TOWN OF MARKHAM

YONGE + STEELES

CORRIDOR STUDY



FINAL REPORT

du Toit Allsopp Hillier
Butler Group Consultants Inc.
UMA | AECOM
N. Barry Lyon Consulting

2008 September

urban design | landscape architecture DTAH

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1. Introduction

1.1 Study Purpose

The Town of Markham initiated a process in early 2007 to develop a land use and urban design study that would form the basis for an update to the Thornhill Secondary Plan—specifically focusing on the Yonge Street corridor and lands to the immediate east.

The purpose of this study is to provide a realistic and focused prescription for change, with a primary emphasis on improving the mix of development types to take advantage of the planned rapid transit corridor along Yonge Street.

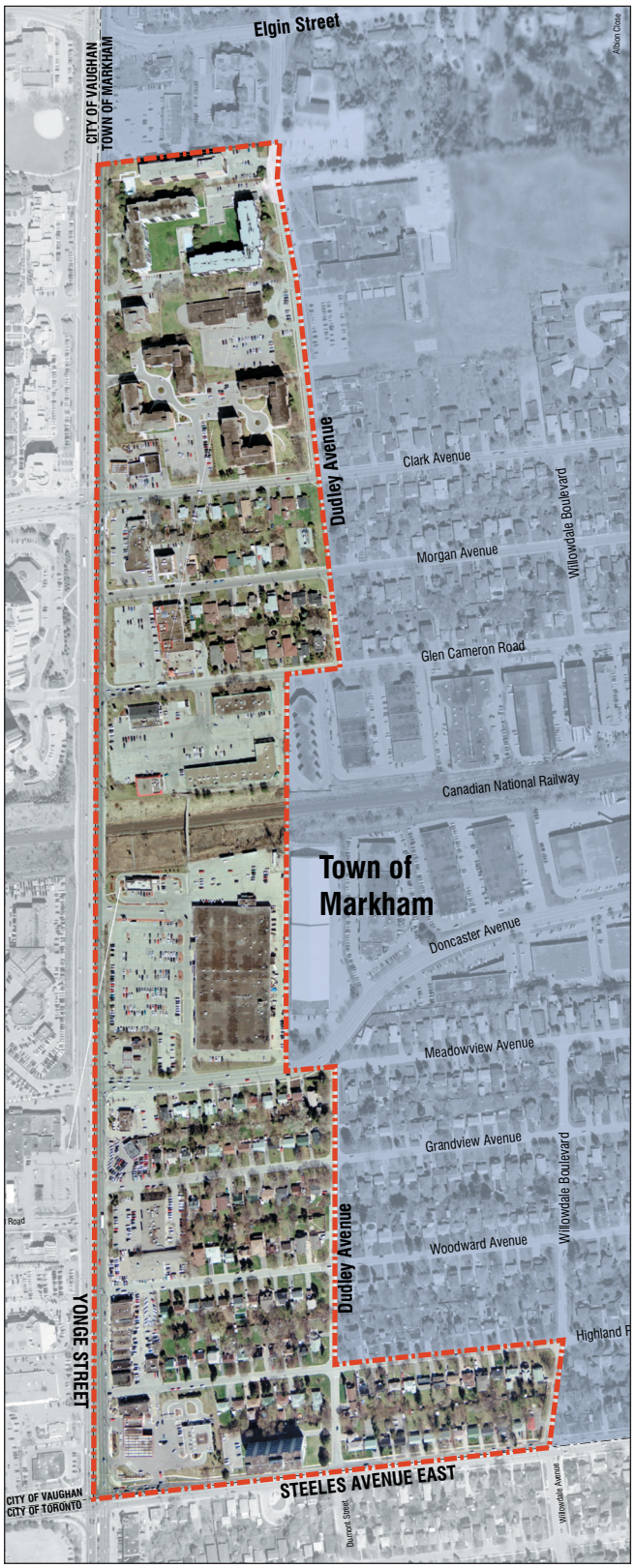
This document provides an overall vision for the redevelopment area, one that can be implemented by private and public investment in accordance with market conditions. It endorses roadway and streetscape improvements in addition to an open space network and other community facilities for public benefit and to act as catalysts for private development.

1.2 Setting

The approximate 21.5 hectare (53 acre) study area is located at the southwestern corner of the Town of Markham, and is bordered by the Cities of Vaughan to the west and Toronto to the south. Yonge Street defines the area on the west, Steeles on the south, Dudley Avenue on the east for all but one block, and just south of Elgin Street and the Thornhill Village Heritage District on the north.

Overall, the current built form is highly varied: a mix and match of 1- to 2-storey corridor mixed use retail with residential above, auto-oriented strip commercial, medium density residential, and industrial. Parcels vary in size from traditional small frontage "Main Street" lots and single family residential to large, assembled commercial areas, each presenting different opportunities for redevelopment.

The community is currently served by several surface transit options in mixed traffic (VIVA, TTC, GO Bus) with considerable roadway congestion. To help alleviate pressure on an already near capacity traffic network, York Region has planned for a dedicated bus-rapid transit service along the Yonge Street corridor. However, implementation is currently on hold to determine the feasibility of extending the Toronto Transit Commission subway northwards into York Region.



Yonge Steeles Corridor Study Area (outlined in red)

1	2	3
4		
5	6	
7		

Existing Setting

1. Yonge Steeles intersection looking south towards North York Centre in Toronto
2. Traditional small frontage commerical
3. Auto-oriented strip commerical
4. Panoramic view of the Yonge Steeles intersection looking north
5. East-west residential street
6. Low-density residential housing
7. Yonge Street north of the CN rail corridor

1.3 Vision for a New Markham District

Provide a gateway to Markham. Markham has an opportunity to develop a possible gateway district that announces the Town as one travels from both Toronto and Vaughan. The character of this district will largely depend on the height, scale and quality of its buildings. This new district should emphasize an urban character, with higher densities along the main streets, stepping down towards the adjacent residential neighbourhoods. Architecture of high quality should announce that one has arrived in Markham and improve the quality and character of the Town.

Encourage mixed-use infill. Current Provincial and regional policies are trying to intensify existing urban areas. The study seeks to encourage the highest and best use of available land, with a range of building types and character. Larger parcels can support infill projects with the biggest impact. These lands can provide for employment and balanced growth, and help the Town meet the regional target of 40% of new residential development directed to urban areas by 2015. There exist traffic and servicing limitations, but intensification should still nonetheless be encouraged.

Respect adjacent land uses. The study area is on Markham's edge, adjacent to other municipalities in which the Town have no direct control over land use and built form. The Town must respect and address this particular issue, as well as also consider the many existing land uses adjacent to the potential redevelopment sites: established residential neighbourhoods to the east; large-scale retail commercial developments west of Yonge; and the retail and industrial land uses north and south of the rail corridor. The Town will work with the City of Vaughan as they undergo a similar corridor study for the lands to the west side of Yonge Street.

Encourage high-quality parks and open space. All public spaces should contribute to "placemaking". This study suggests opportunities for improving the supply and quality of parks and open spaces. Strategies include adding a north-south park system linking across the rail corridor, creating a pedestrian boulevard and street related plazas as part of redevelopment projects that front on Yonge to create places for pedestrian activity along the corridor, and elevating the stature of the streets themselves, becoming considerable landscape features in their own right.

Create a great street environment. Streets represent the largest percentage of public open space within urban areas. Successful urban streets are scaled to the pedestrian, offering a comfortable retail and residential environment. Street trees—often the single most important feature of a good street—should be planted consistently along all streets. Trees will help engage pedestrians, provide visual relief, and help define the boundary between the vehicular areas and pedestrian realm. Quality furnishings will enhance community livability and help enrich the street's character.

Take advantage of the planned transit corridor. York Region considers this section of Yonge an "Intensification Corridor" based on transit. Future redevelopment must take advantage of these infrastructure improvements. Transit related land uses—such as office and residential—can further ensure the success of retail throughout the area.

Promote Markham's green agenda. The Town is serious about being a sustainable community. Redevelopment areas should implement environmentally responsible practices and adhere to Markham's target for a minimum Canada Green Building Council LEED® Silver Rating or equivalent standard in all new development. Consider green technologies to reduce energy and water consumption and demand on infrastructure. Improve pedestrian comfort through microclimate amelioration. Explore innovative sanitary and storm water treatment technologies and on-site power generation.

1.4 Existing Conditions

Land Use and Built Form

The physical setting and configuration of the study area plays a critical role in both its character and function. Perhaps the most significant factor to understanding the physical setting is that it was not originally planned as a commercial district, but has evolved somewhat haphazardly over time.

