

GRAND NIAGARA COMMUNITY

Urban Design Brief

Prepared for
Empire (Grand Niagara) Project GP Inc.



February 2023

Prepared by



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1.0 INTRODUCTION

WSP Canada Inc. (WSP) has been retained by Empire (Grand Niagara) Project GP Inc. to prepare Urban Design Brief for the proposed development known as the Grand Niagara Community (the "Subject Lands") in the City of Niagara Falls in the Regional Municipality of Niagara

The purpose and intent of this Urban Design Brief (UDB) is to provide an overview of the proposed Grand Niagara community structure, proposed land uses, private realm built form typologies, street network and road types, and the public realm park and open spaces to be located within the Subject Lands.

This UDB and the guidelines presented within them, should be read in conjunction with the draft Grand Niagara Secondary Plan's Appendix A: Grand Niagara Urban Design Guidelines (May 2018). Where there is a discrepancy between this UDB

and those urban design guidelines, the UDB criteria and guidelines will take precedent.

Generally, the UDB for the Subject Land is in keeping with both the Secondary Plan's and the Region of Niagara's Model Urban Design Guidelines (2005).

This UDB serves as an urban design manual with respect to the relationship of the proposed land uses and direction for built form, roads, parks and open spaces of the Grand Niagara Community.



Figure 1: Location of Subject Lands in Niagara Falls

2.0 SITE CONTEXT AND ANALYSIS

2.1 Context

The Subject Lands are located within the Grand Niagara Secondary Plan and are bounded by the Welland River to the north, Biggar Road to the south, Montrose Road to the east, and Crowland Avenue to the west. The Queen Elizabeth Way (QEW) is in close proximity further east of the community and Montrose Road.

A significant portion of the site is currently occupied by the Grand Niagara Golf Club. The surrounding areas include employment land uses and agricultural lands and immediately to the east are employment uses with frontage along Montrose Road (i.e. E.S. Fox Limited Constructors, Concentrix, Arrow Games, Niagara Falls Lightning Gymnastic Club).

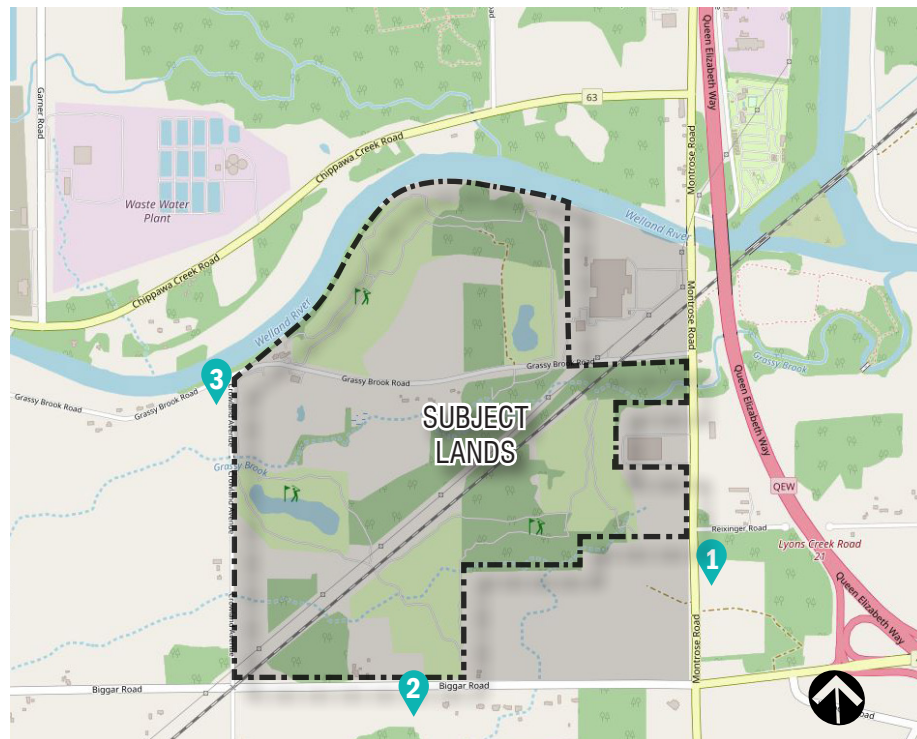


Figure 2: Subject Lands Context Map



2.2 Policy Context

This Urban Design Brief (UDB) has been prepared to be in keeping with the urban design intent and framework outlined in the Grand Niagara Secondary Plan's Urban Design Guidelines (Appendix 'A'). Besides these area specific guidelines it is understood that the proposed development is subject to the:

- Grand Niagara Secondary Plan (May 2018);
- City of Niagara Falls Official Plan; and,
- City of Niagara Falls Zoning By-Law.

As per the Official Plan, the subject lands are primarily designated a community area which permits an array of residential and institutional uses along with park spaces (Fig. 3). The additional land uses present are for mixed-use residential and employment land uses. The remaining lands are composed of lands associated with the natural heritage system. The UDB will consider these various land uses and their interface with adjacent land uses with respect to design guidance and criteria for the community's public and private realms.



Figure 3: Excerpt from Niagara Falls Official Plan - Urban Structure

3.0 DESIGN VISION & PRINCIPLES

3.1 Design Statement

The design vision of this Urban Design Brief is in keeping and builds upon those stated in Grand Niagara Urban Design Guidelines, namely:

"The vision for the Grand Niagara Community is of one that will develop as an environmentally sustainable, healthy, and complete community with distinctive, livable neighbourhoods, integrated and connected green spaces, efficient transportation, transit, trail system, services, and employment opportunities."

The proposed Grand Niagara development is designed around the protection of natural heritage areas which result in distinct neighbourhood areas (Fig. 5, page 6) in the community that are connected through trails and proposed park space as well as interconnected road networks with collector roads that can provide for and accommodate future transit services.

3.2 Guiding Principles

The principles established in this Urban Design Brief are informed by and support overarching principles outlined in the Grand Niagara Urban Design Guidelines which included guidance to:

1. Protect and restore natural heritage features
2. Promote the responsible use of resources
3. Promote place-making
4. Create a diverse community
5. Promote active transportation
6. Create a connected and integrated open space and trails system
7. Create employment opportunities
8. Manage growth
9. Promote green infrastructure and building

In addition to these broad principles, the proposed Grand Niagara community will also consider the following specific guiding principles:

- Create a complete community with a variety and mix of housing types ranging from low-rise residential to higher density multi-unit residential as well as institutional and employment land uses;
- Address the significant views onto and from the Welland River edges through a combination of built form design and orientation;
- Provide for a street design that provides views and connections into the natural heritage system;
- Provide for a street interface that supports an active trail system and connections between off and on road trail/cycling facilities;
- Address community entrances from Montrose Road and Biggar Road as gateways through the provision of more significant built form in terms of massing and/or height, architectural design and details, and through landscape features;
- Provide opportunities to create a mixed-use node at the Biggar Road entrance to the community and mixed-uses along Montrose to provide for interface and transition with adjacent existing uses;
- Integrate stormwater management features into community amenity spaces and allow for potential trail connections;
- In addition to maintaining the existing open space system, ensure that park spaces are within a 200m radius, 3 minute walking distance, from the majority of the residential areas; and,
- Create a high quality streetscape on all local roads and especially along the main collector roads (Streets 'A', 'Q' (Grassy Brook Road), and 'HH' to encourage active transportation (i.e. pedestrian circulation and cycling).

3.3 Development Proposal

The proposed development (Figure 4) is comprised of the following land uses:

- Low density residential uses;
- Medium density residential uses;
- Apartments (5 to 10 Storeys);
- Mixed-Use Residential (10 to 15 Storeys);
- Institutional (Schools);
- Employment Areas; and,
- Parks and Open Space

The proposed street network follows an intuitive hierarchy of collector and local streets with a modified grid layout and short block lengths. Where long residential blocks are proposed, cap end units will be introduced to visually shorten the block, encourage walkability and create a safe, pedestrian-led environment.

The range of housing types proposed create the conditions for future residents to "age in place" and have access to housing that meets various needs for all age groups. Higher density and multi-unit residential are located either along or near the collector road network or at entrances to the community to provide a strong visual and physical connection to the Grand Niagara community.

In particular, the Street 'A' collector road provides a significant community connector by linking key nodes within Grand Niagara, to the other significant collector roads (Streets 'Q' and 'HH') and to leads to the broad continuous open space edge along the Welland River frontage ensuring its visual and physical connectivity and significance to the community.

Finally, stormwater management ponds, parks spaces, and natural open spaces are integrated throughout creating significant green amenity space, trail connection opportunities and green vistas.



Figure 4: Proposed Grand Niagara Community Plan

3.4 Community Neighbourhoods

As per the Grand Niagara Urban Design Guidelines, the Subject Lands reflect that proposed community structure of four neighbourhoods and is specifically applied to the proposed development (Figure 5). The neighbourhoods are as follows:

Neighbourhood 1:

This is the northern neighbourhood that is comprised of a significant number of residential units that include single detached dwellings, townhouses, medium density and apartment blocks. It also includes significant public realm park spaces, stormwater management ponds and the Street 'A' special road section adjacent to the Welland River edge.

Neighbourhood 2:

This neighbourhood is southwest of neighbourhood 1 and is characterized by low-rise residential units and medium density blocks which are generally nested within and bound by the surrounding natural heritage open space system. It includes parkettes central to the neighbourhood which adjoin and transition to the open spaces providing for trail opportunities and more connectivity to green spaces.

Neighbourhood 3:

This is the eastern neighbourhood that includes one of two eastern gateway entrances from Montrose Road. It is defined by the rail line that traverses the Subject Lands, open space edges, Montrose Road to the east and hospital employment lands to the south. It is further distinguished from the other neighbourhoods as it is predominantly comprised of Mixed-Use and Apartment residential uses.

Neighbourhood 4:

This is the southern neighbourhood with the southern gateway entrance from Biggar Road. It is also defined by the rail line that traverses the Subject Lands, open space edges, Biggar Road to the south. It includes street townhouses and is distinguished from the other neighbourhoods by the residential mixed uses serving as a community node and gateway.

