha. = 12.41 UNITS/ ha
PROPOSED GFA	
PHASE -1	394023 sqft. (36606 sqm)
PHASE -2	158778.44 sqft. (14751 sqm)
TOTAL	552801.44 sqft. (51357 sqm)
PROPOSED FLOOR SPACE INDEX	
PHASE -1	36606 Sqm / 53,245.80 sqm = 0.69
PHASE -2	14751 Sqm / 53,245.80 sqm = 0.28
TOTAL	51357 Sqm / 53,245.80 sqm = 0.97
PROPOSED LOT COVERAGE	
PHASE -1	17531.05 sqm / 53,245.80 sqm = 32.92 %
PHASE -2	2914.76 sqm / 53,245.80 sqm = 5.47 %
TOTAL	20445.81 sqm / 53,245.80 sqm = 38.39%
SNOW STORAGE AREA	+/- 1460 sqm

2.0 SITE CIRCULATION

ZONING STANDARD	REQUIRED (MU2)	REQUIRED (NMR)	PROPOSED
VEHICULAR PARKING REQUIREMENTS			
PHASE 1 TOWNHOUSE DWELLING	1 / UNIT (244)	(DISTRICT 5) 1 / UNIT (244)	1 / UNIT 244 (GARAGE) = 244
	N/A	(DISTRICT 5) 0.2 / UNIT	244 (EXTRA TANDEM PARKING @ DRIVEWAY) 51 (RATIO PROPOSED 0.21/UNIT)
PHASE 2 APARTMENT UNITS	1 / UNIT (214)	(DISTRICT 3) MIN 0.7/UNIT MAX 1.25 /UNIT	1 / UNIT 163 (U.G PARKING) 41 (SURFACE) = 204
	N/A	MIN 0.1 /UNIT MAX 0.3 /UNIT	
TOTAL PARKING SPACE	458		743
MINIMUM PARKING SPACE WIDTH	2.70 m	2.70 m	2.70 m
MINIMUM PARKING SPACE LENGTH	5.5 m	5.5 m	5.5 m
BARRIER FREE PARKING			
MINIMUM NUMBER OF ACCESSIBLE PARKING	1 + 3% = 15	1 + 3% = 15	8 SURFACE + 5 UNDERGROUND

1.0 SITE STANDARDS FOR PHASE - 1

PHASE 1 LOT AREA	46,750.20 sqm ; 4.67 ha. (11.55ac)
PROPOSED DENSITY	244 UNITS / 4.67 ha. = 52.25 UNITS/ ha
TOTAL GFA	394023 sqft. (36606 sqm)
FLOOR SPACE INDEX	36606 Sqm / 46,750.20 sqm = 0.78
LOT COVERAGE PHASE-1	
TYPE 'A' LOT COVERAGE - 144	9288.06 sqm / 46,750.20 sqm = 19.87%
TYPE 'B' LOT COVERAGE - 60	4864.19 sqm / 46,750.20 sqm = 10.41%
TYPE 'C' LOT COVERAGE - 22	1596.42 sqm / 46,750.20 sqm = 3.41%
TYPE 'D' LOT COVERAGE - 18	1782.38 sqm / 46,750.20 sqm = 3.81%
TOTAL LOT COVERAGE FOR PHASE-1	17531.05 sqm / 46,750.20 sqm = 37.50 %

PHASE -1 UNIT COUNT - GROSS FLOOR AREA	NUMBER OF UNITS	GFA
TYPE 'A' - 3 STOREY, 6.40M BACK TO BACK TOWNHOUSE BLOCKS 6 - 10 & 14 - 18 +/- 1,580 sqft. (PER MODULE)	144 UNITS	208088 sqft. (19332 sqm)
TYPE 'B' - 3 STOREY, 5.40 M DUAL FRONTAGE TOWNS BLOCKS 1 - 2 & 19 - 25 +/- 1,806 sqft. (PER MODULE)	60 UNITS	113085 sqft. (10506 sqm)
TYPE 'C' - 3 STOREY, 5.40 M FRONT LOADED TOWNS BLOCKS 3 - 5 +/- 1,806 sqft. (PER MODULE)	22 UNITS	40752 sqft. (3786 sqm)
TYPE 'D' - 2 STOREY, 6.10 M FRONT LOADED TOWNS BLOCKS 11 - 13 +/- 1,813 sqft. (PER MODULE)	18 UNITS	32098 sqft. (2982 sqm)
TOTAL UNITS (PHASE - 1)	244 UNITS	394023 sqft. (36606 sqm)

2.0 ZONING STANDARDS FOR PHASE 1

ZONING STANDARD	REQUIRED (MU2)	REQUIRED (NMR)	PROPOSED
MINIMUM LOT FRONTAGE	N/A	35m	368.34m.
NORTH BLOCK LOT FRONTAGE	N/A	35m	181.64m
MINIMUM LOT AREA	N/A	N/A	N/A
MAXIMUM BUILDING LENGTH	N/A	65m	51.76m
MINIMUM BUILDING HEIGHT	7.5m	5 STOREYS (17.5m)	
MAXIMUM BUILDING HEIGHT	16.5m (W/ GRD FLR COMMERCIAL)	12 STOREYS (42m)	12.15m
MAXIMUM LOT COVERAGE			
	N/A	50%	37.50%
MIN. FRONT FACADE STEP-BACK			
	45 deg. ANGULAR PLANE AT HEIGHT ABOVE 0% EQUIVALENT RIGHT OF WAY USING 3m MIN. STEP-BACKS	N/A	N/A
MIN. SIDE FACADE STEP-BACK			
	IF ADJACENT TO AN OS ZONE, 5.0M AT HEIGHT ABOVE 0% EQUIVALENT OF RIGHT OF WAY	N/A	N/A
MIN. REAR FACADE STEP-BACK			
	45 deg. ANGULAR PLANE ABOVE 7.5M USING USING 3m MIN. STEP-BACKS	N/A	N/A
MIN. GROUND LEVEL FLR HEIGHT			
	4.5m	N/A	
MIN. FRONT YARD			
	MIN. 75% of FRONTAGE WITHIN 1m.	3m	22.57m
MAX. FRONT YARD			
	MAX. 25% of FRONTAGE WITHIN 5m.	7m	22.57m
MIN. INTERIOR SIDE YARD			
	3m MIN. ABUTTING STREET OR LANE	3m	4.78m
MAX. INTERIOR SIDE YARD			
	3.0 m	N/A	
MIN. REAR YARD			
	1.5m MIN. A BUTTING ST. OR LANE 7m MIN. A BUTTING RES. OS. OR EP	5m	6.0m
MIN. EXTERIOR SIDE YARD			
	N/A	3m	N/A
MIN. DRIVEWAYS			
	N/A	2.7m x 6.0m	
PERMITTED ENCROACHMENTS - REAR YARD			
	DECK - 0.6m SETBACK	DECK - 1.2m SETBACK	DECK - 4.5m SETBACK
MIN. SEPARATION DISTANCE - FACING DISTANCE			
	N/A	9m (1-2 STRY), 11m (3-4 STRY)	14.42m
MIN. LANDSCAPE AREA			
	N/A	20%	
	N/A	A MIN. OF 50% OF ALL LANDSCAPED AREAS ON A LOT SHALL BE PROVIDED AS SOFT LANDSCAPING	75% OF THE 15% PROVIDED IS SOFT LANDSCAPING
AMENITY AREA REQUIRED			
	12 sqm. / UNIT	COMMON AMENITY - 12 sqm. / UNIT PRIVATE AMENITY - 5 sqm. / UNIT	PRIVATE AMENITY - 5 sqm. / UNIT

3.0 SITE CIRCULATION FOR PHASE 1

ZONING STANDARD	REQUIRED (MU2)	REQUIRED (NMR)	PROPOSED
VEHICULAR PARKING REQUIREMENTS			
PHASE 1 TOWNHOUSE DWELLING	1 / UNIT (244)	1 / UNIT (244)	1 / UNIT 244 (GARAGE) = 244
	N/A	0.2 / UNIT	244 (EXTRA TANDEM PARKING @ DRIVEWAY) 51 (RATIO PROPOSED 0.21/UNIT)
TOTAL PARKING SPACE	244	244	295
MINIMUM PARKING SPACE WIDTH	2.70 m	2.70 m	2.70 m
MINIMUM PARKING SPACE LENGTH	5.5 m	5.5 m	5.5 m
MINIMUM NUMBER OF ACCESSIBLE PARKING	3	3	4
ELECTRIC VEHICLE READY PARKING (EV/RP)	N/A	ALL REQ. PARKING SPACES AS EV/RP	

2.0 ZONING STANDARDS FOR PHASE 2

ZONING STANDARD	REQUIRED (MU2)	REQUIRED (NMR)	PROPOSED
MINIMUM LOT FRONTAGE	N/A	35m	368.34m.
NORTH BLOCK LOT FRONTAGE	N/A	35m	171.01 m.
MINIMUM LOT AREA	N/A	N/A	N/A
MAXIMUM BUILDING LENGTH	N/A	65m	58.50 m
MINIMUM BUILDING HEIGHT	7.5m	5 STOREYS (17.5m)	6 ST 20.05 METERS (APARTMENT)
MAXIMUM BUILDING HEIGHT	16.5m (W/ GRD FLR COMMERCIAL)	12 STOREYS (42m)	6 ST 20.05 METERS (APARTMENT)
MINIMUM COVERAGE (FOR COMMERCIAL ONLY)	50% of ground flr GFA (min.)	25% OF GFA	0.0 m
MAXIMUM LOT COVERAGE			
	N/A	50%	5.80 % (2520.60 SQ.M.) (FOR PH-2)
MIN. FRONT FACADE STEP-BACK			
	45 deg. ANGULAR PLANE AT HEIGHT ABOVE 0% EQUIVALENT RIGHT OF WAY USING 3m MIN. STEP-BACKS	3.0M ON ANY FLOOR BETWEEN 2ND TO 6TH	3.5 M (2M AT LVL3 AND 1.5 M AT LVL 6)
MIN. SIDE FACADE STEP-BACK			
	IF ADJACENT TO AN OS ZONE, 5.0M AT HEIGHT ABOVE 0% EQUIVALENT OF RIGHT OF WAY	N/A	N/A
MIN. REAR FACADE STEP-BACK			
	45 deg. ANGULAR PLANE ABOVE 7.5M USING USING 3m MIN. STEP-BACKS	N/A	N/A
GROUND LEVEL FLR HEIGHT BUILDINGS B1/B2			
	4.5m	3.5	4.5m
MIN. FRONT YARD			
	MIN. 75% of FRONTAGE WITHIN 1m.	3m	2.5 m
MAX. FRONT YARD			
	MAX. 25% of FRONTAGE WITHIN 5m.	7m	---
MIN. INTERIOR SIDE YARD			
	3m MIN. ABUTTING STREET OR LANE	3m	5.17 m
MAX. INTERIOR SIDE YARD			
	3.0 m	N/A	---
MIN. REAR YARD			
	1.5m MIN. A BUTTING ST. OR LANE 7m MIN. A BUTTING RES. OS. OR EP	5m	---
MIN. EXTERIOR SIDE YARD			
	N/A	3m	---
PERMITTED ENCROACHMENTS			
	---	U.G PARKING STRU., STAIR PERMITTED IN FRONT OR REAR YARD	---
	---	ACCESSIBILITY RAMP/LIFT PERMITTED IN ANY YARD	---
	---	G FLOOR BAL MAY ENCR OACH WITH MIN SETBACK 0.6 M	---
MIN. SEPARATION DISTANCE			
	N/A	15 M (5-12 ST)	15 M
MIN. LANDSCAPE AREA			
	N/A	20%	15%
PLANTING BUFFERS			
	ANY LOT IN A MIXED USE ZONE ADJUTS A LOT IN A RESIDENTIAL ONE, WITH THE EXCEPTION OF THE RAY AND RAZ APARTMENT DWELING ZONES, A CONTINUOUS LANDSCAPED BUFFER AREA OF A MIN. WIDTH OF 3M SHALL BE PROVIDED	ALONG LOT LINES OF ALL ZONES ADJACENT TO NEIGHBOURHOOD LOW ZONES	NOT COMPLYING
SNOW STORAGE			
	---	NOT PERMITTED IN AMENITY AREA AND PLANTING BUFFER	---
	---	NOT PERMITTED WITHIN LANDSCAPED AREAS	---

