

City of
PICKERING

Duffin Heights Neighbourhood

Section 01
Duffin Heights
DEVELOPMENT GUIDELINES

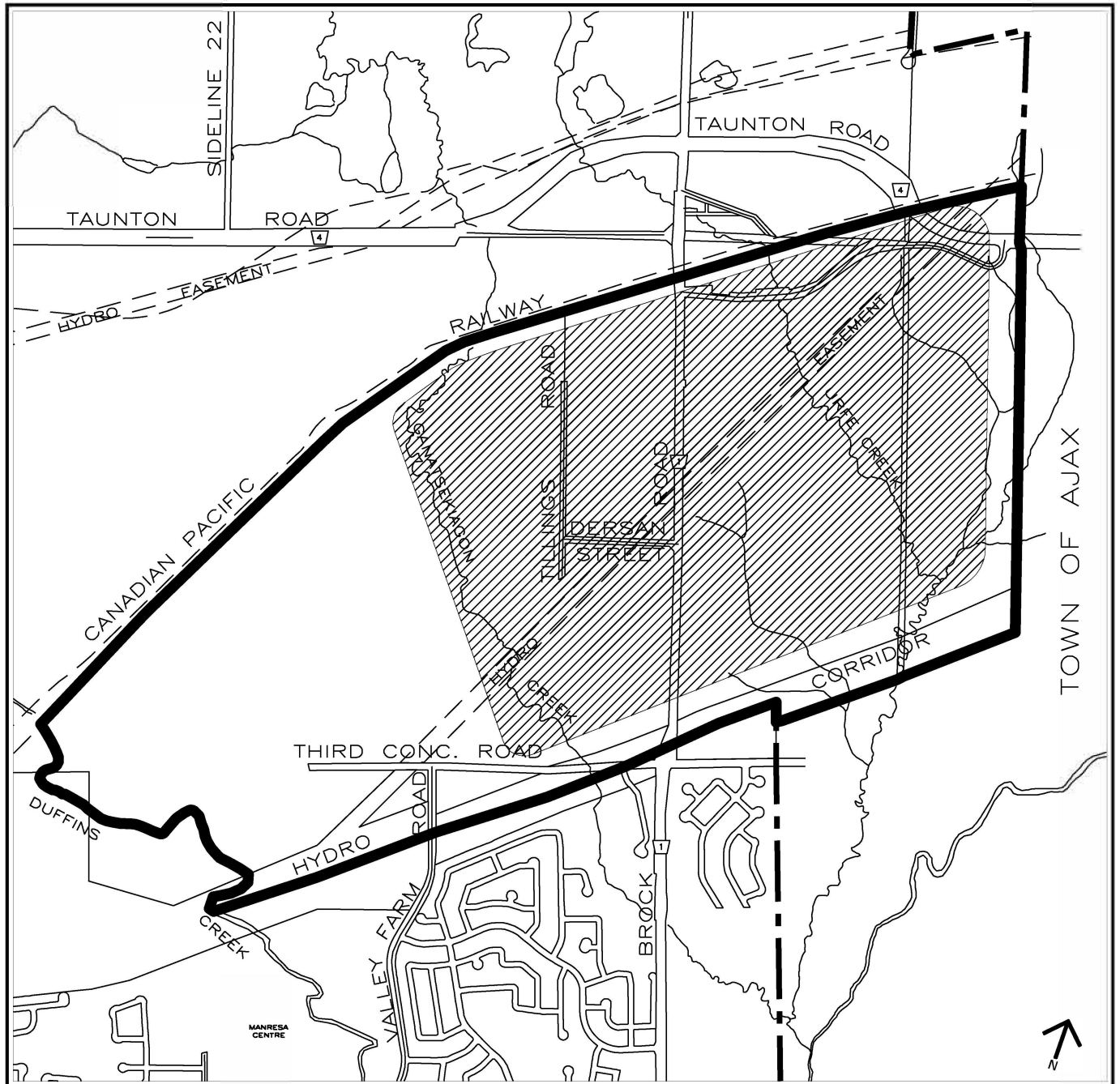


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*The Duffin Heights Neighbourhood Development Guidelines
were adopted by Pickering Council on May 19, 2009.*



1.1 General Description

This document contains Development Guidelines for the Duffin Heights Neighbourhood in the City of Pickering. Although the former Brock West Landfill Site is included in this Neighbourhood, the guidelines contained in this document do not apply to it. The guidelines do apply to the lands on both sides of Brock Road, bounded to the east by the municipal boundary with the Town of Ajax, to the west by the Ganatsekiagon Creek, to the north by the Canadian Pacific Railway, and to the south by the Hydro Corridor.

The subject lands are affected by a number of existing land uses and natural features, which have been taken into consideration during the land use planning process and during the preparation of these Guidelines. The key ones are listed below:

- The valley systems associated with Ganatsekiagon Creek and Urfe Creek;
- Two Hydro Corridors, one running diagonally through the lands and a wider one, which forms the south limit;
- Duffin Meadows cemetery, approximately 34 hectares in size, located on the east side of Brock Road, north of the Hydro Corridor;
- Devi Mandir Temple, a place of worship, located on the west side of Brock Road, north of Dersan Street;
- The Canadian Pacific Railway line located on the northern boundary of the Duffin Heights Neighbourhood; and,
- The tableland forest located between the Ganatsekiagon Creek and Brock Road.

New development shall consider the impact of proposed new uses on existing uses that are expected to remain for the long term and require appropriate mitigation measures to minimize impacts on existing uses expected to remain in the long term.

It is expected that the variety of existing uses along Brock Road will be replaced through redevelopment for more intensive residential, commercial and related uses in the long term.



1.2 Neighbourhood Vision

The Duffin Heights Neighbourhood is conceived as a cluster of separate but linked residential nodes centred around a mixed use corridor. Open spaces including trails, shall serve as a key organizing feature by physically linking the residential areas and by providing edge definition where development areas abut. In addition, open space shall contribute to the overall character by enhancing scenic quality and providing focal points for views.

The neighbourhood shall be designed with the pedestrian in mind by providing appropriate facilities, scale, form and detail to promote walking and social interaction. Such facilities shall include an integrated pedestrian system of sidewalks, trails, village greens and a neighbourhood park.

1.3 Development Framework

The Tertiary Plan - Duffin Heights Neighbourhood, attached as Figure 'A', establishes a broad mix of uses. The Tertiary Plan identifies significant community focal points along Brock Road at three intersections. In addition to residential, retail and shopping opportunities, as well as restaurants, personal services and professional offices will be provided along the frontage of Brock Road.

The Design Plan - Duffin Heights Neighbourhood, attached as Figure 'B', identifies the prominent internal and external views/vistas, major pedestrian routes, a park, village greens and stormwater management ponds.



1.4 Development Objectives

Development within Duffin Heights shall strive to achieve the design objectives and adhere to the policies of the City's Official Plan, particularly, Chapter 9, "Community Design" and Chapter 13, "Detailed Design Considerations." It is the intent of these guidelines to both further those objectives and embellish the ones listed below:

- To create accessible pedestrian-oriented residential areas, distinct in character and harmonious with the larger neighbourhood.
- To create a streetscape which is attractive, safe and encourages social interaction within the neighbourhood.
- To establish a central focus to the neighbourhood which is safe, lively and attractive.
- To provide a diversity of uses to support neighbourhood and City functions.
- To preserve and maintain the ecological function of the tableland forest and valleylands.
- To promote site development and building/construction that is consistent with the City's Sustainable Development Guidelines.
- To provide a mix of housing types, forms, affordability and tenure, on a variety of lot frontages.

The Urban Design Guidelines which follow in sections 2.0 *Urban Design Guidelines - Public Realm* and 3.0 *Urban Design Guidelines - Residential Neighbourhood* have been developed to assist in meeting these objectives.





2.1 Guidelines for Open Space

The existing open space system within Duffin Heights contributes much to the area's character and to the City's ecological system. The multiple valleylands and mature woodlands are considered unique attributes which will benefit the neighbourhood by serving as integral parts of the open space system and optimizing scenic quality. Development of Duffin Heights shall require careful consideration of integration with existing topography and mature vegetation.

2.1.1 Open Space System

1. The road connections through the tableland forest are identified on Figure 'A' - Tertiary Plan and the streets that directly abut the forest shall have development on the opposite side.
2. No development shall occur on lands abutting existing naturalized open space features prior to the completion of an Edge Management Plan.
3. The assessment of vegetation areas shall indicate priority for preservation based on an evaluation of vegetation health, ecological value and sensitivity to development.
4. Existing edge vegetation should be preserved or enhanced to protect interior habitats.
5. Pedestrian access shall be controlled through the provision of a path system that protects sensitive areas, is fully accessible to all, provides opportunities for interpretation and establishes critical links to the community.
6. Significant natural heritage features within the neighbourhood shall be protected and integrated into the community neighbourhood open space system.

2.1.2 Tree Preservation Within Development Areas

1. In addition to the tableland forest, established trees that provide significant buffering or aesthetic contributions to the neighbourhood should be considered for preservation and protected during construction. While it is recognized that tree preservation is difficult to successfully achieve with full urban servicing and grading of new development areas, opportunities for tree preservation should be pursued where practicable. Tree preservation details will be required to be submitted for the City's review.
2. Retention of significant vegetation is encouraged and shall be considered for all development lands. However, the City acknowledges that some vegetation will be lost through development. In some cases, remedial plantings will be required (on-site or off-site as appropriate) to compensate for vegetation loss.



Residential units front directly onto a park

2.1.3 Street Tree Planting

1. **Residential Developments** - Provide at least 1 street tree for each residential dwelling unit, excluding multiple dwellings that are subject to site plan approval, and at least 3 street trees for each flankage lot where practicable. Where possible, the trees should be native species and contribute to the area's biodiversity. Theme street tree planting should be encouraged to assist in identifying and enhancing certain areas/uses within the neighbourhood.
2. **Mixed Use Developments/Park Spaces** - Encourage double-row (paired) street trees, planted at 9.0 metres on centre, along park space frontages, open space frontages, and Brock Road development frontages.



Community mailbox in a park

2.1.4 Neighbourhood Park

1. The Neighbourhood Park will provide opportunities for active and passive recreation for surrounding residents. Generally, the park may include elements such as play structures, informal playgrounds, seating, hard surface areas, shaded areas under tree canopies or open air structures, community mailboxes, specimen tree, shrub and ground cover planting.
2. The Neighbourhood Park will generally be 1.8 hectares of level land.
3. Pedestrian access to the park should be clearly defined using landscaping or architectural elements.
4. Park design should ensure visual privacy for adjoining residents.



Housing and pathway adjacent to park



Street trees enhance the visual appearance of the park



Example of houses fronting onto park



Village Greens create spaces for people to gather in

5. Where the park abuts the golf course, fencing is required and its design should be consistent around the perimeter of the park.
6. Landscape design should enhance microclimate opportunities (wind, sun, shade etc.). Seating and shade areas should be designed in concert with pathways and play areas.
7. Ensure the park area is at a similar grade to the public street and is fully accessible to all residents. Avoid major grade changes in active areas.
8. Ensure the park includes appropriate signage visible from surrounding streets.
9. Locate playground structures with clear visibility to public streets.
10. A balance of hard and soft landscape materials at street corners is encouraged.
11. Architectural structures in active park spaces associated with other neighbourhood uses are encouraged.
12. Locate bike racks along trails, play areas and park entrances. Provide hard surfaces under bike rack.
13. Provide on-street parking along public streets adjacent to the park.

2.1.5 Village Greens

1. A Village Green is a small component of the public park system, that is typically soft landscaped.
2. Village Greens should be located on visible road frontages and their entries should be clearly defined through landscape treatment and built form elements.
3. Pathways within Village Greens should connect to pedestrian sidewalks and trails within the open space system.
4. View corridors terminating at Village Greens should be highlighted through landscape treatment and/or built form elements to create a visual terminus/landmark in the community.
5. Community mailboxes and information boards may be considered within Village Greens.
6. Residential units are encouraged to front Village Greens.