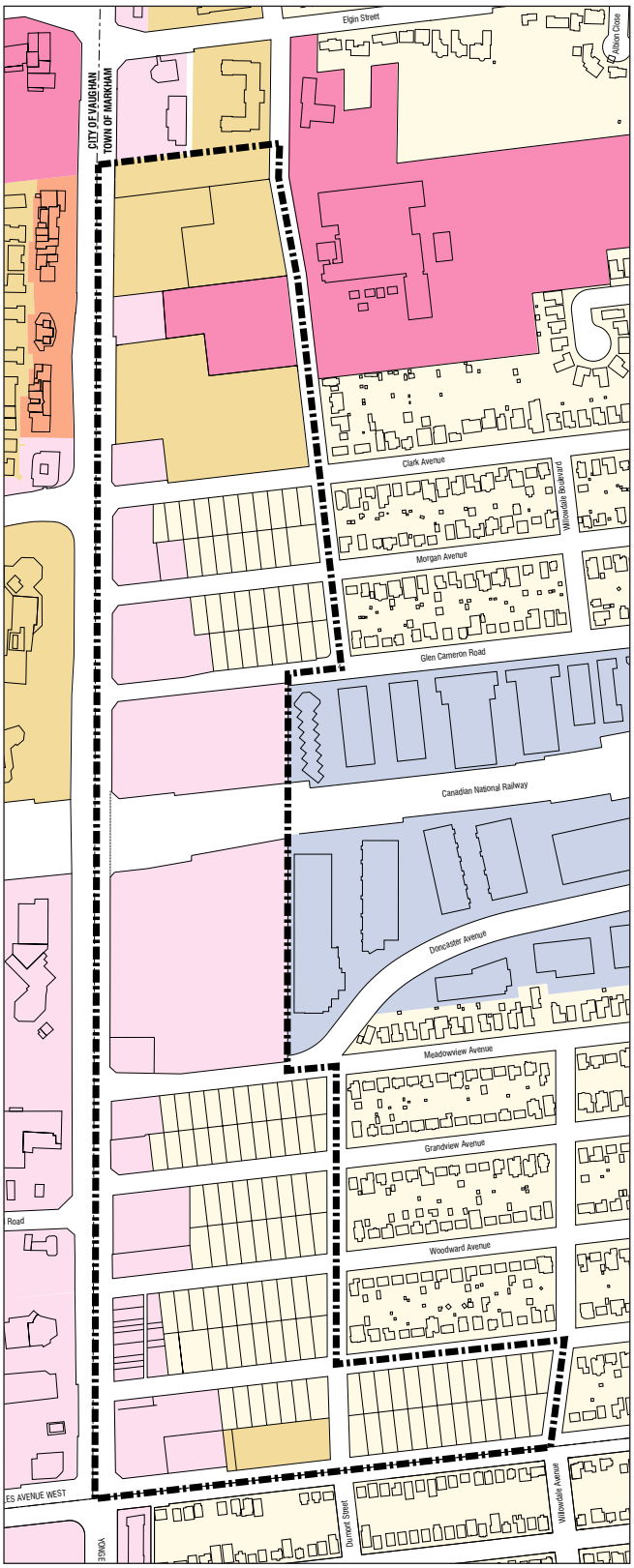
Yonge Street was developed as a route to support military and trade activities and has always served as a major corridor. The Village of Thornhill— now part of both the City of Vaughan and the Town of Markham and situated north of the study area —was originally centered on Yonge Street to take advantage of connections to Toronto and the northern communities. The primary role of Yonge was regional circulation and incidentally as the main street for the widely spaced villages.

Following the post-World War II growth boom, commercial development began to flourish along many parts of Yonge Street as commerce became oriented towards the private automobile rather than the pedestrian. The erosion of the pedestrian-scaled street quickened as vehicle demands on the major streets increased with the growth of the surrounding communities. Today, much of the street is a mix of older street-related commercial, auto-oriented strip development and larger-scale retail set back from the street with surface parking in front.

Public Open Space

The supply of public open space to the overall study area is insufficient. Yonge Street has no open space fronting the road corridor. The section to the north of the CN rail corridor is better served, with access to large school yards, parks in the vicinity of the historic Thornhill Village and connections to the Don River Valley trail system. Neighborhoods to the south of the CN Rail Corridor are less well-served with no community parks and well below the current Town of Markham open space standard requirement.

A more detailed discussion of public open space is found in Appendix B: Community Services, Recreation and Open Space Report.



Existing Land Use

- Single Family Residential
- Multi-Family Residential
- Institutional
- Commerical
- Mixed-Use
- Industrial
- Open Space

Transportation

Existing Circulation and Access: Yonge Street and Steeles Avenue are intersecting arterial roads that form the boundary between Toronto, Vaughan and Markham. Meadowview (Doncaster) Avenue situated four blocks to the north of Steeles and running east of Yonge is the only major collector within the study area. Glen Cameron Road and Clark Avenue are minor collectors than run through the study area, with only Clark continuing to the west. Elgin Avenue/Arnold is a minor collector situated just to the north of the study area. The remaining roads are of a local classification.

Within the study area, signalized intersections are located at Yonge and Steeles, Yonge and Meadowview, and Yonge and Clark. Time-of-day turn restrictions apply on many of the streets to limit diverted through traffic in the residential areas and reduce queuing congestion. Accesses to the majority of properties that front Yonge are directly from the main street.

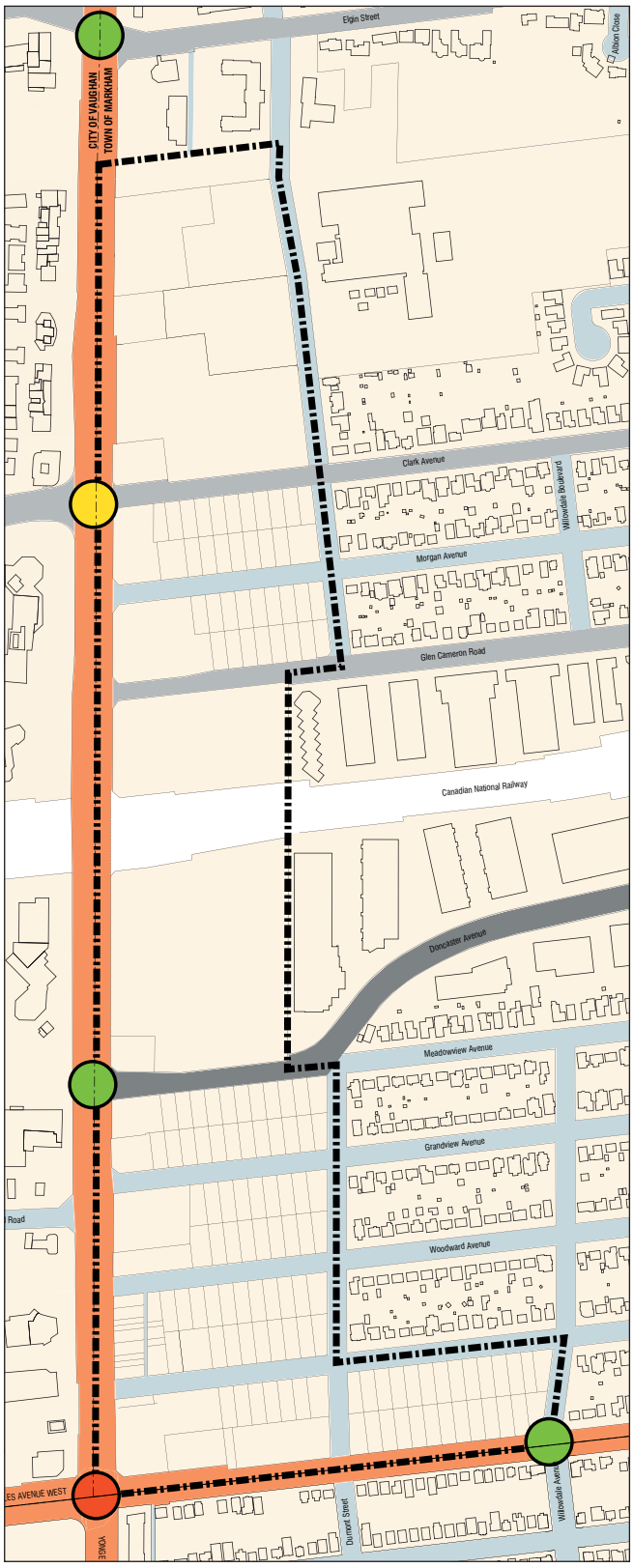
Intersection performance: The performance of the existing primary intersections on Yonge Street varies. The Yonge Steeles intersection is currently at capacity during the peak hours with congested conditions and frequent long delays. Turning movements in all directions are at capacity. The Clark intersection is approaching capacity—somewhere between 85 and 100%—with some congestion and occasionally long delays. Turning movements currently at capacity are northbound lefts and eastbound lefts. The remaining two signalized intersections at Meadowview and Elgin/Arnold are operating at acceptable level with minimal to moderate delays.