ZONING STANDARD	REQUIRED (MU2)	REQUIRED (NMR)	PROPOSED
AMENITY AREA REQUIRED			
	12 sqm. / UNIT (214)	COMMON AMENITY 12 sqm. / UNIT (12 X 214=2568 SQ.M) LENGTH DOES NOT EXCEED 4 TIMES ITS WIDTH. PRIVATE AMENITY - 5 sqm. / UNIT (5 X 214= 1070 SQ.M)	87 sq.m (B1.B2 INDOOR COMMON AMENITY) 1,223 sq.m (outdoor amenity) 162 sq.m (ROOFTOP COMMON AMENITY) TOTAL= 1472 SQ.M PRIVATE AMENITY=5 SQ.M/UNIT (5X214=1,070 SQ.M)/PAT
ACTIVE FRONTAGE REQ.			
	N/A	25% OF GFA OF G FLOOR TO CONSIST OF NON-RESI USES	NOT COMPLYING
ANGULAR PLANE			
	N/A	50% OF FRONTAGE ALONG A STREET OR COMMON AMENITY AREA SHALL BE FOR NON-RESI USES.	NOT COMPLYING
WINDOW TO WALL RATIO			
	N/A	MAX OF 8% OF WINDOW TO WALL RATIO AS MEASURED ACROSS ALL BUILDING FACADES MIN OF 5% OF FACADE ABUTTING A STREET. OPEN SPACE OR AMENITY SHALL BE WINDOWS OPENINGS OR SIMILAR.	36.57% 42.01%
WASTE MANAGEMENT FOR RESIDENTIAL BUILDING			
	ANY ACCESSORY BUILDING OR STRUCTURE ACCOMMODATING WASTE RECEPTABLES SHALL NOT BE PERMITTED WITHIN THE FRONT YARD.	ANY ACCESSORY BUILDING OR STRUCTURE ACCOMMODATING WASTE RECEPTABLES SHALL NOT BE PERMITTED WITHIN THE FRONT YARD.	NOT COMPLYING
	ANY ACCESSORY BLD. ACCOMMODATING WASTE RECEPTABLES SHALL NOT BE PERMITTED WITHIN 10 METRES OF THE FRONT FACE OF THE PRIMARY BUILDING.	ANY ACCESSORY BLD. ACCOMMODATING WASTE RECEPTABLES SHALL NOT BE PERMITTED WITHIN 10 METRES OF THE FRONT FACE OF THE PRIMARY BUILDING.	NOT COMPLYING
	THE MAIN OPENING OF AN ACCESSORY BLD. OR STRUCTURE ACCOMMODATING WASTE RECEPTABLES SHALL NOT FACE ANY STREET FRONTAGE	THE MAIN OPENING OF AN ACCESSORY BLD. OR STRUCTURE ACCOMMODATING WASTE RECEPTABLES SHALL NOT FACE ANY STREET FRONTAGE	
RESIDENTIAL ENTRANCES			
	N/A	THE ELEVATION OF ALL PRIMARY RESID. ENTRANCES SHALL NOT EXCEED 1.2 M FROM THE FINISHED GRADE OF THE FRONT YARD.	NOT COMPLYING



4 ARCHITECTURE INC

SECTION 1.3 - DESIGN CONSIDERATIONS

1.3.2 DESIGN RESPONSE

The following is an analysis of the key concepts incorporated into the development proposal that address the City of Barrie's Official Plan Policies and Urban Design Guidelines (UDG).

1. SITE DESIGN

Site Layout:

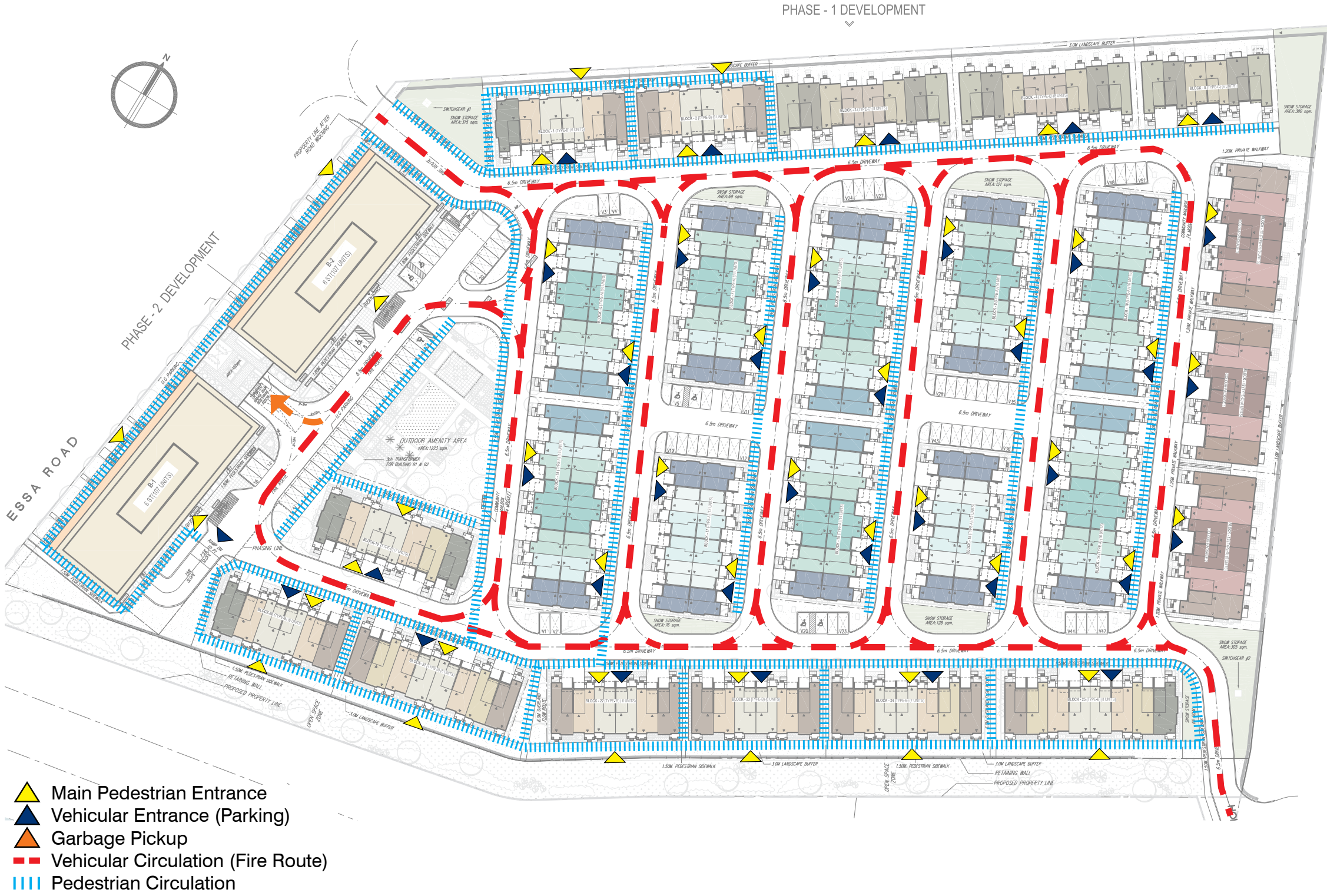
The mid-rise buildings are organized to frame the Essa Road which respond to the Intensification Corridor guidelines. The townhouses are located towards the eastern part of the site. The design objective is to integrate the development with the existing and planned future context, and positively contributing to a streetscape.

Access and Circulation:

Vehicular access to the site is proposed from Essa Road to the West and Hollyholme Farm Road to the East. Two way traffic and full turning movements are provided. The internal driveway will allow vehicles to circulate through the site and access the internal drop-off and parking areas. Traffic calming techniques and various pedestrian sidewalks are incorporated into the design to allow for a safe walkable pedestrian-friendly development. Internal sidewalks connect the internal parking areas to the buildings. Public sidewalks along the Essa Road provide access to building entrances.

Landscape Design:

The proposed site design will incorporate new hard and softscape landscaping features. Refer to Section 3.3 for the proposed design features.



SECTION 1.3 - DESIGN CONSIDERATIONS

1.3.2 DESIGN RESPONSE

1.2 PLACE MAKING – PUBLIC REALM FRAMEWORK

Gateways and Linkages

Landscape features will be incorporated in the design to assist in developing vehicular gateway and pedestrian pathways throughout the site.

Accessibility/Barrier-Free

The proposed development will incorporate both barrier-free and universal accessibility standards throughout the development as outlined in the Accessibility for Ontarians with Disabilities Act.

Public Safety

Natural surveillance through CPTED initiatives have been incorporated into the design to provide safety and security to the residents and visitors. Natural surveillance through improved open space views and lighting and signage will be incorporated in the design.

Sustainability

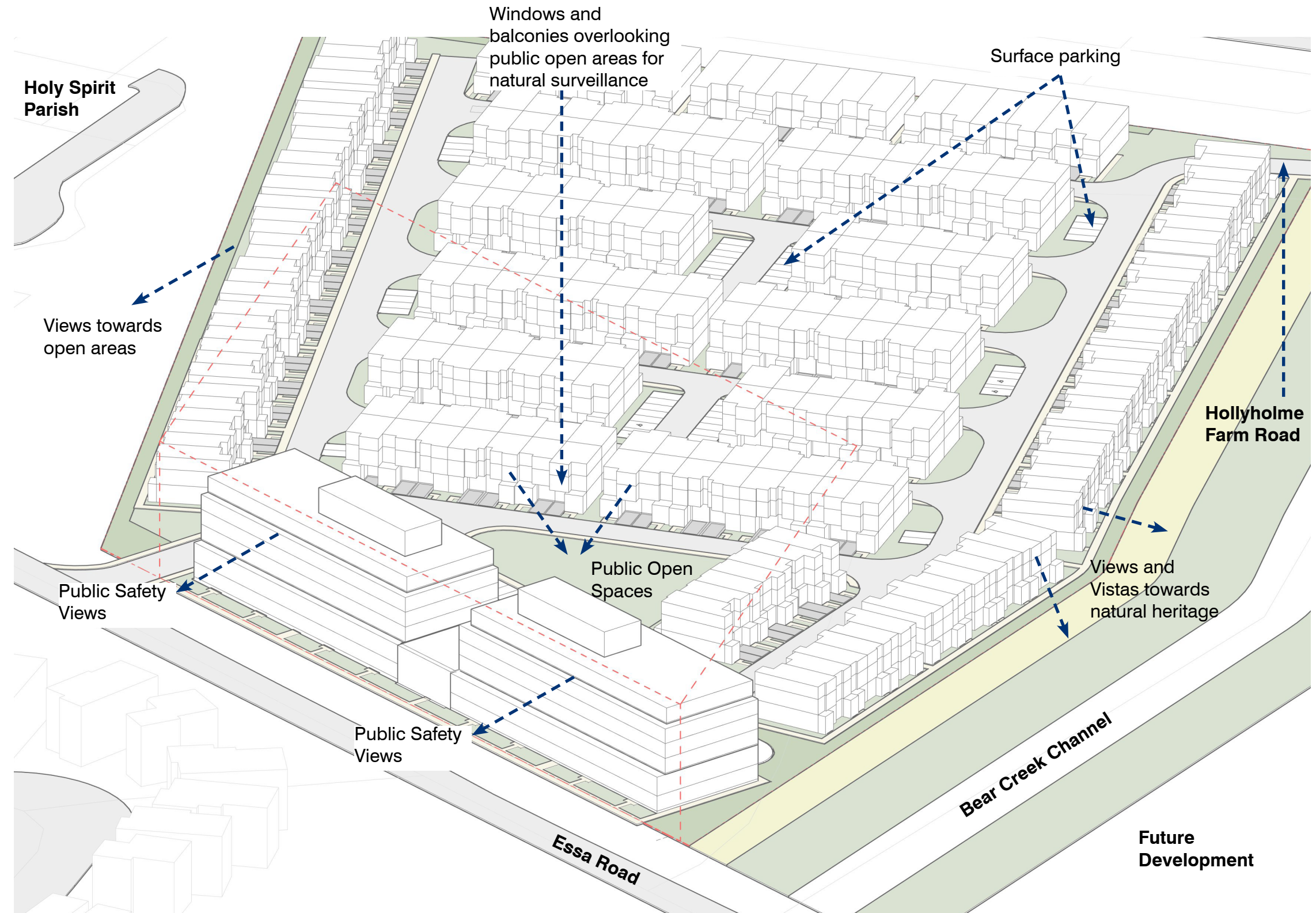
The development will include best practices with environmentally sustainable measures such as energy conservation and waste recycling.

Views and Vistas

Building presence and treatment along Essa Road will promote an urban edge and frame views along the streets. Building design will be enhanced when exposed to public views.

Public Open Space

Internal and external pedestrian sidewalks provide connectivity and fluidity to open space systems (Parks and Trails) on and adjacent to the overall subdivision property.



PART 2 - MID-RISE



SECTION 2.1 - VISION & PRINCIPLES

2.1.1 BUILDING DESIGN (MID-RISE)

Mid-rise buildings will be located in the Urban Growth Centre, Major Transit Station Areas, Strategic Growth Areas, Commercial Districts, and along Intensification Corridors.

Mid-Rise buildings are usually 4-8 storeys in height.

.1 ORIENTATION AND MASSING

Principle: To ensure a gradual transition of scale and placement between existing and future buildings, parks, and open spaces.

Guidelines:

1. Buildings should be positioned to frame the streets, parking, amenity, and open spaces.
2. 1.5m to 3m stepback should be provided in upper storeys, and more generous upper storey terraces.
3. The application of an angular plane is recommended to provide a transition in height from mid-rise buildings to low residential homes to reduce shadow impacts on the residential properties.