2.1.6 Gateways

1. Streetscaping features at gateway corners shall include enhanced landscaping and coordinated fencing to frame the entry into the neighbourhood.
2. Gateway features, such as community signage, low walls, fencing or enhanced landscape treatment, may be incorporated in the design of entry road intersection and shall be coordinated in design and materials with adjacent structures and consistent along main road right-of-way.
3. Intersections should have distinctive surface treatment for pedestrian crossings, including wider sidewalks and connections to bus shelters.
4. Noise attenuation features should be the last option for uses flanking onto the gateway sites. If they are to be permitted they must be minimized and the material and architectural details shall compliment the adjacent structures, integrate into ecological corridors, include landscaping and reflect the fencing details of community-wide fence standards.



A gateway condition with a community identity feature

2.1.7 Stormwater Management

1. Based on preliminary stormwater information, four potential stormwater management ponds are identified on Figure 'A'-Tertiary Plan. The ponds are adjacent to the neighbourhood's open space system and will strive to achieve optimal out-flow water quality to the creeks, in accordance with best management practices.
2. These stormwater management facilities shall be developed in a manner that will yield the greatest environmental and amenity benefit to the neighbourhood.
3. Landowners are required to enter into cost-sharing agreements for stormwater management ponds and other development costs, as conditions of development approval.
4. Stormwater management facilities may be key focal/visual features within the community contributing to the appearance and ambience, while achieving functional objectives related to flow moderation and water quality.
5. Native species and flood tolerant water's edge plants, including a mixture of herbaceous and woody vegetation, may be planted to stabilize banks of ponds. The perimeter of the permanent pool shall be planted with emergent, strand and submergent species to improve the aesthetics and enhance the performance of the facility.



Planted medians help to define gateways



Pond enhancing natural landscape



Houses backing onto a Storm Water Pond

6. Ponds are envisioned to blend with the natural landscape, therefore, geometric forms and standard slope gradients will be avoided in favour of shapes that replicate natural landforms in the area. Inlet and outlet structures will be concealed using a combination of planting, grading and natural stone.
7. Where there is a need to discourage public access to areas around the perimeter of the ponds, living fences and barrier plantings may be utilized in place of fencing. Barrier plantings should be installed along the crest of steep slopes, adjacent to deep-water areas and around inlet and outlet structures.
8. Fencing of ponds should be discouraged - rather, be designed with trails, view points and interpretive signage so that they are an integral part of the pedestrian and trail system.
9. Public walking/cycling trails should encircle ponds and extend along stormwater channels, where possible.

2.1.8 Valleyland System

1. The valleyland system, which is part of the open space system, includes lands below top of bank and appropriate open space buffers as shown in the Duffin Heights Environmental Servicing Plan.
2. Building on the City's Trail and Bikeway Master Plan, which identified a trail network along the Ganatsekiagon Creek valleylands, additional trails have been identified both on the east and west sides of Brock Road, see Figure 'B' - Design Plan.

2.1.9 Pedestrian & Trail System

1. An integrated and fully accessible pedestrian system shall be established which provides safe, attractive and easy access within and to residential areas, community focal points and open spaces. The system shall be comprised of sidewalks, paved pathways and valleyland trails. Major pedestrian routes are identified on Figure 'B'- Design Plan.

2. Major east-west connections shall occur along collector roads, linked to schools, parks and other open spaces. Major north-south connections shall occur within open spaces including valleylands, woodlands and the hydro corridor. The future Valley Farm Road extension shall serve as a critical connection between Duffin Heights and southern Pickering. Opportunities to secure adequate rights-of-way for these pedestrian routes will be considered in the review of subdivision and site designs as the neighbourhood develops.
3. Although Figure 'B' - Design Plan does not identify a pedestrian route through the cemetery lands, the City recognizes that the cemetery provides for a passive open space area which allows for access by the public on a limited basis in accordance with the cemetery's operational requirements. Should the City choose to explore opportunities for a pedestrian route through the cemetery lands to integrate with a neighbourhood pedestrian system, the implementation of any route and any alignment thereof would be considered only following consultation with and the approval of the cemetery owner.
4. Connections to the community trail system or prominent walkways or gateway connections shall be emphasized through increased trail or walkway width. Special treatments at trailhead entrances should be considered such as higher quality landscape features, benches, decorative paving pattern, interpretive or directional signage.
5. Trails into or adjacent to natural or open space features shall be integrated sensitively.
6. Native non-invasive plantings are encouraged along trail connections abutting natural features.
7. Surface and width of the trail will be determined based on function with adequate space for construction of the trail including allowance for site grading, drainage and landscape buffers.
8. Trail design and type will be based on each site's sensitivity in order to minimize environmental impacts.
9. Trails will be designed to accommodate a range of users and abilities. The gradient of trails should not exceed five percent. The use of permeable materials shall be encouraged for trail construction in areas where sufficient drainage exists.



Trail System



Trail System



Multi-Purpose Trail



A multi-purpose/trail adjacent to a pond

10. Trails should be clearly signed regarding permitted uses and speed. Wayfinding signage and/or trail markers should be provided throughout the trail network.
11. Benches and waste management receptacles should be provided at trail heads and at regular intervals along the route.
12. Trails located in proximity to significant sensitive natural features, or adjacent to stormwater management facilities should incorporate interpretive signage at various locations to promote stewardship initiatives that will protect and enhance the features and functions of the natural environment.



2.1.10 Pickering Golf Course

The Pickering Golf Course is identified on the Tertiary Plan and is permitted on lands designated Active Recreational Areas in the Official Plan. Prior to changing the existing golf course holes and/or adding new holes to the golf course, a Golf Course Environmental Management Plan shall be prepared and submitted to the City of Pickering. This Plan shall describe the use of best management practices and other appropriate measures to enhance the natural environment.

2.1.11 Duffin Meadows Cemetery

The Duffin Meadows Cemetery is identified on the Tertiary Plan and is permitted on lands designated Natural Areas - Open Space System in the Official Plan. It is noted that the Cemetery is not within the Brock Road Mixed Use Corridor and therefore not covered by the guidelines contained in Section Four. Notwithstanding the above, the Cemetery is encouraged to have regard to the Brock Road frontage for any major building development on their land.

3.0 Design Guidelines for the Residential Neighbourhoods

This section of the document provides general guidance for the design of built form and how it should address the streetscape and open space in the private realm. These Guidelines are to be read in conjunction with the policies of the Official Plan and Zoning By-law requirements for the Duffin Heights Neighbourhood.

Residential buildings within the Duffin Heights Neighbourhood will be subject to review and approval in accordance with a City approved Architectural Design Control process. The following guidelines will assist in the preparation of the policies/requirements for all residential buildings.

3.1 All Development

3.1.1 Built Form

1. A full range of housing types and tenures on a variety of lot frontages should be provided to make a variety of housing options available to the community.
2. Development should be designed to achieve a high degree of sustainability within the community.
3. Architectural styles of individual units and blocks should be sensitive to and complement each other.
4. A variety of architectural elements such as entry porches, dormers, material detailing will be employed to create a distinctive character for each block.
5. To support public transit and for reasons of public safety and convenience, primary building entrances to principal buildings shall be clearly visible and located on a public road or onto public open spaces.
6. Access from sidewalks and public open space areas to primary building entrances shall be convenient and direct, with minimum changes in grade.



Detached garages provide for streetscape variation



Building projections, such as porches, provide transitional building elements



Buildings fronting on park with direct walkway connections from entrances



Porches provide for “eyes on the park”



Residential built form frames the park



Consistent building setback reinforces the street edge

7. To minimize disruptions to traffic flow and to maximize safety and the attractiveness of Collector Roads, driveways for grade related residential development shall not be permitted.
8. Buildings sited at the end of a view corridor, such as at a “T” intersection, elbow roads, traffic circles and on prime corner lots should be designed with significant architectural elements to address these views.
9. Lots that have high public exposure, such as corner lots or lots located adjacent to active public open space should also have significant architectural elements. The building design on these lots shall be of a high architectural quality. Architectural and siting treatments for different lot configurations are recommended, in order to promote a defined and an attractive streetscape with constructed focal points.
10. Entry doors should be visible from the street. Enclosure of porches is not permitted.
11. Every effort should be made to screen utility meters on townhouse units from public view through the use of recessed walls, inseting within walls, landscaping, or other screening solutions that may be provided by the builder.

3.1.2 Location of Buildings with Respect to Roads and Open Space

1. To reinforce the road, lane and block pattern, the following measures will be employed:
 - buildings will be located in close proximity to the property line adjoining the public road;
 - siting and massing of buildings will provide a consistent relationship, continuity and enclosure to the public roads;
 - buildings located adjacent to, or at the edge of parks and open spaces will provide opportunities for overlook into the open space;

- the massing, siting and scale of buildings located adjacent to, or along the edge of a park or open space will create a degree of enclosure or definition appropriate to the type of open space they enclose; and,
- buildings of significant public use or architectural merit may be sited to specifically differ from the surrounding urban fabric in order to emphasize their importance as landmarks.

3.2 Residential Buildings

For grade related residential development in Duffin Heights the City will require, as a condition of approval, that the property owner enter into an Architectural Design Control process. Architectural Control will promote a high degree of streetscape design within an overall neighbourhood plan. While the specifics of each plan of subdivision/development proposals may vary, the overall objectives will remain the same throughout the neighbourhood. The objectives will include:

- creating distinctive and appealing streetscapes through attention to building design and detailing;
- ensuring appropriate massing, materials and building siting;
- design compatibility;
- identifying specific design requirements for specific priority lots having highly visible elevations; and,
- encourage pedestrian friendly streetscape.

3.2.1 Detached & Semi-Detached Houses

1. Buildings must have front and exterior side facades parallel to the road with front doors, windows and/or entry features facing the road to create a consistent street wall.
2. Garages shall be encouraged to be set behind or flush with the main building face or the front porch or accessed from a rear lane.
3. Paired or grouped driveways will be encouraged to reduce the amount of asphalt on front yards.

3.2.2 Townhouses

1. The siting, massing, and facade design of townhouse units shall be coordinated on a block-by-block basis. Multiple blocks of townhouse blocks which create monotonous streetscapes shall be prohibited.



Example of a one and a half storey Bungalow



Example of two storey house



Semi-detached with rear lane



Townhouses with garages on rear lane



Example of Townhouse Units



Apartment building oriented to public road

2. The elevation of the townhouse block shall be articulated in a manner that provides variation between units, and reinforces common characteristics that visually unit the block.
3. Variety in the design of roofs is required to break up the massing of townhouse blocks.
4. The massing and built form of townhouse units adjacent to single/semi-detached dwellings shall be enhanced with architectural elements to promote visual integration.
5. Garages are encouraged to be accessed from a rear lane for all townhouse dwelling units. However, they must be accessed from a rear lane for all units that have less than a 6.0 metre unit width.
6. Side and rear elevations visible from public areas shall have upgraded facade treatments.
7. Corner unit designs are encouraged to provide significant corner features such as a wrap-around porch, wall articulation, turret or bay window.
8. Buildings sited at the end of view corridor, such as at a "T" intersection, elbow roads, traffic circles and on prime corner lots should be designed with significant architectural elements to address these views.

3.2.3 Apartments

1. Apartment buildings should be oriented to front, face and feature the public road. A substantial portion of the building should front the public road at a minimum setback.
2. Entrances should be located and oriented to public roads.



Variety in unit styles, massing, and elevation design, along a streetscape

3. Permanent parking, loading and service areas should be located in side or rear yards and set back from the front facade of the building.
4. A visitor drop off area should be located at main entry door of the building.
5. Rooftop mechanical equipment shall be screened from view through architectural design and/or with materials that are complementary to the building.

3.3 Residential Buildings - Architectural Features and Details

3.3.1 Front Entries & Porches

1. Front entry elements shall be articulated through the use of framing materials, colour and built form including porches, arches or articulated front steps.
2. A front entry with more than three risers leading to the porch should be avoided, unless integral to the architectural design of the building. Where three risers are exceeded, the front entry design will include such elements as appropriately detailed railing, integrating of steps into the design of the porch and designing the steps in concert with the landscape.
3. Porches on detached units shall be deep enough to allow a seating area (a minimum depth of 1.5 metres, although a 1.8 metres depth is encouraged).
4. Entry features shall be articulated through detailing and/or a variation of materials.
5. Single entry doors are encouraged to incorporate sidelights and/or transoms. Where these are not possible due to floor plan arrangement, a vision panel (glazing) shall be provided in the entry door.

