

Prince Edward Island Housing Corporation

HILLSBOROUGHPARK COMMUNITY DEVELOPMENT PLAN

Final REPORT Dec 2022

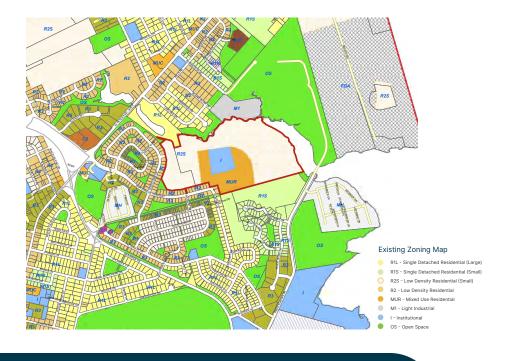
Prepared by:

Fathom

Welcome

What is this event?

The purpose of this event is to gather input on the park spaces as well as to address any questions or concerns regarding the proposed residential development at the Hillsborough Park site. The goal of this plan is to create a dynamic, and affordable community for all Islanders that is a model of ecological planning and 'Complete Communities' design.





What happens next? Rezoning to CDA

Public Open House August 10th, 2023

Planning Board Meeting Public Information Meeting Public Hearing, 1st Reading with Council Final Reading with Council, Re-Zoning Formally Approved

Dates to be Determined

Community Design Workshop

In addition to stakeholder consultation, we held two community design workshops in partnership with PEI's Department of Social Development & Housing on August 9th and 10th, 2022. The initial workshop was in-person, attended by 35 people, followed by an online workshop, attended by another 12 residents, that was live-translated in French.



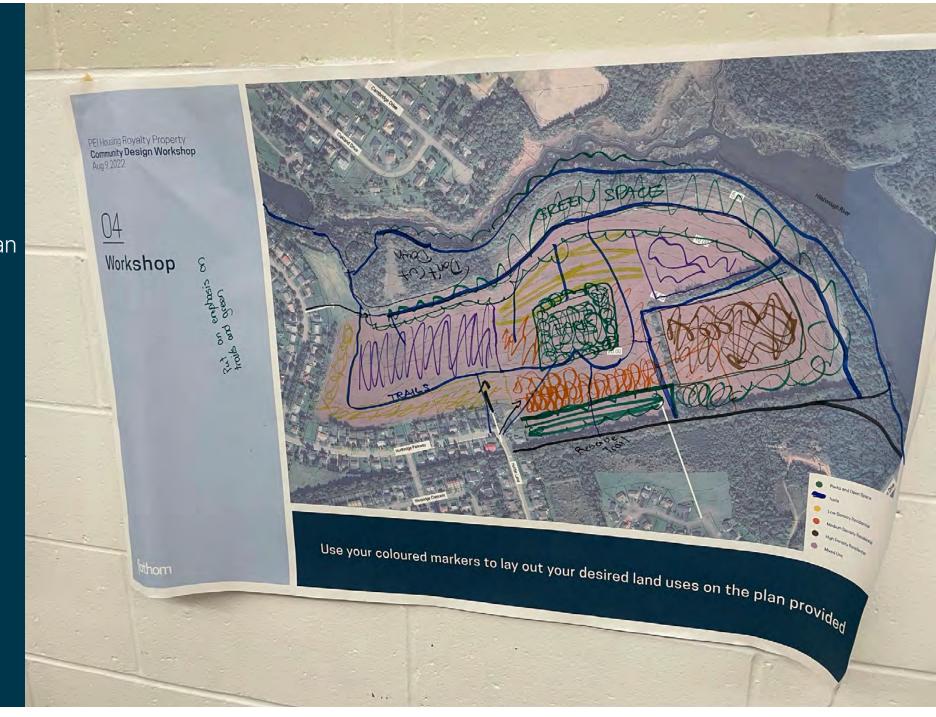
August 9, 2022 Workshop



- Trails and Open Space
 - Graduated Density
 - Mixed Use
 - Connectivity
 - Green Space



02 Master Plan



Site Analysis

This chapter outlines the existing conditions which have given rise to the geography, landscapes, flora and fauna of the study area today. Our social and ecological analysis forms the basis for the eventual layout of the proposed master plan by avoiding the sensitive areas, increasing the density in more robust areas, preserving the hydrological character of the watershed, mixing density nodes and parks throughout the various phases of the development, maximizing view sheds of the river valley and ensuring the highest connectivity (walking, cycling, vehicles) between neighborhoods.