.2 RELATIONSHIP TO STREET

Principle: : To site and design buildings to positively frame and activate streets.

Guidelines:

1. Ensure lobbies and main building entries are clearly visible and accessible from the fronting street.
2. Ground floor height should at least be 4.5 m to incorporate various uses.
3. Ground levels should be free of any significant grade changes to promote barrier-free access and retail activity.
4. Buildings and entrances should front onto the main street to maximize public surveillance of the street.

.3 FACADE TREATMENT

Principle: To enhance liveability, visual interest, identity, and sense of place through building form, architectural composition, and materials

Guidelines:

1. Articulate building facades into intervals that are 12m wide by modulating a portion of the facade towards inside or outside.
2. Awnings, canopies, and overhangs should be provided along all commercial facade.
3. Attractive signage should be provided to identify usage and shops.

.4 AMENITY SPACE

Principle: To design open spaces that are integrated flexible, and accessible.

Guidelines:

1. Provide publicly accessible open space on-site, such as hard or soft landscaped setbacks, plazas, courtyards, and mid-block pedestrian connections.
2. Provide private outdoor amenity spaces on site, such as balconies, private courtyards, private gardens, and accessible green roofs.
3. Locate indoor amenity areas adjacent to shared outdoor amenity areas and allow access between the two areas.

.5 PARKING

Guidelines:

1. Provide access to site servicing and parking at the rear of the building or along a secondary street.
2. Buildings with ground floor usage may integrate half-storey underground parking to a maximum of 1.2 m above grade.
3. Where a building fronts an intensification corridor, collector, or arterial street, line the parking structure with active retail frontage.

.6 ROOFSCAPES

Guidelines:

1. Mechanical penthouses may exceed the maximum height limit by up to 5 meters, but may not penetrate the recommended angular planes.
2. All mechanical penthouses should be designed and clad with materials that complement the main building facades.
3. The portion of the building roof that is not used for a mechanical penthouse should be occupied by green roofs and/or usable outdoor amenity space.

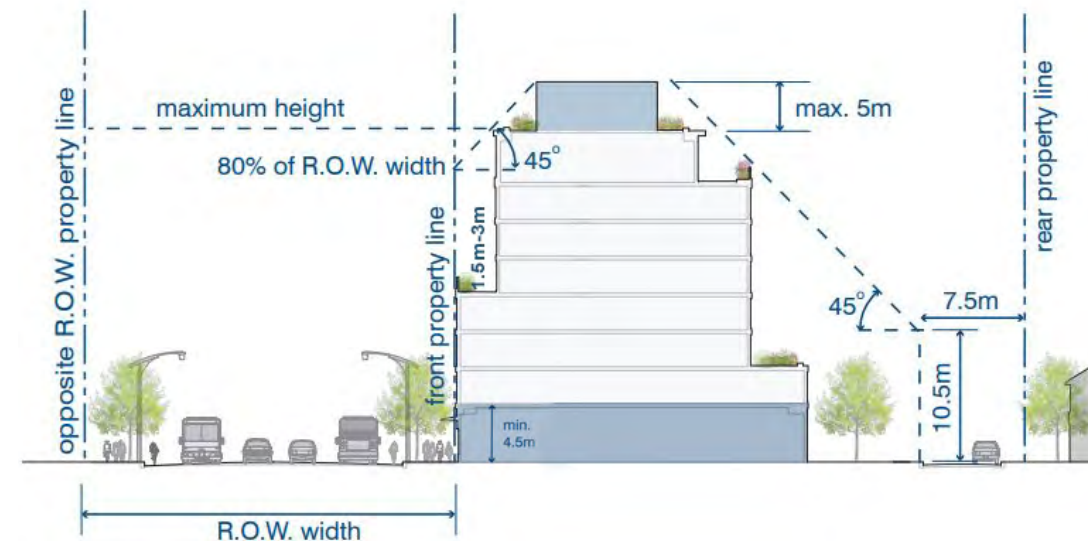


Figure 30: Maximum Building Heights
The use of angular set-backs, step-backs and angular planes help to shape the built form.



Figure 38: Sample Building Articulation
Diagram depicts some of the key components of the guidelines affecting the built form.

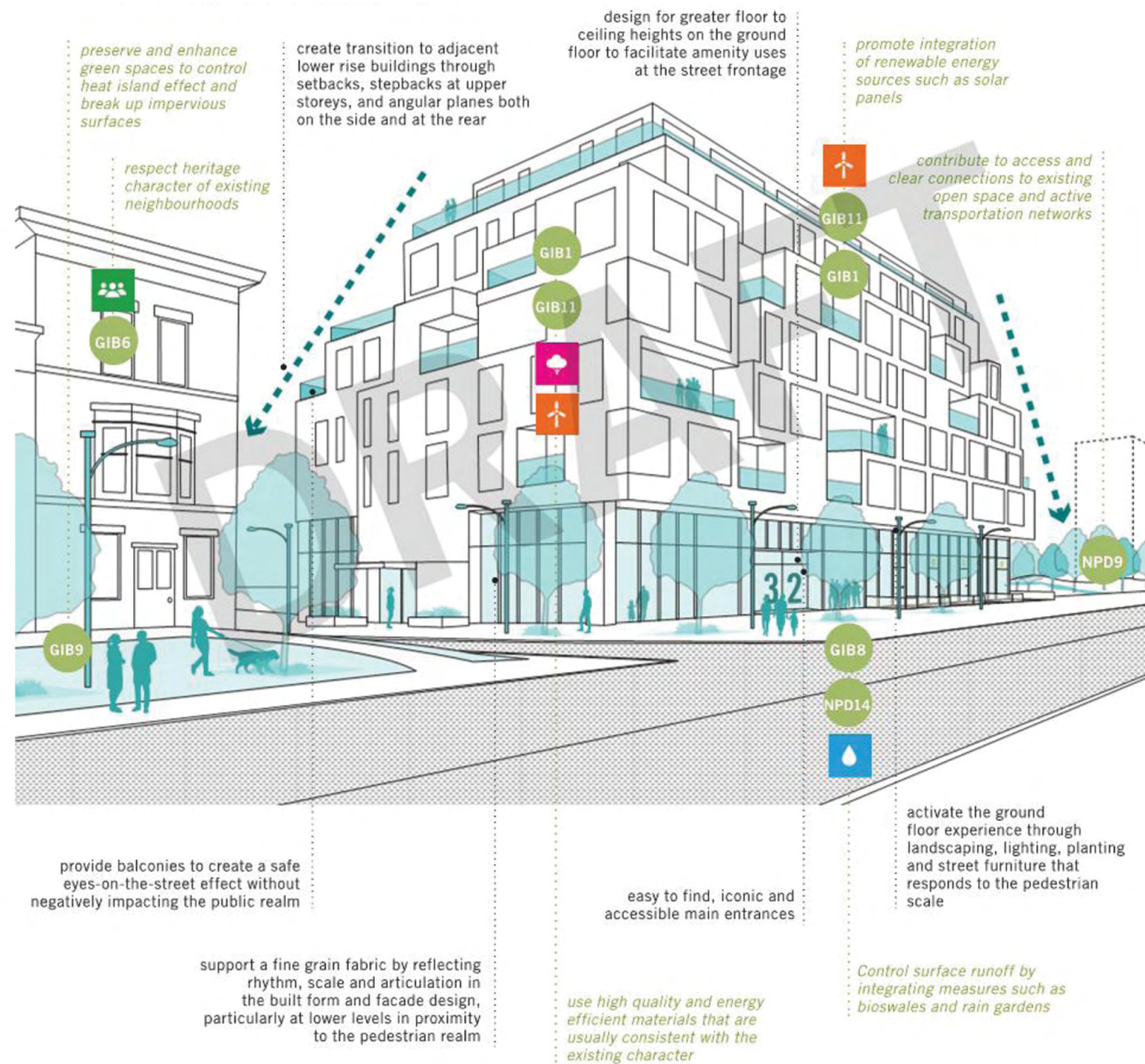
SECTION 2.2 - POLICY CONTEXT & SITE ANALYSIS

2.2.1 CITY POLICY AND REGULATORY FRAMEWORK

BUILT FORM TYPE AND DEVELOPMENT CRITERIA (MID-RISE)

The major urban design policies for the Mid Rise applies as follows:

1. The building, including its principal entrance, should frame the street it is fronting, while allowing access to sunlight for adjacent properties.
2. Mid-rise buildings should be designed with a human scaled base to frame the public realm and should be consistent with the scale, massing, setback, and other policies in the City's official plan.
3. Mid-rise buildings should be located and oriented to maximize privacy and daylight conditions for the people living and/or working within them.
4. Where buildings front onto a public street and are greater than 30.0 metres in length, entrances should be located at regular intervals.
5. Shadow, view, and micro-climatic studies may be required to determine potential impacts arising from mid-rise buildings.
6. The first storey should generally be taller in height to accommodate a range of non-residential uses.
7. The rooftop of mid-rise buildings should include landscaped green space, private outdoor amenity space, or environmental sustainability features such as solar panels.



ONE PLANET LIVING PRINCIPLES

-  SUSTAINABLE WATER
-  CULTURE AND COMMUNITY
-  MATERIALS AND PRODUCTS
-  ZERO CARBON ENERGY

*as per Bioregional One Planet Living framework

LEED ND SUSTAINABILITY STRATEGIES

-  COMPACT DEVELOPMENT
-  ACCESS TO CIVIC AND PUBLIC SPACES
-  TREE-LINED AND SHADED STREETS
-  CERTIFIED GREEN BUILDINGS
-  HISTORIC RESOURCE PRESERVATION / ADAPTIVE REUSE
-  STORMWATER MANAGEMENT
-  HEAT ISLAND REDUCTION
-  ON-SITE RENEWABLE ENERGY SOURCES