3.3.2 Roofs

1. A variety of roof configurations is required including accent gables, dormers, porches and variation of roof ridges both parallel and perpendicular to the street. Accent materials in gables such as decorative materials are encouraged.



Emphasis should be placed on the entry



Variety in roof configuration creates streetscape interest



Utility meters should be recessed and hidden from view



Example of a detached garage in rear yard



Detached house with integrated garage



2. The roof material and colour for detached garages shall be the same as the main building.

3.3.3 Utilities and Mechanical Equipment

1. On interior lots utility meters are encouraged to be limited to side elevation of dwellings and coordinated between units to generate consistency. Landscaping as a means of screening meters is encouraged.
2. Where meters are located on side elevations of lots flanking streets, parks, or other highly visible locations the meters should be placed at an inconspicuous location, recessed and treated with an architectural surround or screened by landscaping, where permitted by utility company standards.
3. Air conditioning units, vents for dryers, exhaust fans, etc., should not be located on any elevation facing the street and where this not possible, appropriate shielding shall be provided.

3.3.4 Garages

1. The design of garages can have a major impact on the visual character of the individual dwelling and the collective streetscape. Therefore, the design and material of attached garages should complement, not dominate, the main dwelling to create a cohesive streetscape.
2. Builders are encouraged to provide a variety of garage types including attached front garages, detached garages and lane based garages.

3.4 Guidelines for Public/Institutional Buildings

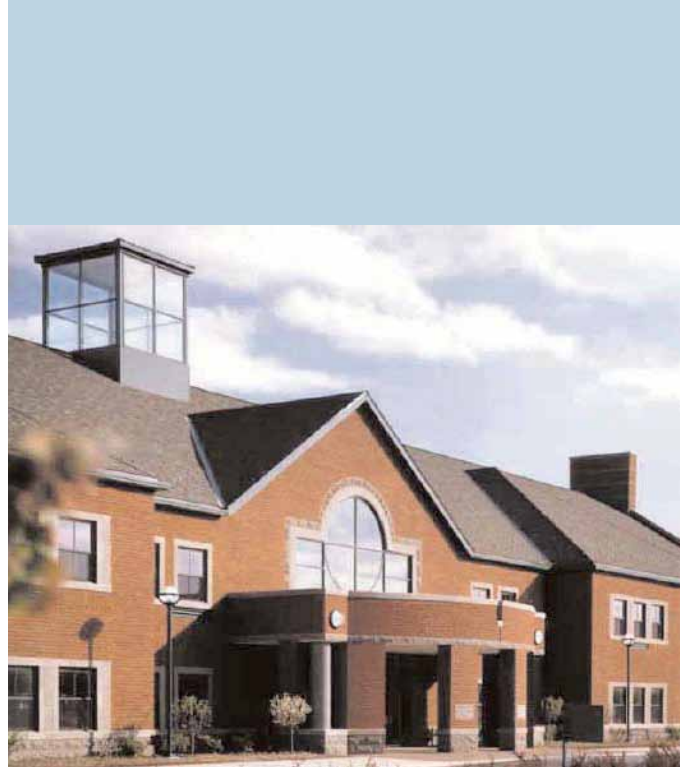
Public/Institutional uses form an important aspect of community identity. Buildings serving these uses act as important built landmarks in the community. Careful attention must be paid to the design of these structures to ensure that they reflect the built quality and integrate with the scale of the surrounding neighbourhood.

1. Public/Institutional buildings should be sited prominently and where possible, should terminate views.
2. Public/Institutional buildings are encouraged to locate in the Brock Road mixed corridor area and should be located close to the road to reinforce the street wall and define intersections.

3. Public/Institutional buildings should set a high standard of architectural design and reflect the scale and character of surrounding neighbourhoods.
4. Special landscape features are encouraged to distinguish important landmark buildings at the pedestrian level.
5. Public/Institutional buildings should be designed as special landmark buildings with high quality design, materials and finishes. The site should be well landscaped in recognition of their prominent locations and status as landmark buildings.
6. The front door of all Public/Institutional buildings shall be connected with a walkway to the sidewalk on the road.
7. Vehicular parking should be located at the side or rear of the building. Parking for cyclists should be located near building entrances and where visual surveillance can be maximized.
8. Drop-off areas should be provided for buses and cars at the side of the building, but may be located in the front of the building subject to building design and site plan considerations.
9. Consideration for a road lay-by should be given for buses and cars.
10. Rooftop mechanical equipment shall be screened with materials that are complementary to the building or through parapet height where applicable.

3.4.1 School Sites

Two elementary schools are identified conceptually on the Tertiary Plan, one to the west of Brock Road and one to the east of Brock Road. Each site is proposed to have an area of approximately 2.4 hectares. These schools should front onto a collector road.



Projecting entry and tower element emphasize the main entrance



School reinforcing the road edge

Urban Design Demonstration Plan



4.0 Brock Road Mixed Use Corridor Urban Design Guidelines

4.1 Brock Road Corridor Streetscape

4.1.1 Building Massing & Architecture

1. Higher density, mid-rise and mixed use buildings shall be encouraged along the Brock Road mixed use corridor.
2. A high level of architectural quality will be required for the buildings adjacent to Brock Road and along the collector road facades at the focal point intersection areas.
3. All buildings adjacent to Brock Road must provide a minimum of two functional floors with a minimum three storey massing except at corners where all buildings shall have a minimum of three functional floors and a minimum four storey massing and have a unique identity and architectural design. In general, increased building heights shall be encouraged.
4. For development within the Brock Road mixed use corridor, that fronts local roads, a minimum two storey building will be required and is encouraged to have higher roof pitches to visually transition heights from the corridor to the adjacent residential areas.
5. High quality building design, including vertical massing elements at neighbourhood focal points, shall be encouraged.
6. Sites with multiple buildings are encouraged to reflect a similar/consistent architectural theme/treatment.
7. High quality building design and architectural elements shall be consistent on all building elevation, particularly on facades in public view or backing onto residential properties.
8. Where appropriate to the architectural style of the building, double height entries along Brock Road are encouraged for prominence and celebration of building.
9. Architectural features such as awnings, projections, French balconies, terraces, cornices, friezes, moulds, eaves, roof lines, arches, trims, horizontal or vertical lines, bandings, etc. must form part of the design of the buildings to offer buildings uniqueness in character, visual interest and variety in design.





10. Variations in colour or multiple colours shall be permitted within an overall, planned, and attractive range of colours. Building colours shall be diverse with contrast of colour value, tone and hue.
11. Contrasting materials, patterns, textures, lighting and colour are encouraged to create interest, focus, unity, and compatibility for building entrances and accent areas or features.
12. Building windows must have detailed elements such as recessed, projecting or bay windows to provide an interesting visual appearance to buildings.
13. Secondary doors, such as emergency exits or service doors shall be designed to blend in with the building façade.

4.1.2 Landscaping & Signage

1. Streetscape elements such as furniture, accessories, fencing, transit shelters and gateway features should be visually harmonious and complement building architecture.
2. Landscaping shall be provided on unbuilt areas of a site that are not required to meet parking requirements. This includes any areas reserved for future phases of development.
3. Parking areas shall have landscaped islands that have a minimum width of 3.0 metres that provides for tree growth and retention. In specific instances, islands should be wide enough to accommodate a pedestrian walkway in addition to landscaping.
4. Trees, shrubs and other vegetation shall be selected considering their tolerance to urban conditions, such as road salt or heat. Preference shall be given to native species of the region of equal suitability.
5. Along the Brock Road frontage significant landscape features and detailed fencing shall be required to provide a street edge at the initial stages of development where there is no building and/or to help soften views to parking areas.
6. Building signage should be compatible with and respect the building form and architectural features. Signage lighting should be directed to limit light trespass to surrounding properties.
7. Lighting design should complement the design of the development.
8. Exterior lighting shall not spill over onto adjacent properties or streets.

9. Lighting shall be downcast to prevent light pollution.
10. Lighting and light standards in public areas including parking lots should relate to the pedestrian and be limited to a height of 6.0 metres.
11. All areas not required for building, storage, servicing, or parking shall be landscaped.
12. Enhanced landscaping shall be provided at intersection corners, site entrances and to buffer utility areas located in rear yards.
13. Ground-mounted and wall-mounted signs shall be located and designed to complement the character and scale of the area and promote an active, pedestrian-friendly environment.
14. Attractive exterior seating areas or courtyards shall be encouraged that include benches, bicycle lock-ups and waste management receptacles, and be safely removed from vehicular routes.
15. Bicycle lock-up areas, waste management receptacles and seating shall be located near building entrances and amenity areas where possible, and shall ensure that these locations do not conflict with pedestrian circulation.

4.1.3 Brock Road Frontages and the Pedestrian Environment

1. All buildings shall frame the street and be located within the build-to-zones established by the respective zoning by-laws.
2. All primary frontages of buildings shall front Brock Road and provide pedestrian access directly to the sidewalk and trail along Brock Road.
3. Canopies shall be encouraged above windows and signs. Canopies should overhang private space but not the public sidewalk.
4. Windows shall be provided along building facades facing public streets. Spandrel glazed windows may be considered in select locations and only on a limited basis.





5. Non-residential floors façades are encouraged to be at least 33 percent transparent on all the floors and must be at least 60 percent transparent on the ground floor to encourage pedestrian interaction with retail and commercial activities. Clear vision glass must be utilized for all ground floor non-residential uses.
6. Large walls visible from Brock Road shall be articulated through various treatments such as offsets in massing, arcades, colonnades, piers and plane changes, corbelling and rustication detailing and the use of a variety of different cladding materials and colour palettes.
7. Blank façades will not be permitted facing Brock Road or any public street.
8. Retail and commercial uses are encouraged to be provided on the ground floors of buildings to bring animation to the streets and encourage pedestrian activity.
9. Medium density residential development may be located behind buildings that front Brock Road. However, individual unit vehicle access from collector or local roads for grade related townhouse developments will not be permitted. Single detached and semi-detached dwelling units are also not permitted.

4.1.4 Transitions

1. Increased rear yard depths are encouraged for taller buildings abutting lower buildings to accommodate increased landscaping.
2. Increased setbacks with tree planting should be provided for intensive apartment blocks adjacent to existing or planned grade related dwellings.
3. Floor setbacks must be considered for tower buildings greater than six storeys, with base podiums to express the visual transition in scale and proportions. Where additional levels are considered, podium levels should be consistent with adjacent buildings and will step back appropriately from that level.
4. A variety of residential and business opportunities are encouraged. These uses may be provided independently, or in combination with other uses. The development of residential dwellings in combination with retail/commercial space is encouraged.

4.1.5 Pedestrian Circulation & Connections

1. Multiple pedestrian linkages shall be provided to commercial development, including direct sidewalk connections at intersection and perimeter sidewalk connections and through mid-block developments. The location of the pedestrian linkages should take transit stops into consideration.
2. The pedestrian system shall be comprised of primarily concrete sidewalks within the road right-of-way. An enhanced pedestrian realm will be required along both sides of Brock Road and at focal points to accommodate multiple users.
3. The system should be designed to provide clear and accessible pedestrian connections within the neighbourhood and beyond. Alternate pavement markings or materials, landscaping, signage and/or lighting may be used as required to minimize conflicts between vehicular and pedestrian traffic.
4. Entry locations for buildings or mid-block pedestrian connections should be obvious, easy to find, safe and clearly visible from the sidewalk.
5. Landscaping shall be used to accentuate and define pedestrian walkways within parking areas.
6. Connections to collector roads and local roads shall be provided by a grid pattern of roads or private drive aisles with appropriate easements.
7. Small development blocks shall be designed for overall development along the corridor to achieve cohesive streetscape of buildings and frequent connections.

