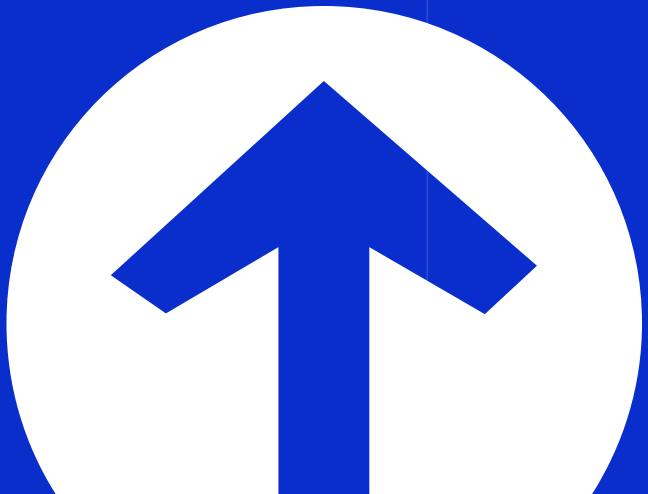


Urban Design Guidelines

- Streets & Blocks
- Built Form
- Tall Buildings
- Public Realm
- Site Plan
- Sustainability
- Lighting

The following guidelines have been created to illustrate the types of built form control recommended to achieve the objectives of the Steeles West Secondary Plan. Guidelines are useful tools in the creation and delivery of new communities and the infill of existing ones. They demonstrate the desired outcome and recommendations for the layout, look and function for the Steeles West District as development occurs. Design Guidelines provide the City, the public and the development community with a clear understanding of the benchmarks for design proposals.

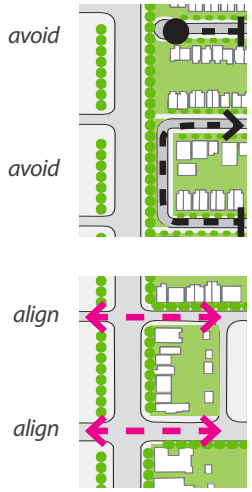


Figure S.1

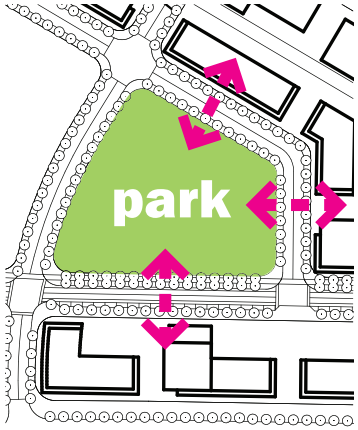


Figure S.3

S.1 - Align Streets

Align local streets on either side of major arterials to allow for future crossing points and connectivity between neighbourhoods. Avoid dead-end streets and cul-de-sacs, which isolate parts of the neigbourhood and fragment pedestrian movement.

S.2 - Define Open Spaces

Define parks and public open space with public streets. This stimulates public access and promotes security within the park. Buildings with primary frontages and ground level active uses will also help to define and activate the public parks and open spaces.

S.3 - Park Edges

Parks should have a minimum of two street frontages and 50% frontage abutting public streets. Avoid creating parks adjacent to the rear yards of existing or proposed development.

S.4 - Create a Fine Grained Grid

Develop a fine-grain street grid, which offers choices for pedestrians, cyclists, and vehicular movements, and creates more intersections for passive traffic control. “Fine grain” means that a variety of ways of travel are available due to the number of street intersections and smaller blocks make a community more walkable.

S.5 - Street Types

Design streets and street right-of-way (ROW) to reflect the desired adjacent land use, including the intensity of uses, heights, and provision of modal options. Utilize street types to support a variety of functions in the development area.

Figure S.2 & S.4

Develop a fine grain street grid.

Avoid use of cul-de-sacs(11.3.12.26)

S.6 - Parking Near Activity

Where feasible, allocate lay-by and street parking on-street near activity generators such as community facilities, large open spaces, parks, grade-related retail or on important streets.

S.7 - Tree and Soil Volume

Street trees require generous soil volumes and quality soils to survive and grow. Provide sufficient soil volumes in street ROW design for street trees to properly mature (Refer to City Tree Planting Guidelines). Provide permeable tree bases to allow for rainwater and infiltration to nourish tree growth. Where sufficient volumes cannot be provided, provide structural soil cells to ensure adequate soil volumes required to reach maturity.