21 HERITAGE

Hillsborough Park History

The Hillsborough Park neighbourhood was amalgamated with Charlottetown in 1995 along with several other communities. In the 1770s, the site was part of the Charlottetown Royalty lands. Royalty Lands were distinct from the 67 Lots of Prince Edward in that they were intended to provide farmland for the early Charlottetown citizens.

The site is adjacent to an inlet of the 45km long Hillsborough River, known to the early Epekwitnewag Mi'kmag as Elsitkuk, meaning "running close by high rocks." For thousands of years, the Epekwitnewaq Mi'kmaq people fished, travelled, and lived along the Elsitkuks' banks; in 1997, the river was designated a Canadian Heritage River due to its cultural significance. Today. this river serves as an important tidal estuary with salt marshes providing habitat and breeding areas for thousands of birds, such as American black duck and willet. The river was designated as a "Canadian Heritage Rivers System" in 1997. It is one of 41

designated heritage rivers.

By the 1720s, early French and Acadian settlers established communities along the river; however, in 1758, many Acadians and French were deported, with some later returning. In 1767, the British split Prince Edward Island' into 67 lots each comprised of approximately 20,000 acres. The lots were awarded to proprietors through a lottery, which was then rented to settlers. What is now Hillsborough Park neighbourhood was used for agricultural purposes. Due to the land being used for primarily agricultural purposes, the site would have been a part of the Charlottetown Royalty land, and was not included in one of the 67 Lots. After many unsuccessful attempts, measures to dismantle this proprietor/tenant system were not put in place in PEI until 1851. It was not until 1875 (now part of the Canadian Confederation) that the largest landowners could be bought out through the Land

During the mid-19th century, the river itself served as an important water highway and shipping route for transporting



produce, livestock, and timber, and other goods and resources to foreign markets. Shipbuilding along the Hillsborough River also occurred during this period and over 600 vessels were built on the Hillsborough. However, by the 1880s, the shipbuilding industry had collapsed and many of the timber resources of the regional Acadian forest were already depleted and sold.

Wright family property

This site is situated on a large portion of the former Wright family farm property along the present-day Wright's Creek. A historic cadastral map of the Charlottetown Royalty shows that this site was owned by Benjamin E. Wright, a son of George Wright, in the year 1880.

Today, a heritage property farmhouse remains in Belmont - a

and site. Based on birth records of the Wright children, this house was likely built between 1810 and 1812 by the Honourable George Wright, G. Wright - a colonial administrator, surveyor, and militia officer. Typical of Regency architecture, the home would have been sited for a remarkable view of the Hillsborough River at the time; however, recent development has obstructed the view. The Wright family owned a large parcel of farmland which extended to the present-day Wright's Creek. The Wright family and the Belmont neighbourhood exemplified the lifestyle of the wealthy who benefited from the Charlottetown Royalty lands

neighbourhood located close to the Hillsborough Park neighbourhood

George Wright married Phoebe Cambridge, whose parents, John and Mary, were also landowners and successful business owners. The families partnered in business, starting a brewery and grist mill at Bird

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Island Creek, now known as Andrew's Pond and Wright's Creek. This would have been the first brewery on Prince Edward Island. On the northeast side of the creek is Bird Island, which is also a designated heritage site due to its significance as an industrial site. However, none of the original buildings remain.