4.1.6 Parking

1. On-street parking is encouraged to provide convenient parking to businesses fronting local or collector roads.
2. Enhanced landscape buffers shall be provided between parking areas and residential properties.
3. Parking areas should be located at the rear or side of buildings where possible. Views of large parking areas shall be minimized by utilizing appropriate principles of site planning and street edge treatment as noted above.
4. A minimum landscape strip of 3.0 metres shall separate parking areas from adjacent residential development.
5. No parking in front of the buildings shall be permitted adjacent to the Brock Road frontage.



6. In large parking areas, landscaped pedestrian walkways shall be provided to help break up large stretches of parking while providing a secure pedestrian route from the parking area to the main entry (plantings to reduce heat island effect).
7. To reduce the impact of surface parking and to provide at grade amenity areas the provision of structured parking shall be encouraged for higher density forms of development. Where it is not feasible to locate parking in structures either below or above grade, parking should be located to the rear of principal buildings and/or within the exterior side yard.
8. Vehicular access to parking areas shall be shared between adjacent properties in order to reduce the extent of interruption along the sidewalk and the streetscape.
9. Access drives and parking lots of adjacent properties are to be linked to allow for efficient circulation of vehicles within the mixed use blocks.
10. Lands within the Hydro corridor are encouraged to be utilized for parking areas to serve abutting development.

4.1.7 Utilities and Servicing

1. Service and utility areas shall be located away from public streets and public view.
2. For all restaurant uses, restaurant cooking ventilation systems shall incorporate ecologizer, water wash, ultraviolet or other equivalent odour extraction mechanisms sufficient to ensure that the resulting exhaust is substantially odour free and will not affect surrounding residents.
3. For restaurant uses, refuse and recycling storage must be designed and incorporated in the building and must be refrigerated to suppress odours. No outdoor storage shall be permitted.
4. Parapets heights of the buildings shall be high enough to screen roof-mounted equipment from finished grade at roads immediately adjacent to the sites. All mechanical equipment located at roof level should be integrated into the building design. Screening such as enclosures that are consistent with the colour and material of the building will also be considered.
5. Service utility areas shall be clustered, grouped or incorporated within streetscape furniture, where possible, to minimize visual impact. The City requires utility providers to consider innovative methods of containing utility services on or within streetscape features. Where large above ground utility infrastructure is required, it will be located and designed to be compatible with the environment and streetscape.

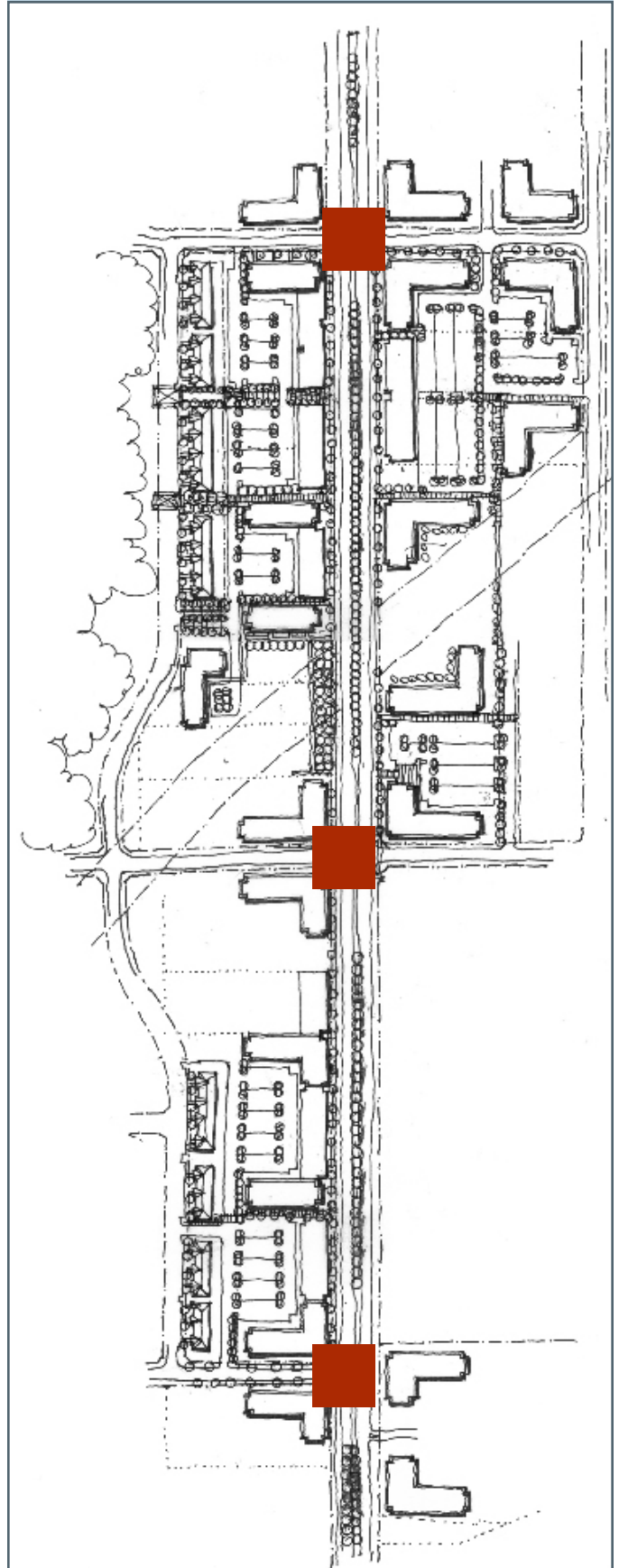


4.2 Brock Road Mixed Use Corridor Phasing and Evolution

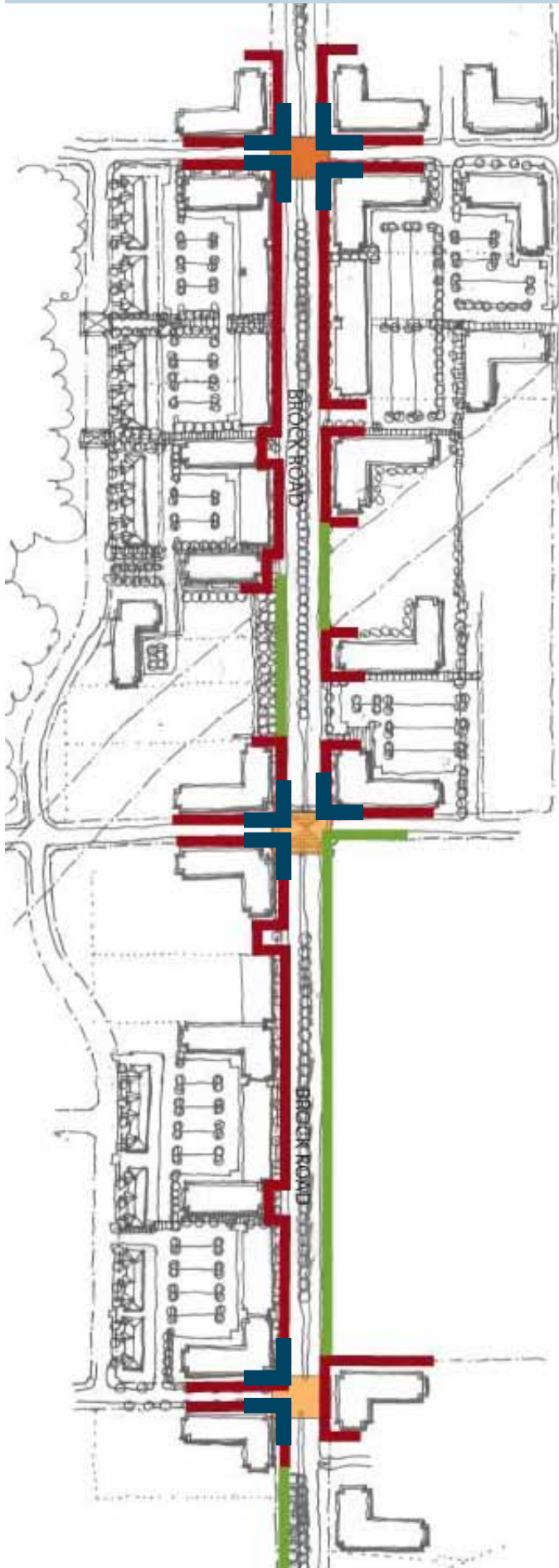
Taking into consideration the guidelines a potential phasing scenario over time has been developed to illustrate a possible development scenario for the evolution of the mixed use corridor over time.

4.2.1 Focal Points Along Brock Road

1. Focal points are identified at the intersections of Brock Road and the collector roads as indicated on Figure 'A' - Tertiary Plan and the adjacent image. The use of appropriate building heights, massing, architectural features and landscaping will establish a prominent image at these intersections.
2. Buildings shall have a minimum of three functional storeys with four storey massing at the corners and architectural details and features that accentuate and address the focal point intersections.
3. Building heights and massing must be sensitive (i.e. minimize the casting of shadows) to adjacent development.
4. At corner locations, multi-storey buildings shall be designed to contain the street by having their front walls parallel to the street and occupying at least the minimum percentage of the build-to-zone specified in the implementing zoning by-law.
5. The building focus shall be augmented by distinctive boulevard hard and soft landscaping that will assist in establishing a sense of "arrival" at the intersection.
6. Creation of outdoor public spaces is encouraged at the focal points.



Focal Point Intersections

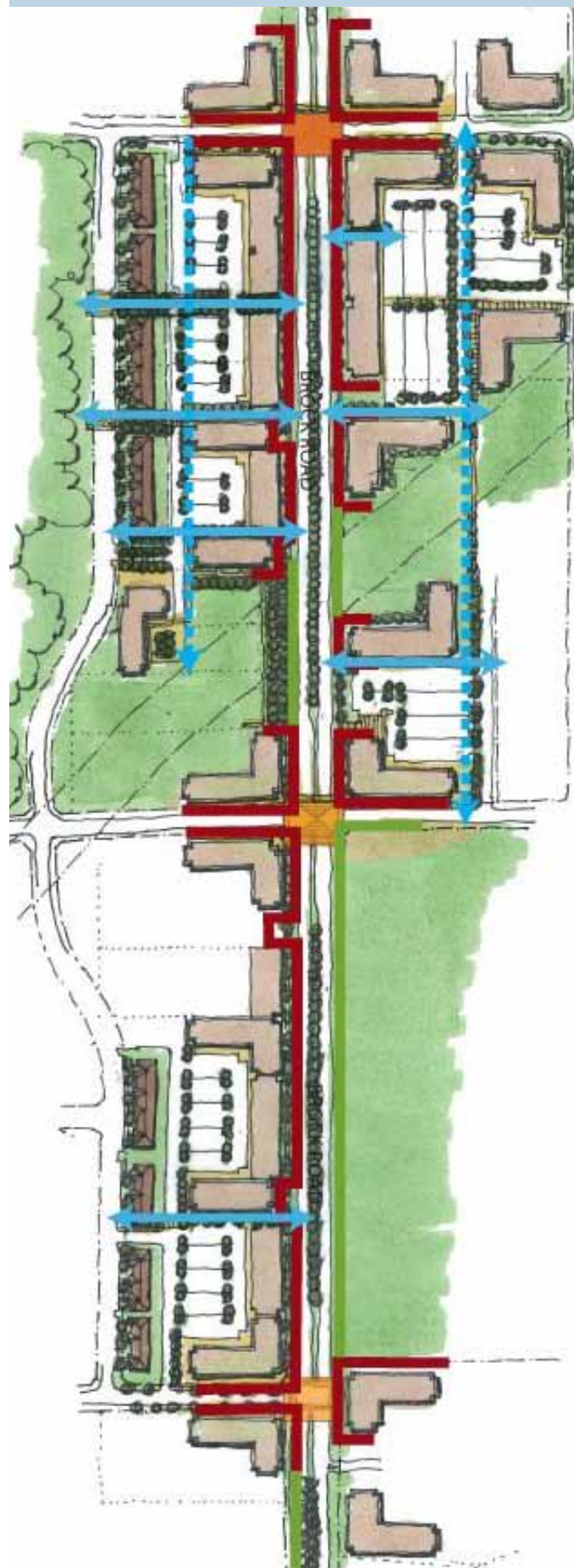


4.2.2 Framing Corners & Streets

1. Corners are focal point intersections and shall be reinforced with a built form edge and landscaping.
2. Corner buildings will address the street and intersection through the use of massing variations, architectural details and features.
3. Building heights at corners will be increased to accentuate and visually anchor the focal intersections along Brock Road.
4. Both hard and soft landscaping will embellish and enhance the corners through features such as special paving at intersections. The enhanced landscaping should be designed to provide year round interest.
5. At the initial stages of development, properties fronting Brock Road shall be required to provide a built form across a minimum of 60 percent of the lot frontage. The remaining frontage will require a substantial landscaped edge and decorative fencing to define street edge and "soften" views to parking. While the objective is to achieve 60 percent of the frontage occupied with buildings at the initial phase, it is recognized that properties with extensive frontage may necessitate consideration for a reduction in the percentage.
6. At the final stage of ongoing/phased development, built form will infill to provide a continuous building frontage along Brock Road in place of the initial landscaped edges.
7. For buildings along Brock Road between the focal points, building heights shall be minimum two functional floors with a three storey massing and appearance along Brock Road.
8. Where a lot includes an intersection corner, that corner shall be built prior to building along the interior of the lot in order to ensure that the focal points along Brock Road are reinforced early.