A more detailed discussion of transportation is found in the accompanying Transportation and Servicing Report under seperate cover.

Services

Servicing infrastructure for water, sanitary and storm is a major concern with residents in the study area. There is currently a limit on residential construction within the area due to the constraints of existing infrastructure. Recent major storm events have revealed a storm water system capacity issue, with basement flooding in many homes within the area. For major redevelopment to occur, servicing improvements must first take place.

A more detailed discussion of servicing infrastructure is found in the accompanying Transportation and Servicing Report under seperate cover.



Existing Road Classifications and Intersection Performance

- Arterial
- Major Collector
- Minor Collector
- Local Street
- At Capacity: Congested conditions with frequent long delays (100% of capacity)
- Approaching Capacity: Some congestion and occasionally long delays (85% to 100% of capacity)
- Acceptable Operations: Minimal to moderate driver delay (<85% of capacity)

1.5 Study Process

The standards and recommendations set forth in this report where shaped by input solicited through a detailed three-level consultation process carried out between May 2007 and September 2008. The process included four Public Open Houses, a Community Working Group consisting of focused stakeholders and local representatives, and a Technical Steering Committee with representatives from the adjacent municipalities: City of Toronto and City of Vaughan and York Region. Meetings with the Working Group and Steering Committee preceded each of the four Public Open Houses.

The public open houses were well attended and demonstrated a strong community interest in the character and form that redevelopment might take and how it could relate to the existing residential neighbourhoods. One of the process highlights was the second public open house in June 2007. The primary message was the relationship between density and built form, and how the same density of development can be realized in a wide range of building types and arrangements. In a community where the existing neighbourhoods are principally composed of low-density single-family homes, the participants appreciated the thorough presentation and thoughtful efforts made by the Town to educate the public and help them better understand intensification. It also helped them contribute with a greater degree of confidence to the rest of the process.

2. Planning Framework

2.1 Provincial Policy Statement

The Provincial Policy Statement (PPS) dated March 2005, is the overarching policy at the Provincial level that guides the Regional and Local Official Plans within Ontario.

The PPS emphasizes the management of efficient development and land use patterns that support strong communities while protecting natural resources and heritage. The PPS states that sufficient land shall be made available through intensification, redevelopment, and designated growth areas to accommodate an appropriate range and mix of employment opportunities, housing and other land uses to meet projected needs for a period of up to 20 years (Policy 1.1.2). Specific PPS provisions, recommendations and policies include the following:

- Promote opportunities within Settlement Areas for intensification and redevelopment, taking into account existing building stock (including brownfield sites) and the availability of suitable existing or planned infrastructure and public service facilities required to accommodate projected needs (1.1.3.3). The PPS also provides that appropriate development standards be promoted which facilitate intensification, redevelopment and compact form, while maintaining appropriate levels of public health and safety (1.1.3.4).

- Planning authorities are required to establish and implement minimum targets for intensification and redevelopment within built-up areas. Where Provincial Plans are in effect, these targets shall represent the minimum targets for affected areas (1.1.3.5). The PPS also requires the establishment and implementation of phasing policies to ensure that specific targets for intensification and redevelopment are achieved prior to or concurrent with new development in designated growth areas (1.1.3.6).

- Coordination between the upper and lower tier municipalities is required to identify where growth will be directed including the identification of nodes and the corridors linking these nodes and identification of density targets for areas adjacent or in proximity to existing or proposed transit corridors (1.2.2).

- Provide an appropriate range of housing types and densities and maintain the ability to accommodate residential growth for a period of 10 years. The emphasis of the policy is on residential intensification and redevelopment as opposed to vacant designated land. Similarly a 3-year supply of appropriate zoned lands is maintianed to facilitate residential intensification and redevelopment and draft approved and registered plans (1.4.1).

- Provide for housing which is affordable to low and moderate income households, directing new housing to locations with appropriate levels of existing or proposed infrastructure and public service facilities and that support public transit and facilitate compact form (1.4.3).

- Provide public space, parks and open spaces for a full range of opportunities with equitable distribution to publicly accessible built and natural settings for recreation (1.5.1).

- Optimize infrastructure and public service facilities and where feasible public service facilities should be co-located for cost effectiveness and to facilitate service integration. (1.6). Further the PPS provides that land use patterns, density and mix of uses should support plans for public transit.

The main implementation mechanism for the PPS is through local and regional Official Plans, which must be consistent with the PPS.

In addition to the PPS, the recent enhancements to the Planning Act through Bill 51 in particular to make transit a Provincial interest and changes to broaden the scope of site plan review strengthen the link between land use planning and transit investment.

2.2 Growth Plan for the Greater Golden Horseshoe

The Growth Plan for the Greater Golden Horseshoe was approved by Cabinet to take effect on June 16, 2006. The Growth Plan is a provincially approved plan as referred to in the PPS.

The Growth Plan envisages increasing intensification of built up areas with a focus on urban growth centres, intensification corridors, and major transit station areas among others. All intensification areas are intended to attract a significant proportion of population and employment growth, support vibrant neighbourhoods, provide high quality public open spaces, support transit, walking and cycling, achieve higher densities than the surrounding areas and provide an appropriate transition in built form to adjacent areas.

The general intensification policies of the Plan provide for a minimum of 40% of all residential development occurring annually by the year 2015 and each year thereafter to be within built up areas.

The urban growth centres identified in the Growth Plan in and near Markham include Markham Centre, on Highway 7 at Warden Avenue and Richmond Hill/Langstaff Gateway at Yonge Street at Highway 407 and south on Yonge Street at Sheppard in the City of Toronto at the North York Centre. Yonge Street is proposed for higher order transit along its length through York Region to Newmarket to 2031.

The urban growth centres in York Region will be planned to achieve, by 2031 or earlier, a minimum gross density of 200 residents and jobs combined per hectare.

As a higher order transit corridor, Yonge Street is also an intensification corridor in the Growth Plan to be designated in the Official Plan and identified for higher density mixed use development consistent with planned transit service levels.

2.3 Region of York Official Plan

Amendment 43 to the Official Plan for the Regional Municipality of York (ROPA 43) was approved in January, 2005. The purpose of the amendment is to enhance the existing policies of the Regional Structure and Growth Management section of the Regional Official Plan dealing with Regional Centres and Corridors and Local Centres and Corridors.

Consistent with Provincial policies and plans, the primary focus of growth in the Region will be in Regional Centres and locally identified Key Development Areas within Regional Corridors. The Region recognizes that a balance of residential and employment growth in Centres and Corridors is part of the strategy to sustain growth in the Region over the long term.

Regional Corridors including Yonge Street and Highway 7 linking the Regional Centres have great potential for more intensive mixed use development serviced by rapid transit. These Regional Corridors form the key connections between Regional Centres.

Regional policies supports the identification of Key Development Areas (KDAs) within corridors that:

a) have the highest opportunity for compact and mixed use development;

b) are assigned early priority for rapid transit service and infrastructure;

c) abut or are adjacent to rapid transit stations;

d) interest with other major transportation routes or facilities.

KDAs should support an overall, long term average density target of 2.5 FSI for Regional Corridors. Secondary Plans for Regional Corridors need to be consistent with the following Regional criteria as set out in ROPA 43:

a) identify the role and function of the secondary plan area;

b) promote public transit ridership through high quality urban design, human scale, land use mix, and compact development;

c) maintain and enhance historical mainstreets;

d) recognize and protect the cultural heritage resources;

e) orient buildings to the street to create a consistent setback and building form adjacent to the street right –of –way;

f) set a high standard of urban design;

g) provide convenient access for public transit users, pedestrians, cyclists and persons with disabilities;

h) achieve a mix of commercial, housing, employment and institutional uses in the Regional Corridor;

i) coordinate with Regional streetscape policies;

j) Identify KDAs consistent with Local Centre policies (5.5.4);

k) Identify areas that may not redevelop in the near future but may have redevelopment potential in the longer term;

l) Recognize that infill and intensification may occur incrementally over time as land uses evolve and mature;

m) Provide for public gathering places, streetscaping and greening to create a pedestrian friendly environment, integrated with local and Regional Greenland Systems including parks, bicycle and pedestrian systems and natural features;

n) Appropriately integrate and transition to surrounding land uses and built form through scale, land use and design.

The Regional Plan supports higher density residential designations along the Regional Corridors and new development that fronts or flanks the roadway.