SECTION 2.3- DESIGN CONSIDERATIONS

2.3.1 THE PROPOSED DESIGN - MASTER PLAN (MID-RISE)

Proposed Apartment Building 2

6 storey
107 residential units

Central Waste Storage and Garbage Collection Area for Mid-Rise Component

Rooftop Amenity fronting Essa Road

Accessible to residents of both towns and apartment

Proposed Apartment Building 1

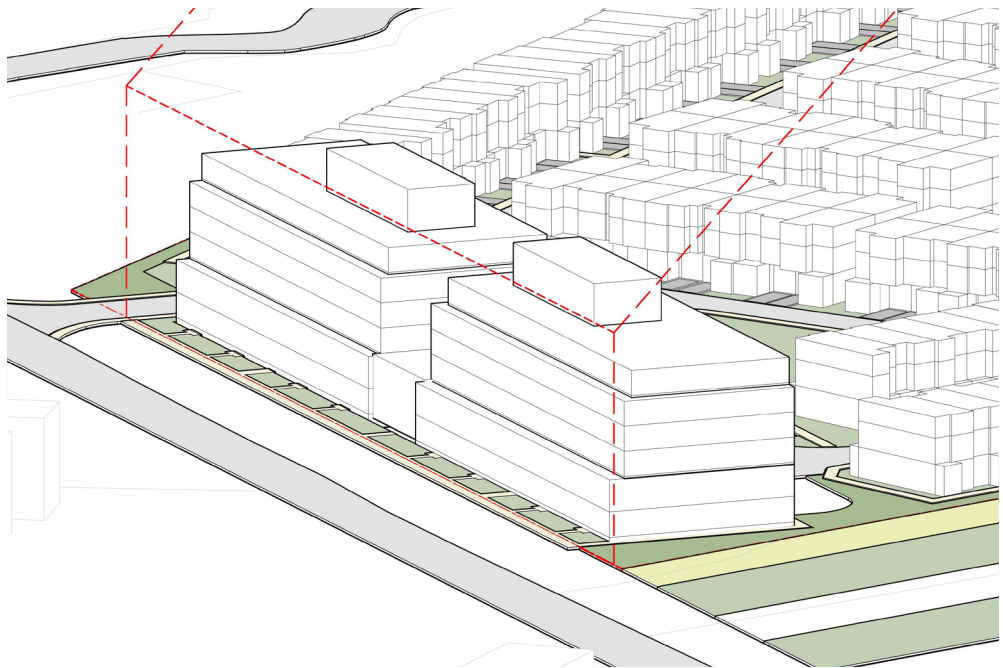
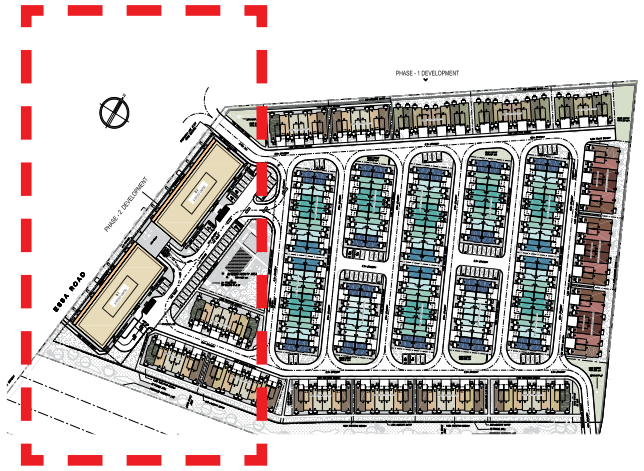
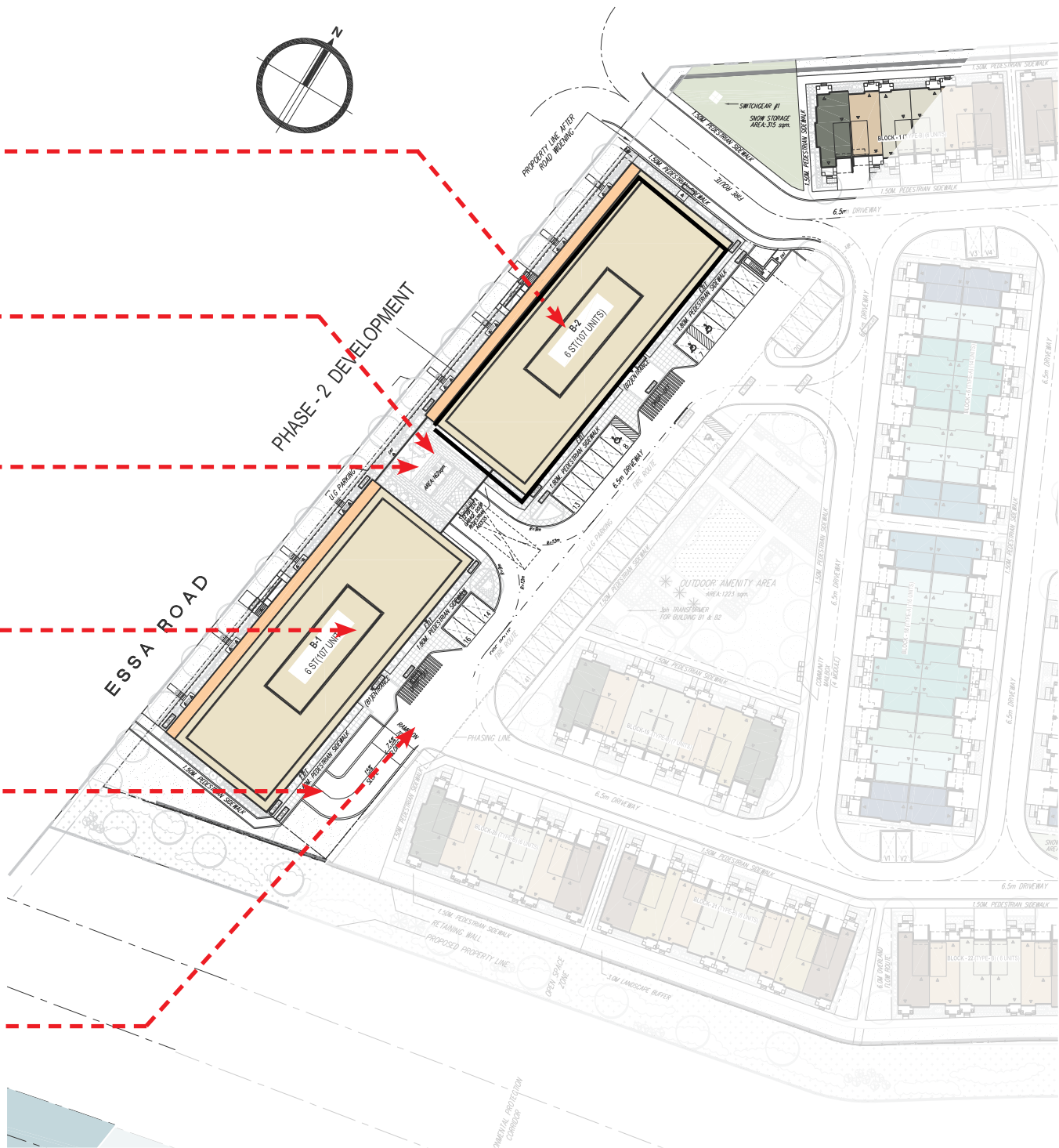
6 storey
107 residential units

Underground Parking Area - P1

163 parking spaces

Proposed Road

Indirect parking access away from the intensification corridor - Essa Road



MID-RISE STATISTICS

Total number of residential units: 214 Units
GFA residential: 14,751 sm
Total parking spaces: 214 spaces

SECTION 2.3 - DESIGN CONSIDERATIONS

2.3.2 DESIGN RESPONSE

Building Location:

Patio entrances at grade activate the Essa Road streetscape promoting a pedestrian friendly environment that engage the multi-use path along the East of Essa Road. The active frontage serves to reinforce the City’s vision of the site as a strategic development along the Intensification Corridor.

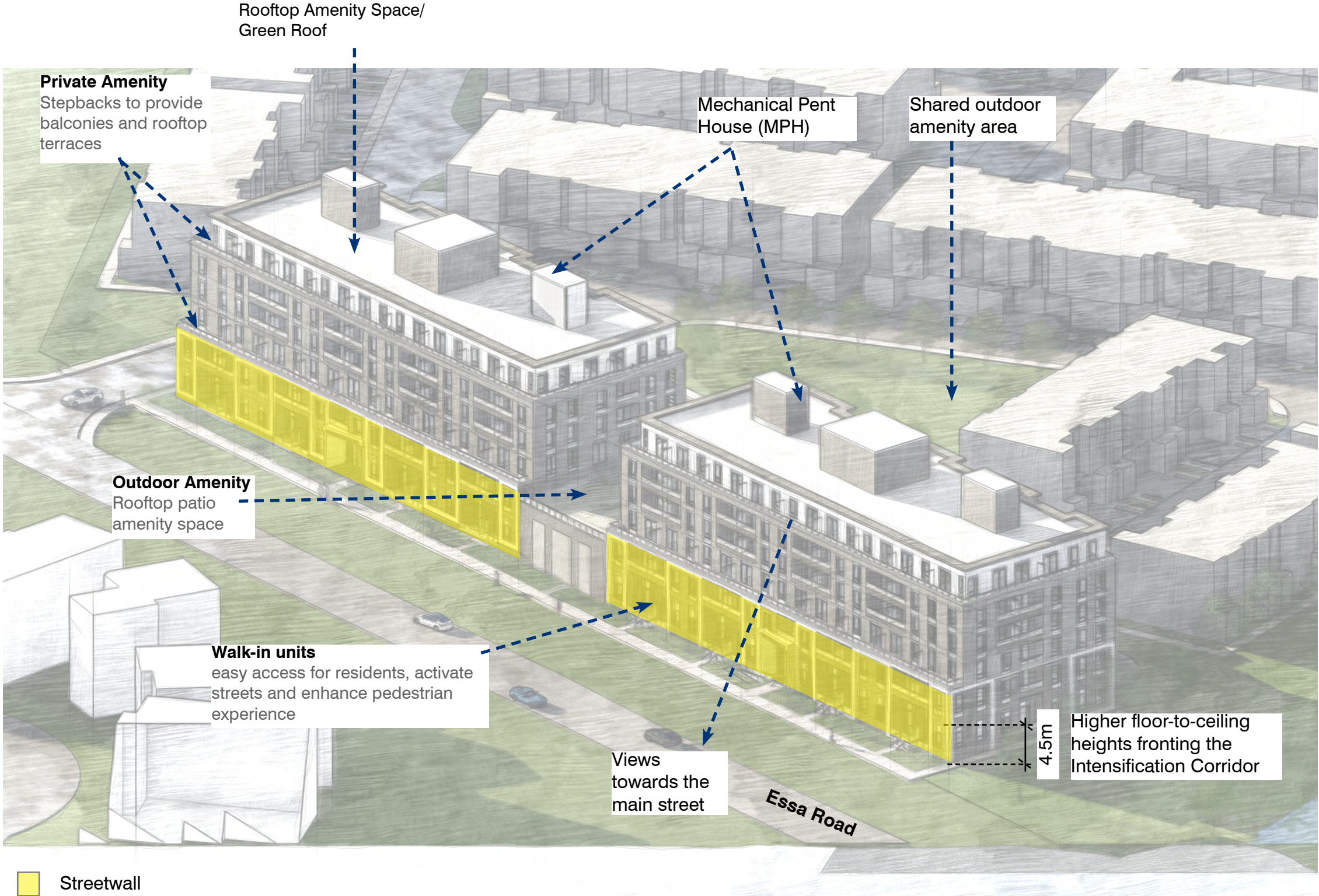
Building design maximize access to sunlight and increase privacy with a generous building separation of 15 m. Building articulation and scale contribute to a consistent pattern, rhythm, and human scale along the fronting street. A consolidated indoor amenity space is provided in each building.

Parking and Loading:

Vehicle parking for the mid-rise component is located in a one-level underground parking. Access to the parking is provided from a secondary street away from the public view through building B1. Additional surface parking is also located on-site. Loading and waste collection is located in a separate central collection area which can be accessed through the secondary street.

Private Amenity:

The proposed development will provide sufficient private amenity space in the form of balconies, and rooftop terraces. A shared amenity area is centrally located on the site.



SECTION 2.3 - DESIGN CONSIDERATIONS

2.3.2 DESIGN RESPONSE

Podium Concept:

The proposed new building will incorporate a podium design to promote street activity uses and create a lowered human-scale streetwall to mitigate the appearance of height.

Transition in Scale:

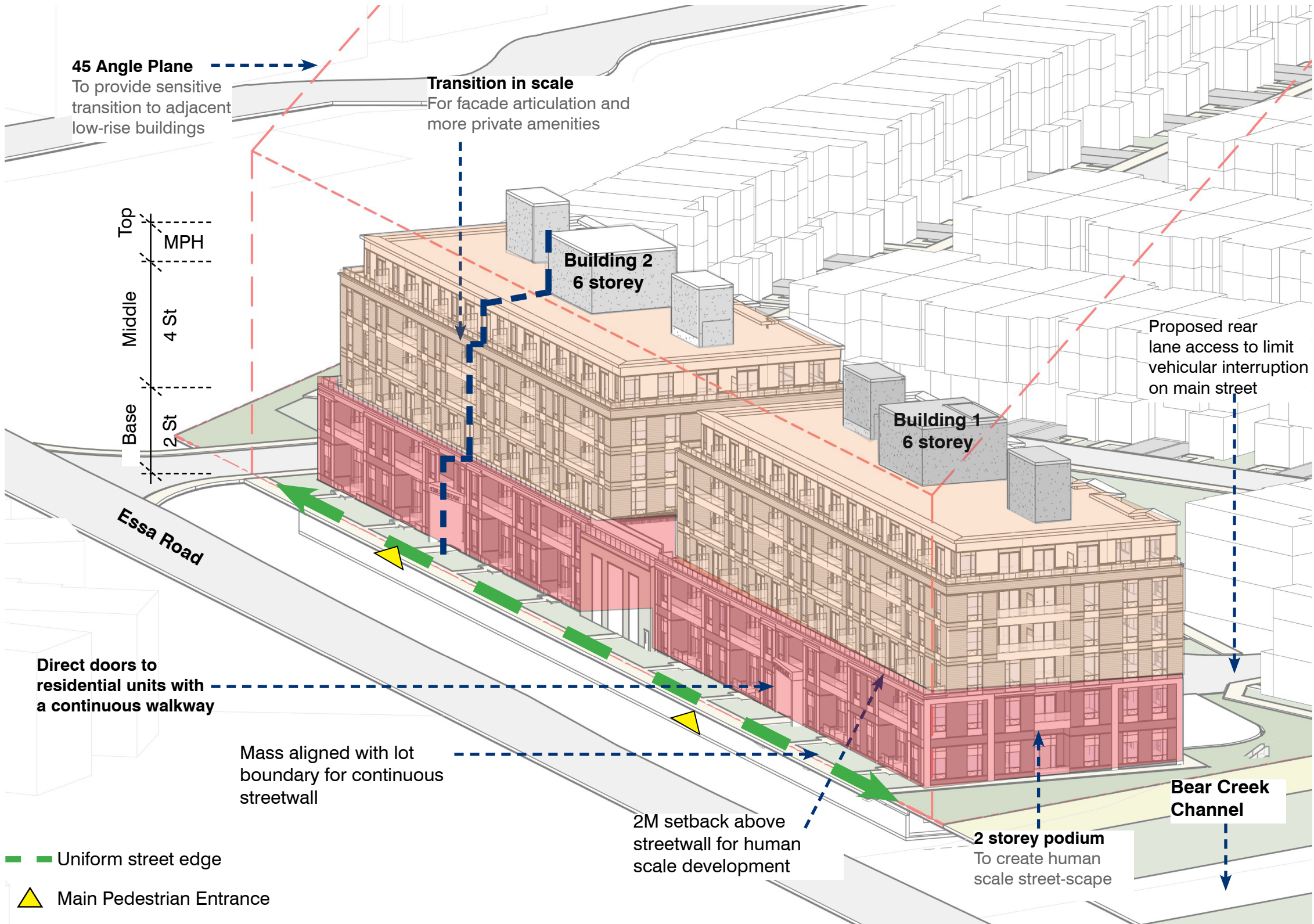
The streetwall steps back 2m to provide human-scale development. Upper levels are stepback to provide enhanced pedestrian environment and provide generous rooftop terraces to the residential units.