2.2 PRESENT DAY CONDITIONS

Surrounding context

The site is located within Charlottetown's East Royalty neighbourhood, which is one of the largest developable tracts of land remaining in Charlottetown. The Charlottetown's Official Plan envisions developing East Royalty into six neighbourhoods: each neighbourhood should be developed to encapsulate the concept of a five-minute walk. For the site to meet the requirements for a five minute neighbourhood, it is essential the concept includes institutional, open space, and retail opportunities Secondly, the proposed development must enhance connectivity throughout the surrounding neighbourhood and downtown Charlottetown by connecting to existing roads and expanding the active ransportation networks wherever possible

There are several schools and daycares surrounding the site (L.M. Montgomery Elementary School, École FrançoisBuote, Sherwood Elementary School, Royalty Kindergarten, and Carrefour de fisle-Saint-Jean) within a 2km radius! Charlottetown Rural High School is located within an 3km radius from the site's center. However, to be considered walkable. elementary schools should fall within a Tkm radius, and high schools should fall within a 2km radius respectively.

Major grocery stores, downtown Charlottetown, Holland College, and the University of Prince Edward Island are located over 45 minutes away, and are ultimately not considered a walkable distance. These destinations are drivable, but take approximately the same time as walking using transit. Building housing in likely incentivizing Charlottetown's transit authority to implement more transit routes to connect to the site to the downtown area and major amenities.

The site connects to the surrounding area and downtown through a system of active streets and nature pathways. There is an additional stretch of recommended routes separate from traffic along the site's eastern edge; however, these trails connect to an existing network stretching along Charlottetown's shoreline, and may not be as convenient as active

Charlottetown's Existing and Proposed Trails Plan suggests a proposed trail along the site's southern and northern

boundaries that would connect the site to the downtown area and major amenities. If these were implemented in the future, it would be extremely beneficial to the site and the surrounding community.

Existing neighbours

The site is currently surrounded by the East Royalty neighbourhood. Housing mostly consists of single family homes built in the style of one-to-two storey bungatows. The future concept should be mindful of the surrounding neighbourhood, and the proposed density mirrors that of the existing neighbourhood along the site's estern and southern boundaries.

Hillsborough River, Wright's Creek, and Wright's Creek Nature trail form the site's north and eastern boundaries. Along the site's northern edge, a 100m buffer zone was established by the PEIHC working. with the Wright's Creek Watershed Environmental Committee in 2020. The Committee has worked to protect the existing woodland along the forest's edge, which mostly consists of Acadian goodland species. In recent years, the group has expanded the area with newer planting within the 100m buffer to enhance the existing buffer zone and promote the growth of historic Acadian forest

Charlottetown's Future Land Use Map proposes a bridge connecting the land masses along the site's eastern edge. This would promote traffic circulation along the site's perimeter, and offers an additional



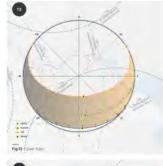
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opportunity for a future entrance to the site. Having a road network along the site's south-eastern boundary would enable healthy traffic circulation throughout the development.

Wright's Creek Nature Trail

The Wight's Creek Nature Trail passes along the site's northern and eastern sides along a channel that flows into the Hillsborough River, Wight's Creek. The area's surrounding affiliated wettlands are classified as brackish and marsh components. Further upstream, the creek becomes Andrew's Pond located to the northeast of St. Peter's Road (Boute 2).

In 2020, PEIHC approved a 100m (330°) buffer based on recommendations from a report written for the Whight's Creek Environmental Committee. The group has begun planting a mixture of trees and shrubs typical of an Acadian forest throughout the extant buffer zone. The Wright Creek Trail passes through a hardwood forest, located alongside a wetland. Tree species in this area include white spruce, red maples, white brich, yellow birch, balsam fir, and yellow birch, which are all characteristic species of the Acadian Forest. The site's remaining land is predominantly used for agricultural purposes.