The Region has recently adopted (2006) Transit Oriented Development Guidelines (TOD) to implement provincial policy and the Regional Official Plan's planned urban structure of Regional Centres linked by Regional Corridors served by public transit. The guidelines are intended to shape development in a way that responds to the needs of transit users and transit service in order to generate ridership and enhance the quality and frequency of the transit system. The most common elements of TOD include:

- Concentrating development around transit stations
- Buildings that are in a compact form and well designed
- Mixed use
- Activity generating use, like schools and shopping along transit routes
- Buildings and spaces between are connected by sidewalks that lead to transit stations.

In order to address planning matters such as massing, height and density, parking, pedestrian safety and comfort, street layout and connections between transit stops and buildings, the Region has established six themes with more detailed development guidelines and considerations under each. These themes include:

- Pedestrians
- Parking
- Land use
- Built form
- Connections
- Implementation.

In terms of other Regional initiatives, there is an approved Environmental Assessment for a dedicated Rapid Bus Transitway on Yonge Street. Public consultation is ongoing related to this project. Further, the recent announcement by the Provincial government to extend the subway up Yonge Street north of Steeles to Highway 407 has advanced the transit initiatives in this area of the GTA, and therefore, the need to encourage transit oriented development along the corridor.

2.4 Town of Markham Official Plan

The Town of Markham Official Plan approved in 1993, as amended designates the Yonge Steeles Corridor Study Area as Commercial and Residential within the primary plan.

Generally, mixed use development including retail, office and higher density residential is permitted along the Yonge Street frontage, while providing protection for the stable low density residential neighbourhoods abutting to the east. The more specific details of development densities and other land use permissions are found in the Thornhill Secondary Plan.

2.5 Thornhill Secondary Plan

The Thornhill Secondary Plan (OPA #1) covers the entire Community of Thornhill bounded by Highway 404 in the east, Steeles Avenue in the south, Yonge Street in the west and the former Parkway Belt limits (approximately Highway 7/407) in the north. The Thornhill Secondary Plan was approved in June 1997, with the exception that the lands located at the northeast corner of Yonge Street and Steeles Avenue were deferred due to objections from the Centrepoint Mall in the City of Toronto. The deferral also included the Yonge Steeles Redevelopment Area that extended north to the CNR tracks and the lands between the CNR tracks and Glen Cameron Road to the north. As such, the land use policies have never been approved, and there has been little or no redevelopment to-date.

Designations within the Thornhill Secondary Plan (TSP) are depicted in Figure 1. Most lands fronting onto Yonge Street within the Study Area are designated Community Amenity Area (commercial designation) with the exception of the High Density Housing designation of the existing apartment lands north of Clark Avenue. The remaining Study Area lands are a combination of residential designations discussed below from south to north within the Study Area.

Yonge Steeles Redevelopment Area – High Density II Housing

The High Density II Housing designation (S5.8) north of Steeles Avenue, east of the Community Amenity designation, west of Dudley Avenue and south of Meadowview Avenue were intended to develop to an average net density of 1.5 FSI and up to 2 FSI depending on required technical study recommendations and urban design studies. The plan recognizes and identifies certain specific locations as appropriate for future potential high density residential uses similar to 99 to 148 units per hectare that exist in Thornhill.

The intent of the High Density II designation in the Yonge Steeles Redevelopment Area (S5.8.3) was to provide for comprehensive assembly and sensitive redevelopment of the existing commercial and low density residential uses in the four block area north of Steeles Avenue. It also provides for building forms that step down from Yonge Street to the east and a relatively continuous buffer form of housing of moderate height (generally 3-4 storeys) constructed along the east perimeter of the redevelopment area. Road systems that separate the redevelopment area from local roads serving the low density area. Development was to be guided by the following objectives:

- To achieve an area of mixed use development within mid-rise forms
- To provide park and /or recreation facilities in and adjacent to the redevelopment area
- To achieve energy efficiency and residential amenity taking account of height, massing, landscaping and effects of wind and sun
- To ensure pedestrian convenience and comfort.

Comprehensive assembly had assumed some transfer of density from the east to the west.

All of the comprehensive studies related to the redevelopment area were to also include the Community Amenity designation lands to the east and north to the railway and the Low Density Housing and Low Density Housing Special lands bounded by Steeles Avenue, Dudley Avenue, Highland Park Blvd., and Willowdale Blvd.

All of the Yonge Street Redevelopment lands north to the CNR tracks and west to Dudley Avenue were deferred upon approval of the Thornhill Secondary Plan at the request of Centre Point Mall in North York.

Low Density Housing Special. Lots on the north side of Steeles between Willowdale Blvd. and Dudley Avenue are designated Low Density Housing Special (S5.5). Permitted uses include low density forms of housing, to reflect the stable character of the area. Policies also recognize that land use and transportation influences detract from normal enjoyment and amenity therefore expanded residential and limited office uses are permitted subject to a maximum density of 0.5 FSI and a maximum building height of two storeys. The entire block bounded by Dudley Avenue, Highland Park Blvd., Willowdale Blvd., and Steeles shall be included in a comprehensive study of High Density II Housing designation area to west. This block was incorporated into the Yonge Steeles Redevelopment Area study area, specifically to be evaluated as a transitional "buffer" block between the existing apartment and further higher density development to the west and low density development to the east and north. Accordingly, it is intended

that the overall building height and density of development on this block, considered in the studies, be lower than for the blocks fronting Yonge Street.

Low Density Housing. Lots on the south side of Highland Park Blvd., between Willowdale Avenue and Dudley Avenue are designated Low Density Housing. Permitted uses (S5.4)include low density forms of housing, to reflect the stable character of the area. Again this entire block bounded by Dudley Avenue, Highland Park Blvd., Willowdale Blvd., and Steeles Avenue is to be included in the comprehensive study of High Density II Housing designation area to west. This block was incorporated into the Yonge Steeles Redevelopment Area study area, specifically to be evaluated as a transitional "buffer" block intended to be lower than for the blocks fronting Yonge Street.

Community Amenity Area – Yonge Steeles

The Yonge Steeles Community Amenity Area fronts onto Yonge Street from Steeles to the CNR line. Lands designated Yonge Steeles Community Amenity Area from Steeles north to the CNR tracks shall be included in a comprehensive study of High Density II Housing area to east. However, the policies differ for those CAA designations north and south of Meadowview Avenue.

North of Meadowview Avenue (S6.4.3.3-6.4.3.6): Lands are encouraged for retail uses, service commercial uses, offices, residential uses in mixed use buildings or single use apartment buildings, subject to certain criteria. Among these include a maximum of 1.5 FSI, with relatively continuous commercial frontage along major streets. Council may consider increasing the maximum average density for these lands to 2 FSI (without subway) without further OPA, based on traffic and servicing studies.

South of Meadowview Avenue (S6.4.3.7-6.4.3.9): Lands are encouraged for high density residential development in conjunction with compatible commercial use, or mixed use development subject to certain criteria. The general intent of the designation is to provide for, in conjunction with the High Density II Housing lands to the east, comprehensive assembly and sensitive redevelopment of existing commercial and low density residential uses in the four-block area bounded by Yonge Street, Steeles Avenue, Dudley Avenue and Meadowview Avenue.

Two essential characteristics of the redevelopment include building forms which step down away from Yonge Street and appropriate road system changes which may include a new Dudley Avenue roadway. Development is limited to a maximum of 1.5 FSI, however, Council may consider increasing the maximum average density for these lands to 2.0 FSI based on traffic, community services and servicing studies. Substantial property assembly is required and policies provide for the inclusion of road system changes, buffer housing and additional parkland provision to be included in density calculation (density transfer).

Community Amenity Area – Yonge Street Corridor

This includes the lands fronting on to Yonge Street from the CNR tracks to just north of Clark Avenue. This designation (S6.4.4) is intended to recognize the traditional forms of commercial and mixed use development in Thornhill, in linear form along certain sections of Yonge Street, and to reinforce this character. This is encouraged by additional development of this type including moderately-scaled retail and service commercial uses on the ground floor, with residential on upper floors, and office uses in buildings generally of a maximum height of four storeys. Additional height will be considered if Council is satisfied that there is sufficient transition to the adjacent lower density residential uses. Policies permit a maximum net site density of 1.0 FSI of which not less than 0.3 FSI shall be reserved for commercial uses to encourage a relatively continuous commercial frontage.

The block between CNR line and Glen Cameron Road was also deferred at the time of approval.

Low Density Housing Special. Lots on north side of Glen Cameron Road, west of Dudley Avenue, and east of the Yonge Street Corridor Community Amenity Area permit low density forms of housing to reflect stable character of the area (S5.4). Similar to the lands along Steeles Avenue, policies (S5.5) recognize that land use and transportation influences detract from normal enjoyment and amenity, therefore expanded residential and limited office uses are permitted subject to maximum FSI of 0.5 and maximum building height of two storeys.