4.2.3 Pedestrian Connections

1. In addition to the pedestrian circulation that will take place on street sidewalks, provision shall be made to provide multiple private pedestrian connections from Brock Road through the mixed use blocks and their locations should have regard to transit stops.
2. These connections provide alternative pedestrian routes from the corridor into the adjacent residential areas and within the mixed use blocks themselves.
3. The introduction of these connections creates for more pedestrian friendly built form edge lengths and provides additional permeability by avoiding uninterrupted long blocks.
4. The private pedestrian connections within the blocks assist in the transitioning from more intensified built form along the corridor to the adjacent residential areas and help connect the woodlands to the west with Brock Road.
5. The private pedestrian paths/connections may be accentuated and defined through the use of landscaping such as decorative paving materials and the introduction of tree rows.
6. The east - west connections are reinforced by continuous built form, landscaped pathways, and in some instances, will provide for informal gathering spaces and street oriented commercial uses.
7. The north - south connections shown mid-block in the mixed use areas are accented and defined through a combination of tree rows and decorative paving. The width for planted parking medians shall be of a width that can accommodate an appropriate walkway width for safe pedestrian movement.



Pedestrian Connections

4.2.4 Transition Between Uses

1. Townhouse residential units (including stacked townhouses) with minimum three storey massing is an example of an appropriate transitioning layer between the mixed use built form along the corridor to the adjacent residential and woodland areas.
2. The introduction of rear lane garage access will provide a transition buffer between the parking areas serving the mixed use corridor and the townhouses themselves.
3. The townhouses provide a suitable interface with the woodlot, provide a more appropriate edge condition against the proposed collector road and provide for a pedestrian experience that differs from either the connections or the Brock Road corridor.
4. Landscaped connections also address transitioning by creating smaller parking courtyards. The connection leads from the intensity of the corridor, to the residential character of the townhouses, to the woodlot through the continuity of the landscaped walkway.

4.3 Demonstration of Phasing/ Evolution of the Mixed Use Corridor

Based on the guideline requirements noted above and the demonstration plan that follows is a possible development scenario which shows the evolution of the mixed use block over time.

4.3.1 Phase 1

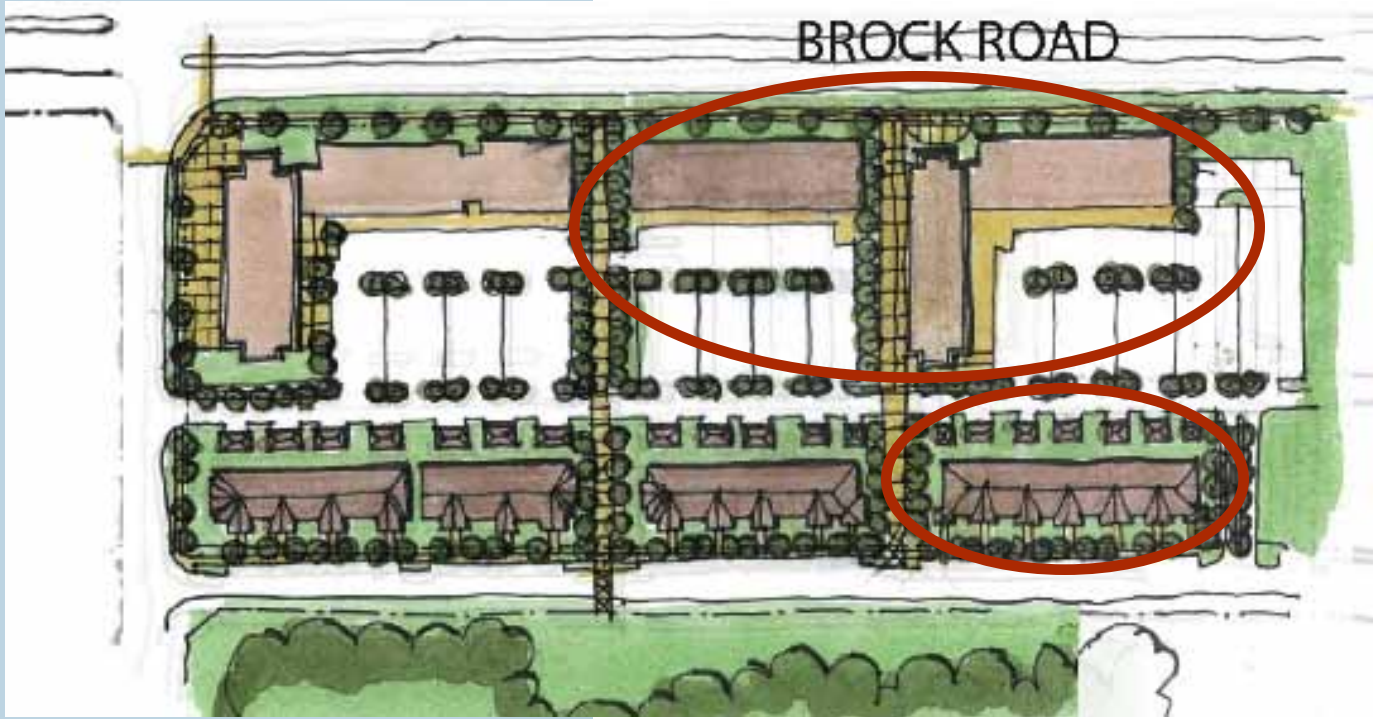
- The corner at the focal intersection is developed first with increased massing and height at the corner along with a mid-block building with similar or slightly lower height.
- Townhouses would be developed to provide a residential edge to the proposed collector road or local road with no individual vehicular access to the street.
- Parking areas are screened through landscaping along the Brock Road edge and a pedestrian walkway connection is introduced.



Transition Area Detail

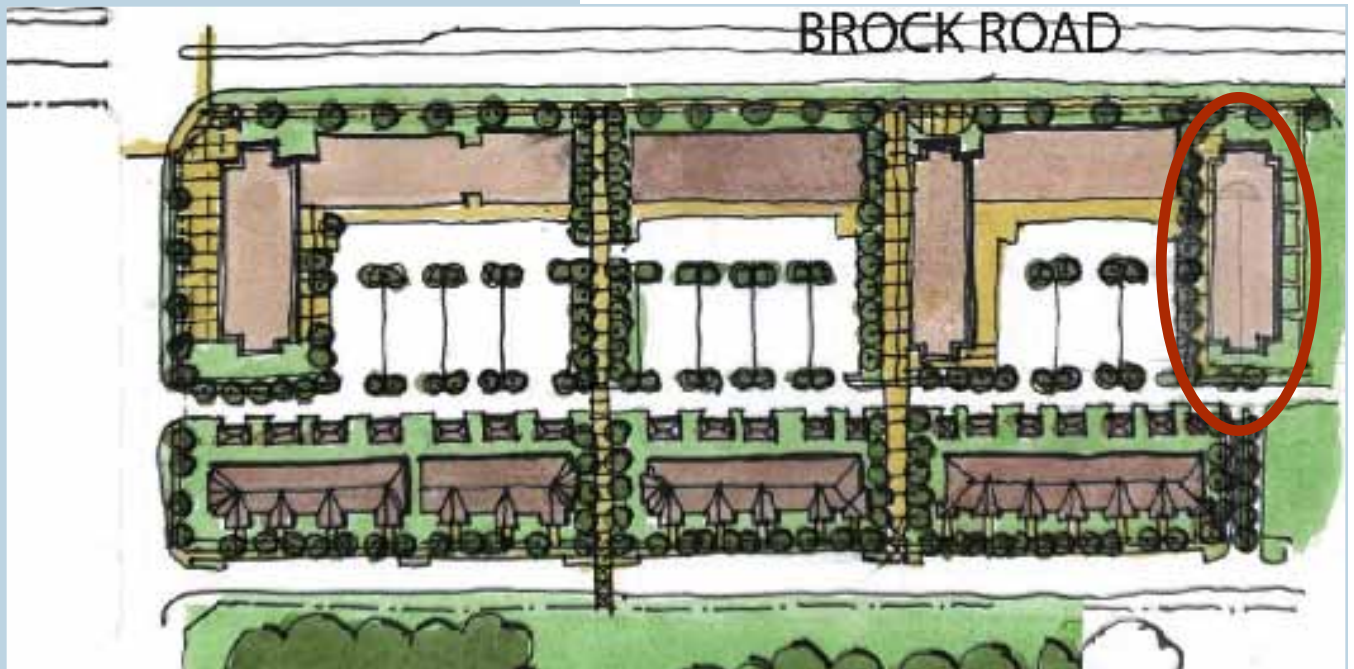
4.3.2 Phase 2

The Brock Road frontage receives additional built form replacing landscaped edges and screening parking areas. Additional townhouses are introduced along with a taller stepped buildings along Brock Road and walkway connections introduced.



4.3.3 Phase 3

Additional built form is introduced along Brock Road, continuing the street edge while completing the enclosure of the parking area. At this stage, added building height may be introduced with a stepback which addresses the massing and height of existing buildings.



5.0 Road Network

The Tertiary Plan is structured around Brock Road, a Type “A” Arterial Road that passes through the entire neighbourhood. Public roads intersecting with Brock Road will occur at points indicated by the Tertiary Plan, with signalized intersections occurring at Dersan Street and the new collector roads south of the CPR track. New driveway access intersecting with Brock Road will be considered only if approved by the Region of Durham, and if they do not prejudice the achievement of other planned road intersections.

Public and Private Roads should be aligned to form a grid or modified grid pattern, with connections to the Brock Road corridor and transit routes. Where possible, roads should front onto or terminate at key features including the valleylands, woodlands, stormwater management facility, school and parks.

In keeping with the neighbourhood objective of pedestrian oriented design, all streets shall provide sidewalks on both sides, except in limited circumstance where plan design, street function and abutting development justify the provision of a sidewalk on one side only.

Consideration may be given to reduced road standards and to the use of rear lanes. For example, a modified road cross section may be considered for road linkages passing through the area of tableland forest to reduce impact on the woodlands and its wildlife. The modified road cross section may deviate from those shown throughout this Section.