Uniform Street Edges:

Building facades and street-scape elements to create a consistent rhythm to maintain visual interest and vitality. Rhythm will be achieved through changes in materials, fenestration, solid and void relationships, building articulation and spacing of street-scape elements.

Building Entrance and Access:

Primary building entrances will be located along Essa Road to animate street and increase public activity at street level. Access at mid-block points will be developed throughout the building facade to articulate the facade.



SECTION 2.3 - DESIGN CONSIDERATIONS

2.3.2 DESIGN RESPONSE

Ground Floor Height

A ground level floor-to-ceiling height of 4.5m is proposed for walk-in apartment units. The ground level will accommodate the various uses including entry lobby area, utility area and residential units.

Transition to Neighborhood:

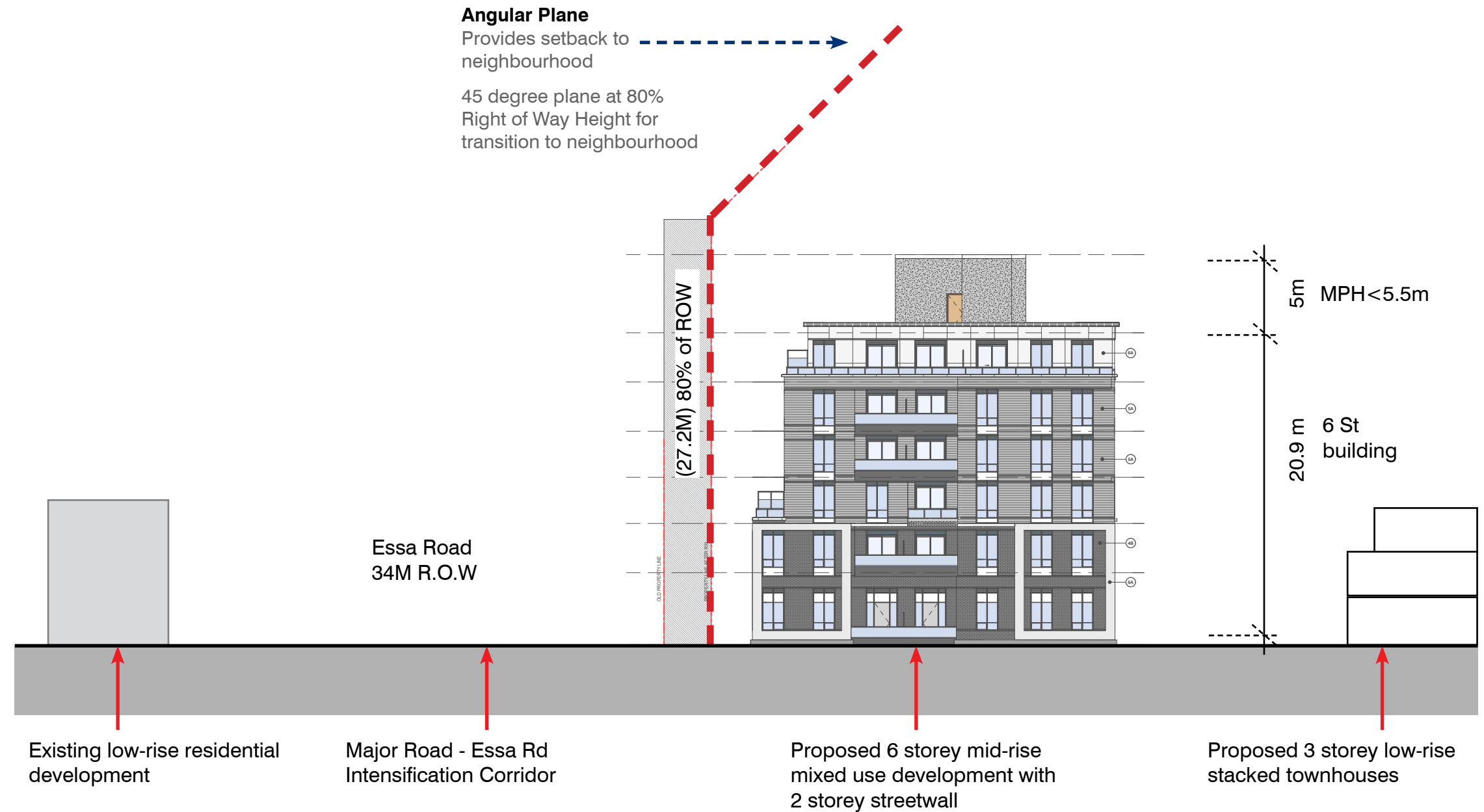
The proposed development is made compatible with the neighborhood allowing a 45 degree viewing plane, above 80% of the R.O.W. of Essa Road.

Pedestrian Shelter:

Sidewalks and pathways adjacent to buildings will be protected from sun, wind and rain through the ground level canopies, arcades and awnings.

Roofscape:

A 5m high mechanical penthouse is located within the angular plane. The roof is designed to have amenity space and is setback to reduce shadow impacts of the surroundings.



SECTION 2.3 - DESIGN CONSIDERATIONS

2.3.2 DESIGN RESPONSE

BUILDING ARTICULATION AND MATERIAL

The architectural approach for the development is one that creates an elegant contemporary exterior facade that incorporates traditional materials. This includes clay brick juxtaposed with modern elements of metal and glass to create a unique exterior facade. This achieves a high standard of design, detailing and variety. Building facades will incorporate architectural details that achieve a unique identity. They include varying fenestration, awnings, balcony projections and building elements arranged in a manner that reinforces the contemporary architectural vocabulary. The buildings will be developed with high-quality materials that are durable, energy efficient, and exhibit a quality of workmanship, sustainability and that will require minimal maintenance.

1. Masonry & precast concrete finish

Utilize masonry and precast elements as a primary building material applied to all facade levels.

2. Exterior glazing system :

Consists of various types of maintenance free window wall systems, punched openings and integrated glass railing systems.

3. Landscape materials

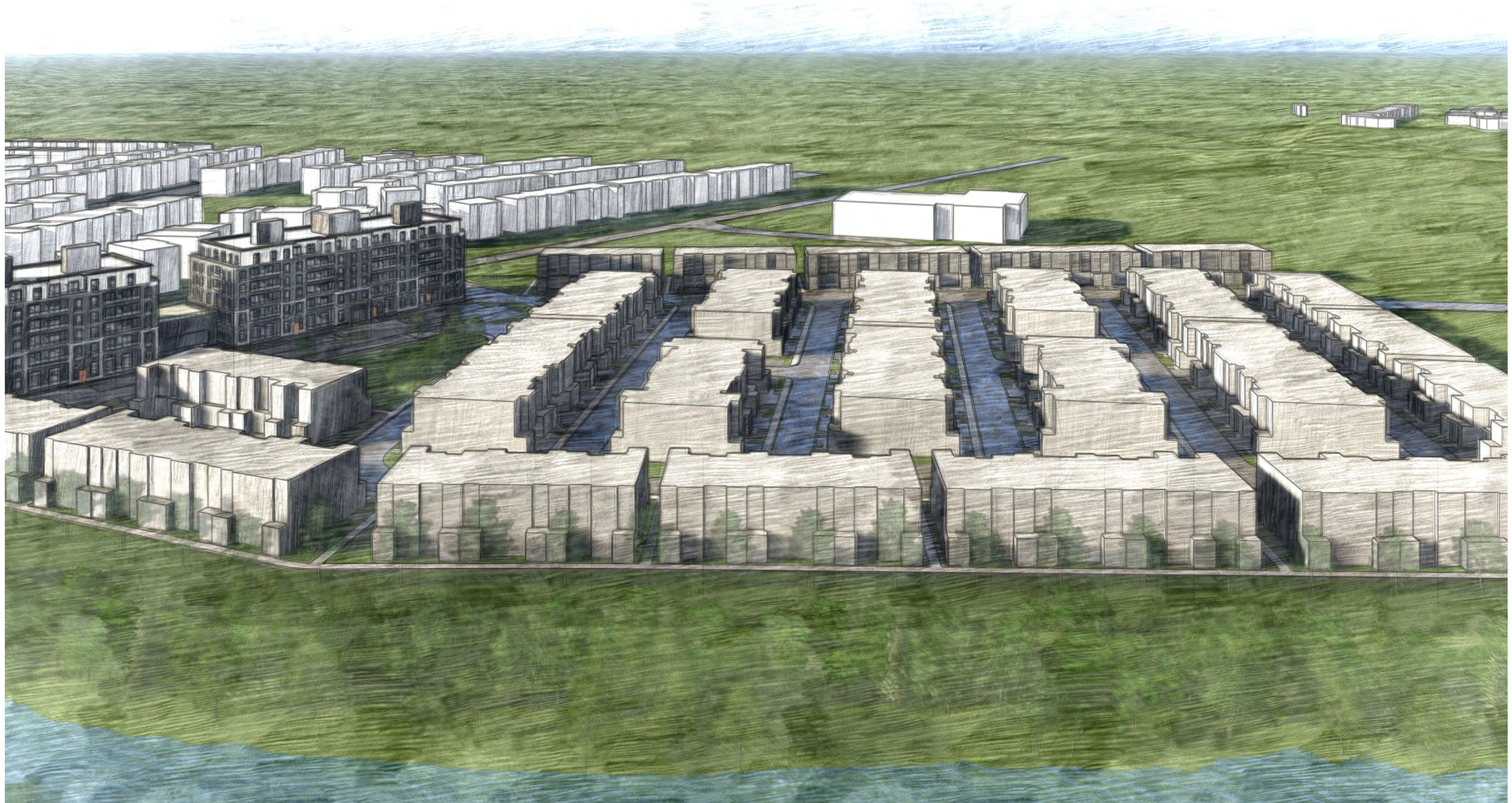
High quality design elements including pavers, raised planters, benches and soft landscaping features.



FRONT ELEVATION

<p>2A PREFINISHED WINDOW WALL SYSTEM - GLASS SPANDREL PANEL EXT. COLOUR : DARK WHITE</p> <p>2B PREFINISHED WINDOW WALL SYSTEM - OPERABLE AWNING EXT. COLOUR : CLEAR</p> <p>2C PREFINISHED WINDOW WALL SYSTEM - GLASS VISION PANEL EXT. COLOUR : CLEAR</p> <p>2D PREFINISHED WINDOW WALL - METAL LOUVRES EXT. COLOUR : XXX</p>	<p>3A PREFINISHED CURTAIN WALL SYSTEM - GLASS SPANDREL PANEL EXT. COLOUR : DARK WHITE</p> <p>3B PREFINISHED CURTAIN WALL SYSTEM - OPERABLE AWNING EXT. COLOUR : CLEAR WHITE</p> <p>3C PREFINISHED CURTAIN WALL SYSTEM - GLASS VISION PANEL EXT. COLOUR : CLEAR</p> <p>3D PREFINISHED CURTAIN WALL - METAL LOUVRES EXT. COLOUR : XXX</p>	<p>4A MASONRY BRICK VENEER - ICELAND WHITE EXT. COLOUR : ICELAND WHITE</p> <p>4B MASONRY BRICK VENEER - ASHLAND EXT. COLOUR : ASHLAND</p> <p>5A KWP SIDING - GRANITE RUSTIC EXT. COLOUR : GRANITE RUSTIC</p> <p>6A PREFINISHED ALUMINIUM COMPOSITE PANEL - WHITE EXT. COLOUR : WHITE</p>	<p>6B PREFINISHED ALUMINIUM COMPOSITE PANEL - BLACK EXT. COLOUR : BLACK</p> <p>7 EIFS - STUCCO EXT. COLOUR : CLEAR WITH COATED PATTERN</p> <p>8 BIRD FRIENDLY GLASS BALCONY RAIL EXT. COLOUR : CLEAR WITH COATED FRIT PATTERN</p>
---	---	--	--

PART 3 - LOW-RISE



4 ARCHITECTURE INC.

WWW.4ARCHITECTURE.CA

**664, 674, 692 ESSA ROAD & 320,364
MAPLEVIEW DRIVE WEST, BARRIE, ON**

PEARL BUILDERS

423010

Page 26 of 40

SECTION 3.1 - VISION & PRINCIPLES

3.1.1 BUILDING DESIGN (LOW-RISE)

Low-rise residential buildings will be expected in Neighbourhood Areas at key intersections or adjacent to open spaces. They may also be utilized in larger multi-building developments in Strategic Growth Areas to create transition to surrounding adjacent Neighbourhood Areas.

Low-Rise buildings are typically 3-4 storeys in height.

.1 SCALE AND MASSING

Principle: To ensure buildings contribute positively to the neighbourhood context.

Guidelines:

1. Buildings mass should generally be 40-50m long.
2. Buildings should have a maximum width of 24m.

.2 GROUND-TO-FLOOR RELATIONSHIP

Principle: To site and design buildings to positively frame and activate open spaces.