S.8 - Co-locate Utilities

Coordinate, locate and consolidate utilities and services in underground tunnels, duct banks or other technologies wherever possible. *(11.3.11.18, 11.3.13.15)* **Avoid locating underground utilities under street tree planting beds wherever possible. This will be evaluated at detailed design stage of a development.**

S.9 - Green Streets

This Plan includes a conceptual Green Street network that is subject to further review and detailed design. Green Streets are an integrated approach to infrastructure as high functioning landscapes that perform multiple functions with multiple benefits, including stormwater management and addressing urban heat island, biodiversity and human health. The proposed Green Streets have enhanced plantings and tree canopies that will create a beautiful and comfortable walking and cycling environment. In the Steeles West Streetscape Plan, Green Streets are located along right-of-ways that connect major parks and on-street commercial spaces.

Figure S.9 & S.10

On-street cycling is provided in a shared-use lane.

Figure S.8

Figure S.7 & S.9

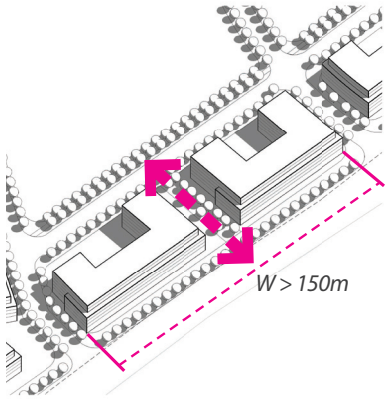


Figure S.11

Figure S.12

S.11 - Mid-Block Connection

Provide a high quality mid-block pedestrian connection, street, or lane for blocks over 150m in length. Mid-block connections should be wide enough to allow for safe cyclist and pedestrian passage, well lit and be naturally surveilled from adjacent buildings *(11.3.11.14 - 11.3.11.16)*.

S.12 - Emphasize Crossings

Emphasize important pedestrian street crossing areas through a combination of tactile walking surface indicators, changes in materials, contrasting colours and appropriate vehicle signals (crosswalks, etc) to provide greater visibility to motorists, cyclists and encourage pedestrian use.

S.13 - Shorten Pedestrian Crossing Distances

Curb extensions or "bump-outs" are effective in calming traffic and shorten the roadway crossing distance for pedestrians. Curb extensions should be used on appropriate streets for crosswalks and intersections wherever possible.

S.14 - Access to Transit

Create clear, direct and enjoyable pedestrian and cycling routes for access to transit facilities.

Urban Design Guidelines

BF.1 - Intensify near Transit

Locate higher levels of intensity and height surrounding the new Steeles West Station. These highly transit-supportive development sites are located within a five minute walk from the subway station (a 5 minute walk corresponds to a 500 metre radius). *See Ontario Municipal Board Notice of Decision pertaining to United Parcel Service Canada Ltd.*

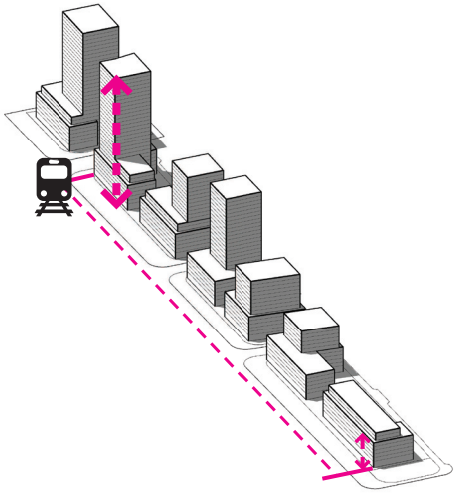


Figure BF.1

BF.2 - Mid-Rise Street Scale

"Mid-rise" scale creates a comfortable pedestrian environment in an urban neighbourhood, and allows for sunlight access on the opposite sidewalk. Blocks primarily within the 250m radius to the subway station can have heights in excess of this scale *(11.3.10.8 f)*