Low Density Housing. Lots fronting onto Morgan Avenue to the north, west of Dudley Avenue, and east of the Yonge Street Corridor Community Amenity Area as well as lands between Dudley Avenue, Clark Avenue, the Yonge Street Corridor Community Amenity Area and Morgan Avenue are designated Low Density Housing (S5.4) and permit low density forms of housing to reflect the stable character of the area.

High Density II Housing. Lands fronting onto Yonge Street north of Clark are designated High Density II Housing (S5.8.1 and 5.8.2) generally reflecting the existing apartment housing at densities between 99 and 148 units per hectare.

Institutional (St Lukes). Uses permitted in the Institutional designation (S8) are limited to the existing institutional uses, residential accommodation associated with the institutional use and ancillary uses.

2.6 Vaughan Official Plan

OPA 210 is the Official Plan amendment for the City of Vaughan's Thornhill Vaughan Community Plan. The original amendment was approved in 1987, and was further modified and consolidated in 1997.

Most of the lands to the west along Yonge Street in Vaughan are designated General Commercial. These lands extend from Steeles Avenue in the south to the CNR tracks in the north. Most of the lands adjacent to Yonge Street north of the CNR tracks are designated Medium Density Residential north to Arnold Avenue with some High Density Residential pockets.

General Commercial areas permit existing commercial uses, retail stores for the buying, leasing and exchanging of goods and services, restaurants, banks and business and professional offices with a number of site specific exemptions. New General Commercial uses are encouraged to develop in nodes.

Medium density areas generally permit densities between 25-44 units per ha within medium density forms and High Density Residential Areas permit apartments up to 124 units per ha.

At the time of writing of this report, the City of Vaughan has initiated a similar land use review along the west side of Yonge Street north of Steeles Avenue. Presumably, the above-noted Thornhill Vaughan Community Plan may be amended as a result of this study in 2008 or 2009.

2.7 Toronto Official Plan

The City of Toronto Official Plan was approved in July 2006. The Urban Structure, Map 2, designates the area adjacent to Yonge Street south of Steeles to Cummer Avenue as an "Avenue". "Avenues" are intended to be reurbanized incrementally for the creation of new housing and jobs while improving the pedestrian environment and supporting transit initiatives. Generally, development is intended to be in a mid-rise form, subject to more detailed Avenue planning and urban design studies.

The Land Use Plan designated lands adjacent to the corridor as Mixed Use largely with Neighbourhoods behind. Mixed Use Areas are made up of a broad range of commercial, residential and institutional uses, in single use or mixed use buildings, as well as parks and open spaces and utilities. The Official Plan sets out the criteria for development in Mixed Use Areas, among them consideration of the transition to adjacent "Neighbourhoods". No City initiated Avenue study has been conducted of this area to date. Development proponents wishing to proceed with intensification along Yonge Street in this area in advance of an Avenues Study would have to satisfy the Avenues criteria of the Official Plan for such study.

3. Urban Design Principles and Guidelines

3.1 Introduction

The urban design guidelines set forth a long-term vision for the physical form and character of Markham's segment of the highly important Yonge Street corridor. The objective of the guidelines is to direct future growth in a manner which builds upon recent intensification efforts and higher-order transit improvements and protects the character of the existing neighbourhood.

The intent is to insure that all development contributes to making Markham a unique and special place—a 'Made in Markham' solution. The Plan seeks to capitalize on burgeoning development potential and ensure that proposed higher density development also provides the qualities and amenities that will create an attractive, livable community with a lively mix of uses, walkable streets, convenient transit, distinctive neighborhoods, and access to open spaces.

Finally, this plan is only a means to an end—a tool to assist the Town in achieving its long-range vision. The vision itself will only be brought to life through the persistence and cooperative efforts of all those who participate in the creative process of building Markham's future.

The public realm guidelines provide some guidance for private development, but their primary focus is to provide direction to Town departments and decision-makers who are responsible for the design, implementation and maintenance of improvements within the City's parks and public rights-of-way.

The guidelines will provide Town staff, decision-makers, and private interests a common basis for the evaluation of design and development issues during the design review and approval process for individual private development proposals.

The guidelines in this document are intended to provide direction rather than prescriptive requirements. The Town should have the authority to waive individual guidelines for specific projects where it is found that such waiver will better achieve the design policy objectives than strict application of the guidelines.

This chapter is organized in five sections:

General Principles and Guidelines - describes the overall intent of the urban design and articulates the overall vision for the physical form and character of the redevelopment area;

Built Form Guidelines - addresses the key elements regarding the placement and design of buildings, how they relate to one another as well as the existing neighbourhood;

The Streets: Built Form and Public Realm Guidelines - addresses in more specific detail the built form and public realm guidelines for each street type in the redevelopment area;

Environmental Design and Sustainable Development - suggests how new projects within the redevelopment area can reduce their impact on the environment and contribute to the overall green image of Markham.

Demonstration Plan - illustrates—through the use of digital 3-dimensional models—one possible scenario for redevelopment of the study area that follows the urban design principles and guidelines.

3.2 General Principles and Guidelines

3.2.1 Encourage a Well-Integrated, Rich and Varied Urban Form

Principle: Redevelopment should include a broad mix of housing, commercial and employment uses, with the higher densities and greater building height and massing focused closer to Yonge Street with transitions down towards the low-rise residential areas.

Background

Region of York transit-supportive intensification targets applicable in the Yonge Street corridor (outlined in Chapter 2: Planning Framework) provide for significantly higher development densities than currently exist in the Study Area.

With redevelopment comes the opportunity to define vibrant mixed use and high quality transit-oriented development—to create places where people will want to live, work, recreate, shop and spend time. Redevelopment should incorporate mixed-use projects, new housing, neighborhood-serving retail, employment, schools, day care centres, parks and other amenities to serve the local community.

The scale of new development must balance the transit supportive intensification objectives with the protection of adjacent stable residential neighbourhoods. Intensification can and should improve overall environmental and community sustainability.

Built-form analyses conducted through this study conclude that the target average densities and satisfactory interfaces with the residential neighbourhoods can be achieved if mid-rise and high-rise development is concentrated towards Yonge Street and on larger land parcels adjacent to the railway and industrial uses; transitioning to low-rise residential development closer to the existing residential neighbourhoods.

This pattern of built-form is entirely consistent with the urban design and traffic objectives of having substantial built-up edges and mixed-uses towards the Yonge Street Corridor to give shape and a sense of enclosure as well as reinforcing the pedestrian realm of this main street.

Guidelines

- Built form, density and land use designations will guide and regulate the mix and emphasis of land uses.
- Building massing and density should concentrate closer to Yonge Street. There should be a transition in the density and built form so that building mass increases towards Yonge Street and away from the residential areas outside of the redevelopment area. Absolute height limits and angular planes will regulate the heights of buildings in various locations.
- Provide for and encourage the development of both residential, employment and other non-residential uses through the land use and urban design policies.

3.2.2 Transition with Adjoining Neighbourhoods

Principle: The interface between the redevelopment sites and the adjoining neighbourhoods should minimize adverse impact and respect the character of the single-family residential areas by creating a comfortable transition in the built form.