Guidelines:

1. A maximum 1.2m height (e.g., 5-6 steps) above ground level is desired for front entryways.
2. Incorporate individual entrances to ground floor units accessible from the street or public open spaces.
3. Site and orient buildings so that windows and balconies overlook public streets, parks, walkways, and shared amenity spaces while minimizing views into private residences.

.3 FACADE TREATMENT

Principle: To design a well articulated building facade for enhanced pedestrian experience.

Guidelines:

1. Buildings should be articulated with numerous doors and windows, particularly along the facade, to increase access and transparency.
2. The design of townhouses and stacked townhouses should generally avoid straight continuous massing. For longer frontages, building masses should be designed to appear as if they are composed of smaller parts using vertical breaks, different materials or colors or architectural features such as bays or porches.

.4 AMENITY SPACE

Principle: To integrate shared and private amenity spaces to provide flexible and accessible open spaces to the users.

Guidelines:

1. Locate open spaces to maximize sunlight, minimize noise disruptions, and minimize 'overlook' from adjacent units.
2. Provide stacked units with balconies or porches for semi-private outdoor amenity space.
3. Integrate front yards with a path from the fronting street sidewalk to the primary entry, landscaping, and semi-private outdoor amenity space.



.5 GARAGE DESIGN

Guidelines:

1. Design garage doors to limit visual impact, using strategies such as recessing the garage from the rest of the facade.
2. Front garages and driveway parking are acceptable in townhouses facing internal strata roads.
3. Centralized parking garages, where provided, should be designed to reflect the architecture of the main building.

.6 BUILT FORM TYPE AND DEVELOPMENT CRITERIA (LOW-RISE)

The major urban design policies for the Low Rise applies as follows:

1. Low-rise development should respect and complement the scale, massing, setback, and orientation of other built and approved low-rise buildings in the immediate area and should be consistent with the other policies in the City's official plan.
2. A flanking unit(s) should generally provide a front-yard and front-door pedestrian entrance facing the public street. Where such elements cannot be included, enhanced architectural elements may be required to address the street-facing nature of the flanking elevation.
3. Stacked townhouses should be a maximum of four storeys in height and should be designed to generally resemble a traditional street townhouse.
4. To create visual interest and diversity in the built environment, a wide variety of architectural designs are encouraged. However, new buildings proposed within older, established areas of the city are encouraged to be designed to complement the visual character and architectural/building material elements found in these areas.
5. Garages should not project forward in such a way that the resultant streetscape created at ground level is dominated by the garages rather than the overall building facades. To promote attractive building facade and streetscapes, visually reduce the garage prominence by recessing it behind building facades or covered porches or locating it in their rear yard accessed by a lane.

SECTION 3.2 - DESIGN CONSIDERATIONS

3.2.1 THE PROPOSED DESIGN - MASTER PLAN (LOW-RISE)

Proposed Residential Building 4 - Front Loaded Towns

8 residential units
16 parking spaces

Proposed Residential Building 9 - Back to Back Towns

14 residential units
28 parking spaces

Surface Parking

24 Visitor parking
Total: 24 spaces

Proposed Residential Building 15 - Back to Back Towns

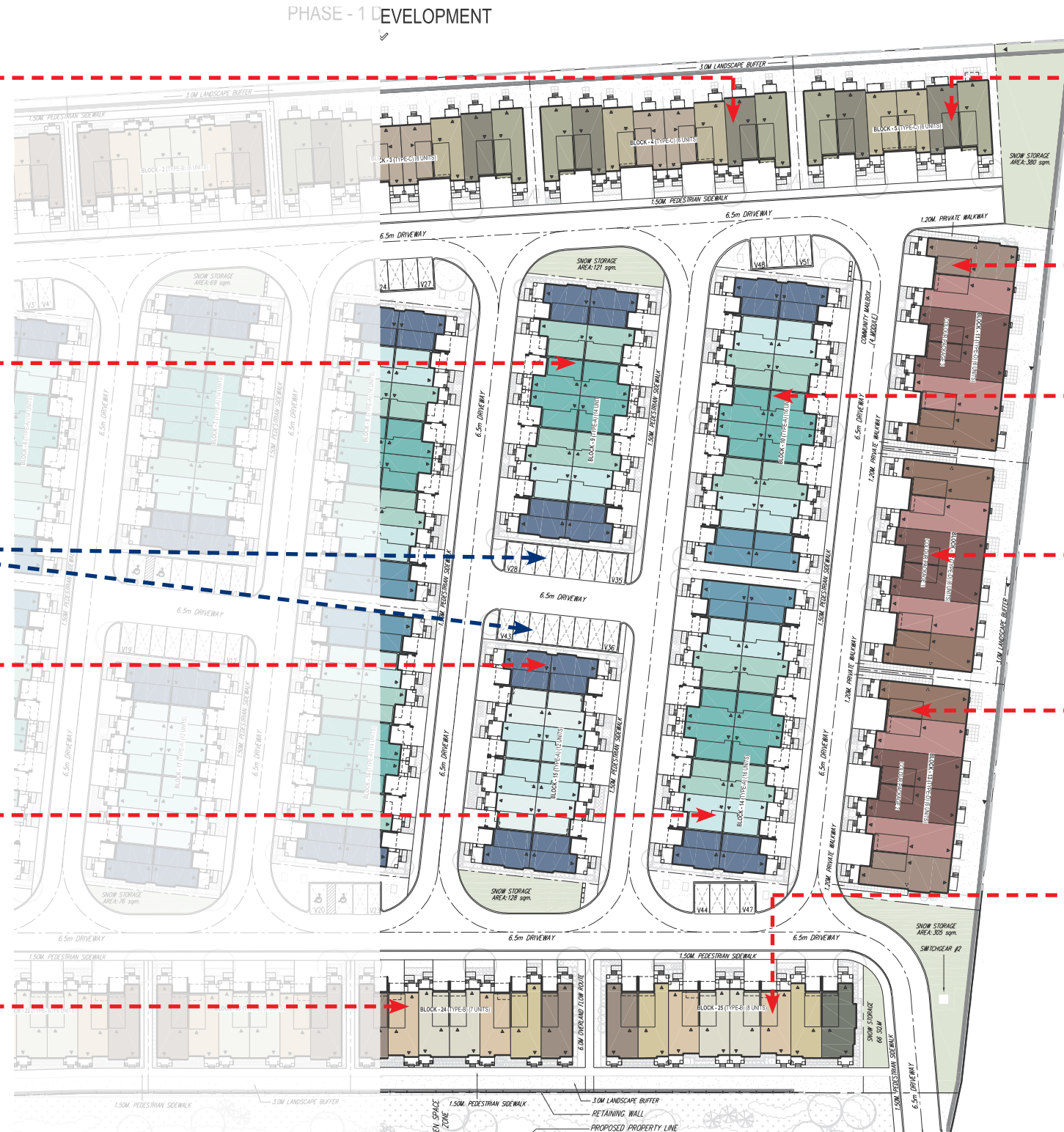
12 residential units
24 parking spaces

Proposed Residential Building 14 - Back to Back Towns

16 residential units
32 parking spaces

Proposed Residential Building 24 - Dual Frontage Towns

7 residential units
14 parking spaces



Proposed Residential Building 5 - Front Loaded Towns

6 residential units
12 parking spaces

Proposed Residential Building 11 - Front Loaded Towns

6 residential units
12 parking spaces

Proposed Residential Building 10 - Front Loaded Towns

16 residential units
32 parking spaces

Proposed Residential Building 12 - Front Loaded Towns

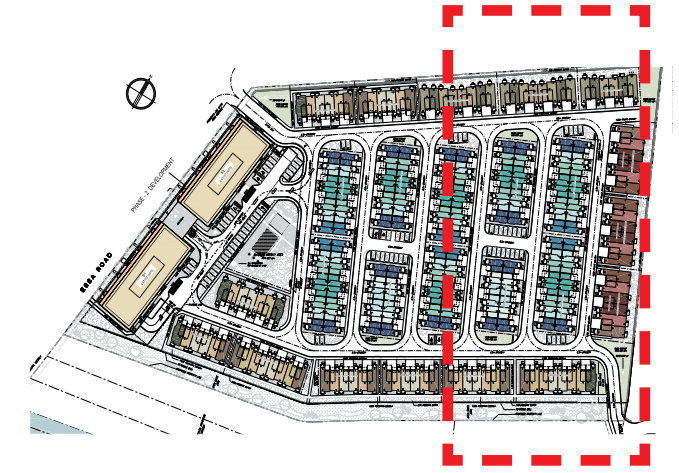
6 residential units
12 parking spaces

Proposed Residential Building 13 - Front Loaded Towns

6 residential units
12 parking spaces

Proposed Residential Building 25 - Stacked Towns

8 residential units
16 parking spaces



4 ARCHITECTURE INC

WWW.4ARCHITECTURE.CA

664, 674, 692 ESSA ROAD & 320,364
MAPLEVIEW DRIVE WEST, BARRIE, ON

423010

PEARL BUILDERS

Page 29 of 40

SECTION 3.2 - DESIGN CONSIDERATIONS

3.2.2 DESIGN RESPONSE

Building Location:

The townhouses have a strong relationship to the existing and planned street and open space network. Buildings, their entrances, porches, windows are facing the proposed roads or shared amenity areas.

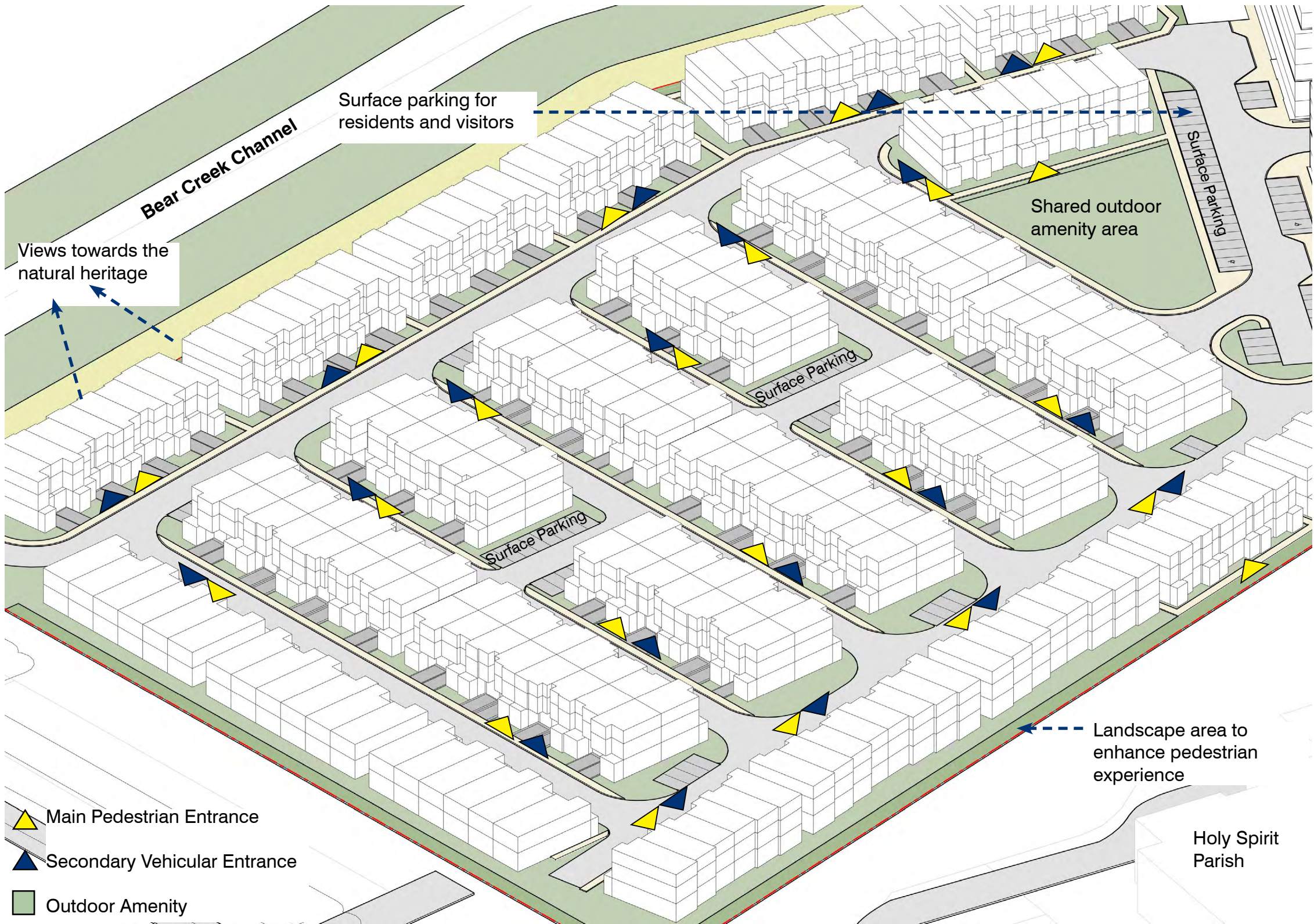
Building articulation and scale define individual units and/or intervals and contribute to a consistent pattern, rhythm, and human scale along the fronting street. Breaks in the building massing are provided by vertical and horizontal articulation of facades including insets, projections, color, and texture. Access to parking spaces is provided from a secondary street and internal lane-ways.