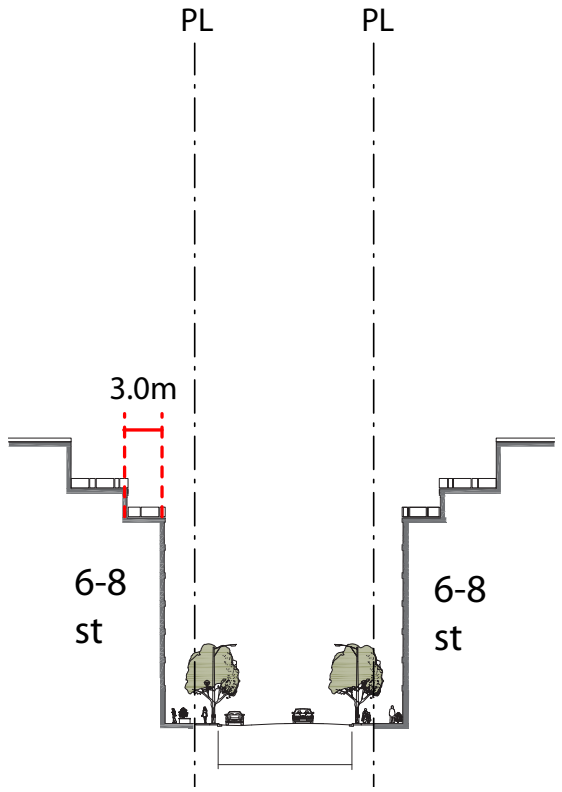


Figure BF.2

BF.3 - Build-To Lines

Establish build-to requirements for buildings facing important streets in applicable and site specific zoning by-laws. Build-to lines help create a cohesive streetscape *(11.3.10.10)*.**.**

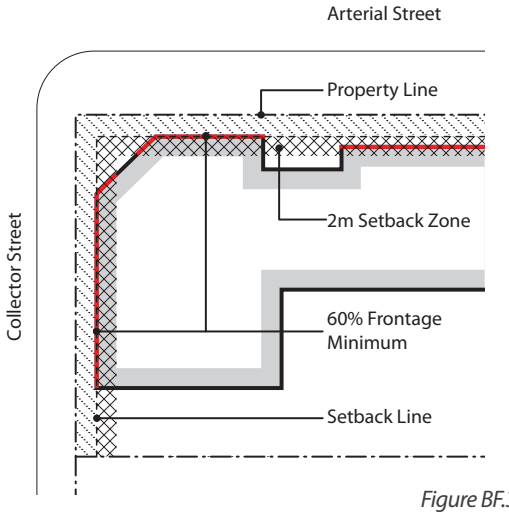


Figure BF.3

Figure BF.4 & BF.5

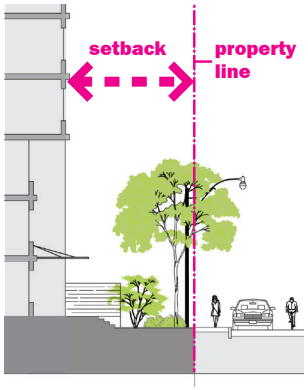


Figure BF.6

BF.4 - Design Variety

Consider a variety of architectural designs and facades to create variety in built form within developments that occupy large or multiple blocks. Continuous repetitive architectural styles, building design and materials produce sterile and ostrasizing streetscapes. Design diversity is encouraged.

BF.5 - Building Finish

Strong, pedestrian friendly streetscapes require building facades to be designed with durable materials, and aesthetic qualities appropriate to the character and scale of the public realm.

BF.6 - Defining Private Space

Define the threshold between private residential uses at grade and the public realm through measures such as screening, setbacks, planting, and elevation changes.

BF.7 - Pedestrian Shelter

Incorporate weather protection along Primary Retail sidewalks to protect from sun, wind and rain. Buildings with components such as canopies, or awnings provide relief, cover and definition of space while complementing at-grade use.

BF.8 - Create Street Rhythm

Design building facades and streetscape elements to create a consistent rhythm with visual interest and vitality. Rhythm can be achieved through changes of materials, fenestration, building articulation and spacing of streetscape elements (ie. trees, planters, etc).

Figure BF.4 -BF.8

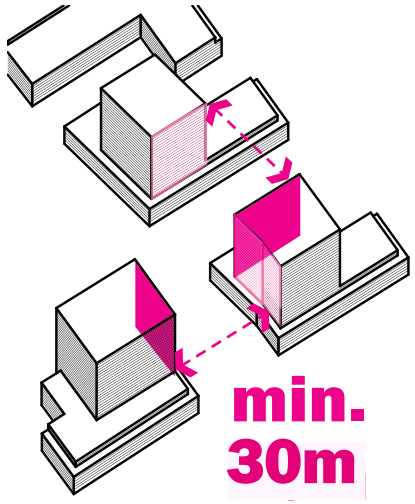
Urban Design Guidelines

Tall Buildings

TB.1 - Minimum Tower Spacing

Tall buildings (taller than 8 storeys) should be spaced sufficiently far apart to prevent overcrowding of skyviews and skylines, as well as reduce wind tunnelling and create comfortable microclimates. The separation distance between towers should be a minimum of 30m. A similar separation should be considered where towers are located on adjacent blocks and/or across streets.