Background

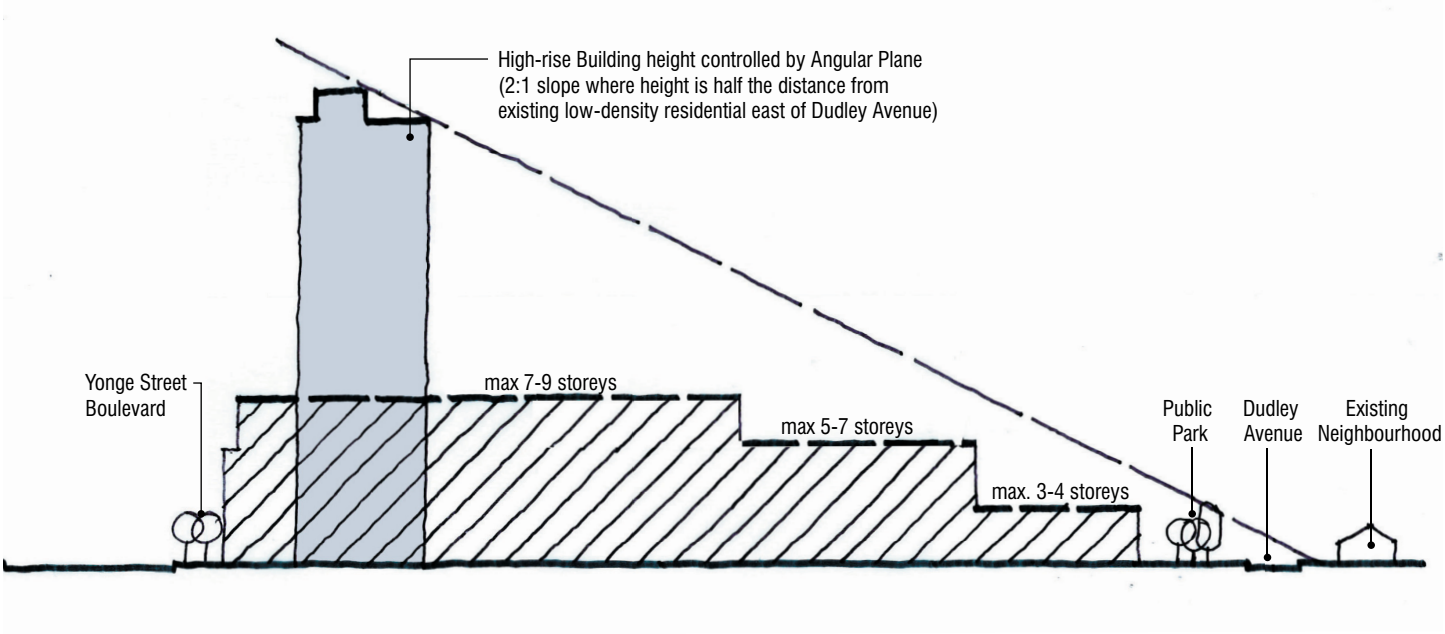
Built-form and public realm design guidelines are required to minimize the visual and traffic impacts of higher density development on the adjacent low-density residential neighbourhoods.

The neighborhoods immediately east of the study area are predominantly single-family residential homes of modest scale on small lots. Those existing properties that abut Dudley Avenue on the eastern edge of the study area are mainly single storey with pitched roofs fronting the east-west streets.

New high-rise buildings in the redevelopment study area should be clustered in the area of Yonge Street and the CN Rail corridor, furthest away from the low-rise residential neighbourhood. The building height and scale should be stepped down towards the low-rise residential areas.

Guidelines

- Linear parks are required on the west side of Dudley Avenue at the ends of all redevelopment blocks. Larger neighbourhood parks and publicly accessible open spaces are also required to better serve the broader study area.
- Redevelopment on the west side of the linear park facing Dudley Avenue is restricted to 12 metres in height—3 or 4 storey residential buildings (most likely townhouses or small walk-up apartments) that address the linear parks and have entrances accessed from a footpath at the edges of the parks.
- New buildings that face the larger neighbourhood parks, or are behind the 'front row' of low-rise buildings along the linear parks, will be restricted to mid-rise buildings no higher than 25 metres (5-7 storeys) inclusive of mechanical penthouse.
- High-rise point tower buildings (over 35 metres) will be permitted in a typical block close to Yonge Street. These buildings are subject to 'angular plane' height controls that slope up and away from the existing residential neighbourhoods, along with floor plate size restrictions and spacing requirements that control the visual bulk and appropriate separation.
- Refer to Section 3.3 for the specific details of these built-form guidelines including the angular plane.



General transition of building height and density between new development and the existing adjacent low-density neighbourhood for a typical development block

3.2.3 Redevelop with Appropriate Densities

Principle: Redevelopment densities should meet regional and Town intensification objectives while minimizing the impact on existing low-density residential areas.

Background

Density controls are required to help guide the intensity and location of redevelopment within the study area. These controls will work in concert with the built form guidelines to limit building mass adjacent to the existing neighbourhoods, with greater massing towards Yonge Street.

Recent high-level planning targets by the Province and Region suggest a target density along intensification corridors (such as Yonge Street) be increased to a Floor Space Index (FSI) of 2.5.

An average block density of 2.5 FSI is useful as a coarse grain planning-level tool. The recommended approach in this study is to have a transition, with higher densities towards Yonge Street, the railway and the industrial areas and lower densities towards the existing residential neighbourhoods. The average residential density in the study area will generally meet the Region's target. Additional provisions are recommended to encourage commercial development and to support higher-order transit improvements. This strategy will allow for flexible redevelopment either incrementally or with larger parcel assembly.

Guidelines

- Density will be higher towards Yonge Street, the railway and the industrial land uses and lower towards the existing low-density residential neighbourhoods to the east.
- The average net density target for new residential development within the study area should be 2.5 FSI.
- An additional 1.0 FSI should be permitted for commercial buildings or commercial floor space within mixed residential/commercial buildings. Therefore, the maximum density for a mixed use building shall be 3.5 FSI.
- Densities should be restricted to 1.5 FSI closest to the existing low-density residential neighbourhoods.
- A minimum density of 1.0 FSI should be required on all redevelopment sites.

Maximum Density Zones

- 2.5 FSI Residential / 1.0 FSI Commercial
- 1.5 FSI Residential
- 2.5 FSI Residential
- Public or Publicly Accessible Open Spaces, Easements, or Boulevard Setbacks

3.2.4 Enhance Community Facilities through Redevelopment

Principle: The Town should leverage redevelopment to improve the quality and supply of community facilities and services within the study area.

Background

One of the aspects most impacted by an increase in population—and often overlooked—is the provision of community facilities and services. A considerable benefit of redevelopment is the opportunity for the Town to enhance community facilities, services and other public amenities through various mechanisms. Potential enhancements could include the acquisition of land for and the on-going operations and maintenance of parks and open space, libraries, community centres, streetscape improvements and infrastructure upgrades.

Guidelines

- The Town will enhance community facilities and other public amenities in the study area through the redevelopment process.
- The Town should monitor community facilities and services as redevelopment proceeds to ensure that capacity allocation is sufficient to meet the demand.
- The Town should investigate opportunities with the Cities of Vaughan and Toronto to share the cost of joint facilities and services where appropriate.

3.2.5 Balance Pedestrian and Vehicular Priorities

Principle: The impact of vehicular circulation, access and parking in the pedestrian realm should be minimized.

Background

With intensification and transit-oriented redevelopment comes the opportunity to reduce the amount of space dedicated to the movement and storage of private automobiles and service vehicles and to redress the balance towards the pedestrian.

For example, parking can be located below grade to liberate the ground level for other uses such as parks and other public spaces; service entrances can be incorporated into the interior of blocks; and driveways and drop-off areas can be consolidated and located so as to not interfere with the continuity of public sidewalks and the regularity of street tree plantings, and to minimize visual impact on public streets and open spaces.

With significantly improved transit, the overall demands for parking can be reduced. The Town's parking standards should be reviewed and adjusted in recognition of a higher transit modal split.

Above grade parking structures should not be permitted unless they are surrounded by residential or commerical buildings, meaning they should not have a public address. Underground access ramps should be incorporated into the ground floor of buildings where possible. Ventilation of below grade parking garages should be located away from pedestrian areas.

Vehicle access to development sites should be from the east-west side streets in order to concentrate local access/egress movements and maintain continuity of building frontages and pedestrian routes on the north-south streets (Yonge and Dudley and on Steeles).

Guidelines

- No direct vehicular access will be permitted from Yonge Street, Steeles Avenue or the west side of Dudley Avenue. Access should be from rear service lanes or the east-west local streets.
- A system of north-south lanes behind the Yonge Street properties should also be considered as part of the development process.
- No direct vehicular access will be permitted on the redeveloped frontages on Steeles Avenue east of Dudley Avenue. Access will be from an east-west mid-block service lane or from the east side of Dudley Avenue south of Highland Park Boulevard).
- Vehicular access to buildings fronting on the local streets should be consolidated to serve multiple buildings. Shared rear access lanes and interior service courts are encouraged.
- Service entries should be screened to provide a visual buffer and reduce noise impacts on the adjacent neighbourhood.
- Surface parking should be minimized and generally limited to wheelchair-accessible spaces.
- All other parking should be below ground, under buildings or landscaped courtyards.
- Structured above-grade parking should only be considered where it is surrounded by residential or commercial frontage and incorporates a landscaped 'green' roof.
- The Town should explore opportunities with the Region to provide on-street parking on Yonge Street (off-peak).
- Parking should be provided wherever possible on the east-west local streets between Yonge Street and Dudley Avenue.
- To faclitiate an increase in the modal split, the Town should reduce parking requirement standards for redevelopment as the study area becomes better served by transit.
- Adequate and sheltered public bicycle parking should be provided at or near building entrances for residents and employees within residential and commerical buildings.
- Major redevelopment applications should be required to provide a Travel Demand Management (TDM) study. TDM studies should explore opportunities for reducing parking supply, indicate before-and-after trip generation, and assess TDM initiatives such as bicycle parking, shuttle bus service to subway stations, enclosed bus shelters, and priority parking for carpooling.
- The Town should explore opportunities to ensure that any subway stations within the study area are accessible from grade as part of any potential subway extension along Yonge Street. Below grade connections to the subway station should also be explored as part of any redevelopment.