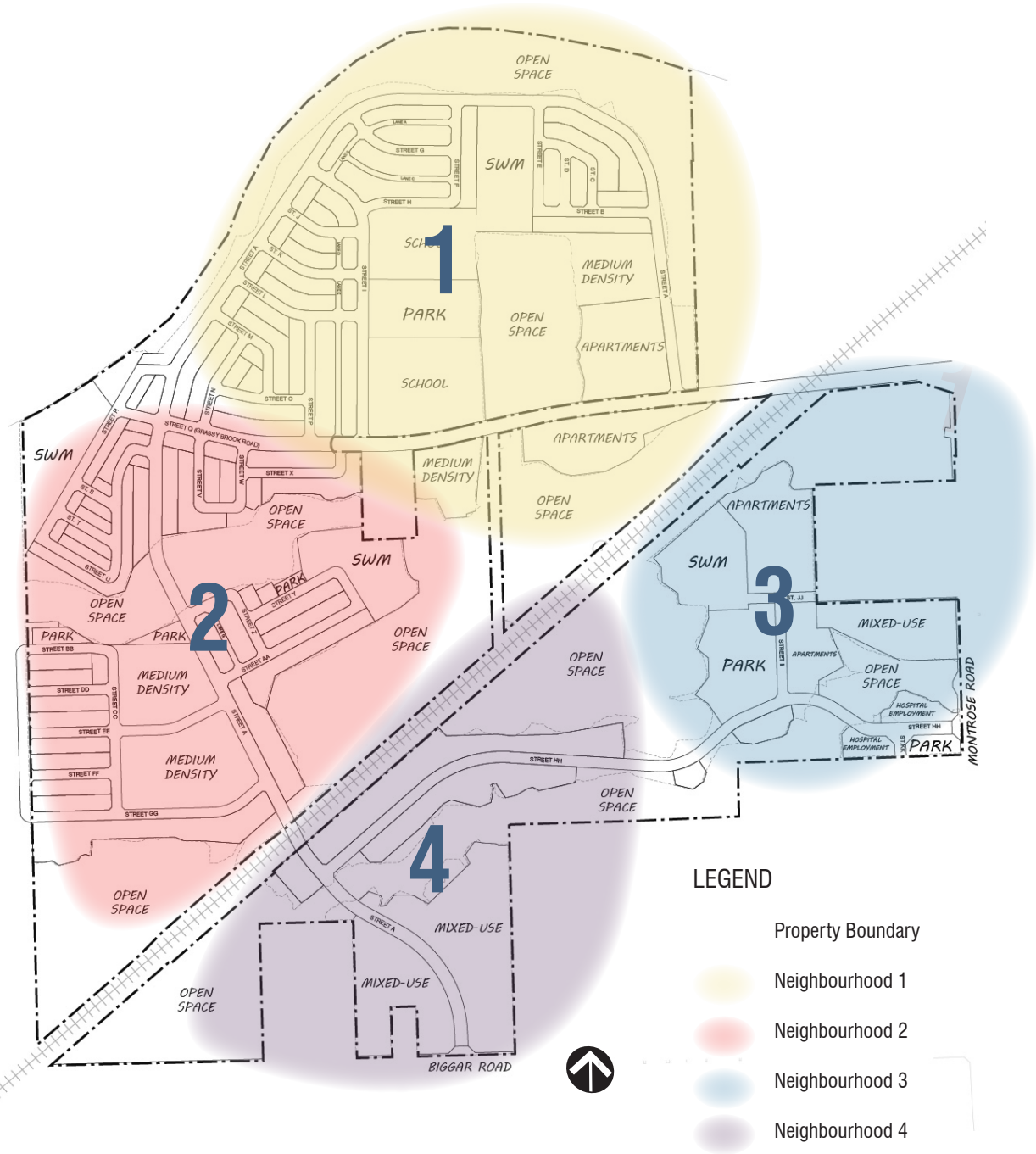


Figure 5: Proposed Community Structure Map

4.0 STREET NETWORK

4.1 Street Types & Circulation

The street network serves as a significant portion of the public realm and within the Grand Niagara community, three different road types have been identified along with lanes (Figure 6):

- 23.0 to 26.0 metre Major Collector Roads (Streets 'A', and 'Q' - Grassy Brook Road and the east portion of Street 'HH');
- 20.0 metre Minor Collector Road (Street 'A', north of Street 'Q' flanking the Welland River open space, Street 'I' and the west portion of Street 'HH');
- 18.0 metre Local Roads for the majority of streets throughout the community; and,
- 10.0 metre Lanes for Coach House residential blocks in Neighbourhoods Street "A" connects Neighbourhoods 1 and 2.

At the edges of the community are the regional arterial roads of Montrose Road and Biggar Road that are envisioned to have a right-of-way width of approximately 30.0 metres.

4.2 Arterial Roads

The arterial roads and their associated public realm boulevards provide the surrounding edges and entry points into the Grand Niagara community. Given their prominence and importance in providing view into the community, they will be addressed through enhanced urban built form and building interface as well as landscaping and buffering where identified. They will also provide important links and connectivity to the internal sidewalk network, provide access to transit and a link to the proposed bicycle facilities, in the community. Key intersections with Montrose and Biggar Roads to the Collector Road system will be treated as gateway entries into the community.

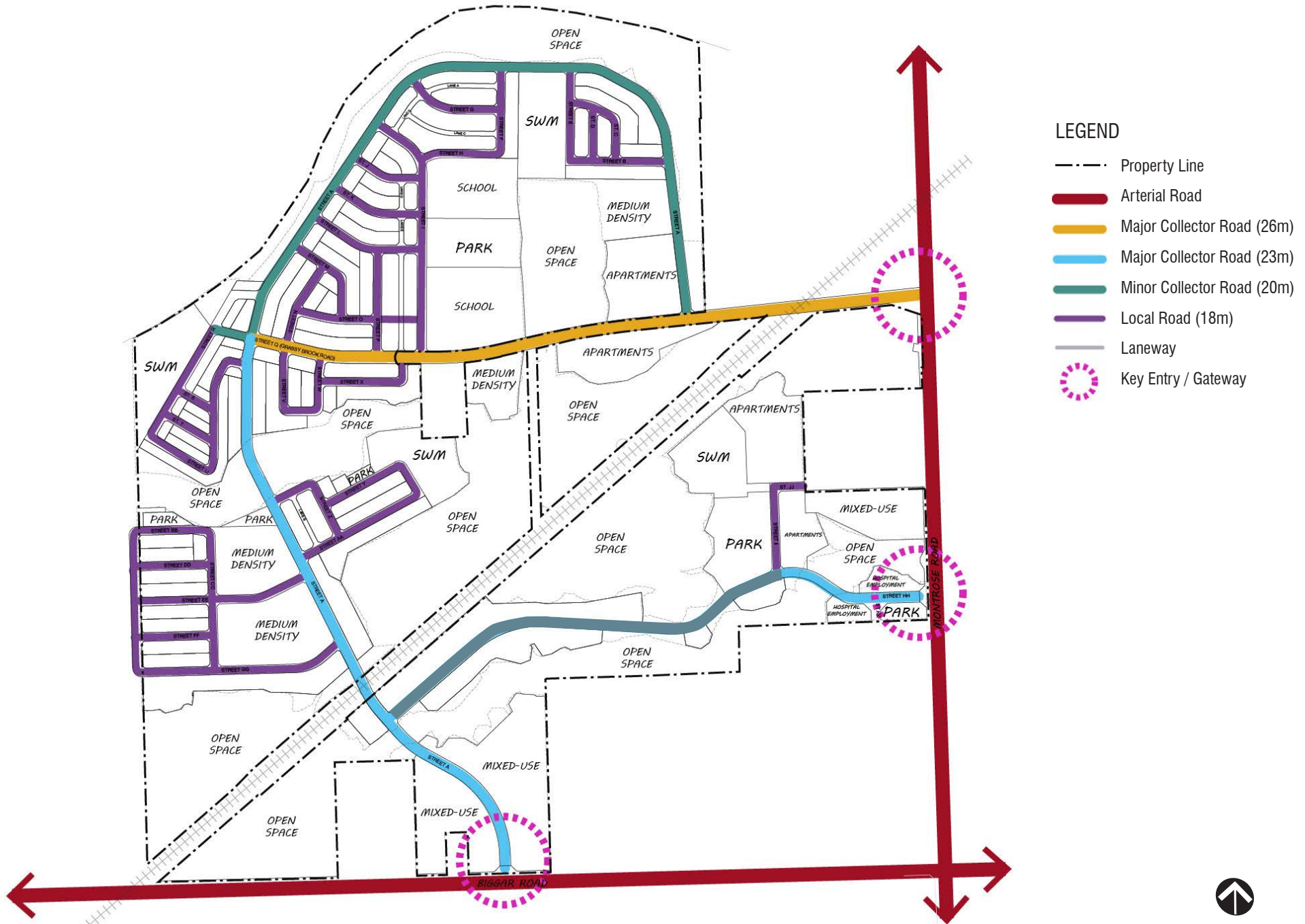


Figure 6: Proposed Street Network

4.3 Major & Minor Collector Roads

Proposed major and minor collector roads will facilitate movement through the community by connecting arterial roads to the finer grain of the local street network while also linking the array of green amenity spaces, parks and schools. Collector roads will have cycling and pedestrian infrastructure, such as multi-use pathways, bike lanes and sidewalks, on both sides of the right-of-way to enable safe and convenient movement for pedestrians and cyclists on these key routes. Collector roads within the community are all designed to accommodate at least two lanes of vehicular movement that can support potential future bus routes.

Collector road entrances from arterial roads to the Grand Niagara community vary in their right-of-way widths in order to match existing street treatments and widths at the proposed intersections. The 23.0 to 26.0 metre major collector road right-of-way width will typically include (Figures 8 and 11):

- two 3.5 metre wide travel lanes with 2.4 metre layby parking spaces on both sides of the road or on one side of the road for the 23.0 metre collector road;
- 1.8 metre defined cycling lanes on both sides of the road; and,
- 5.0 to 5.3 metre pedestrian and planting boulevards on both sides of the road that include a 1.8 metre sidewalk.

The 20.0 metre Street 'A' minor collector road right-of-way width will typically include (Figure 13):

- 8.5 metre roadway with 2 travel lanes, shared cycling on the residential side and parking layby provided on the open space edge of Street 'A';
- 4.7 metre pedestrian and planting boulevard on the residential side of Street 'A', that includes a 1.8 metre sidewalk; and,
- 6.8 metre multi-use and planting boulevard on the open space edge of Street 'A', that includes a 3.9 metre multi-use path.

The following right-of-ways are proposed for the collector roads in the following neighbourhoods:

Neighbourhood 1

- Major Collector Road Street 'Q' (Grassy Brook Road) is 26.0m right-of-way running east to west (orange) connecting Montrose Road to Street 'A';
- Minor Collector Road Street 'A' is a 20.0 metre right-of-way running north starting from Street 'Q' (teal) proceeding north along the edge of the Welland River open space edge and loops back south to Grassy Brook Road (Street 'Q').
- The local road network is illustrated to indicate its relationship to the surrounding collector roads.