Figure TB.1



TB.2 - Maximum Floorplate

Design tall residential buildings above any podium with a maximum gross floor area of approximately 750 m² (exclusive of balconies) to minimize shadow impacts on surrounding streets, sidewalks neighbouring buildings and private amenities.

TB.3 - Street Edges

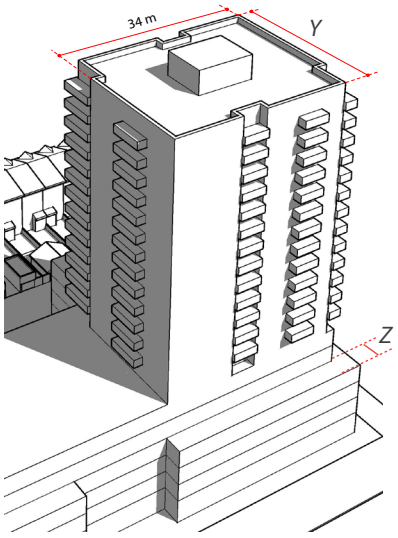
In residential developments, set back "tall buildings" from the podium street edge for at least 2/3 of the frontage. Locate the podium parallel to street edges.

TB.4 - Minimize Shadows

Minimize shadows cast by tall buildings on public open spaces/parks and private yards. Applications involving tall buildings should include shadow studies and analysis by the applicant, particularly where there is the potential for appreciable shadow impacts on public parks and private open spaces (including rooftop gardens) .

X

Figure TB.2 & TB.3



X x Y = 750m², max tower floorplate.

Z = Setback of tower from podium & street edge

Figure TB.2

Urban Design Guidelines

Public Realm

PR.1 - Protect Microclimate

New development can affect microclimate and have an impact on human comfort in the public realm. To ensure favourable shade and/or wind conditions, locate tall buildings a minimum of 30m apart, and avoid tall slab buildings. Similarly, provide weather protection along Primary and Secondary Retail streets. For cool months, maximize sun exposure by careful siting of architectural and site elements, and by providing weather protection from wind, rain and snow. For warm months, ensure opportunities for shade.

PR.2 - Connect Open Spaces

Connect new open spaces to create a network of parks, pathways, and gathering spaces to promote active transport (walk, cycle, etc) and healthy living.

PR.3 - Open Space Hierarchy

Create types and sizes of parks and open spaces to support a diversity of district, neighbourhood, and local activities that contribute to place-making and a legible public realm.

PR.4 - Focal Points

Create neighbourhood focal points with open and public spaces. Each open space can take on different functions or thematic qualities to provide identity for neighbouring inhabitants and workers.

PR.5 - Open Space Variety

Design new open spaces to provide a variety of options for residents and visitors: passive and active space; planted and paved areas; pathways and seating.

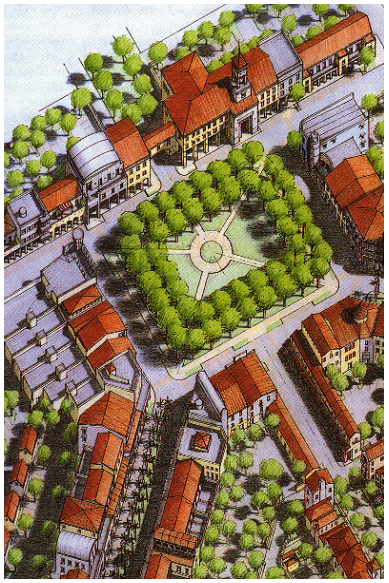
PR.6 - Space Flexibility

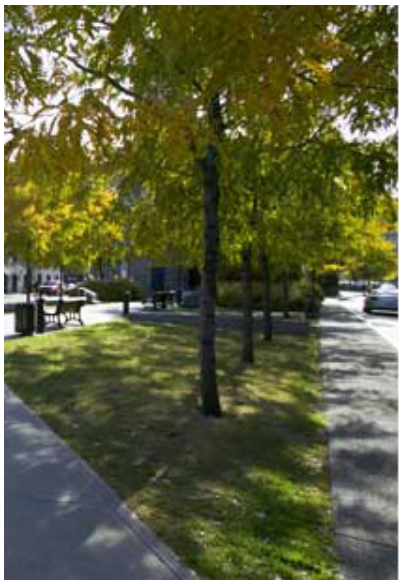
Provide flexible indoor and outdoor community spaces that can be programmed at hours in the day and evening.