3.2.6 Strengthen the Traditional Pattern of Streets and Blocks

Principle: The existing fine-grain pattern of streets and blocks should be retained and extended into large redevelopment sites.

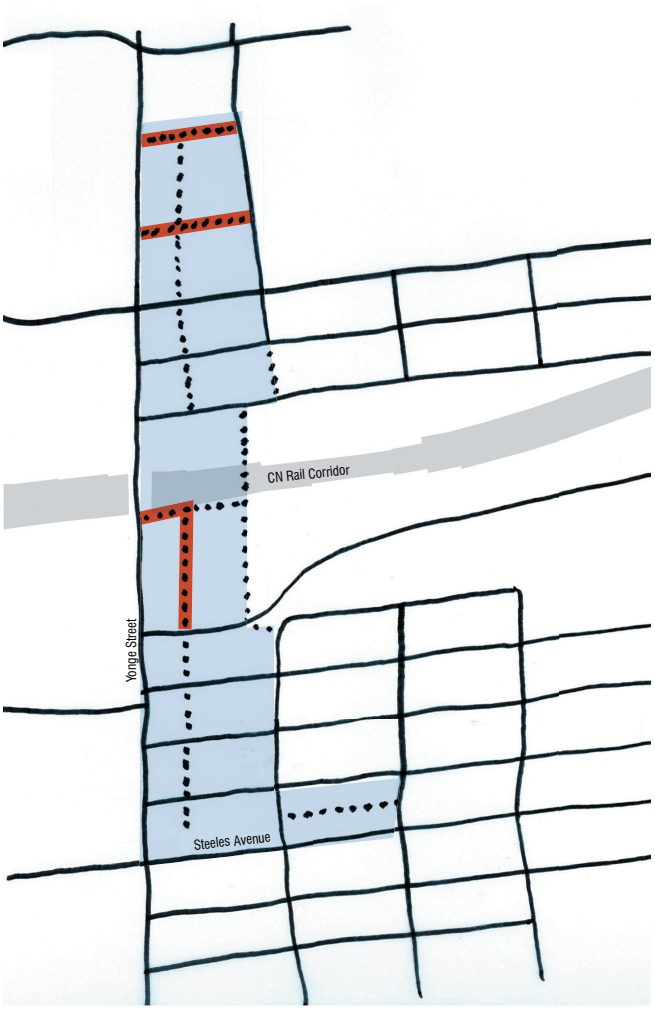
Background

Throughout North America, the traditional manner in which communities have developed is with a planned grid of streets and development blocks. This pattern allows municipalities to guide future growth in a manner that supports incremental development of varied scales and facilitates connectivity of public circulation. The grid permits an even distribution of traffic, and provides a variety of routes to all parts of the community for pedestrians, bikes, and cars alike.

The existing street and block pattern within the study area is similar to much of the urban fabric along the historic Yonge Street corridor. The street network is a rectilinear grid with an average block size of about 80 by 200 metres. A similar pattern is found to the south of the study area in the City of Toronto.

There are two larger blocks with consolidated parcels in the study area that front Yonge Street: one on the south side of CN Rail corridor that currently has a retail plaza and large surface parking lot and a second on the north side of Clark Avenue which accommodates a group of mid-rise apartment buildings, a corner gas station and the St. Luke's Learning Centre.

In these large parcels where the frontage on Yonge is much greater than the typical historic block, publicly accessible streets should be introduced. These could be in either public or private ownership but with full public access and designed to look like public streets. These streets will segment the block to better relate to the surrounding context, improve pedestrian connectivity, and provide a street address for development internal to the super-block.



Existing Street Pattern with Potential New Connections to Improve Vehicular and Pedestrian Access.
Public or Publicly Accessible Streets in red, alleys and lanes in dotted lines.
Conceptual Diagram only

Guidelines

- Large land parcels should be dissected by streets to ensure a high-level of permeability for public circulation and to encourage a scale of redevelopment similar to that of a traditionally sized block.
- The closure of public streets to consolidate ownership of adjacent blocks and facilitate super-block scale redevelopment should not be permitted.
- New streets may be transferred to public ownership and should meet all municipal standards or they may be retained in private ownership, as long as full public access is guaranteed and the design characteristics are similar to those of public streets.
- A system of public or publicly accessible lanes and driveways should also be introduced or protected for, through the redevelopment process, to facilitate internal block circulation for vehicles and pedestrians.

3.2.7 Develop a Context-Sensitive Circulation Network

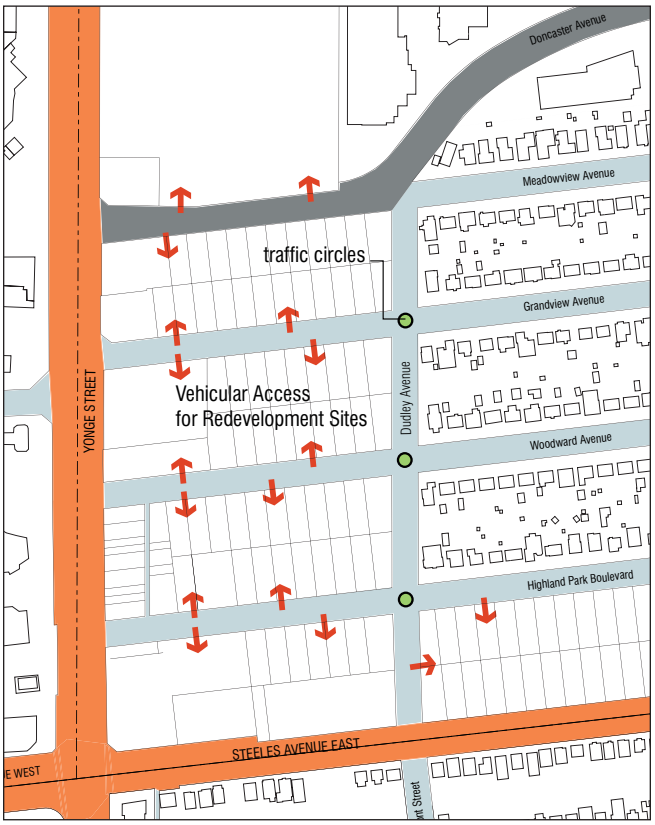
Principle: Through-traffic issues should be resolved by traffic management rather than street closures or diversions.

Background

In a grid system, traffic is distributed to accommodate the appropriate traffic volume in order to maintain a balance in the entire network. Thus, this Plan discourages the closure of existing streets to vehicular traffic. In response to public concerns over traffic infiltration, a series of traffic calming measures should be introduced to the existing residential neighbourhoods. The intent of traffic calming is straightforward—make drivers more aware of their slower-pace surroundings to improve the safety and livability of streets. This is accomplished by increasing 'friction' along the street through the addition of on-street parking, bike lanes and narrower travel lanes, and the introduction of traffic circles at appropriate intersections.

Guidelines

- A street structure plan should be incorporated into the Town's Secondary Plan, including both public streets and privately owned streets with guaranteed public access.
- The Town should commission a traffic calming study for the local residential neighbourhoods in consultation with adjacent municipalities.



Site Access and Traffic Calming Measures (conceptual only)

To reduce the impact of traffic on the neighbourhood, consider traffic calming measures (top images) for the intersections of Dudley Avenue and the east-west local streets (shown in yellow). This would indicate to vehicles that they are entering a slower paced residential area and provide a gateway transition from the existing neighbourhood to the new redevelopment.

To further minimize traffic infiltration into the existing residential neighbourhood restrict access to the redevelopment blocks from the east-west streets between Dudley Avenue and Yonge Street.

3.2.8 Improve the Pedestrian Realm

Principle: A vibrant public realm will set the stage for and be framed by redevelopment. Streets, parks and publicly accessible open spaces will support a range of local social and recreation activities.