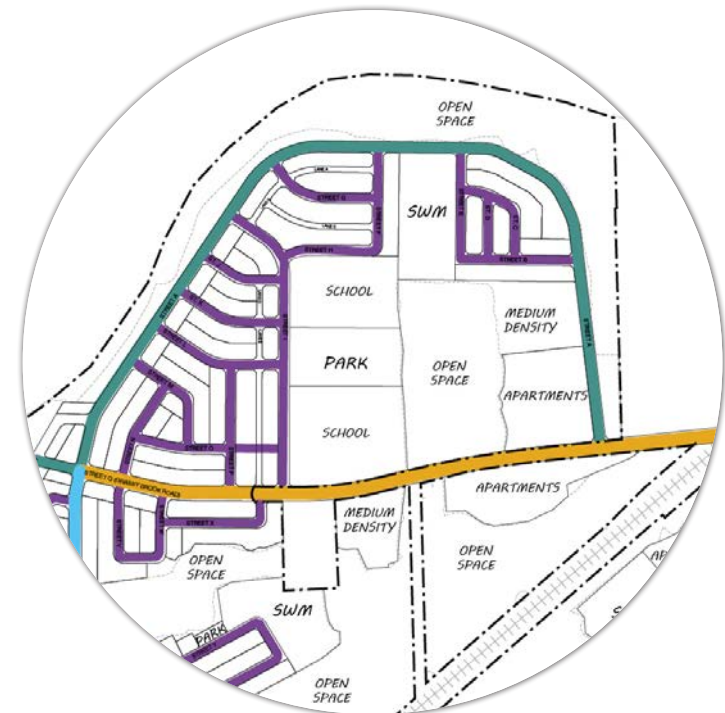


Figure 7: Neighbourhood 1 Road Network

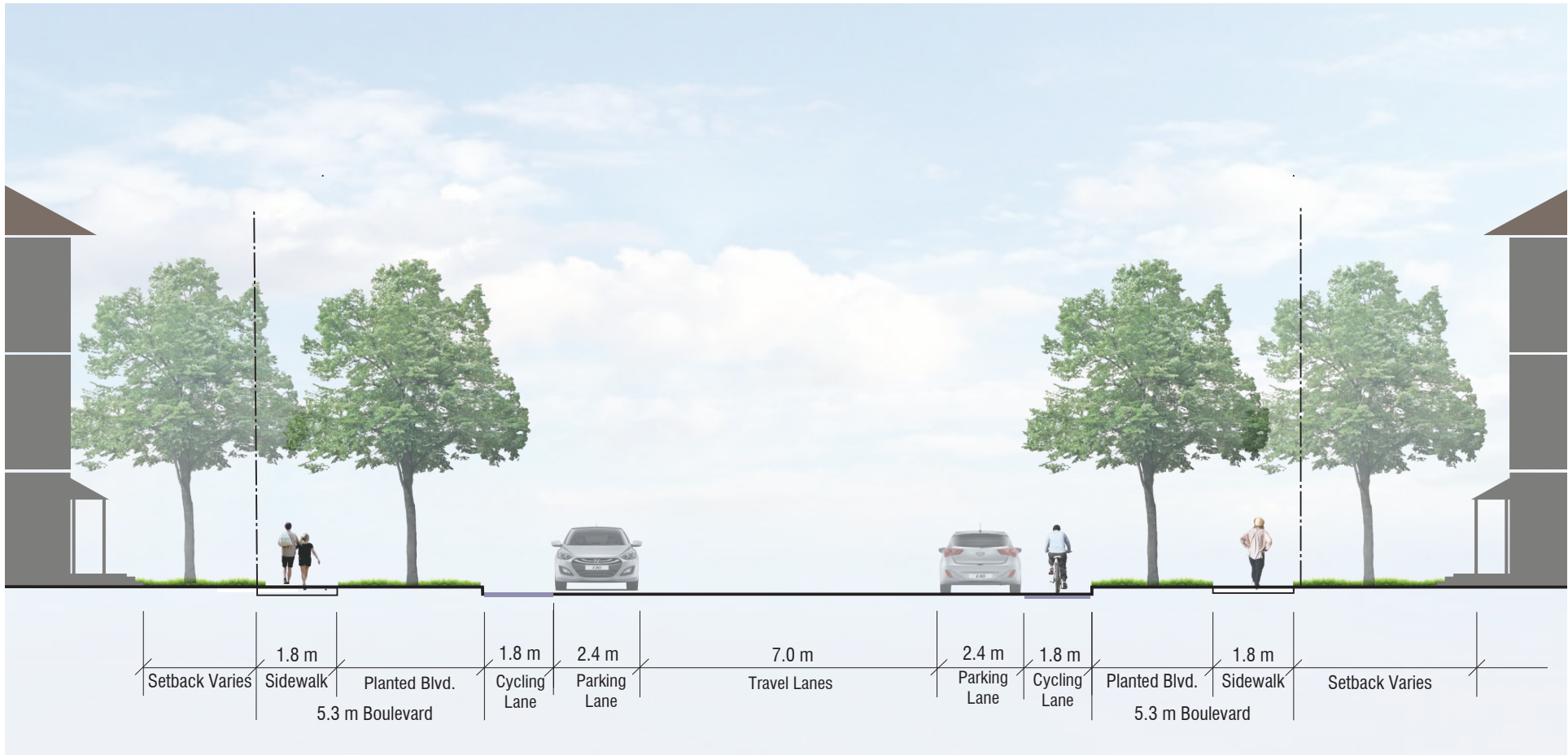


Figure 8: 26.0m Major Collector Road

Neighbourhood 2:

- Major Collector Road, Street 'A' south of Street 'Q', running north to south (orange) is a 23.0 metre right-of-way that is proposed, is the main spine in the neighbourhood and continues south to Biggar Road through Neighbourhood 4.
- The neighbourhood is predominantly comprised of a local road network and the figure below illustrates indicates the relationship with the Street 'A' collector road.

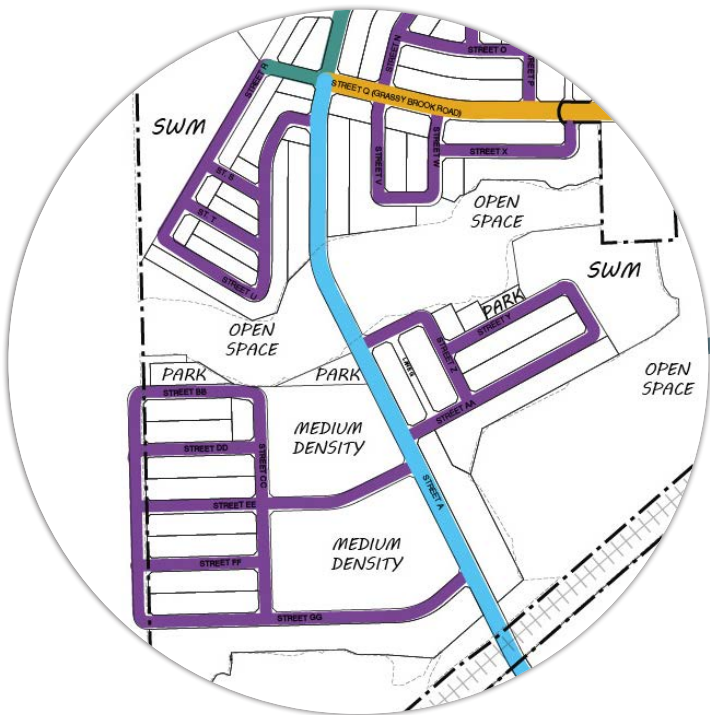


Figure 9: Neighbourhood 2 Road Network

Neighbourhood 3:

- Major to Minor Collector Road (23.0 to 20.0 metre) right-of-way proposed for Street "HH", running east-west from Montrose Road to Street 'A' in Neighbourhood 4 connecting the two neighbourhoods.
- The intersection with Montrose Road introduces the second entry / gateway from Montrose into the community.
- One Local Road provides access to the neighbourhood park and the Apartment land use blocks.