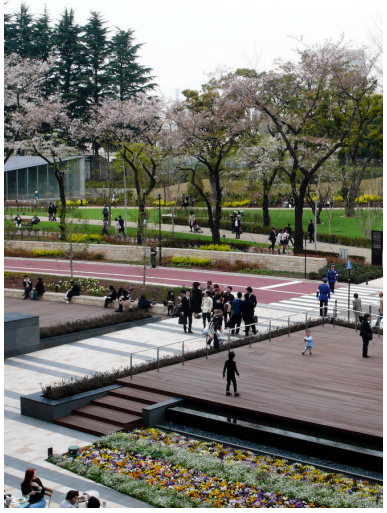
PR.7 - Open & Urban

Create year-round pedestrian friendly urban environments: square, plaza, courtyard, promenades. These open spaces complement vibrant social spaces like recreation and cultural facilities, schools, commercial-retail areas and transit hubs.

Figures PR.2-7







Urban Design Guidelines

Figure PR.8

Figure PR.8 & PR.9

PR.8 - Park Views

Maximize the opportunity for views from buildings adjacent to parks and open spaces. Large windows, balconies, terraces or amenity areas provide a point of visual connection with the exterior.

PR.9 - School Open Space

Locate schools adjacent to public parks to encourage the shared use of open space and potential reduction in overall site area needed for school sites.

PR.10 - Park Edge Enhancements

Provide for enhanced planting, wider sidewalks, and bicycle lanes along streets that connect to and surround major parks and open spaces. This emphasizes the relationship of the park to the surrounding neighbourhood.

PR.11- Mid-Block Security

Maximize the opportunity for views from buildings adjacent to mid-block connections. Pedestrian safety and comfort can be enhanced with visibility, passive surveillance, lighting, access and direct interaction with large windows, balconies, terraces and amenity areas.

Figures PR.11

PR.13 - Consistent Street Treatment

Provide a consistent, solid, stable and durable pedestrian environment with continuous street edge treatments. Coordinate the streetscape with neighbouring properties.

PR.14 - Sidewalk Design

Sidewalks should be designed to be barrier-free. This should include intersections with curbs, connections to building entrances, and across private driveways. Entrances to retail should be flush with grade and the public sidewalk to allow for accessible entrance/exit.

PR.15 - Wide Sidewalks

Provide sidewalk widths wider than 2.0 metres on main streets, grade-related commercial areas and in higher density areas, which allows for greater volumes of pedestrian movement, street retail sales and a more comfortable pedestrian experience.

PR.16 - Double-Sided Sidewalks

Wherever possible, sidewalks should be on both sides of the street to facilitate convenient and safe pedestrian movement.

PR.17 - On-street cycling

All shared-use (vehicular & cycling) lanes will be designated with roadway markings and have a minimum width of 3.5 metres, whereas wider is encouraged. On-street cycling allows for connections between local and regional cycling network and to the mobility hub itself. Streets “C” and “G” have a dedicated cycling lane.

Figures PR.13-16

Figure PR.18

Figure PR.19 & PR.20

Urban Design Guidelines

PR.18 - Off-street cycling

Off-street bicycle pathways will be a minimum of 3.0 metres in width. This minimum width allows for two-way movement along the network. Pathways should be accessible and finished with a solid, stable and smooth material. Visibility of the finished pathway should be provided with markings and/or colour contrast to minimize conflicts with pedestrians.

PR.19 - Street Furniture

Street furnishings should be co-ordinated to avoid conflict with building at-grade use, sidewalks, planting, utilities, lanes, driveways and crosswalks. Furnishings should be co-located with pedestrian and cyclist acitivities to contribute to a consistent and coherent public realm.

PR.20 - Bike Parking

Bike Parking (including short-term for visitors and commuters) should be considered both as streets and blocks are constructed. Convenient access to safe and visible bicycle parking will encourage visitors and commuters to utilize bicycles to get around.

PR.21 - Transit

Transit stops should include amenites like shelters (weather protection) and be co-ordinated with associated street furnishings (waste, recycling, wayfinding etc.), and the overall streetscape to minimize conflicts with vehicles, planting, lighting etc. Stops should be directly accessible to sidewalks.

PR.22 - Wayfinding

Incorporate wayfinding and visual cues into street and building design to direct pedestrian, bicycle, and vehicular movement. The ease to which a resident or visitor can move through a space will enhance their understanding and enjoyment of that space.