2.3 BIOPHYSICAL ATTRIBUTES

Solar gain

The site receives the most amount of sunshine during the summertime, with an average of 15.5 hours per day. During the winter, the site receives the least amount of sunlight with an average of approximately 8 hours per day.

The sum's movement follows the site's southern perimeter, meaning south-facing portions of the building will receive the most amount of sunlight throughout the day. However, north-facing facades and areas located to buildings north of buildings will be cast in shade. The location of parks, plazas, and other open space areas should be located in southern areas, or areas that will not be impacted by shade to ensure user comfort.

Wind

The site's prevailing winter winds come from the west, with an average speed of 11 mph. Due to the wind's direction, it is possible residential buildings along the western portion - and especially buildings with west-facing frontages – will be exposed to colder stronger winter winds. To minimize exposure to cold winds, vegetated buffers should be preserved and enhanced throughout these areas, to reduce wind speeds, the proximity and prientation of multi-storied buildings must be considered to avoid creating wind turnels throughout the proposed development and surrounding neighbour/host.

Summer winds enter the site along its southwest and western boundaries, with an average speed of 10.3mph. Open spaces should be placed in areas where residents and visitors can optimize the cooler summer breezes entering the site from the southwest.

Similarly to considerations for winter winds, building orientation should be considered to avoid potential wind tunnels. However, during the summer/time months, breezes are encouraged to ensure thermal comfort. Micro-climatic strategies should be encouraged and implemented in later design strategies to optimize warmer summer winds in the sites final design.

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North
East
South
West
Existing 2m Contours

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8 to 6 makers 6 to 12 miles 12 to 18 moters 13 to 24 makers 15 to 24 makers 15 to 24 makers 15 to 24 makers 15 to 25 makers 16 to 25 makers 17 to 25 makers 16 to 25 makers 17 to 25 makers 17 to 25 makers 18 to 25 makers 18

2.4 ELEVATION

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Elevation range is visually depicted by the proximity contour lines, (refer to legend). Where contours are located closely together and there is sudden colour changes, the user will experience noticeable change in grade. Where contours are located far away from one another, the site will be flat or gently sloped.

The site ranges in elevation from 2m along the border of the Hillsborough River to a maximum height of 24m along the southern border between the site and the surrounding neighbourhood. In total, the site experiences a 22m change in

elevation (approximately 7 storeys). Due to the site's large size, the grade change is not readily noticeable. Overall, the site is fairly evenly sloped; it is unlikely there will be any significant grading challenges for the future development.

To accommodate the proposed medium and high density developments, the site will have to be cut to provide underground parking. As the introduction discusses, Wrights Creek and Hillsborough River were both significant areas to the area's PEI Mixmaq communities; consequently, an archaeological survey is recommended after the field has recently been tilled.

25 SOLAR ASPECT

Solar aspect refers to how a site's natural topography informs the amount of solar exposure specific portions of the site receives. Different colours depict specific types of sun exposure.

North-facing slopes (indicated by blue on the map), receive less sunlight compared to other cardinal orientations. The gentle sloping nature of the site means these north facing slopes are only slightly less it by sunlight than other parts of the property. Combined with the north-western winter winds, this site will benefit from the planting of an urban forest to mitigate the northern aspect and prevailing winter winds. The 100m buffer will eventually provide good wind buffering for this site.

While the majority of the site has a

north facing aspect, the remaining site area faces east. During the winter, these slopes will receive warm, morning sunlight.

Wind direction, speed, and solar exposure are all conditions that are vital in creating a final site design that will be ecologically successful and support the thermal comfort and well-being of the site's visitors and residents.

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Chapter 04

Precedents

This is a discussion about the different types of living based on the physical characteristics and the property attributes of a home.

Single Family Homes

A single family home is constructed on its own piece of land and has no shared property. The area around the building is private for the home owner to use. This is a type of home built for one family, person or household, with an undivided ownership. It is usually a property with one or two floors above ground (Fig.30 to 32).