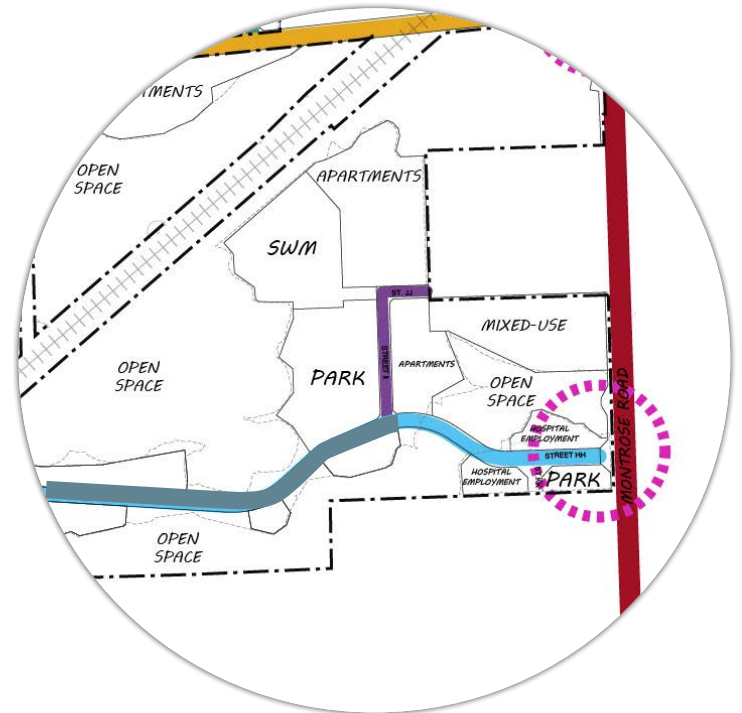


Figure 10: Neighbourhood 3 Road Network

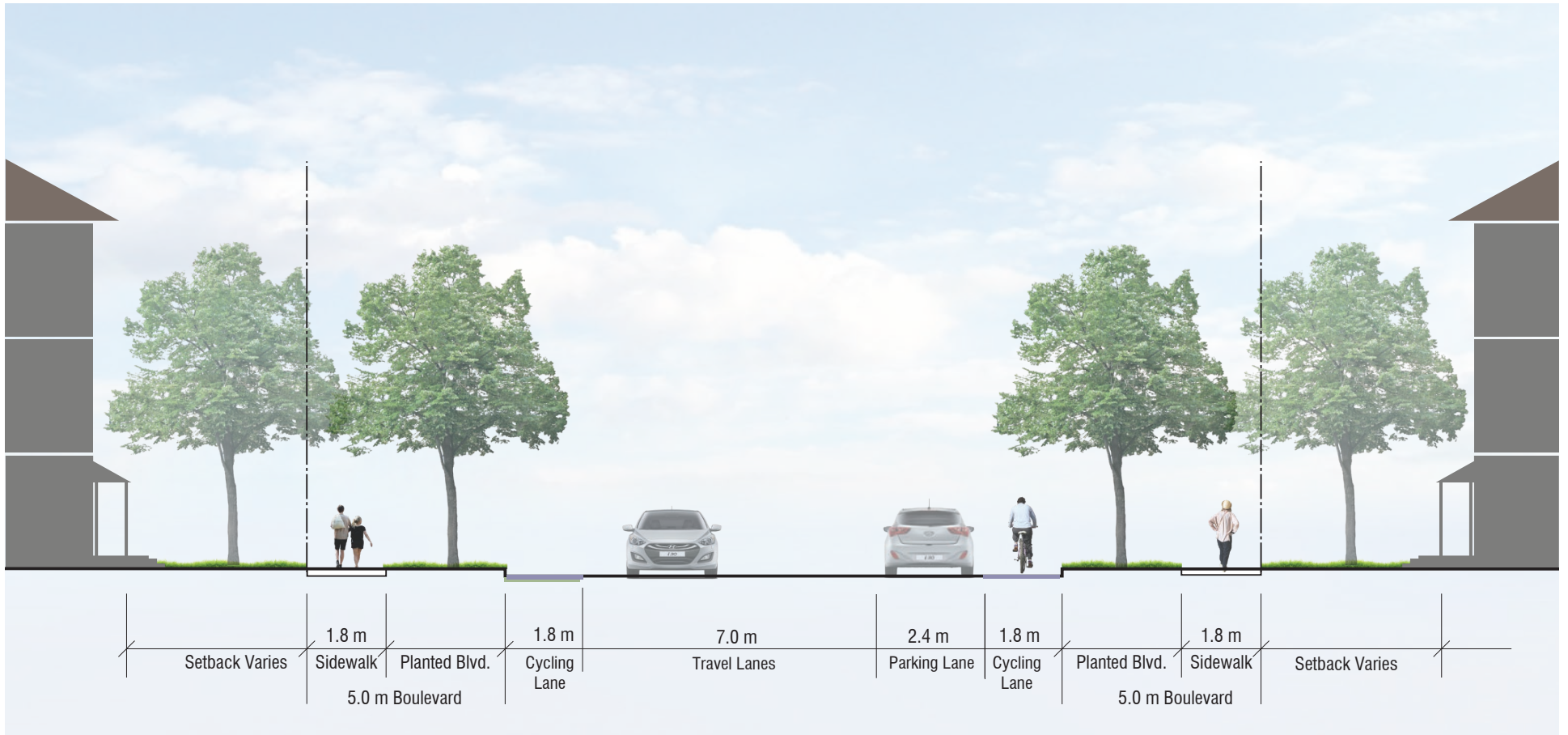


Figure 11: 23.0m Major Collector Road

Neighbourhood 4:

- Major Collector Road, Street 'A' is a 23.0 metre right-of-way running south to north and provides a connection from Biggar Road at the south edge of the community to Neighbourhoods 2 and 3
- The intersection of Street 'A' with Biggar introduces the third significant community entry / gateway and the only one from Biggar Road.

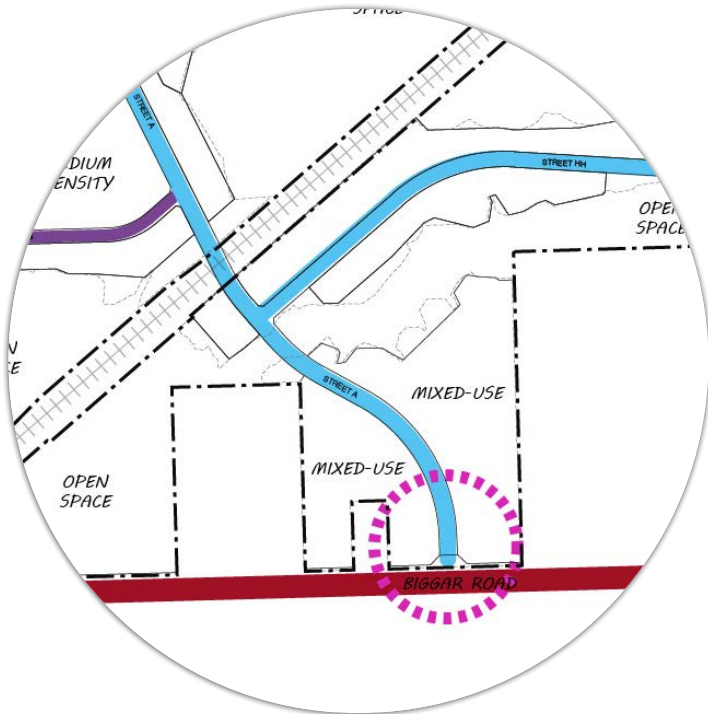


Figure 12: Neighbourhood 4 Road Network

4.4 General Guidelines for Collector Roads

The following general guidelines will apply to the collector road network proposed for the Grand Niagara community:

- The design of these roads will accommodate a more conventional street section that addresses pedestrian and vehicular circulation to access residential and mixed-use buildings.
- They will employ a “complete streets” approach that supports active transportation (walking, cycling and transit) as well as shared street designs, where possible.
- Location of main building entrances shall include direct sidewalk connections and ensure they are flush with the public sidewalk.
- Individual detached residential driveway accesses onto collector roads shall be limited wherever possible. Where they are proposed, they should be combined or paired with the adjacent building or property.
- Rear laneway or local road access is encouraged for uses fronting onto collector roads.
- A wide planted/pedestrian boulevard that can accommodate active transportation and street tree planting / landscaping are encouraged to support pedestrian and cyclist circulation

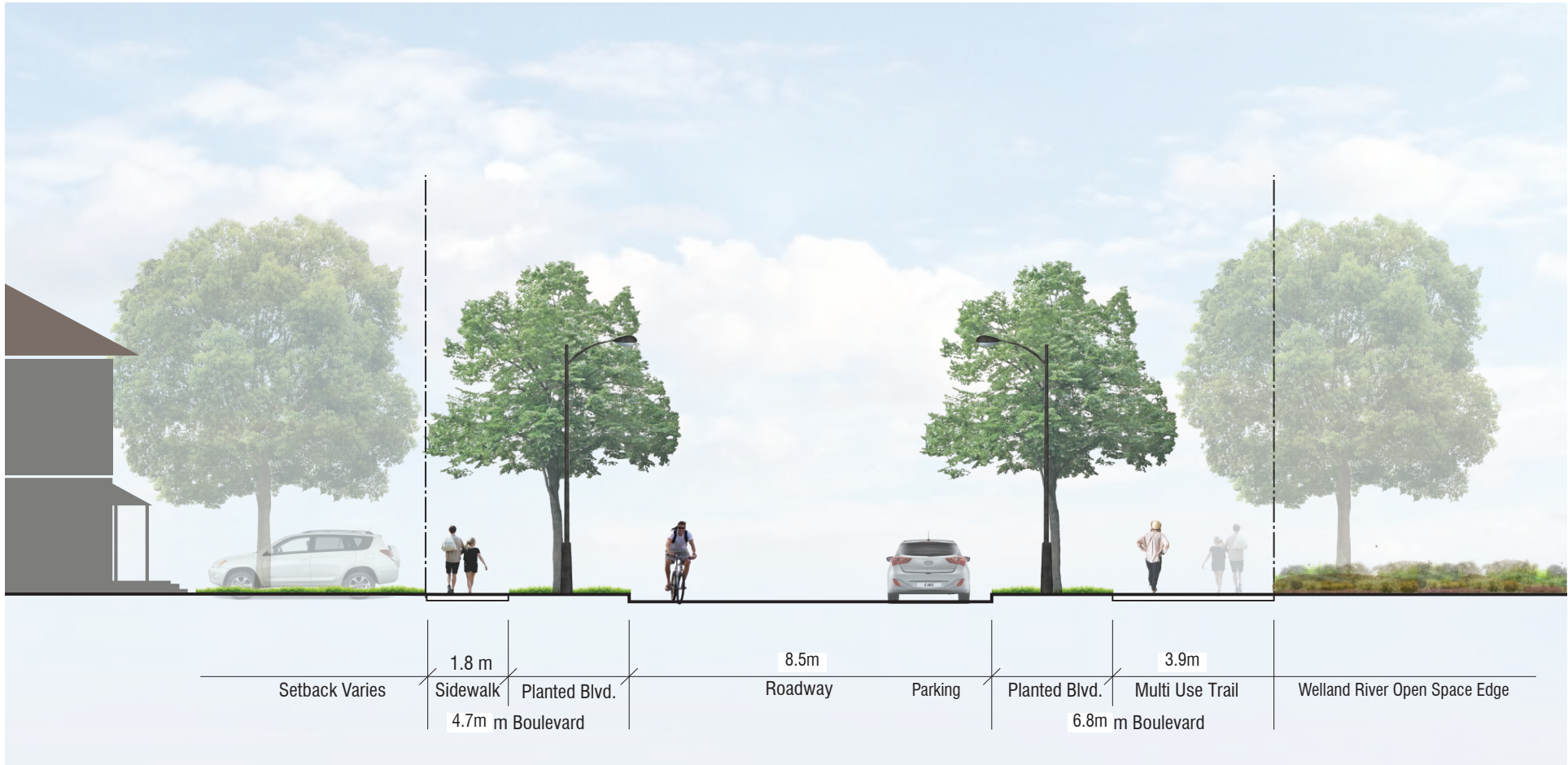


Figure 13: 20.0m Minor Collector Road (Fronting Welland River Open Space - Street 'A')

4.5 Local Roads and Window Streets

The local street network has been developed to respond to the existing topography and incorporates short block lengths that support walkability. Sidewalks and shared bicycle facilities provide both pedestrians and cyclists with direct and effective movement through the community. Local roads provide access between the collector roads and the internal residential blocks.

These roads will be predominantly composed of grade-related residential dwellings (e.g. detached, semi-detached, a variety of townhouses types, and medium density block). They will have a right-of-way width of 18.0 metres (Figure 14) and generally be comprised of:

- an 8.5 metre paved width that is comprised of two wide travel lanes and accommodating layby parking on one side of the road;
- the paved area of the road will allow for shared use with cycling; and,
- a 4.75 metre boulevard that can accommodate street trees and includes a 1.8 metre sidewalk on both sides of the road.

Window streets are proposed in all neighbourhoods, running parallel to the open space edges. They will also be designed with an 18.0 metre right-of-way to accommodate landscaping and layby parking, where necessary.

Neighbourhood 1:

The local road system in this neighbourhood connect to the adjacent collector road network especially Street 'A', and to the key park features and schools in the community. They will help to connect the proposed trail and pathways from open space areas into the community.

Neighbourhood 2:

The local roads in this neighbourhood are predominantly accessed from Street 'A' and provide numerous window streets that provide viewing vistas into the open space system that surrounds them.