Parking and Loading:

Parking, loading, and waste collection areas are provided throughout the site for ease of access of residents. Private garages are provided in most of the units. Molok garbage disposal system is used for waste collection and disposal. The private road also functions as a fire route.

Public Open Space:

Internal and external pedestrian sidewalks provide connectivity and fluidity to the shared outdoor amenity spaces.



SECTION 3.2 - DESIGN CONSIDERATIONS

3.2.2 DESIGN RESPONSE

Facade treatment:

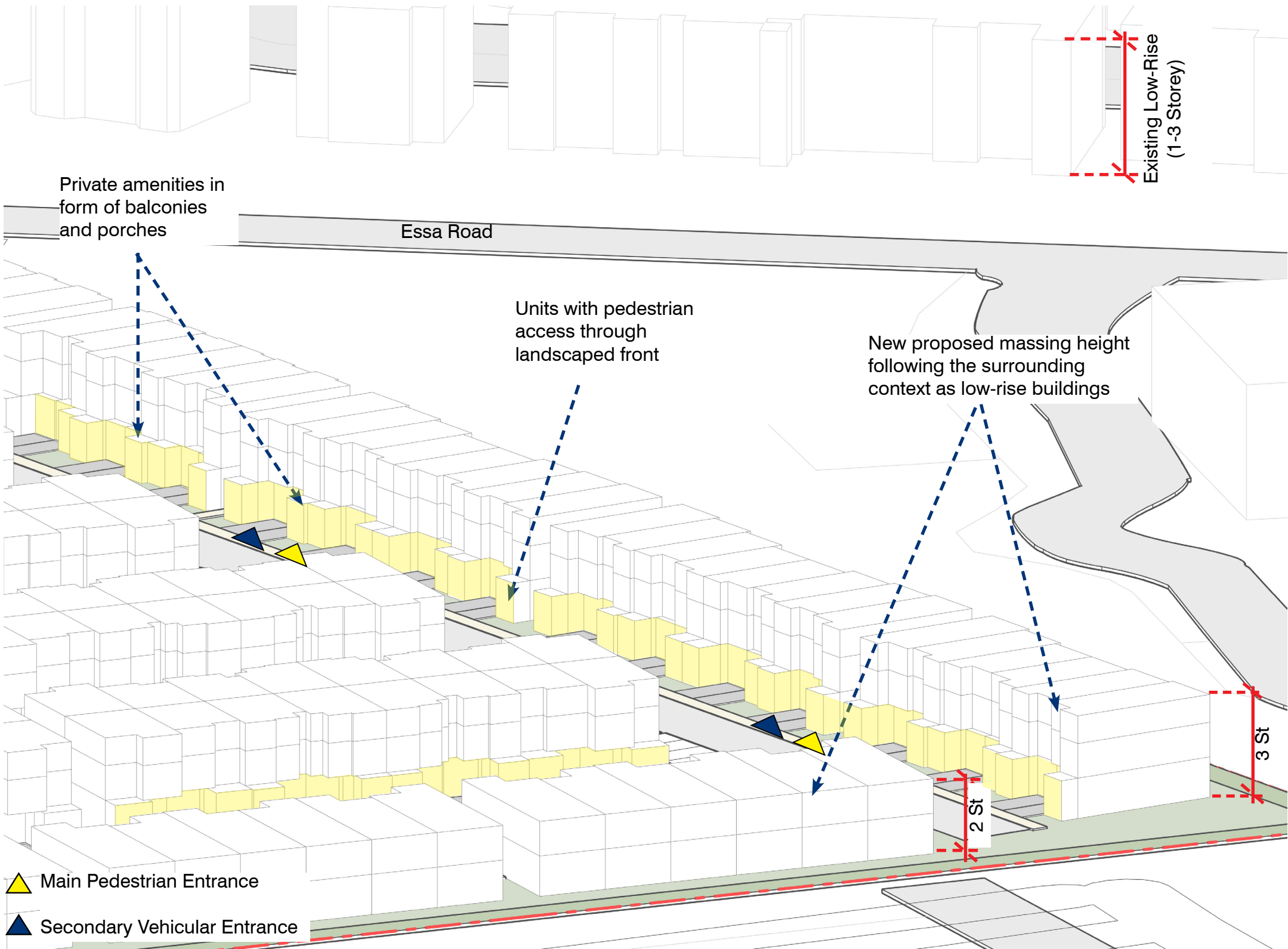
The towns will be organized to avoid long facade. Windows, doors, porches, and balconies are located strategically to generate interest in the building elevation and the building is articulated to have enhanced pedestrian experience.

Building Entrance and Access:

Primary building entrances will be directly through the proposed driveways. Additionally, garage access is provided via the driveway in all types of units.

Private Amenity:

The proposed development will provide sufficient private amenity space in the form of porches and balconies. Multiple shared outdoor amenity areas are centrally located on the site.



SECTION 3.3 - DESIGN CONSIDERATIONS

3.3.2 DESIGN RESPONSE

BUILDING ARTICULATION AND MATERIAL

The architectural approach for the development is one that creates an elegant contemporary exterior facade that incorporates traditional materials. This includes clay brick juxtaposed with modern elements of metal and glass to create a unique exterior facade. This achieves a high standard of design, detailing and variety. Building facades will incorporate architectural details that achieve a unique identity. They include varying fenestration, awnings, balcony projections and building elements arranged in a manner that reinforces the contemporary architectural vocabulary. The buildings will be developed with high-quality materials that are durable, energy efficient, and exhibit a quality of workmanship, sustainability and that will require minimal maintenance.

1. Masonry & precast concrete finish

Utilize masonry and precast elements as a primary building material applied to all facade levels.

2. Exterior glazing system :

Consists of various types of maintenance free window wall systems & punched openings.

3. Landscape materials

High quality design elements including pavers, raised planters, benches and soft landscaping features.



TYPE A FRONT ELEVATION



TYPE B FRONT ELEVATION



TYPE D FRONT ELEVATION



TYPE C FRONT ELEVATION

PART 4 - OVERVIEW



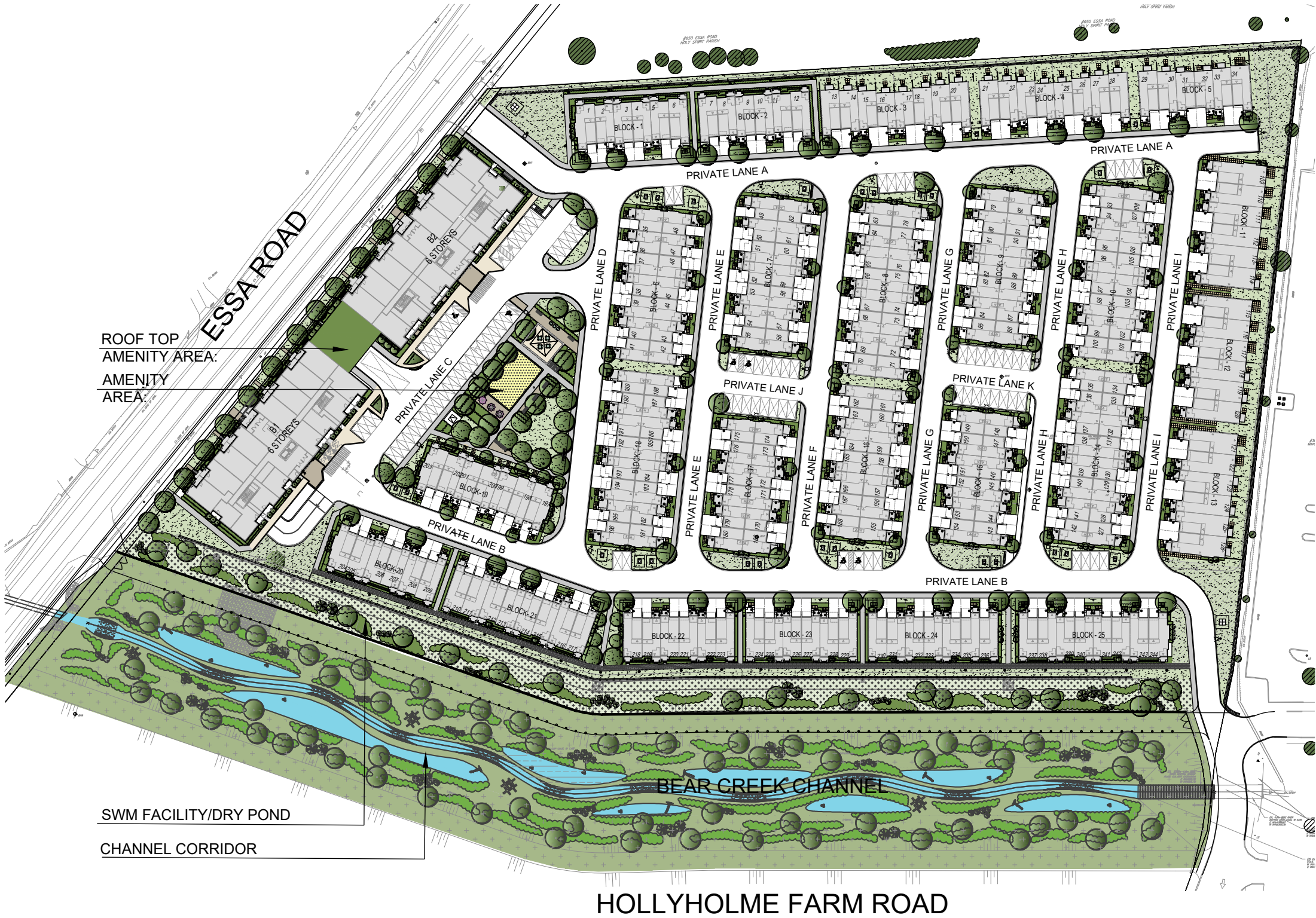
SECTION 4.1 - LANDSCAPE DESIGN

4.1.1 LANDSCAPE DESIGN

4.1.1 LANDSCAPE DESIGN

The purpose of this chapter is to describe and illustrate the design intent of the project's proposed landscape and urban design features which will deliver an attractive high quality landscape treatment through design, material selection, and implementation. The landscape design for Maplevue Village North involves the integration of urban design and streetscape treatments for the low-rise residential townhome component with the mid-rise buildings fronting Essa Road. A common outdoor amenity space situated between the mid-rise and low-rise buildings will provide a recreational hub and community link. The Maplevue Village North development includes the completion of the Bear Creek restoration. This naturalized channel will provide a green interface between Maplevue Village North and the future phase to the south.

Through well-designed and highly articulated urban design and landscape treatments, Maplevue Village North will respect the character of the surrounding neighbourhood while exhibiting its own unique community identity.



SECTION 4.1 - LANDSCAPE DESIGN

4.1.1 LANDSCAPE DESIGN

LANDSCAPE ELEMENTS

Boulevard Trees

- Boulevard trees are significant features of the streetscape and are subject to City of Barrie requirements.
- Deciduous canopy trees shall be provided along internal condominium roads to provide shade for the pedestrian sidewalks, create visual interest, and to unify the community.
- Boulevard trees to be planted where utilities allow and are to be located as directed by the City of Barrie's standard road profiles.
- Tree species should be in groups of 3-6 to provide species diversity.
- Narrow-form trees will be required next to streetlights and where spatial limitations occur.

Fencing

Depending on the need for privacy, property delineation, or height barriers, the following types of fencing will be required: wood privacy and chain link. All fencing types will be in accordance with the City of Barrie Standards.

Wood Privacy Fence

- Wood privacy fence screens will be 1.8m (6') high, providing effective visual screening of residential rear yards.
- Wood privacy fence will be constructed with superior materials and carpentry, consistent with the quality of other built elements within the development.

Chain Link Fence

- 1.5m high galvanized chain-link fence shall be provided along the boundary of the naturalized Bear Creek channel.
- Chain link fence shall be as per the City's standard detail.

Black Vinyl Chain Link Fence

- Black vinyl chain link fence will provide delineation of the property boundaries and a safety barrier along retaining walls located in various locations on the periphery of the site.

Decorative Paving

- Paving treatments shall be of high-quality materials that harmonize with the building's exterior architectural treatments.
- Decorative paving will be designed to define the various pedestrian zones and to highlight building entrances.
- High-albedo paving shall be provided for pedestrian areas and walkways where appropriate to reflect light and thereby mitigate the Urban Heat Island Effect.

STREETSCAPE

Streetscape involves a combination of landscape elements including tree and ornamental plantings, paving, and site furnishings which enhance the built form while delineating the boundaries between the public and private realms. Landscape elements contribute to a dynamic and vibrant streetscape and convey the character of the development while contributing to an enhanced pedestrian environment.