To keep the homes in this development affordable, the following guidelines have been assumed

- Narrow lot housing on lots with 10-12m frontage.
- Narrow lot homes make it difficult to add garages unless. on flankage lots
- . Lot depths are reduced to between 40-45m deep requiring buildings to be pulled up close to the street.
- · Parking happens on the side of the unit instead of the
- . Stand alone garages can happen on the rear of the lot connected by driveways.







Semi and Duplex Homes

Semis are two different homes with separate owners and lots that are erected next to one another and joined by a common wall (Fig.33 and 34). A duplex on the other hand, is a house with two separate homes on a single lot, one above the other separated by

These two types of homes usually share a common wall or ceiling but the floor plan can vary. We have assumed 10-12m frontage per unit leaving room for a 1.5-2m sideyard. Lot depths range from 35-45m

Townhomes

Townhomes are individually owned multifloor homes. They are usually two or three stories high, connected to other similar homes by shared walls on either side of each unit (Fig.36). They are often tall and narrow in design. Townhouses are seen as a blend between a single family home and a condominium. Residents who own townhouses are generally responsible for both the interior and exterior unlike in apartment complexes.

Some of the features of a townhouse include:

- · A private entrance, which in some cases come with a small front lawn and a backyard as well.
- · A parking space in front of the unit
- . Lots are usually 7.3m x 40m













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Fig. 33 and 34 - Sami and Duplie Proc Fig. 35 and 37 - Milliam Directivy Housing

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Cluster Homes

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Cluster Homes are private properties built in groupings relatively close to each other usually with a pocket yard (Fig. 38 and 39). It is for people who wish to live on private land but would also like to enjoy access to the facilities one can find in a condominium like public gardens, playgrounds and swimming pools. Some of the advantages of living in cluster homes include:

- . Enjoy both privacy and the shared
- · Safety as the cluster would be on constant community watch:

Agrihoods

Agrihood is a type of housing development with integrated agricultural communities. Agricultural practices are interspersed throughout the neighbourhood and inspires the community's character and design (Fig.40 and 41).

Some of the features of an agrihood

- · Community growing plots where residents can grow yielding plants such as vegetables.
- · A range of housing types and densities.
- . The parking in most cases is underground as the lots above are usually used for agricultural practices.
- . A mixed use town center with a market

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High Density with Active Frontages

High density buildings are often mixed-use (residential and commercial) with active frontages that include store fronts, sitting spaces, and shaded walking corridors (Fig.42). Buildings here will range from 3 storeys to 10 storeys.

Institutional Spaces

Institutional areas are lots allocated for opportunities and services like education health and research activity that benefit the community. Schools (Fig.43 to 45), hospitals and clinics are a few examples of Institutional

Parkland and Open Space

Parks and open spaces can either be for recreation or for what the piece of land holds. Sensitive areas with wetlands that contain plant and animal species that are not to be disturbed by human activity and with water bodies that flood often are designated as conservation areas (Fig.48). They are lands which are usually maintained in their





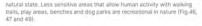












Fig. 46 to 49 - Park and Open Space Pro

Chapter 0

Master Plan

Following the engagement sessions held in August and September, the Fathom team assembled two preliminary development concepts and pro forma to present to the steering committee in late September 2022. The committee weighed the pros and cons of each option and then eventually selected a preferred option with some suggested changes to pursue further in the final master plan.

PRELIMINARY CONCEPTS

Concept 1

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The first concept locates the low density single family home uses to the west of the property and the higher density uses on the east and central portions of the property. The lower density portion would also allow for semis, townhomes and garden clusters (RT type uses that front onto park space rather than a street). All existing RT homes would be backed onto by future RTs and garden cluster homes. The existing walkway connections would extend into the site to create greater walkability to the new village square and Whight's Creek Greenway.