Neighbourhood 3:

- One local road provides access to the neighbourhood park and the Apartment land use blocks.

Neighbourhood 4:

- There is no local road within the mixed -use block proposed for this neighbourhood. For these block, an internal private road system may be proposed once their built form typology has been established.

4.6 General Guidelines for Local Roads

The following general guidelines will apply to the local road network proposed for the Grand Niagara community:

- The roadway width shall be minimized to slow traffic and enhance walkability, but will still include space for parking on one side of the road.
- Driveways of front-loaded residential dwellings, where proposed, shall be paired to minimize sidewalk interruption, wherever possible.
- Residential dwellings can be set back from the street to allow for the accommodation of one car length for parking on driveways.
- Where local roads face onto open spaces and vistas dwelling facing onto them are encouraged to include full porches and/or balconies to address these key features.
- Street lighting should be pedestrian scaled.

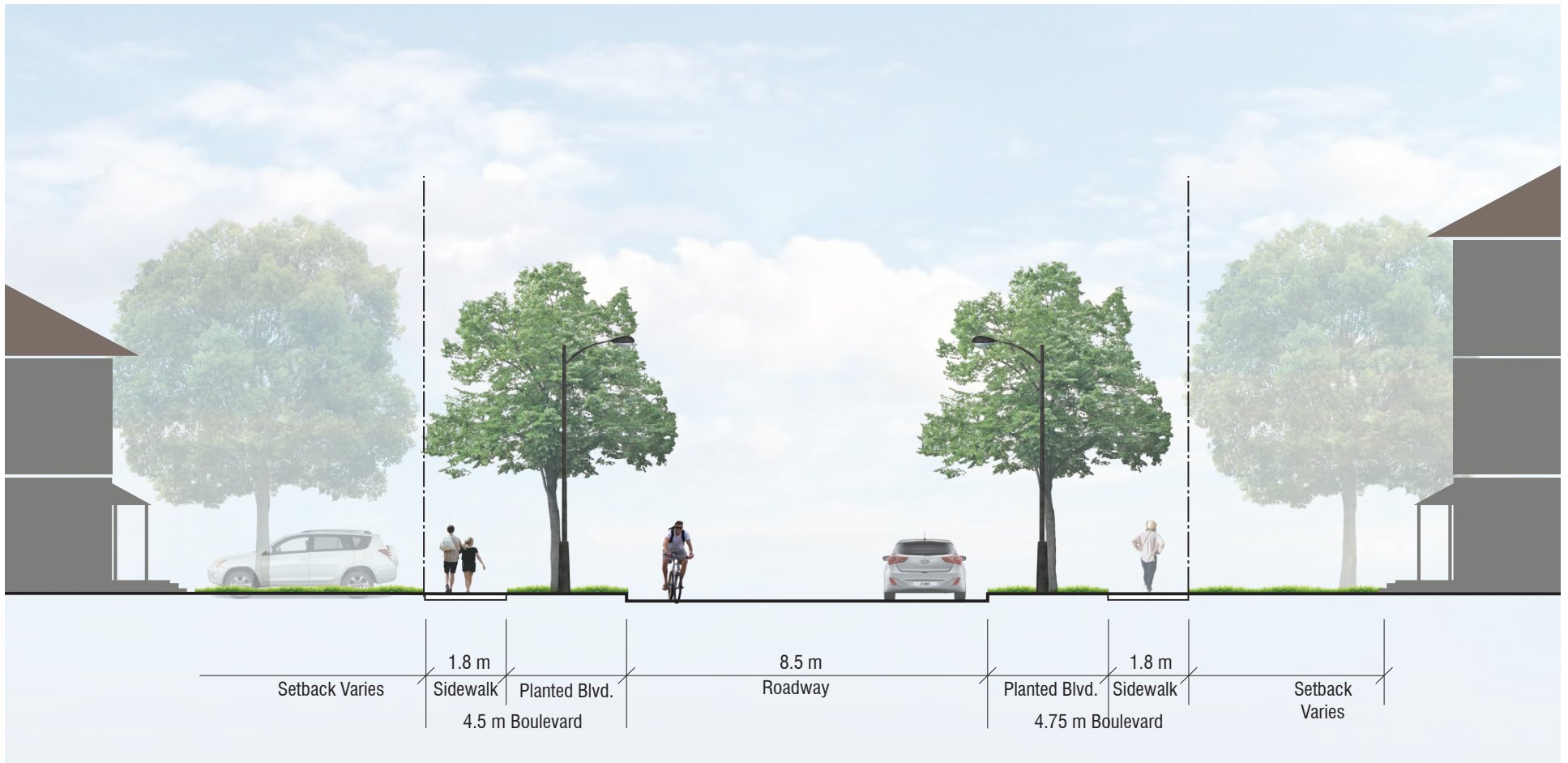


Figure 14: 18.0m Local Road

4.7 Lanes

Lanes have been proposed for the Townhouse / Coach House units proposed in Neighbourhoods 1 and 2. They provide vehicular access to garages or parking facilities for these lane-based residential dwellings, and are located at the rear of these dwellings. The lanes proposed for the Gran Niagara community are 10.0 metres in width and generally consist of:

- a 6.0 metre paved drive lane that can accommodate two car widths; and,
- 2.0 metre paved shoulders, on each side to accommodate pedestrians, street lighting, utility pedestals and wider emergency vehicles, when required.

4.8 General Guidelines for Lanes

The following guidelines provide general guidance for lanes:

- Lanes should be used to provide access to garages where front-facing garages are not preferred or permitted.
- A minimum right-of-way width of 8.5m should be provided for lanes for residential dwelling blocks.
- Wider lanes may be required for blocks sited with low-rise apartment, mixed-use, mid-rise, and high-rise apartment buildings.
- The use of permeable materials are encouraged in lane construction to assist in stormwater management within the community.
- Municipal addresses number should be provided on laneway garages.
- Coach houses above laneway garages are encouraged especially at corner lot locations.

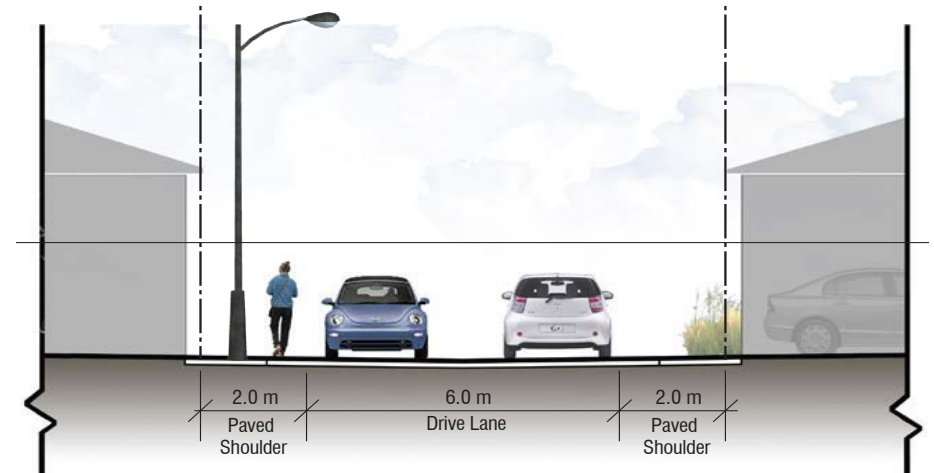


Figure 15: 10.0m Public Lane

5.0 OPEN SPACE NETWORK

5.1 Parks and Open Space

The existing open space network in the Grand Niagara Community is supported by four stormwater facilities (total of 8.78 ha in area) and six parks and parkettes (total of 5.23 ha in area), distributed to all neighbourhoods to ensure access to park amenities for all residents. The parks typically serve as a focus in each neighbourhood and have been located to ensure they are within a 5-minute walk from the majority of surrounding residential neighbourhoods (Figure 20).

Neighbourhood 1:

- A 2.0 ha central park, is the second largest park proposed in the Grand Niagara community, and is campused with a school, providing a focus for the Neighbourhood 1 community and supporting institutional needs (Figure 16). The park is located within close proximity of the open space.



Neighbourhood 2:

- Three parkettes, totalling 0.62 ha are located adjacent to open space and stormwater management features (Figure 17).
- The proposed 0.12 hectare eastern parkette is located adjacent to the stormwater management pond to enhance transition to the open space.
- Two parkettes (totalling 0.5 ha) are adjacent to the Open Space on the east side of Street 'A' to facilitate views and vistas and provide another point of transition and connection to the proposed trail system.



Figure 16: Proposed Park Co-located with the school (Neighbourhood 1)

Figure 17: Proposed Parkettes located adjacent to SWM & Open Space (Neighbourhood 2)

Neighbourhood 3:

- A 2.3 hectare park is co-located with the proposed stormwater management pond situated north of the collector road and serves as focal point for the neighbourhood. The park provides a green amenity space for the higher density Apartment blocks and the adjacent mixed-use block and single-detached residential and employment uses nearby.
- Another 0.3 hectare parkette is proposed directly south of the collector street road at the entry / gateway point from Montrose Road. This parkette provides green respite space for the hospital employment uses and also serves as a "green" gateway feature leading into the community.



Neighbourhood 4:

- Although there is not a distinct park space / block within this neighbourhood, the mixed-use blocks are envisioned to include a combination of soft and hard landscaped amenity space and urban plazas.
- This neighbourhood is surrounded by green open space and proposed trails provide another access to green amenities in the community as well as connections to parks in other neighbourhoods.



Figure 19: Proposed Park / SWM & Entry Parkette (Neighbourhood 3)

Figure 18: Open Spaces Surrounding the Mixed Use Blocks (Neighbourhood 4)

GRAND NIAGARA CONCEPTUAL OPEN SPACE PLAN



Figure 20: Proposed Open Space Plan and 5-min Walking Distance

5.2 Stormwater Management Facilities

Stormwater management facilities shall be both functional and serve as open space features. The following guidelines apply to stormwater management facilities:

- Native species and flood tolerant water's edge plants, with a mixture of woody vegetation, should be planted to stabilize banks of ponds.
- The perimeter of permanent pools shall be planted with emergent, strand and submergent species to improve the aesthetics and performance of the facility.
- Ponds are envisioned to blend with the natural landscape, therefore, geometric forms and standard slope gradients should be avoided in favour of organic shapes and land form in keeping with natural landforms in the area.
- Where there is a need to discourage public access to areas around ponds, living fences and barrier planting should be utilized in place of fencing.
- Ponds will not be fenced, but rather will be designed with trails, overlooks and signage so as to connect with the park and open spaces in Grand Niagara.
- Where possible, public walking/cycling trails should be integrated and connected to ponds and along stormwater channels.