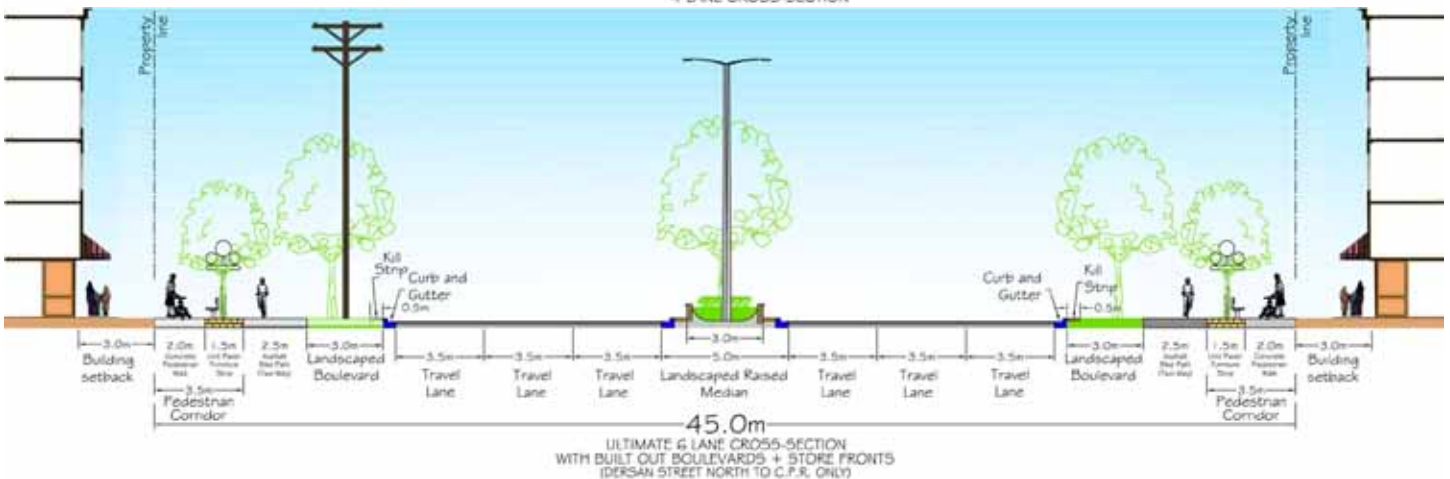
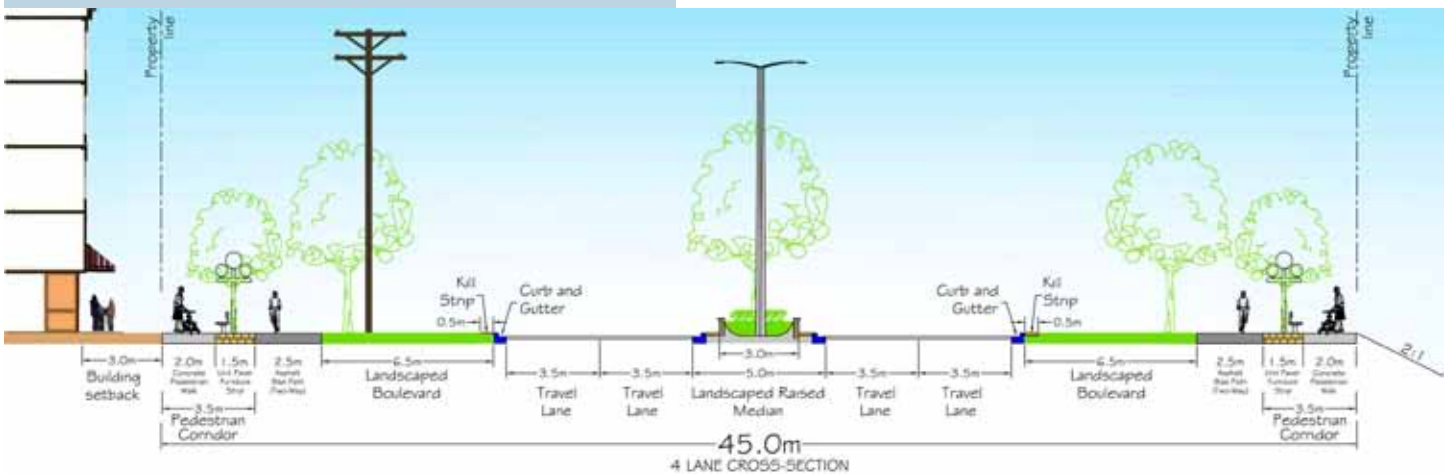
Brock Road is a Regional Type “A” Arterial Road, and is anticipated to eventually achieve a six lane urban profile. The City has requested that the Region apply special treatment to the design of Brock Road, especially at strategic intersections and through median design, to enhance the streetscape and road aesthetics. City Council has set an objective to introduce medians along Brock Road in sections, as vehicular access to a public road becomes available at the rear of the mixed-use blocks. The centre median proposed on Brock Road south of Dersan Road should be constructed during the initial construction of Brock Road.

5.1 Brock Road

Brock Road will transform over time from its current two lane rural profile through Duffin Heights, to a four lane urban profile in 2010/11, and finally to a six lane urban profile when traffic volumes warrant. Brock Road is envisioned to have enhanced boulevards with raised landscaped medians and ample sidewalks encouraging pedestrian activity and double tree rows.

1. Boulevards on both sides of the pavement area shall be a minimum of 9.0 metres and will include a grass verge with street trees and initially a 2.0 metre sidewalk, with a multi-use trail having a width of 2.5 metres, on both sides of the road.
2. Buildings that abut Brock Road shall present a facade with architectural detailing, building entries and landscape features that address this important road frontage, create a pedestrian scale setting that will result in a pedestrian friendly environment.
3. Accommodation for transit facilities should be provided.

In addition to these requirements please refer to the previous section, *4.0 Brock Road Urban Design Guidelines*, for further details.

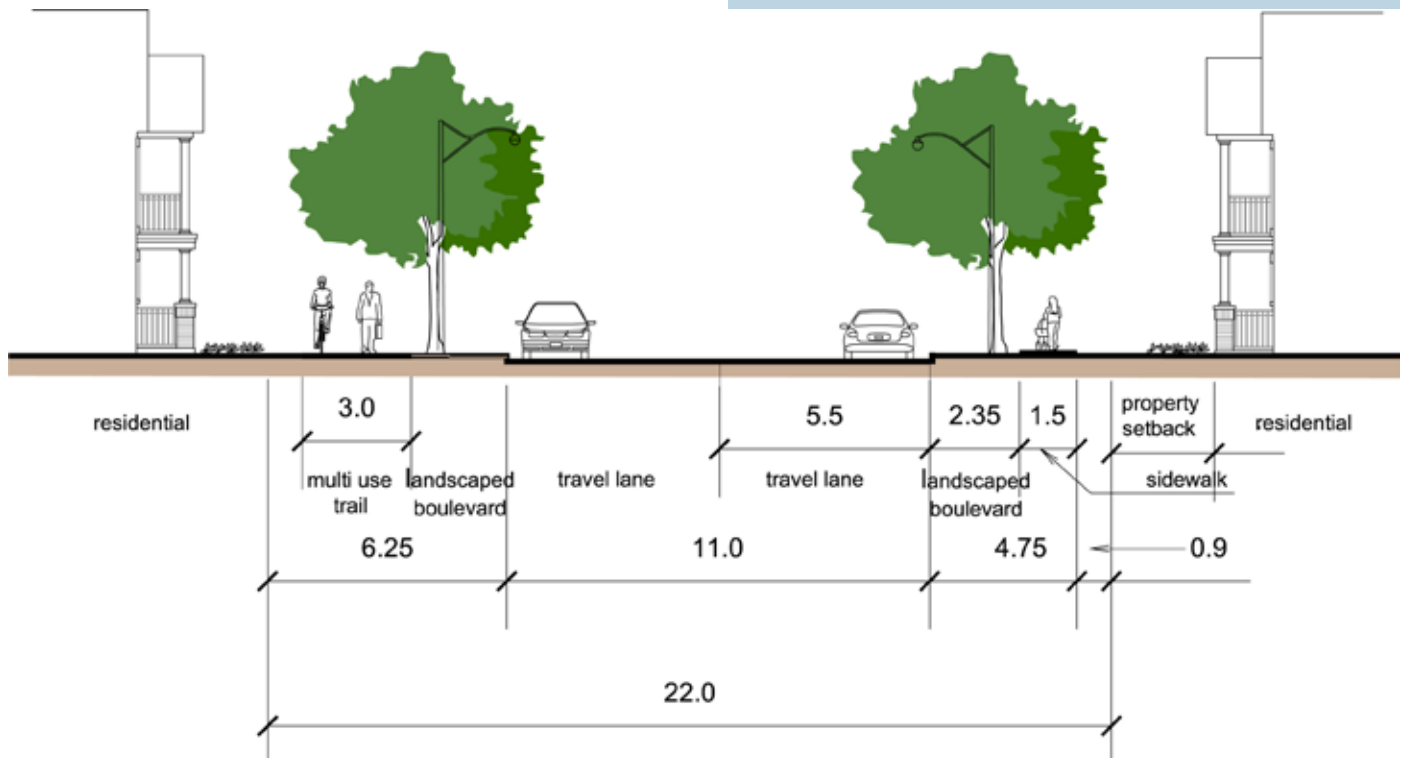


Conceptual Brock Road Cross-Sections

5.2 Collector Roads

Collector Roads provide important connections between residential neighbourhoods and other community functions. They typically define the community structure.

1. Collector Roads shall have a maximum right-of-way of 22.0 metres.
2. The road surface, including parking lanes on both sides of the road shall be a maximum of 11.0 metres.
3. Boulevards on both sides of the pavement area shall be a minimum of 4.75 metres and will include a grass area with street trees and 1.5 metre sidewalks on one side and a 3.0 metre multi-use trail on the other side.
4. Individual, direct access from a Collector Road is not permitted for grade related residential dwellings.
5. Transit facilities shall be located on Collector Roads.
6. Buildings that abut Collector Roads shall present a facade with architectural detailing and landscape features that address the road frontage. Reverse frontage development shall not be permitted adjacent to any Collector Road.



5.3 Local Roads

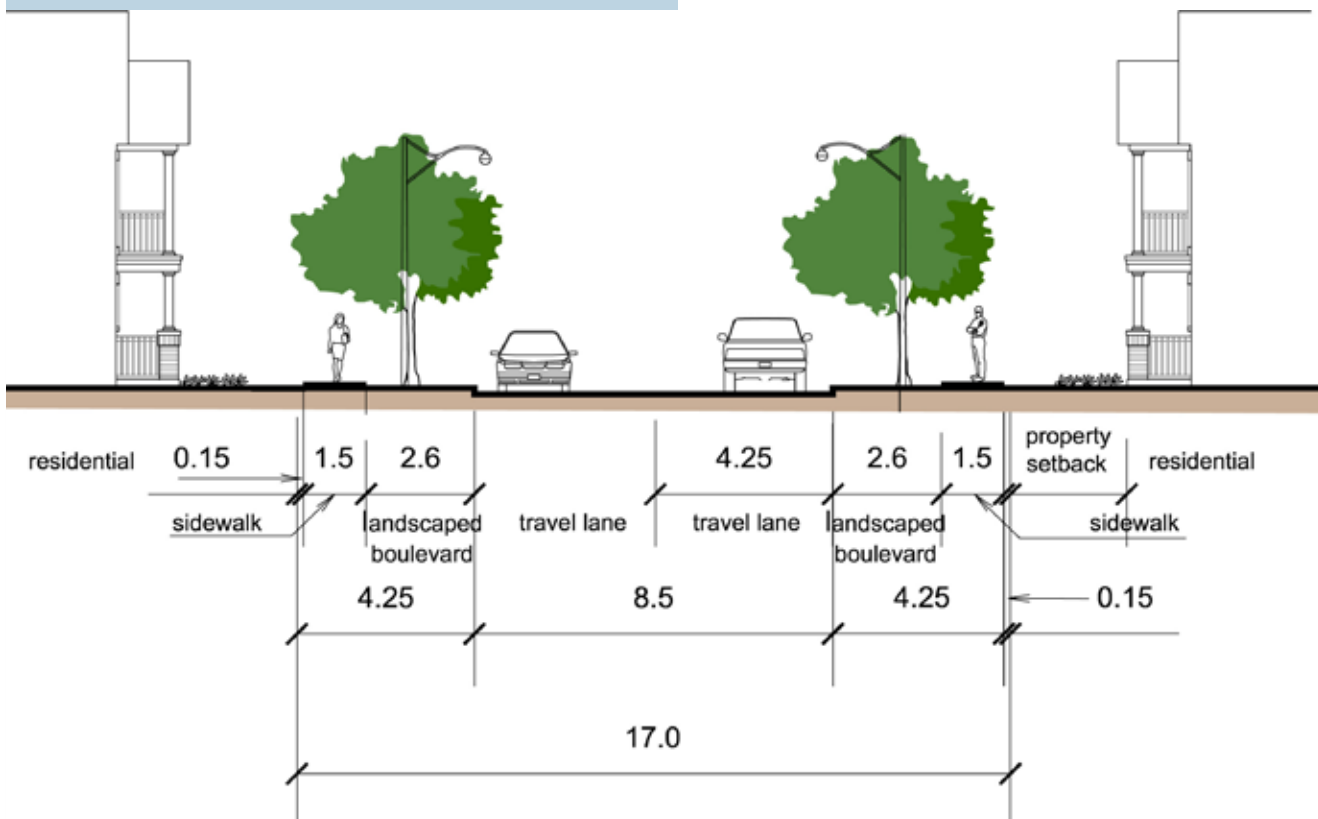
Local Roads connect to Collector Roads and link with public spaces. The Duffin Heights Neighbourhood will include local roads with 17.0 metre to 15.5 metre rights-of-way.