Both the Northridge Parkway and Hunter Lane extend into the property with three additional connections to Longbast Drive, Acadian Drive and Westcome Crescent. As Hunter Lane extends into the site, the entire east side of the road is reserved for a village square public park. This village square also extends eastward as a paved public piaza between some of the larger multi-unit buildings. The buildings which front on this park would allow ground floor commercial uses.

The existing hedgerow and walking trail from Hunter Lane to

Acadian Drive would be preserved in this plan.

The pro forms for this plan yields about 1007 units, with about 80% of the units being multi-family housing units and the remaining units being low density housing units. The overall density of the plan is about 12 units per acre over the 85 acres. The plan shows the 90 acre 100m buffer along the river and an additional 8.7 acres of parkland. The total parkland in this plan is almost half or 47% parkland. This amount of parkland is extremely generous.

The overall road length for this plan is 2-4km of road and all roads have included a 20m road right-of-way. Assuming a road cost of \$4,000/m i3.5m travel lares, sidewalk on one side, street trees on both sides, and water/sewer infrastructure), the roads will cost about \$8.5m or \$9500 per unit.

The multi-unit buildings range in height from 3-storeys to 6-storeys enabling all buildings to be constructed with wood if so desired.



Pro Forma: Concept 1

	Underground Parking	Surface Furking	Total Parking	Parking Ratio	Plate GPA (m2)	Ground Commercial	Places	Total GFA	Unite	Satu Areta Depailty	
Building A	53	-65	118	2.6			3	5,806	40	100m Buffer Area	
haking B	30	35	67	1.6	1,099	9	4	4,356	33	Other park Area Parkia nd Dedication Boad Length Boad Unit Cost Road Cost	
Building C	53	40	99	I.1	1,936		6	11.616	93		
Building D	53	86	-99	1.1			6	11,616	93		
Dalding E	80	36	76	1.7	1,457	14.	4	3,808	46		
Itselding F	- 40	40	30	1.7	3,452	-	4	5,808	46		
lialding G	59	30	29	1.3	- 2,057		- 4	AL128	- 66		- 5
halding H	. 59		139	1.0				9,912	70	Cost per Usiti	-1
Soulding I	50	701	124	1.6		- 1		0,912	79		
Dalding 7	59	50	100	1.9	1,815	14.	- 4	7,260	549		
balding K	79	72	151	1.7	2,785		- 4	11,132	. 89	51	
Italding L	86	160	135	1.7	1,694		.6	30,164	85	-	
Bul-Total	. 59	53	112	1.1	2,057		6	12,942	99	_	
	632	669			23,106			101,620	811		

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Multi Unit Buildings

There are 19 multi unit buildings shown in the plan, out of which, 4 are mixed-use (residential, commercial and office) with ground floor commercial uses surrounding the central park. The buildings range in size from 3-6 storeys and from 30 units to about 100 units.

Every multi is assumed to have at least 1 level of underground parking to minimize the amount of surface parking needed. There is a cost to underground parking from an affordability standpoint. Underground parking spaces cost about \$30k per space and surface parking costs about SSk per space. Tenants, however, have the choice of paying extra (usually about \$100 per month) for the benefit of an underground space. The plan shows about 820 underground parking spaces and 539 surface parking lots (5 scres) with an overall parking count of about 1395 spaces creating a parking ratio of 1.4 spaces per unit. If regular transit can be encouraged in this development, a parking ratio of 1.0 may be more suitable to encourage higher transit use and less whicie use. The less surface parking, the better for this development. There should be no parking requirements for this development. There should be no parking requirements for this development.



Village Square

The Village Square is located in the heart of the community, providing easy access to the commercial core and linkages to the main transit stop. The square may want to pay homage to the original Mirmagn ame for this area [Elistikuk] and its design could contain cultural references to the First people's. The Village Square will need to be coordinated with City Park staff but it could contain:

- Sport courts
- A storm water pond and fountain
- · Large performance areas for special events
- A grove of flowering trees to enjoy during the spring
- An accessible playground for the kids of the community.
- Other cultural areas for use in ceremony, or Pow wow/Mawiomi

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02 Master Plan



02

Master Plan

Aerial View



Village Square

What amenities would you like to see in the Village Square? Use sticky notes to provide input.