PR.23 - Tree/Utility Coordination

Coordinate street planting with utility location to minimize disruption and ensure adequate space and growing conditions for trees to reach healthy maturity. Consideration must also be made for planting bed maintenance operations.

PR.24 - Public Art

Public art is a valuable public element to be considered for the Steeles West District. Art reinforces the urban design goals of the public realm and outlines consideration of site conditions, built form opportunities and context. Public art selections will help define a unique character for the evolving district, and can be integrated into the architecture, landscape and open space design of a place early in the design process. Public Art should consider the following:

Artistic Excellence - High aesthetic standards, with attention to design, materials, construction and location.
Image - Create important visual interest through focal points, meeting places or identifiers that enhance the area's image.
Authentic Sense of Place - Recognize local cultural significance or create new identity
Informative - Create interest and "clues" for navigation and to welcome visitors into a new area.
Timely Consideration - Art should be considered early on in site planning stages to integrate with the site.

See the Vaughan City-Wide Public Art Program for further information.

This category in particular should be accessed during a site plan application, but also can be considered in rezonings.

Figure SP.1

Figure SP.2 & SP.3

SP.1 - Uniform Street Edge

Coordinate building setbacks with adjacent properties to help create a uniform street edge. "Build to" lines can be incorporated to ensure the desired proportion of the street frontage is created with building(s). Variety and articulation can still be incorporated into buildings to create interest and identity *(11.3.10.5).*

SP.2 - Entrances at Street

Locate functional primary building entrance(s) along street frontages to encourage security and public activity at street level. The number of entrances and spacing should be co-ordinated with the streetscape *(11.3.10.5 k)*.

SP.3 - Corner Frontages

Design corner lot buildings with entries and articulation on both streets to maximize views and maintain an animated street edge *(11.3.10.15)*.

SP.4 - Ground Floor Residential

Create entrances to ground floor residential units by providing setbacks, landscape, changes in grade, articulation or structures. Provide a threshold of semi-private space between an entrance and a street/sidewalk to allow for privacy and safety.

SP.5 - Ground Floor Height

Design multi-unit, multi-storey buildings on collector and arterial streets with a ground level floor-to-ceiling height to accommodate a mix of uses, including grade-related retail (where appropriate). A minimum height of 4.5m to the underside of ceiling is recommended.

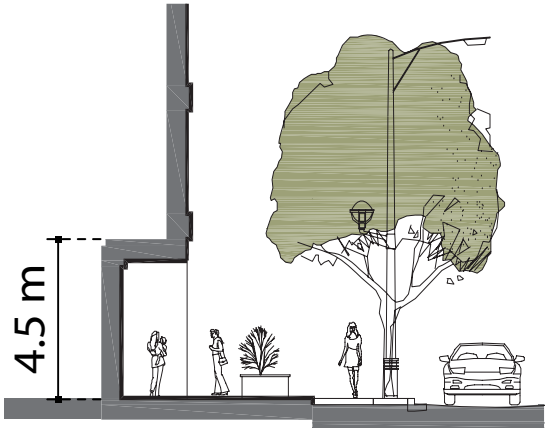


Figure SP.5

Urban Design Guidelines

Figure SP.4, & SP.6

Figure SP.1, SP.2 & SP.5

SP.6- Private Open Spaces

Provide visibility to any private open space in order to increase the surveillance of the open space and improve views (CPTED). Private open spaces should be connected to public streets and parks, and eventually the Black Creek Ravine System *(11.3.8.15).* **Some neighbouring private open spaces (Black Creek Pioneer Village) have sensitivity to height** *(11.3.10.7).*

SP.7 - Barrier Free Access

Incorporate barrier-free access into the site plan design. Refer to the Accessibility for Ontarians with Disabilities Act for details and regulations.

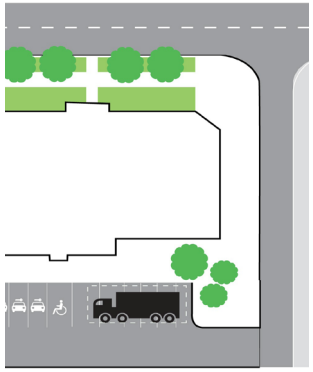
SP.8 - Enclose Refuse and Loading

Provide loading, garbage, and recycling areas within multi-unit residential and mixed use buildings.