5.3.1 Local Road - 17.0 metres

1. The road surface, including a potential parking lane on one side of the road (that could alternate to the other side of the road) shall be a maximum of 8.5 metres.
2. Boulevards on both sides of the pavement area shall be a minimum of 4.25 metres and will accommodate a grass area with street trees and 1.5 metre sidewalks on both sides.
3. Individual direct access onto Local Roads is permitted.
4. Buildings that front or flank a Local Road shall present a facade with architectural detailing and landscape features that address the road frontage.

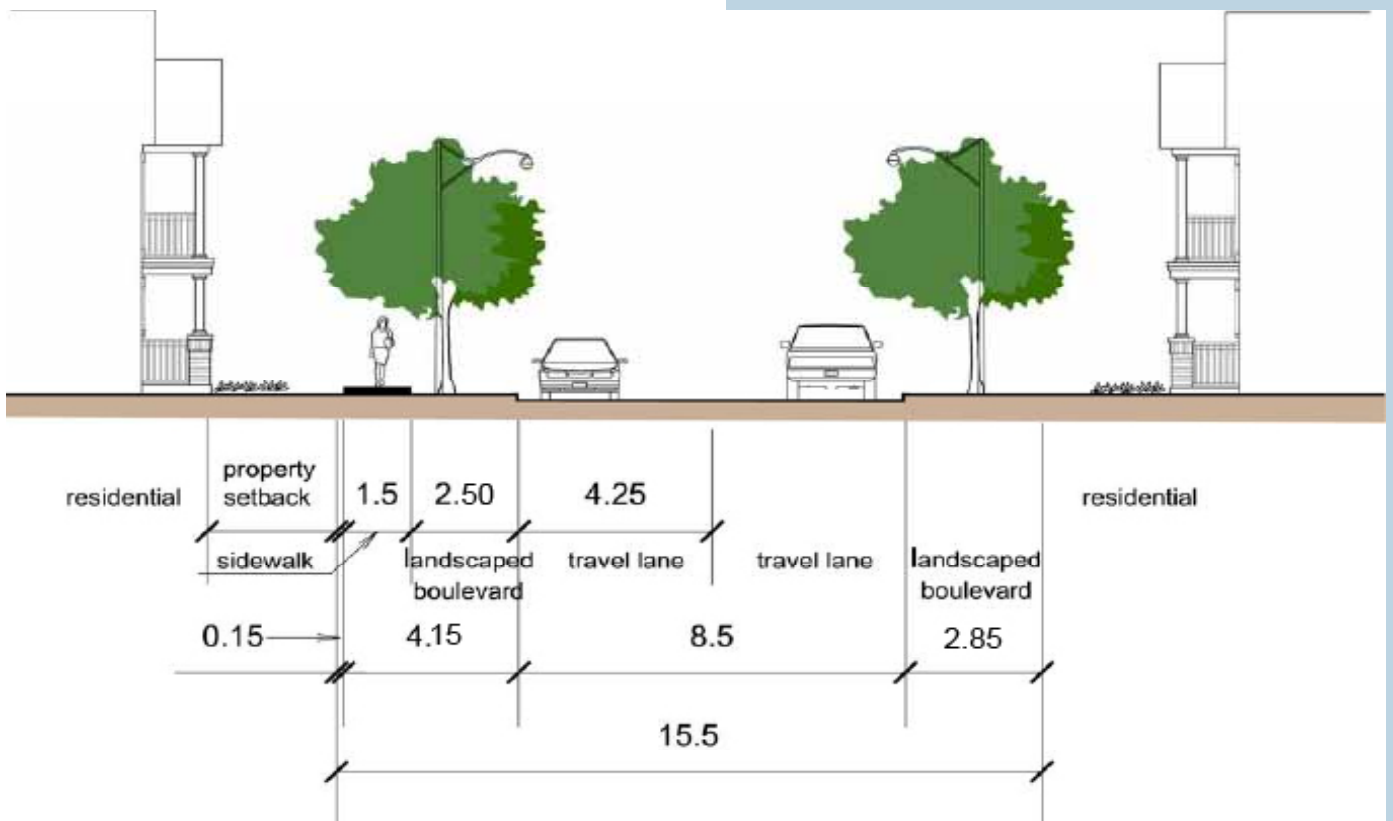
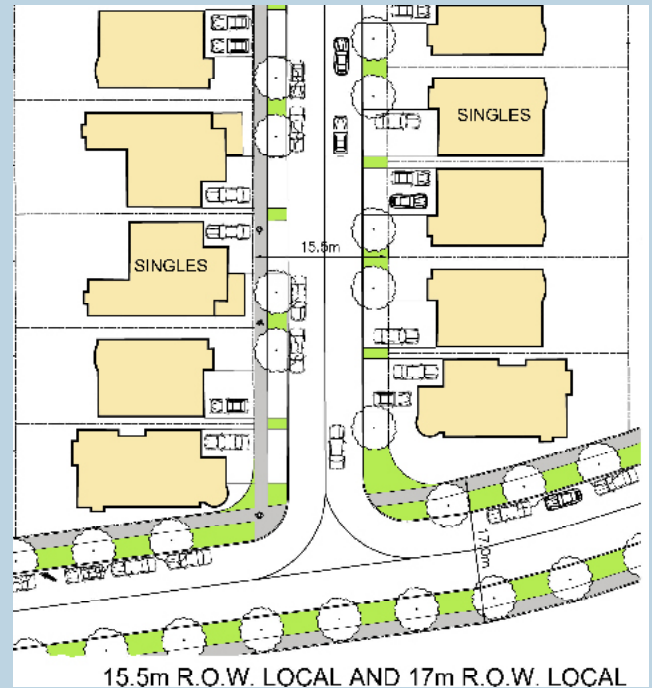


17m R.O.W. LOCAL AND 8.5m R.O.W. LANEWAY



5.3.1 Local Road - 15.5 metres

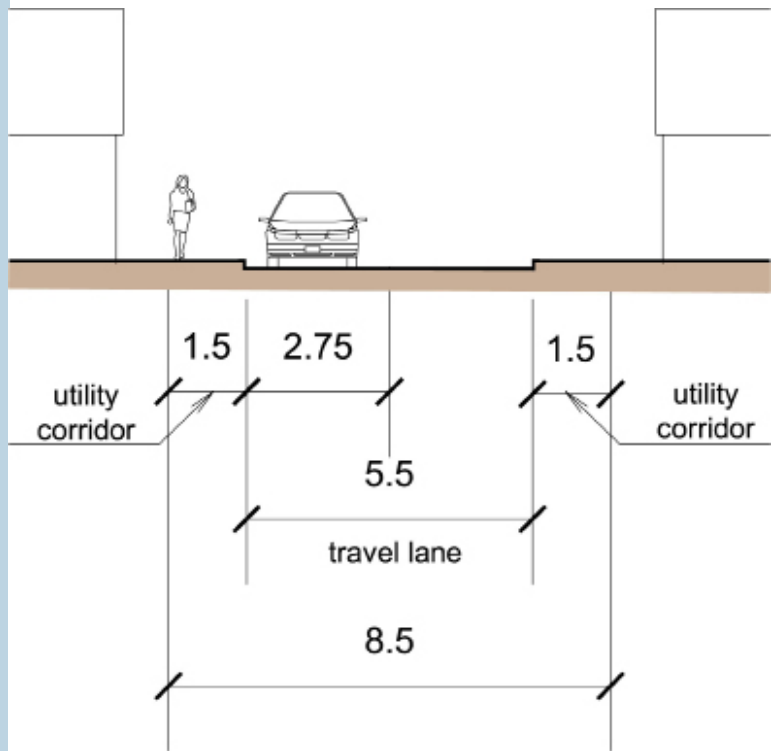
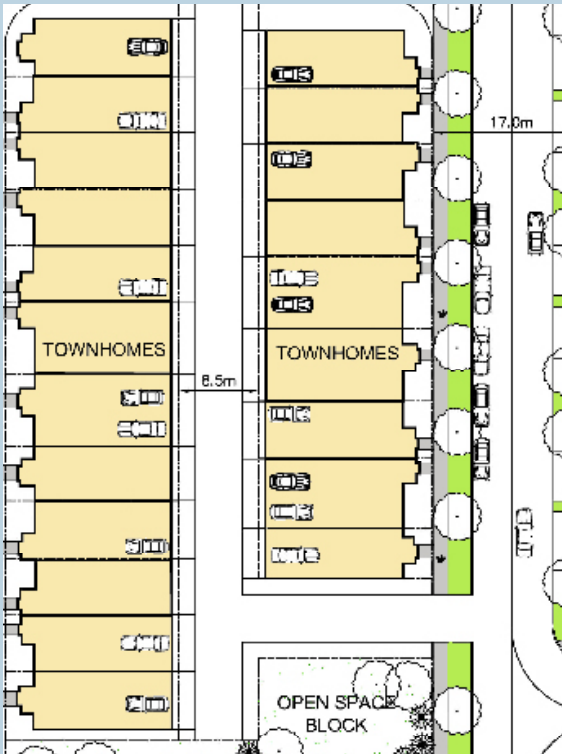
1. The road surface, including a potential parking lane on one side of the road (that could alternate to the other side of the road) shall be a maximum of 8.5 metres.
2. Boulevards on both sides of the pavement area shall be a minimum of 2.85 metres and will accommodate a grass area with street trees and 1.5 metre sidewalks on one side.
3. Individual direct access onto Local Roads is permitted.
4. Buildings that abut or flank a Local Road shall present a facade with architectural detailing and landscape features that address the road frontage.



5.3 Lanes

Lanes provide access to private garage facilities.

1. Lanes should be provided on roads where garages and front driveways will detract from the character of a streetscape, such as along Arterial Roads and/or a Collector Road.
2. Lanes shall have a maximum right-of-way of 8.5 metres.
3. The road surface shall be a maximum of 5.5 metres and shall include a 1.5 metre utility corridor on either side of the lane.
4. The use of permeable materials shall be encouraged in lane construction in areas where sufficient drainage exists.
5. The use of lanes is encouraged for all type of grade related residential development.



6.0 Staging and Implementation

6.1 Staging

Development of Duffin Heights will occur in an orderly and efficient manner, based on full municipal services. The street system and road connections will be extended as necessary to provide safe and secure access to new development. In addition, public facilities such as parks will be developed in a timely manner to ensure that the needs of future residents are met. The provision for a functional trail section of the pedestrian system should be implemented coincidental with adjacent development wherever possible.

Landowners will be required to enter cost-sharing agreements for certain facilities, such as parkland, stormwater management ponds, school sites and collector roads as conditions of development approval. Developers may be required, as conditions of development approval, to post signs at the terminus of partially completed roads identifying that future construction of a through road will occur.