Figure 21: Stormwater Management Ponds and Trail Connections

5.3 Trails and Walkways

A network of open space, walkways and pedestrian trails are proposed to weave throughout the community and into its neighbourhoods to enhance accessibility and promote linkages between parks, open spaces, naturalized stormwater management ponds, school and residential areas.

Walkways and trail heads are proposed in the Grand Niagara community to serve as linkages to the trail network. The walkway blocks are provided in strategic locations, improving the connection through existing open spaces. These blocks incorporate a 3.0 metre wide sidewalk with landscaping and fencing where required. Trails through the natural heritage features are expected to be gravel.

5.4 Views and Vistas

Views and vistas of the existing natural system of the Grand Niagara community are provided along various interfaces, including collector and local roads and parks adjacent to the open space system and the proposed naturalized stormwater management facilities of each neighbourhood. This visual relationship is critical for establishing a sense of place in the community, and reflects the community's unique identity, derived from existing green open space system. Views of the natural heritage open spaces are also provided along some of the community's collector streets and local streets, as indicated in Figure 22, for all neighbourhoods.



Figure 22: Views of the open space network are provided throughout the community

GRAND NIAGARA CONCEPTUAL TRAIL PLAN

LEGEND








-  Property Line
-  Open Space
-  Park
-  SWM Pond
-  On and Off Road Trails
-  Boat Launch
-  Open Space Vistas



Figure 23: Proposed Trail Plan and views vistas to open space



6.0 PRIVATE REALM - BUILT FORM

6.1 Proposed Dwelling Types

A wide variety of residential dwellings are proposed for the Grand Niagara community ensuring a mix and diversity of housing types that contribute to a complete community and the ability to serve the housing needs for a range of age groups and household sizes. Housing will generally be developed with traditional and contemporary architectural influences. The range of housing types includes:

- Single Detached Dwellings;
- Dual Frontage Detached Dwellings;
- Semi-Detached Dwellings;
- Detached Residential Dwellings with Coach House;
- Small Lot Cottage-Style Detached Dwellings;
- Townhouse Dwellings;
- Back-to-Back Townhouses;
- Medium Density Residential Blocks;
- Mixed-Use Residential (10-15 Storeys); and,
- Apartment Residential Blocks (5 to 10 Storeys).



Figure 24: Example of Single Detached



Figure 25: Example of Dual Frontage Detached



Figure 26: Example of Semi-Detached



Figure 27: Examples of Coach House



Figure 28: Cottage Style Detached



Figure 29: Example of Street Townhouses

6.2 Residential Dwelling Composition

The majority of the units proposed in the community will be comprised of medium density, mixed-use residential and residential apartment buildings. In addition, ground-related low rise residential comprised of single and semi-detached dwellings, townhouses, and back-to-back townhouse dwellings as well as cottage style and detached dwelling with lane accessed coach houses (see Figure 34). These low rise dwellings comprise the majority of the dwelling types found in Neighbourhoods 1 and 2.

The additional housing variety provided through the provision of medium density residential blocks, mixed-use blocks and apartment blocks earmarked for high density residential and found other neighbourhoods with the majority of these dwelling types found in Neighbourhoods 3 and 4. Townhouse dwellings comprise the ground-related residential found in these neighbourhoods. The following sections describe the types of residential and non-residential development envisioned within each neighbourhood.



Figure 30: Example of Back-to-Back



Figure 31: Example of Medium Density Residential Blocks



Figure 32: Example of Mixed-Use Residential



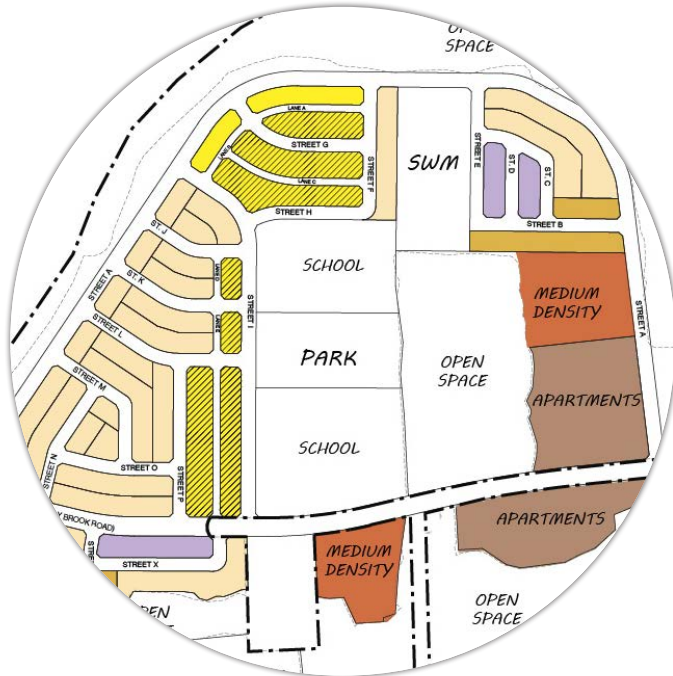
Figure 33: Example of Apartment Residential



Figure 34: Proposed Land Use Distribution

Neighbourhood 1:

- The proposed at grade-related dwellings in Neighbourhood 1 has been carefully distributed to ensure a high quality public realm. The single detached homes are proposed along the minor collector road (Street "A").
- Laneway Townhouses and Townhouses are proposed on the local streets located in the centre of Neighbourhood 1 surrounding the School blocks , central park, and open space. These conditions make for more attractive and varied streetscapes in a more compact form of housing.
- Back-to-back townhouses types are located between single detached dwellings stormwater management and open space feature in the northwest of the neighbourhood.
- Medium Density and Apartment blocks are located on the major collector road leading into the community and are envisioned to further enhance housing variety and type while providing density that support active transportation and future transit.



Neighbourhood 2:

- The majority of Neighbourhood 2 will be comprised of low rise residential and a significant mix of medium density residential uses, and a range of townhouses including front-loaded and lane-based types.
- A node of density is located at the centre of the neighbourhood adjacent to the major collector Street 'A'.
- A variety of townhouses are envisioned for neighbourhood 2. They are located on both side of Street "AA" and "Y" to further enhance housing variety while adding density and affordability in the proposed community.
- A unique aspect of the neighbourhood situation in the community is that all of the higher density dwelling types are surrounded by and abut the open space system and park space.

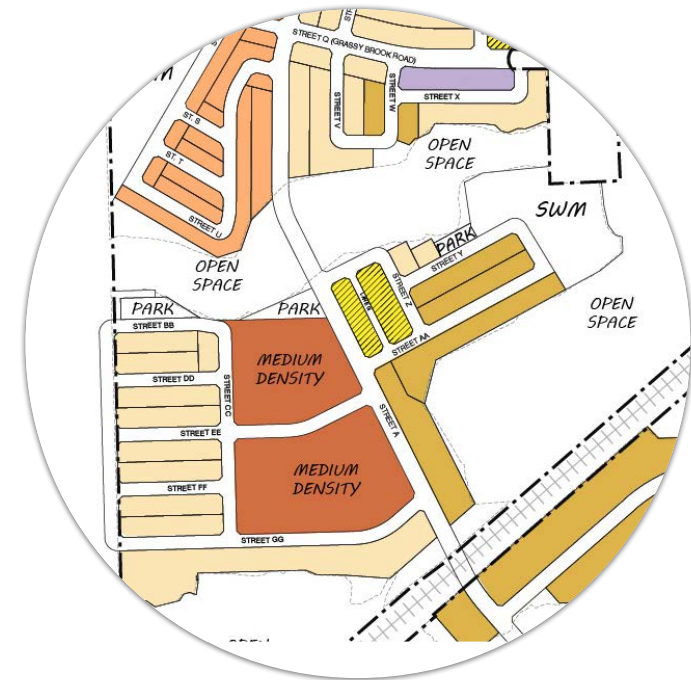
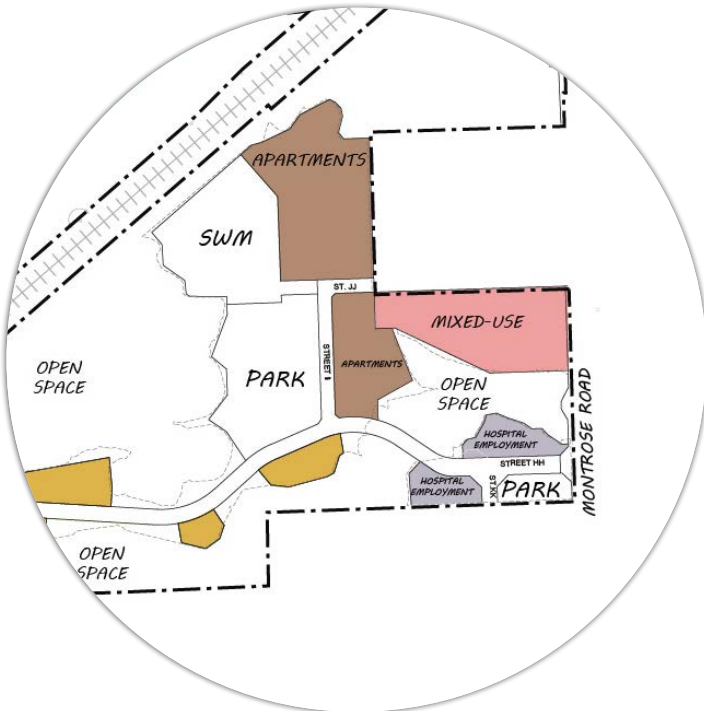


Figure 35: Neighbourhood 1 Proposed Residential Development

Figure 36: Neighbourhood 2 Proposed Residential Development

Neighbourhood 3:

- This neighbourhood is significantly different from the other neighbourhoods as it is predominantly comprised of high density apartment residential uses in blocks that predominantly abut the open space system, a significant park space and stormwater management pond.
- There are some low-rise residential uses located along the collector and that back onto the open spaces that surround the land uses in the neighbourhood.
- Mixed Use block is located west of Montrose Road bounded by the open space to the south and contributes to the higher density residential uses and compliments the apartment blocks.
- Unique to this neighbourhood is the provision of non-residential Hospital Employment uses at the entry into the community from Montrose Road. This use compliments the potential development of adjacent lands for future hospital uses and development.



Neighbourhood 4:

- The predominant land use is mixed-use residential which may include a variety of built form types including traditional mixed use with at-grade commercial uses and residential above, live-work units, and / or a grouping of buildings to form the node and south gateway entrance into the community from Biggar Road.
- Single detached units are proposed along the major collector road north of the mixed-use blocks. These proposed residential lots will provide a deeper back yard than is typical to address their location adjacent to natural heritage lands and to provide for buffering of impact on the open space.
- Townhouse units are proposed for a block just south of the rail line adjacent to Neighbourhood 1; it will terminate views from the that terminates views from the proposed major collector roads.