Illustrative rendering of potential Village Square concept









Precedent images show potential amenities such as a storm water pond and fountain, sports court, urban plaza or a grove of flowering trees



Parks and Trails

02 Master Plan









What do you envision for the parks and trails on the site? Use sticky notes to provide input.



100m Wright's Creek Buffer



Hillsborough River, Wright's Creek, and Wright's Creek Nature trail form the site's north and eastern boundaries. Along the site's northern edge, a 100m buffer zone was established by the PEIHC working with the Wright's Creek Watershed Environmental Committee in 2020.





Images of the Wright's Creek Watershed

<u>U4</u> Transportation

Study

Impact

Transportation Impact

- A Transportation Impact Study was prepared using industry standard methodologies and addressed vehicular, transit and active transportation operations.
- Traditional block pattern design promotes walkability, slows vehicles down and minimizes traffic shortcutting.

Land Use	Trip Code	# Units	Variable		AM Peak		PM Peak			
				Entering	Exiting	TOTAL	Entering	Exiting	TOTAL	
PHASE 1										
Single Family Detached	210	95	Units	18	52	70	59	35	94	
Townhouses/Duplex	220	16	Units	2	5	7	6	3	9	
Mid-Rise/1st Floor Comm.	231	124	Units	10	27	37	31	14	45	
		Phase:	1 Subtotal	30	84	114	96	52	148	
PHASE 2										
Mid-Rise	221	405	Units	35	100	135	104	66	170	
Mid-Rise/1st Floor Comm.	231	120	Units	10	26	36	30	13	43	
		Phase :	2 Subtotal	45	126	171	134	79	213	
PHASE 3										
Townhouses	220	40	Units	3	13	16	14	7	21	
Mid-Rise	221	411	Units	36	101	137	105	67	172	
		Phase	3 Subtotal	39	114	153	119	74	193	
TOTAL DEVELOPMENT	1 21	1 units	114	324	438	349	205	554		

| PHASE 3 | Townhouses | 220 | 40 | Units | 3 | 13 | 16 | 14 | 7 | 21 | Mid-Rise | 221 | 411 | Units | 36 | 101 | 137 | 105 | 67 | 172 | Phase 3 Subtotal | 39 | 114 | 153 | 119 | 74 | 193 | TOTAL DEVELOPMENT / TRIPS | 1,211 units | 114 | 324 | 438 | 349 | 205 | 554 |

What are your Transportation Concerns?

VEHICULAR TRAFFIC

- Multiple access points minimizes impact to local streets.
- Phase 1 primary access by Northridge Parkway with secondary access to Westcomb Crescent and Hunter Lane.
- **Phase 2** adds primary access to Acadian Drive via Longboat Drive.
- **Phase 3** adds new primary access direct to Acadian Drive.



Transit and Active Transportation Needs?