Essa Road

- Mid-rise residential buildings B1 and B2 are located along the Essa Road frontage, a major arterial road and thoroughfare which forms the western boundary of the site.
- The enhanced landscape treatment provided along the Essa Road frontage will include:
 - Decorative paving along the building frontages will demarcate building entrances and highlight pedestrian walkways.
 - Residential units at ground level feature patios and front entries facing the Essa Road right-of-way. Walkways featuring decorative unit paving provide direct pedestrian connections to the sidewalk along Essa Road.
 - Raised planters containing coniferous hedges, ornamental shrubs, perennials, and ornamental grasses will enhance the built form and provide privacy screening and buffering of vehicular activities for the residential patios.

- Deciduous trees will provide vertical accents along the street frontage, softening the building architecture, and will provide shade and privacy for the residential units.
- The boulevard treatment within the Essa Road R.O.W., including street trees and sidewalks, is pending the future Essa Road widening project and will be delivered by others as part of the road construction.

Internal Streetscape – Private Condo Roads

The development's internal street network consists of multiple private condo roads oriented to provide convenient linkages throughout the community.

- Parking for residents of the townhouses will be provided on surface level private driveways and private garages.
- Walkways will be provided between the residential front entries to driveways.
- Planting beds, consisting of ornamental shrubs and perennials will enhance the front entries and flankages of the townhouse buildings.
- Plantings of deciduous canopy trees will be provided in front yards, building flankages, and along pedestrian walkways. Tree plantings will contribute to a pedestrian scale and provide shade along the internal road streetscape.
- Tree plantings will be provided in accordance with City standards and required setbacks.



SECTION 4.1 - LANDSCAPE DESIGN

4.1.1 LANDSCAPE DESIGN

Sustainability

The landscape design shall conform to the requirements to prepare for the impacts of a changing climate and evolving demographic through the effective management of stormwater management, use of green infrastructure, and implementation of sustainable materials.

- Improve social interaction through design and the creation of a 'sense of place' by providing opportunities and locations to draw people together.
- Facilitate storm water management through the engineered design of the SWM facility which will mitigate the effects of storm flows and improve water quality and protect the watershed downstream.
- Creation of micro-climates that provide comfortable pedestrian environment.
- Provide connections to the local transit infrastructure to reduce car dependency and increase variety of travel options.
- Support for active transportation (walking, cycling, in-line skating, mobility aids, and motorized wheelchairs) through provision of barrier free walkways, pathways, and trails and associated infrastructure.
- Specification of locally sourced materials where applicable.
- Promotion of water conservation and energy efficiency.

Microclimate

The following landscape design initiatives and principles will promote the creation of comfortable microclimates in pedestrian environments through environmental design:

- The planting of deciduous canopy trees along streets, walkways, and within amenity and open space areas, will provide shade, contributing to a comfortable pedestrian environment within these outdoor spaces and the adjacent buildings.
- Tree plantings adjacent to roadways and parking areas mitigate the Urban Heat Island Effect by providing shade for areas of low-albedo pavement.
- Specification of high-albedo paving treatments for mitigation of the Urban Heat Island Effect.
- Strategically located plantings of coniferous trees and shrubs combined with landscape screens and fences provide effective buffers which mitigate the negative effects of strong winds in pedestrian areas.

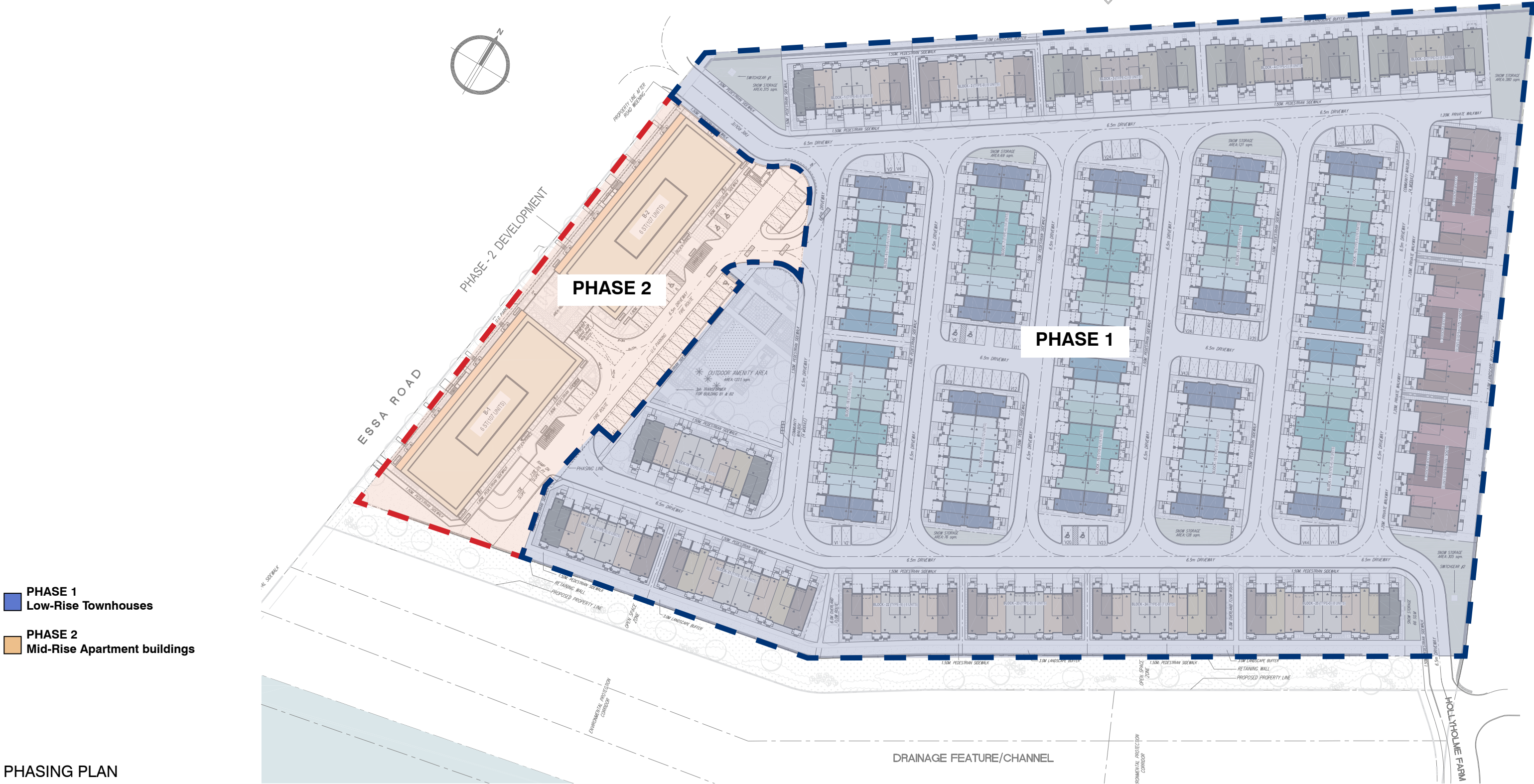
Landscape Sustainability Features

- Encourage the implementation of Low Impact Design Standards (LIDS) for the treatment of stormwater and to reduce stormwater runoff.
- Naturalization of stormwater management facilities, including planting of native trees, shrubs, and groundcover, will enhance the function of the engineered SWM facility, contribute to the establishment of wildlife habitat, and increase canopy coverage and bio-diversity within the site.
- Provide drought tolerant, hard, disease and pest resistant plant species that will contribute to an increased urban canopy.
- Source local materials and manufactured components.
- Selection of landscape building materials which include sustainable features and or qualities ie. Non-toxic, recycled materials, etc.
- Provide high-albedo paving for pedestrian walkways, rooftop amenity areas, private patios, and on-grade parking spaces to reflect sunlight which mitigates the Urban Heat Island Effect.
- Provide convenient opportunities for alternative modes of transportation ie., connection to the City-wide transit routes and active transportation network, provision of bicycle racks and storage.



SECTION 4.2 - CONCLUSION

4.2.1 PHASING PLAN



SECTION 4.2 - CONCLUSION

4.2.2 SUMMARY

The proposed development will provide appropriate intensification, building form, massing, and uses, consistent with Intensification Corridor and Medium Density designation, as defined within the City of Barrie's Official Plan.

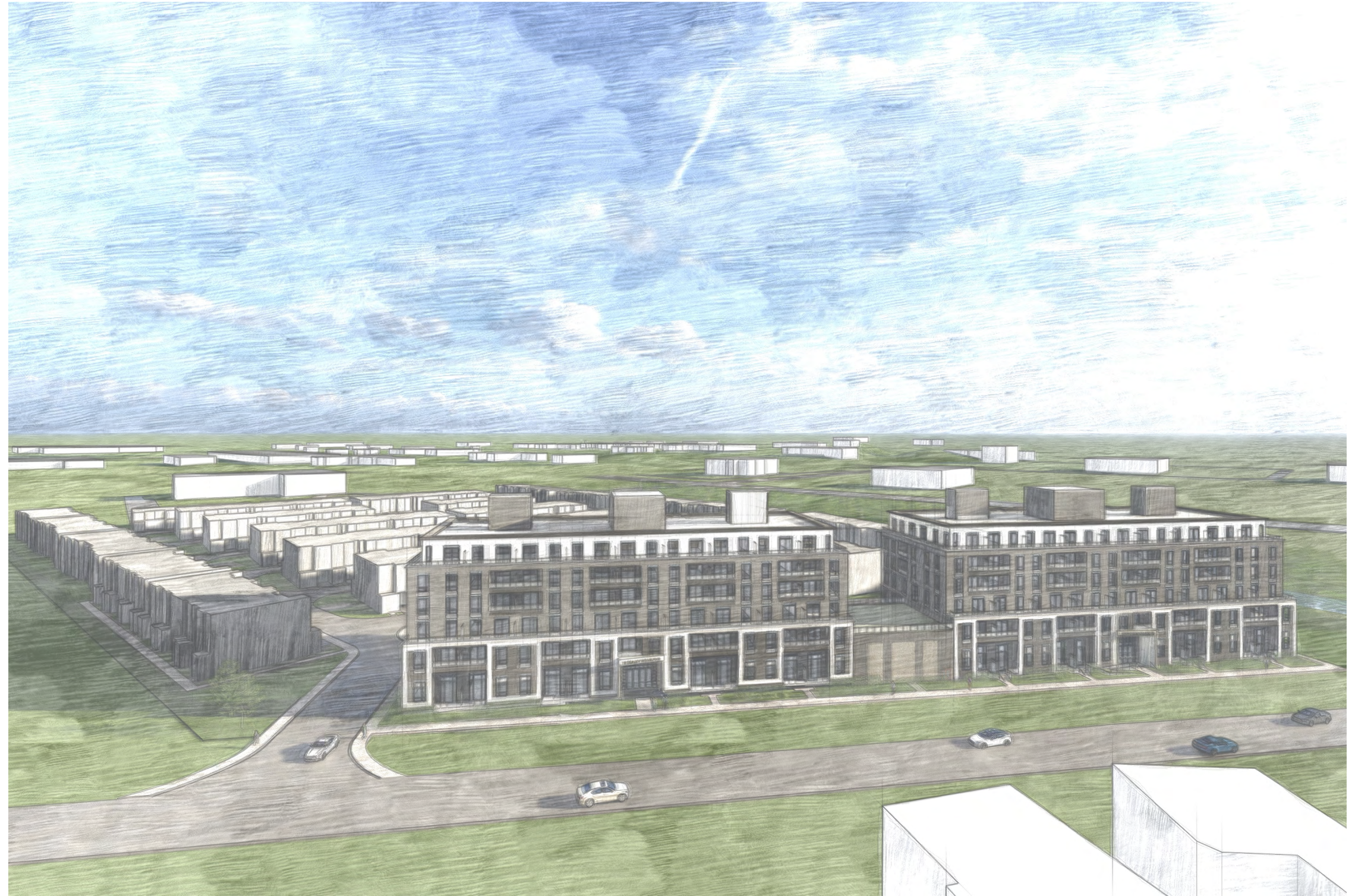
The design solution takes into consideration the site's context and potential. It will provide the local community a sense of place and unique urban spaces. The variety in building forms and architecture add richness to the community and provides affordable housing options that assist in the City's mandate to create higher density communities with access to local and regional public transit.

From a built-form and urban design perspective, the proposed buildings will compliment the existing residential fabric, by its high level of design and use of high quality materials. Appropriate setbacks, massing, height, and density of the development will further compliment these adjacent properties.

Architecturally, the consistent vocabulary and use of materials, colors, & treatment, unify the development into a cohesive enclave.

Furthermore, the proposed design will make substantial enhancements to the existing site and provide an urban streetscape with the additional landscape features and linkages that will provide continuity to the street edge and enhance the existing urban environment.

Lastly, the proposed sustainable design features of the project will ensure that the City of Barrie's commitment to environmental stewardship is continually being addressed, and provides development that will promote environmentally responsible design.



AERIAL VIEW FROM ESSA ROAD

SECTION 4.3 APPENDIX

4.3.1 SHADOW STUDY

Refer to the Shadow Study Document