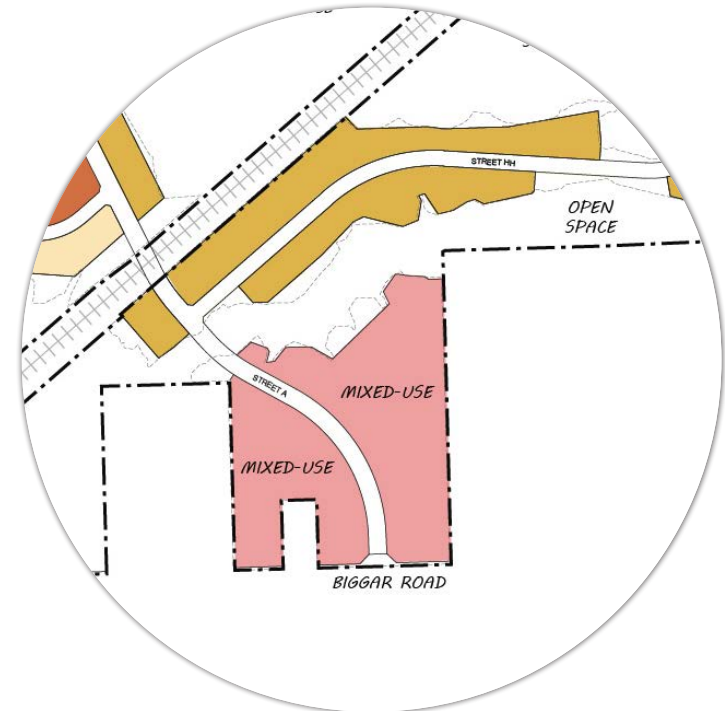


Figure 38: Proposed Street (Neighbourhood 3)

Figure 37: Proposed Street (Neighbourhood 4)

7.0 ARCHITECTURAL DESIGN GUIDELINES

The draft Grand Niagara Secondary Plan's Appendix A: Grand Niagara Urban Design Guidelines (May 2018) provides general guidance with respect built form (Section 6.1, *General Conditions*) and for key locations in the overall Secondary Plan area (Section 6.2, *Conditions for Priority Lots*). In addition to these general guidelines, the sections that follow provide design guidance and/or criteria with respect to the built form proposed in the Grand Niagara community. A Priority Lot Plan has also been provided to assist in identifying the general locations of key lots within the proposed community (Figure 45).

7.1 Built Form Principles

- The following general built form principles shall be encouraged for development in the Grand Niagara community:
- Primary building entrances shall be clearly visible, located on a public road or public open spaces, be direct, and should be accessible to people of all ages and abilities.
- Architectural styles of individual units and blocks should be sensitive to and complement each other. The various architectural forms within the community should provide for a harmonious mix of distinctive architecture, which may incorporate both traditional/heritage and contemporary influences.
- Wherever possible, the architectural form and its architectural style be designed to complement the design of the public realm.
- A variety of architectural elements such as wall plane articulation, entry porches, canopies, columns, dormers, material detailing will be employed to create a distinctive character for block streetscapes in the community.
- More prominent building massing and articulation should be provided at corners and especially at the gateway entrances to the community from Montrose and Biggar Roads to address the significance of these intersections.

- Where parking cannot be provided within structures, or below grade for mixed-use and apartment residences, surface parking areas shall be located to the rear and appropriate landscaping and screening measures provided to mitigate their impact on public views.

7.1.1 Built Form Adjacent to Public Realm

The public realm includes street boulevards, parks, parkettes and open spaces and these areas should be addressed by adjacent buildings as follows:

- Buildings will be aligned parallel to a public road with siting and massing that provides a consistent building relationship, and frame public roads.
- Buildings at corner sites will be sited and massed to not only address the intersection but also the two flanking roads and adjoining public roads.
- Buildings located adjacent to, or at the edge of parks and open spaces, will be designed, sited and massed to address the open space and where appropriate and provide opportunities for overlook onto it.
- Builders should coordinate dwelling site plans with all streetscape elements and utilities located within the street right-of-way, to ensure there are no conflicts between dwelling, driveway, walkway or other site plan components.
- Ground-related dwellings with street-facing garages shall be designed so that the garage is subordinate to the habitable portion of the dwelling.
- Dwellings facing parks, parkettes, open spaces, collector roads, and the Welland River open space are encouraged to have lane based garages and porches/verandas where units include street-facing front loaded garages.
- Projections into the front yard, such as porches, entrance canopies, porticos, entrance steps and bay windows are encouraged for ground-related dwellings to provide pedestrian-scaled streetscape interest.

7.2 Ground-Related Residential Units

7.2.1 Detached and Semi-Detached Dwellings

- Buildings must have front and exterior side façades parallel to the road with front doors, windows and entry features facing the road to create a consistent street wall.
- Garages shall be flush or set behind the main building face and/or porch or be accessed from a rear lane.
- In the case of houses with a double car garage and double-wide driveway, the garage doors facing a public road, shall be set back a minimum of 6.0 metres from the road right-of-way or as per the approved zoning by-law.
- Dwellings with a front loaded garage and driveway should be paired with adjacent houses to maximize a continuous green planting area and reduce the amount of asphalt on front yards.
- Corner lots and homes facing or abutting parks are priority lots within the community. The design of these homes shall include the following considerations:
 - › The flanking side elevation and rear elevation shall be given a similar level of architectural detailing (windows, materials, and details) equal to the front elevation of the house;
 - › The main front entrance should be located on the exterior side elevation, where possible and corner windows, wrap-around porches, or other architectural feature should be included to address the corner location; and,
 - › The rear elevations of both semi-detached units on a corner lot shall be upgraded to be consistent with the front and side elevations of the building.
- Porches, stairs, canopies and other entrance features may encroach into the required setbacks.
- Semi-detached dwellings shall have single-car attached garages when accessed from the street frontage. Double car garages will only be permitted for lane based garages.
- For semi-detached corner lot buildings, the entry feature of the interior unit should be oriented to the front lot line, while the entry of the corner unit is encouraged to be oriented to the flanking lot line.



Figure 39: Examples of Single and Semi-Detached Dwellings

7.2.2 Townhouses

- The siting, massing, and façade design of townhouse units shall be coordinated on a block-by-block basis. The overall streetscape composition should display massing and design continuity while achieving streetscape variety.
- The elevations of the townhouse block shall be articulated in a manner that provides variation between units, but reinforces common characteristics that visually unite the block.
- Variety in the design of roofs through the use of traditional gables and dormers, or more contemporary designs that include cantilevers and parapet details, should be applied to break up the massing of townhouse blocks. However, the main roof should appear as one roof where possible and reflect the architectural style of the townhouse block.
- The massing and form of townhouse units adjacent to single/semi-detached dwellings shall be complementary to those dwellings through height and architectural features to promote visual continuity along the streetscape.
- The main front entry shall be oriented to the front lot line or higher order street, for interior townhouse units, while the entry of the corner unit is encouraged to be oriented to the flanking lot line. Where a dwelling unit flanks a laneway, the main entrance shall face the public street.
- Garages shall be flush or set behind the main building face and/or porch or be accessed from a rear lane.
- Detached lane accessed garages shall be complementary in design and building material with the principal dwelling.
- Where possible, utility meters shall be screened from public view by integrating them into the design of the townhouse units through the use of wall recesses, enclosures, or inseting within the building walls. Rear lane townhouses are encouraged to locate utility meters at the rear.
- Corner unit designs are encouraged to provide significant corner features such as porches, wall articulation and/or bay windows, or other appropriate corner unit architectural features.
- Street townhouse blocks should be limited to a maximum of 8 units, with 6 units preferred. The length of the townhouse blocks should not exceed 50m unless it is essential to the architectural style of the townhouse block.
- Where possible, on townhouse blocks with rear yards, each unit should have access to rear yards via the garage or exterior side yard or a rear yard lane.



Figure 40: Examples of Street and of Back-to-Back Townhouse Types

7.3 Low-Rise Apartment Buildings

- The majority of the main building facade shall front the public road at a minimum setback and should address the adjacent roadway and/or open space areas.
 - The primary building entrance shall be located and oriented toward public roads, be covered and should provide visibility to interior lobbies to allow for safe and convenient arrival and departure from the building.
 - The design of the building and the site layout shall consider overall form, massing and proportions, and rhythm of major repetitive building elements, to create a street façade that supports the pedestrian scale.
 - Permanent parking shall be located below grade at the rear or enclosed in the ground floor.
 - Loading and service areas shall be located in areas of low public visibility in side or rear yards and set back from the front façade of the building. These functions shall not occur along the waterfront promenade frontage.
 - Rooftop mechanical equipment shall be screened from public view and integrated into the design of the building with materials and/or colours that are consistent or complementary to the building.
 - Where a building exceeds 6 storeys, a consistent stepback at 3.0m intervals should be considered to address the pedestrian-scaled streetscape.
- Covered entrances, architectural detailing and weather protection features such as canopies should address the adjacent public roadway and/or open space areas.
 - A stepback of 3.0m should be provided above the third storey to provide transition from adjacent low-rise building to support pedestrians and streetscape quality.
 - A minimum 5.5m sideyard setback, or 11.0m facing wall distance between two medium density buildings should be provided up to the fifth storey. Additional stepbacks of 3.0m per additional storey is recommended above the fifth storey.
 - Servicing, loading and parking access shall be from a shared lane. These functions shall not occur along the waterfront promenade frontage.
 - Permanent parking shall be located below grade. Where it cannot be, it shall be located within the building structure and/or behind the active building frontage facing the street.
 - Rooftop mechanical equipment shall be screened from public view and integrated into the design of the building with materials and/or colours that are complementary to the building.

7.4 Medium Density Buildings

- Buildings and their primary entrance shall be oriented and face onto the public road at a minimum setback.