TRANSIT OPPORTUNITIES



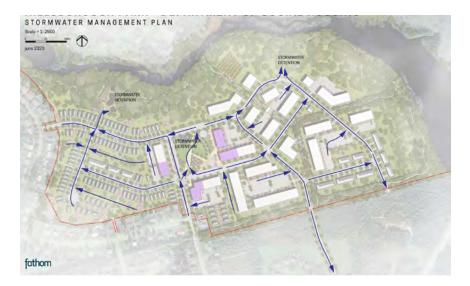


<u>O4</u>MunicipalServicing

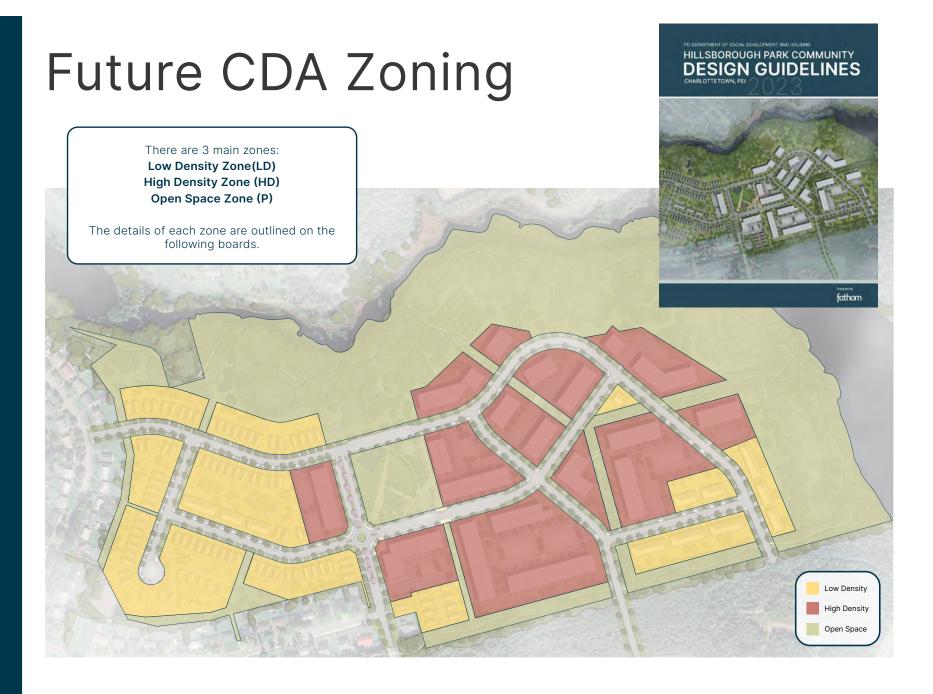
Servicing Schematics







<u>03</u> Zoning



03Zoning

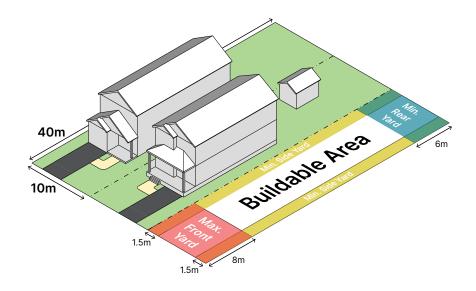
Low Density (LD)

DETAILS

- Intended to accommodate a wide range of low-density housing types including single detached, semi/duplex, townhome, and garden clusters.
- Maximum height of 10m (Up to 3 storeys)
- Each typology shall make up at least 20% of all dwellings in this zone in order to ensure a diverse mixture of housing types.



BUILT FORM REQUIREMENTS



BUILDING PRECEDENTS







Townhouse Dwelling Example



Cluster Housing Example



<u>03</u> Zoning

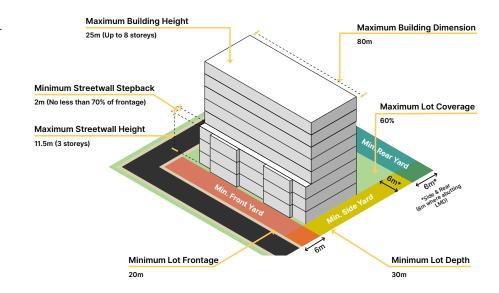
High Density (HD)

DETAILS

- Intended to accommodate mixed-use developments and multi-unit developments. These can include dedicated seniors housing or apartment or condo units.
- 25% of groundfloor shall be retail in Village Centre area
- Maximum height of 25m (Up to 8 storeys)
- A parking ratio of 0.7:1 must be met and underground parking is encouraged over surface parking except where commercial uses are present.



BUILT FORM REQUIREMENTS



BUILDING PRECEDENTS



Multi-Unit Dwelling Example



Multi-Unit Dwelling Example



Mixed Use Example