6.1.1 FUNCTIONAL SERVICING AND STORMWATER REPORT (FSSR)

A Functional Servicing and Stormwater Report shall be required for any proposed development application within the Duffin Heights Neighbourhood.

When preparing an FSSR, the consultant shall address the Water Balance and Stormwater Management components of the FSSR on the basis of the geographical blocks identified in the Duffin Heights Environmental Servicing Plan. Where a previous FSSR has been prepared for a development application within a same block, reference may be made to the conclusions and recommendations of the previous FSSR provided that the existing and proposed post development conditions have not changed. The goal of the water balance mitigation strategy is to maintain pre-development infiltration through appropriate mitigation measures.

A Table of Contents for the FSSR is also appended to this section. Pre-consultation is encouraged prior to submission of the FSSR to confirm the items to be addressed.

6.2 IMPLEMENTATION

The Duffin Heights Development Guidelines will be implemented through various processes, including detailed subdivision design and approval, architectural design control, site plan review and approval, and inclusion of appropriate performance standards in the zoning by-law as well as requirements included in subdivision, development and site plan agreements.

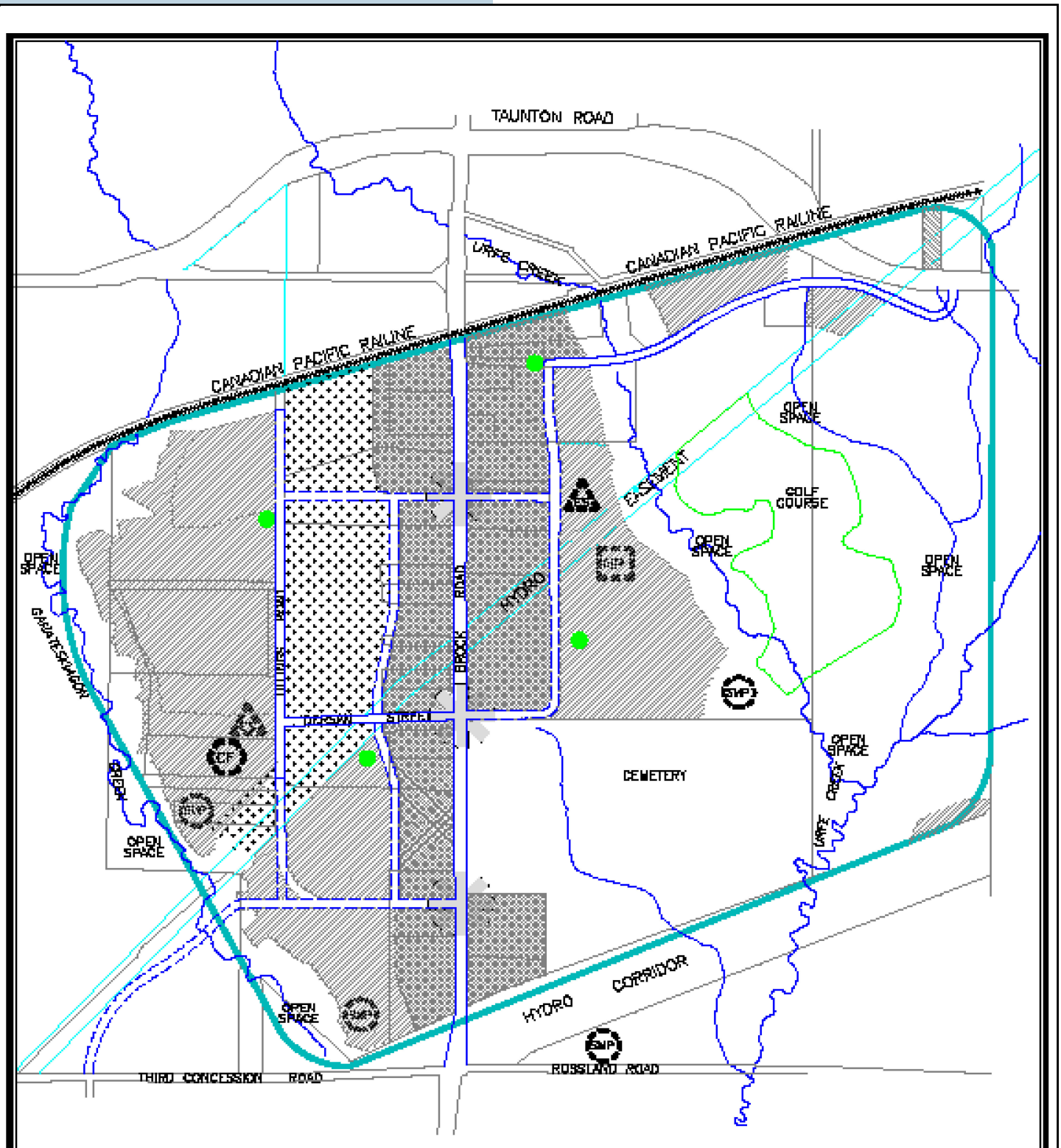
An application for the approval of major development will be required to be supported by a statement as to how the proposal meets the general intent of the Guidelines and the Duffin Heights Neighbourhood Policies, prior to Council's consideration of the application. Further details from the applicant respecting full compliance will be required prior to site plan approval.

Duffin Heights

Functional Servicing and Stormwater Report Requirements In support of Draft Plan or Site Plan Approval

1. Executive Summary
2. Introduction
 - Purpose
 - Study Area
 - Previous Studies
3. Site Location Plan
4. Municipal Servicing
 - Storm Drainage (i.e. major/minor system)
 - Conceptual Grading
 - Sanitary Servicing
 - Water Servicing
5. Water Balance Assessment
 - Existing soils – verify soil type with boreholes
 - Existing hydrogeology – verify groundwater depth
 - Existing water balance – verify recharge targets set in ESP
 - Post water balance
 - Post water balance with mitigation measures to demonstrate how recharge targets will be met
 - Preliminary infiltration facility design details
6. Stormwater Management
 - Existing hydrology/hydraulics/floodlines
 - Proposed hydrology/hydraulics/floodlines (disk copy of modelling required)
 - Stormwater runoff control criteria (i.e. flood, erosion, water quality)
 - Preliminary stormwater facility design details (cross-section through facility required)
7. Transportation System
 - Road network
 - Transit system (if applicable)
 - Preliminary design of crossings (if required)
 - Trails, pedestrian routes
8. Non-Municipal Utilities
 - Hydro One
 - Local Hydro – Veridian
 - Other - cable, gas, telephone
9. Implementation/Phasing
 - Internal
 - External
10. Future Study Requirements
 - Stormwater Management Pond Design Brief & Operations and Maintenance Manual
 - Detailed design of crossings (if applicable)
 - Erosion and Sediment Control Plan and Detail
11. Other Issues Raised Throughout Pre-Consultation
12. Conclusions/Recommendations

figure A | Tertiary Plan - Duffin Heights Neighbourhood



City of Pickering

Planning & Development Department

TERTIARY PLAN - DUFFIN HEIGHTS NEIGHBOURHOOD

- GUIDELINE BOUNDARY
- FUTURE ROADS
- EXISTING ROADS
- GOLF COURSE
- TABLELAND FOREST

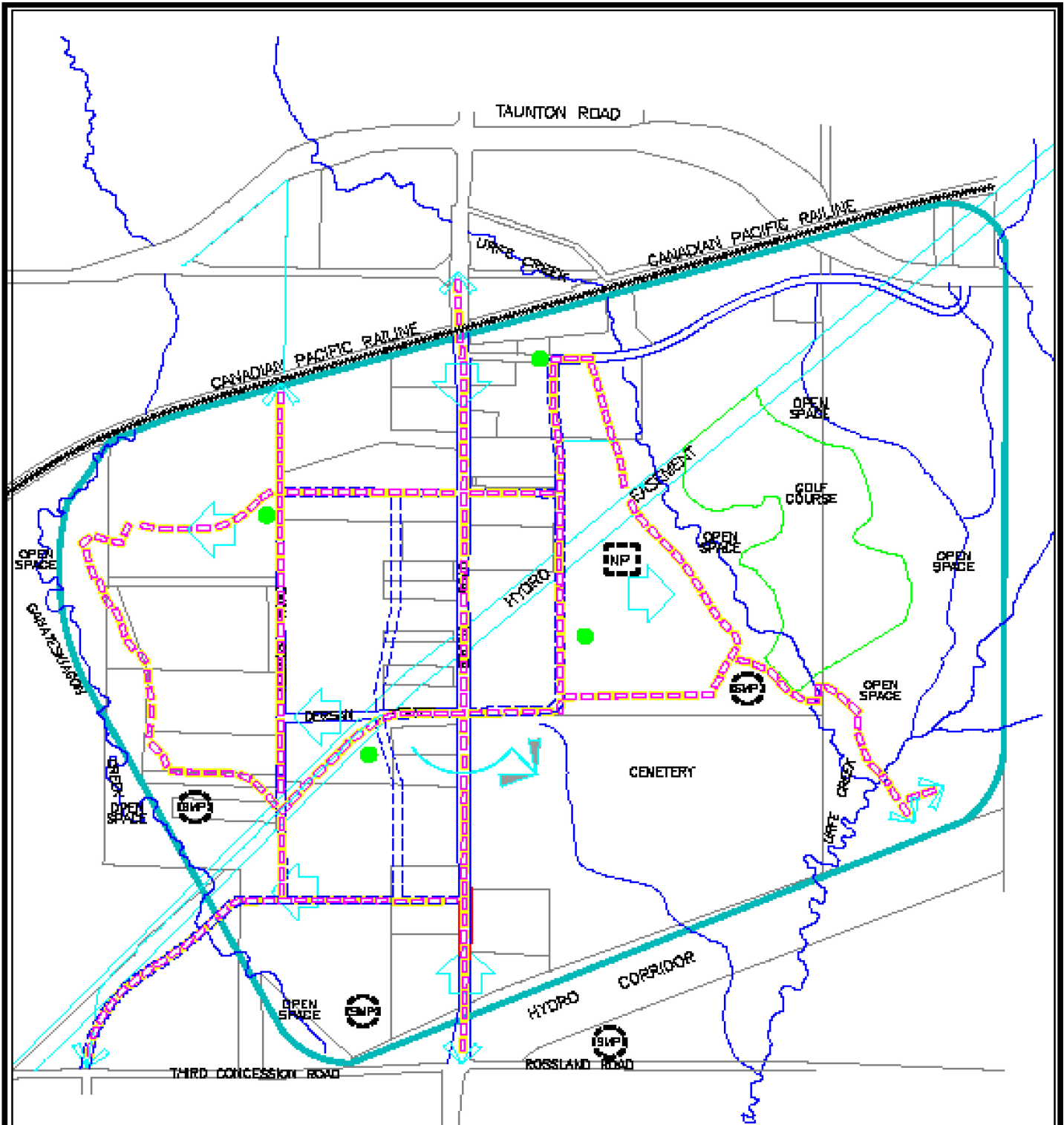
- RESIDENTIAL
- BROCK ROAD STREETSCAPE
- EMPLOYMENT
- FOCAL POINTS
- VILLAGE GREEN

- FUTURE STORMWATER MANAGEMENT POND
- FUTURE NEIGHBOURHOOD PARK
- FUTURE ELEMENTARY SCHOOL
- FUTURE COMMUNITY FACILITY

SCALE 1:12500
 100 0 100
 METERS
MAY 12, 2009

FIGURE A

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City of Pickering

Planning & Development Department

DESIGN PLAN - DUFFIN HEIGHTS NEIGHBOURHOOD

- GUIDELINE BOUNDARY
- FUTURE ROADS
- EXISTING ROADS
- GOLF COURSE

- MAJOR PEDESTRIAN ROUTES
- PROMINENT INTERNAL VERNAL Pools/VETAS
- PROMINENT EXTERNAL VERNAL Pools/VETAS
- VILLAGE GREEN



- FUTURE STORMWATER MANAGEMENT POND
- FUTURE NEIGHBOURHOOD PARK



SCALE 1:1 25000
100 0 100
METERS

MAY 12, 2009

FIGURE B

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