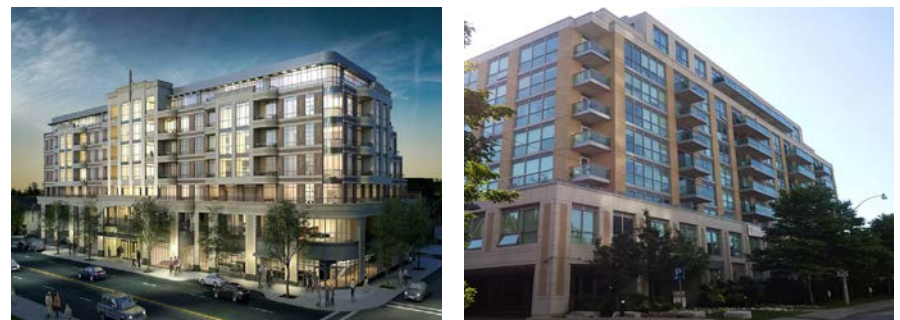


Figure 41: Low-Rise Apartments and Medium Density Examples

7.5 Mixed-Use Buildings

- The guidelines as outlined in the Low-Rise Apartment Building section, shall also apply to mixed-use buildings.
- High-rise buildings will be designed to have a discernible base, middle portion, and top.
- Where base podiums are contemplated they should have a minimum height of 3 storeys, and a maximum height of 6 storeys and be designed to transition to adjacent buildings.
- The middle (tower) portion of the building should stepback from the base a minimum 3.0m with 5.0m preferred.
- Where more than one tall building is proposed for a site, their towers shall have a minimum separation distance of 25.0m and be setback a minimum 12.5m from the property line.
- Tower floor plates should not exceed 850 square metres.
- The top of the building should be distinct and include architectural detailing that contributes to the skyline. Penthouse mechanical rooms shall be integrated into the rooftop design.
- Mixed-use buildings are envisioned for the frontages onto Montrose and Biggar Roads as well as their intersecting Collector Roads.
- Ground floor or at-grade retail / commercial areas should have a minimum height of between 3.7 and 4.5 metres for flexible accommodation of future retail / commercial uses.
- Where a grouping of building is proposed internal circulation will provide pedestrian connections between buildings and to the street boulevard frontage sidewalks.
- The side and rear of buildings abutting low to medium density residential properties should be addresses through built form transition, distance separation, and/or height to create an appropriate interface and scale.
- The base retail / commercial portion should be masonry of 1-2 storeys, defined with a continuous sill between the base and middle portions. The upper portion should contain the largest mass of the building and be emphasized through articulation of the exterior wall plane, window placement, and roofline.
- Residential entrances shall be clearly distinguished from the commercial entrances and can be located at the front or side of the building.
- Large ground floor retail windows shall be provided, scaled to the street frontage, and integrated into the building design. Reflective mirror glass shall not be used for windows at grade.
- Where located at a corner, buildings shall be designed to address both street frontages and be massed towards the corner locations for visual interest and to “anchor” the building in focal areas such as gateways.
- Rooftop mechanical equipment shall be screened from public view and integrated into the design of the building.



Figure 42: Mixed-Use Building Examples

7.6 Hospital Employment Block Built Form

The hospital employment blocks are located along the south major collector road accessed from Montrose Road and form part of the gateway to the community. Buildings in these blocks should be designed, sited, and oriented to address the gateway and contribute to the pedestrian scale of the community.

- Building located near the primary gateway will:
 - › Include distinctive building designs which include articulated built form, massing features and added building height towards the Montrose Road gateway;
 - › Incorporate decorative planting and/or hardscape features that complement the building design and materials; and,
 - › Include decorative paving define direct connections to building main entrances from the pedestrian boulevard.
- Building scale, massing and height should relate to the pedestrian scale and encourage pedestrian circulation.
- Entrances to buildings should be emphasized through material changes, increased height, canopies, wall articulation or a combination of them.
- Buildings should have a minimum 2 storey height or the visual appearance of a 2 storey building (7.5m to 9.0m) to address the collector road street edge, with added height encouraged.
- Street frontages and elevations facing parking areas shall include clear glazing to provide a comfortable and safe pedestrian experience.
- Non-street facing building facades exposed to public view or facing parking areas should provide visual interest through the provision of windows, wall articulation and/or architectural detailing similar to the main façade.
- Large expanses of blank wall faces should be avoided and addressed through landscaping, wall articulation and material changes to create visual interest.
- Rooftop mechanical equipment shall be integrated into the roof design and screened from public view.
- Servicing and loading areas shall be discreetly located and be screened from public view through architectural design, low walls and /or landscaping features.
- Parking areas shall be to the side or rear of the building and should not occupy more than 50% of any street frontage.



Figure 43: Examples of Employment Land Built Form and Gateway Building

7.7 GARAGES, DRIVEWAYS & GARAGE ACCESS

7.7.1 Front Loaded Garages

- Garages must be set back behind the main wall face or a full length front porch. Projecting beyond the dwelling porch face shall be discouraged.
- Dwelling designs with the second storey wall face flush with the garage wall face below shall be avoided unless an appropriate design treatment is provided to create a visual break (i.e. a boxed-bay window; an intermediate roof; or other elements appropriate to the architectural style of the dwelling).
- A variety of garage door sizes and styles should be provided.
- Providing a staggered garage face, staggered garage doors and recessed garage doors are encouraged to provide additional visual variety along the streetscape.
- Garage doors should be sectional, roll-up types with a variety of glazed top panels.
- Coach lamps consistent with the style of the houses shall be provided and be mounted either beside the garage door or above the garage door where space permits.

7.7.2 Lane Based Garages

- Rear-accessed garages shall be complementary to the principal dwelling in terms of materials, character and quality where located on a corner lot.
- Garages shall be designed and arranged to provide an attractive visual environment within the rear lanescap.
- The municipal address shall be provided on the garage in a well lit location facing the lane.

- Pairing of garages within the laneway should occur where appropriate.
- Garages on corner lots or highly exposed to public view shall have upgraded architectural detailing and features consistent with the principal dwelling.
- Landscaping in rear lanes is encouraged to provide visual interest to the garage lanescap.

7.7.3 Below Grade Garage Access

- Access areas or ramps should be discreetly located off of lanes or the short side of the block to limit their physical and visual impact on the streetscape.
- Where possible, for higher density residential and mixed-use buildings, access areas/ramps should be combined with servicing and loading to minimize the visual impact of these services.
- The garage access area will be well lit and include landscaping or architectural treatment to address public views.



Figure 44: Examples of Lane-Based Garages with Landscaping

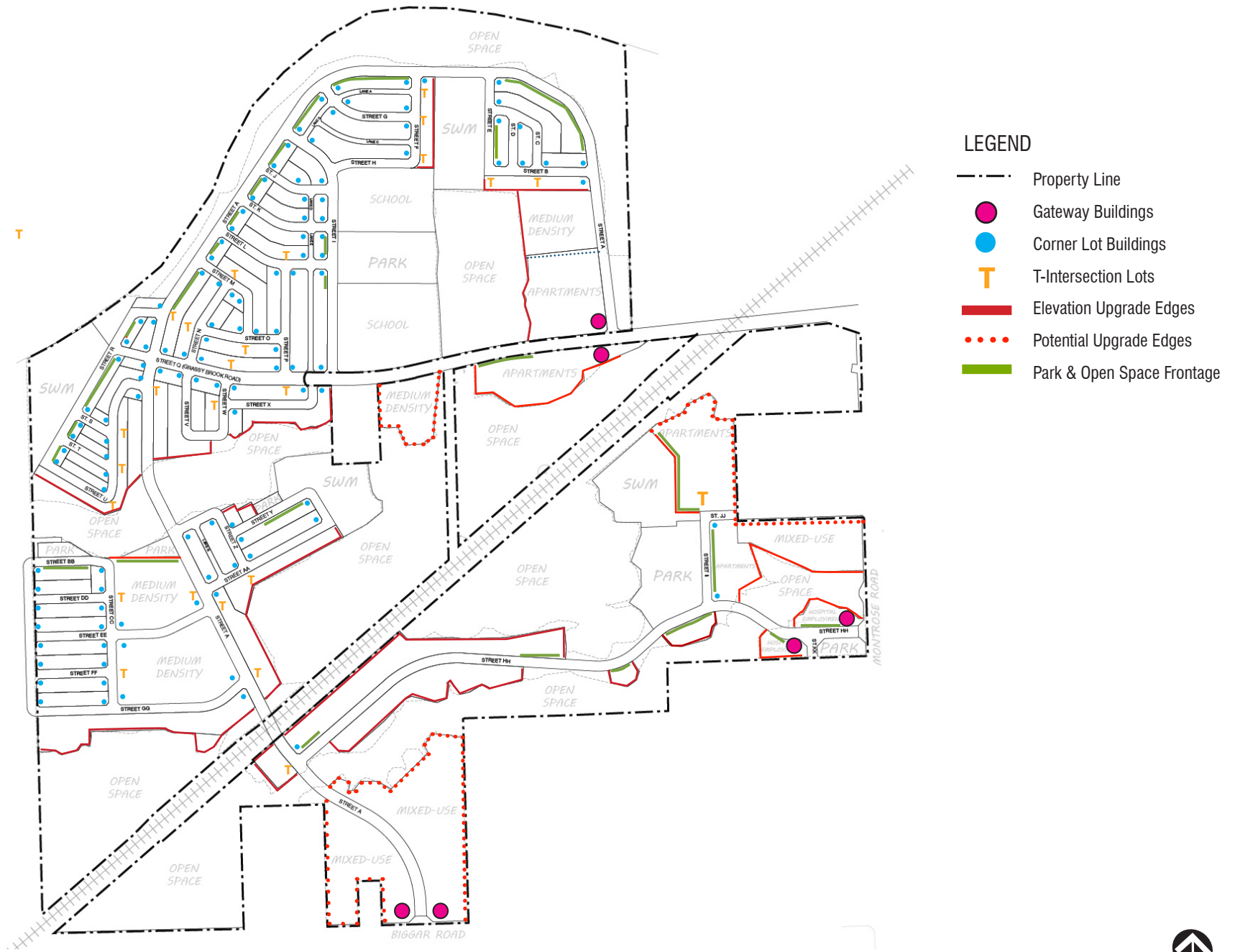


Figure 45: Proposed Priority Lot Plan

8.0 CONCLUSION

The Urban Design Brief demonstrates that the proposed development of this parcel is consistent with the urban design framework and policies as outlined in the:

- Grand Niagara Secondary Plan & Appendix 'A' Urban Design Guidelines;
- City of Niagara Falls Official Plan; and,
- City of Niagara Falls Zoning By-Law.

The proposed development will provide a high quality urban design by:

- Encouraging a pedestrian-oriented environment that support Active Transportation;
- Providing a variety of housing types and forms that contribute to visual interest and aesthetics in a community;
- Providing for a range of park spaces spread throughout the community and integrated, where possible, with open space and stormwater management features;
- Providing for visual and physical connections to the Welland River and the potential for trail and path connections to and from the community;
- Ensuring that road networks and block patterns provide for appropriate orientation of buildings and the leveraging of views and vistas to key park and open spaces;

- Establishing the conditions for the provision of high quality streetscapes that support pedestrian circulation; and
- Contributing to desirable vistas, within the community and to the surrounding open space.

This Urban Design Brief presents an overview of the components that are essential in establishing Grand Niagara as a development that is connected to and integrated with surrounding features and built form in a cohesive manner that will be realized as the community is built out over time.