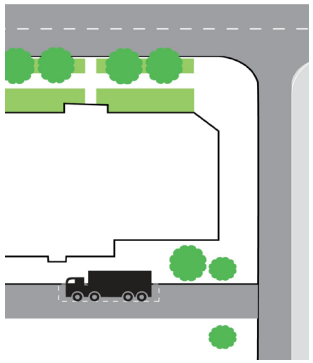
SP.9 - Sight Triangles and Driveway Radii

Driveway radii should be minimized where determined feasible and coordinated with site organization and built form to provide appropriate sight triangles.

Note: Refer to Steeles West Secondary Plan for more site plan policies.



Loading and Parking at the rear, away from primary street frontage.



Loading and Parking lane or driveway leading away from primary street frontage.

Figures SP.9 & SP.10

SP.9 - Loading Access

Wherever possible, locate servicing/ loading access from secondary streets, laneways or driveways *(11.3.11.17 r)***.**

SP.10 - Surface Parking - Rear

Where surface parking is permitted, locate lots to the rear of buildings where possible to maintain consistent street frontage. Where not possible, locate to the side of street-facing buildings. Any surface parking lot design should provide a ratio of 1 tree to for every five parking spaces (1:5) *(11.3.11.17)***.**

SP.11 - Screening from Side Streets

Screen parking and loading from any streets using planting, landscaping, decorative walls, and/or fencing *(11.3.11.17 i)*

Figure SP.11

Urban Design Guidelines

Figures SP.12-13

SP.12 - Threshold for Structured Parking

Provide all parking for buildings 4 storeys or taller in structured garages, preferably below grade. Some convenience/ accessible parking spaces may be considered at-grade. Ramps and entrances should be consolidated where possible to minimize sidewalk disruption and necessity for driveways *(11.13.11.17)*.

SP13 - Wrap Parking Structures

Above-grade parking structures should be wrapped or faced with primary facades facing primary or secondary streets at-grade. This ensures the animation of adjacent street frontages.

SP14 - Shared Parking

Reduce the total amount of parking provided by adopting shared parking practices in mixed-use areas. Combine parking requirements for different uses based on the intensities for each use at different times of the day. Consider street parking for visitor parking provisions *(11.3.12.56-57)*.

SP15 - Parking Under Driveways

Parking may be provided under private driveways where allowed), but should not be a deterrent for them to be publicly accessible or not built to public standards.

SP16- On-Street Parking

Maximize on-street parking opportunities. Encourage on-street parking on main streets and secondary streets wherever possible to supplement visitor parking requirements for developments or public facilities, including those found in parks. Allow for on-street parking on private lands to be counted towards parkland dedication *(11.3.12.56-57)*.

Figure SP.15

Figure SP.16

SP.17 - Signage & Bylaws

All residential and commercial signage within the Study Area is subject to an application and approval with the City of Vaughan's existing sign bylaws. A comprehensive sign plan may be submitted for review, and/or undertaken within an application for Site Plan Approval *(11.3.11.19)*.

SP.18 - Signage Coordination

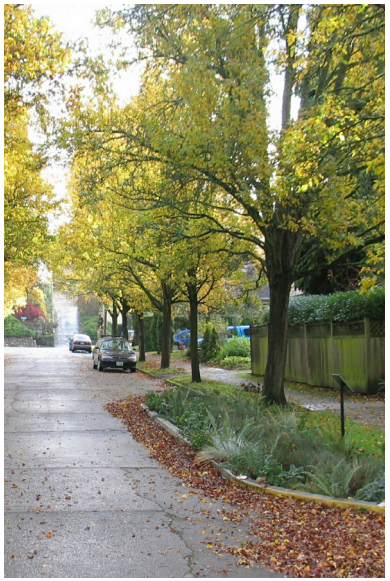
Residential and commercial signage should be co-ordinated to be complementary with buildings, streetscape and landscape, while avoiding conflict with building at-grade use, sidewalks, planting, utilities, lanes, driveways and crosswalks. Where possible, signage can contribute to a consistent and coherent public realm, by integration with exterior architectural building components and landscape features.

SP.19 - Signage Design

Signage should be high quality design with minimal visual clutter; and complement the building(s) in terms of materials, scale and consistency in design. Pylon signs and back-lit box signs are prohibited. Lighting for signage should be top-lit or lit-letter *(11.3.11.19).*

Figures SP.16

Urban Design Guidelines



Figures SS.1-3

SS.1 - Sustainability as a Feature

Develop environmentally sustainable measures such as energy conservation and storm water management into block and public realm design. Their creative incorporation can provide amenity for residents and neighbours *(11.3.13)*.

SS.2 - Mitigate Heat Islands

Local street sidewalks, surface parking areas and urban hardscapes should mitigate the heat island effect by minimizing the extent of paved surfaces and a co-ordinated integration of light coloured and/or porous paving materials, shading from large canopy trees and canopied structures.

SS.3 - Stormwater Management

The increase in stormwater run-off resulting from new development of the lands shall be controlled effectively by combining low impact development (L.I.D.) with standard stormwater management practices. L.I.D. designs shall encourage infiltration, evapotranspiration and water reuse, including such techniques as bio-retention areas and bio-swales. The Black Creek Valley System should be protected through good practices *(11.3.13.8-14)*.

SS.4 - Landscape Irrigation

Create landscapes that require little to no potable water for irrigation. Strategies include using drought-tolerant and resilient plant selections, using recycled water for irrigation and high efficiency irrigation technology (rainwater harvesting, greywater reclamation, drip-line systems) *(11.3.13.4)*.

SS.5 - Community Gardens

Consider opportunities for urban agriculture, community gardens and pocket parks between buildings and spaces. These can strengthen the local identity and community, and provide options for gardening for multi-unit residents.

Figures SS.1-3

Figure SS.8

Figure SS.9

SS.6 Light Pollution

Lighting levels should be co-ordinated and reduced to mitigate the effects of light pollution, trespass and energy efficiency while balancing the requirements for safety and visibility.

Consider all light sources when developing a lighting plan.

Exterior light fixtures should be shielded to prevent glare and/or light trespass onto any neighbouring properties.

No up-lighting from exterior light fixtures.

See “Lighting” section of the City of Vaughan Sustainability Metrics and City of Vaughan Exterior Lighting Guidelines.

SS.7 Green Energy

Renewable energy is encouraged to be produced on-site and incorporated into building and streetscape elements (roofs, street lights, transit shelters, parkland). Photovoltaic and ground source heating-cooling strategies should be considered and integrated into building and site design at an early stage of project development.

SS.8 Sensitive Flora & Fauna

Sensitive migratory birds and other fauna should be considered within the overall design of sites, parkland and structures to mitigate potential future conflicts and potentially provide wildlife habitat. Development should consider the Migratory Birds Convention Act (MBCA) in order to protect and consider areas for species to co-exist post-development.

SS.9 - Green Standards

New buildings and developments should strive to exceed or meet local, national and international environmental standards. “Integrated Design” is encouraged (water, energy and waste systems).

SS.10 - Building Practices

Developments should consider and incorporate renewable, local, recycled and/or sustainably harvested materials.

SS.11 - Green Roofs

Green (planted) or high-albedo roofs are strongly encouraged to reduce the heat island effect.

Urban Design Guidelines

Lighting

The York University Astronomical Observatory is located directly south of the Study Area, and is impacted by the availability of a "dark sky" to effectively maintain their research, teaching and public outreach roles. Light polluted skies from emerging development poses a real threat to their current facilities.

In addition, impacts of lighting from new development, particularly from commercial uses and parking lots, on adjacent properties and on Black Creek Pioneer Village in particular, shall be minimized *(11.3.11.21)*

Figure L.1 - York University Astronomical Observatory

L.1 - Street Lighting

Local streetlights and commuter parking lots shall be designed to maintain dark sky lighting to minimize the ecological impact of artificial lighting and achieve desired light levels, uniformity and light spill control in accordance with dark-sky requirements by directing light downward and inward and maintain zero cut-off light level distribution around observatory locations. Light designs should comply with International Dark-Sky Association (IDA) standards.

L.2 - Building and Site Lighting

Lighting for site plans should be designed to be directed downward and inward and maintain zero cut-off light level distribution at the property line.

Refer to "Lighting" section of the City of Vaughan Sustainabiilty Metrics (Site Plan)

Recommended Minimum Target:
- Shield exterior light fixtures >1000 lumens to prevent night sky lighting
- No up lighting allowed

Aspirational Target:
- Develop lighting controls that reduces night time spillage of light by 50% from 11 pm to 5 am (non residential)
- No architectural lighting allowed between 11p m and 5 am

L.3 - Efficient Lighting

Technological advancements in lights (ie. LED) allow for receptacles and bulbs to utilize significantly less energy and can last longer while still producing ample light levels for visibility and safety.

L.4 - Pedestrian-Scale Lighting

Areas of high activity (priority connections /primary retail areas/ Greenway street) should generally incorporate LED pedestrian-scale lighting as per City Standards. See Vaughan City-Wide Streetscape Implementation Plan and Financial Strategy.