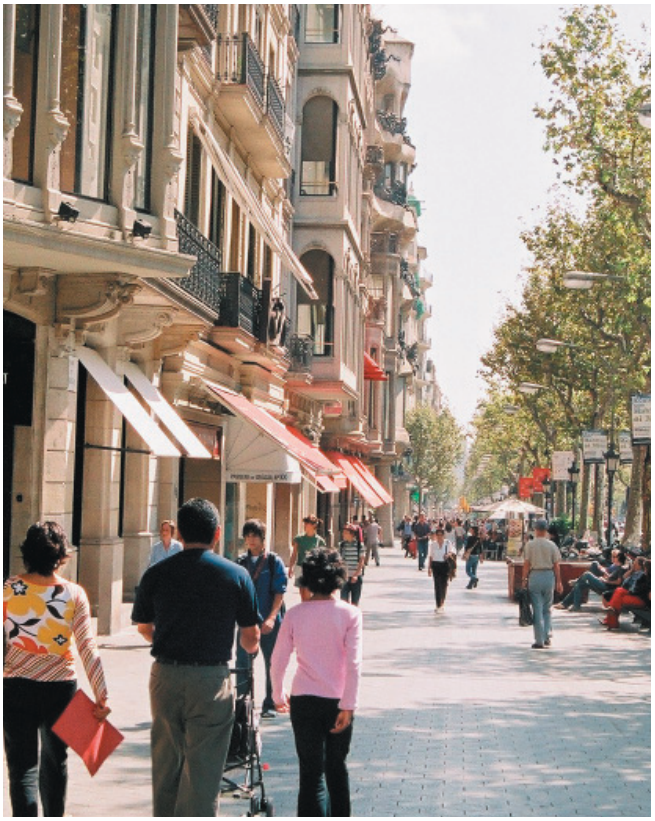
Background

The pedestrian realm is the structure, setting and support for public life in urban settings. A public realm that is well proportioned, connected, legible, comfortable, safe and attractive contributes to the quality of life for all citizens. Improvements for pedestrians should focus on increasing space to support social and retail activities, providing visual relief in an urban setting, and elevating environmental quality. Streets, the foremost open spaces in the study area, should be the primary address for all new buildings.

There are two approaches to treating the transition space between the private and public realms. The first promotes interaction between the ground floor uses and the public sidewalk, which has a primarily paved character to accommodate commercial/pedestrian activities. The second approach provides privacy for the ground floor uses and usually has a soft vegetated character for residential activities.

Guidelines

- In the Yonge Steeles area, the public realm is the framework around which private development should occur, it should:
    - Consist of appropriately scaled public streets, parks and publicly accessible open spaces (see Section 3.2.9).
    - Establish spatial edges created by adjacent buildings and landscape elements, with at-grade uses to help support and animate the pedestrian realm.
    - Where possible, parks, open spaces and easements should be secured in advance of redevelopment or should be integral to the redevelopment application process.



Sensitive design of the pedestrian environment can greatly improve both social and recreational activities as well as foster a sense of community.

3.2.9 Create Better Public Spaces and Parks

Principle: New public parks, promenades, streetscape improvements, pedestrian bridge, and privately owned parkettes should be combined to form a coherent, publicly accessible pedestrian and bicycle, green space system.

Background

Using the Town's standards for the provision of park space, the study area and adjacent neighbourhoods are deficient in publicly owned park space. Redevelopment and intensification of the study area presents the opportunity to contribute to off-setting some area-wide park space differences but more importantly, to provide a range of high-quality parks and public spaces that are specific to an intense urban setting. These are:

Yonge Street Boulevard: Yonge Street could play a more central role in the life of Markham if the boulevards were widened to accommodate a generous promenade and space for lingering, sidewalk merchandising and café seating. Please refer to Section 3.4.3 for more detail).

Publicly Accessible Parkettes, Courts and Squares, particularly on Yonge Street, could expand the use and enjoyment of the area. If they are on private lands their design and public use should be secured through site plan agreements, public right-of-way easements or other mechanisms to ensure public accessibility. They should be enhanced through public art provisions.

Dudley Linear Parks are proposed at the ends of each block, along Dudley Avenue, as part of the green "seam" between the redevelopment areas and the established neighbourhoods.

Neighbourhood Parks and other Large Publicly Accessible Open Spaces: Two larger neighbourhood parks should be established to supplement the Dudley linear parks. They should be sized to accommodate a wider range of recreational activities and facilities than the linear park system. One park is proposed to the north of the rail corridor, the other to the south. A third larger publicly accessible open space is proposed as part of the large redevelopment parcel north of Meadowview Avenue.

Pedestrian Bridge: A new pedestrian and cycle bridge across the C. N. Rail corridor, linked by greenways to the Dudley linear parks, can effectively connect together the entire length of the study area. The bridge should be of sufficient width to accommodate two-way bicycle and pedestrian use. It should be a landmark structure with identifying features such as arches, lighting and unique structural characteristics.

"Green" Linking Streets, with special streetscape improvements—such as designated cycle lanes, signage, sidewalks and street tree planting—could be established between redevelopment in the study area through the neighbourhoods to the east. Particularly important linkages are to the larger parks and school grounds and to the valley lands pathways.

School Grounds: More effective use should be made of the existing school sports and playing fields resources in the area.

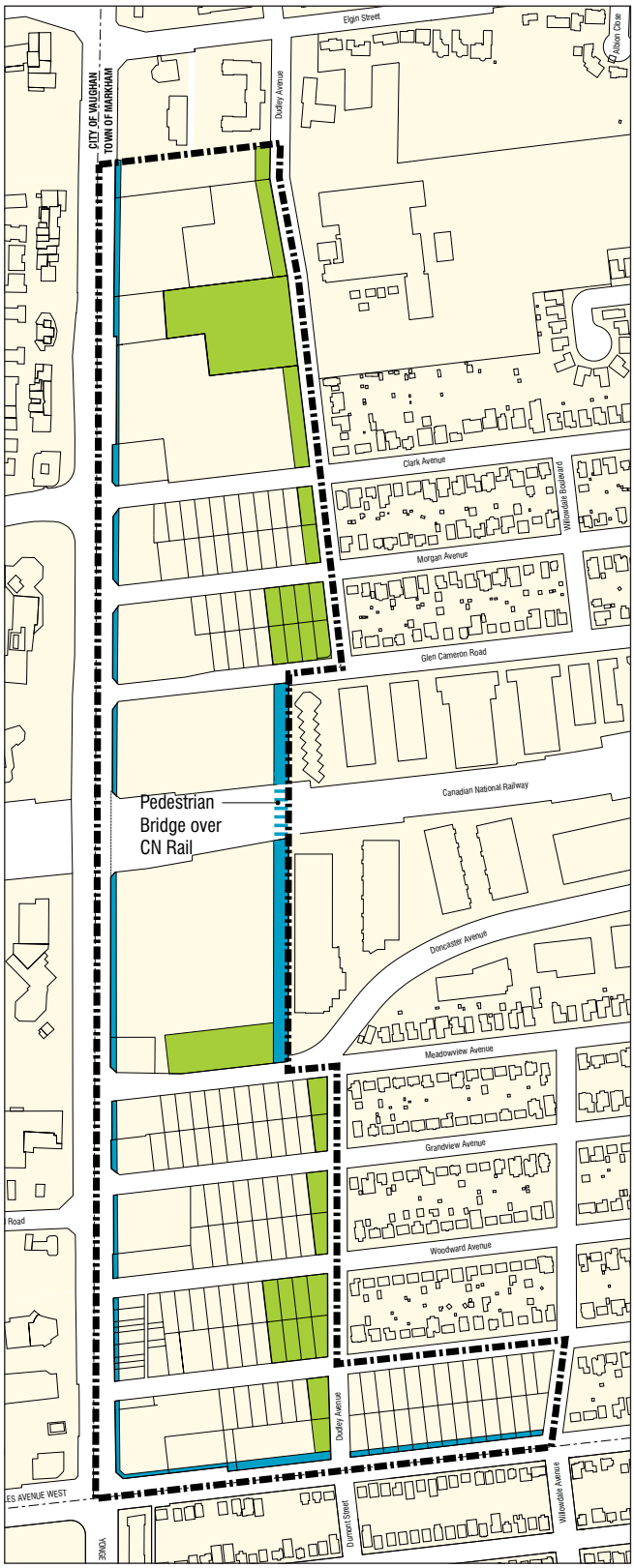
Guidelines

- The Town should develop a detailed implementation strategy for open space and parkland acquisition in the Yonge Steeles Corridor Study Area and adjacent neighbourhoods.
- Refer to Sections 3.4.3 and 3.4.5 for the boulevards on Yonge Street and Steeles Avenue.
- The Dudley Linear Parks shall establish a green seam between the redevelopment area and the stable residential neighbourhood. The Parks shall be equivalent to one parcel depth from Dudley Avenue (approximately 15 metres).
- Neighbourhood parks will be equivalent to four parcel depth from Dudley Avenue (approximately 60 metres) and approximately 0.5 hectares in area. One park will be located on Dudley Avenue between Woodward Avenue and Highland Park Boulevard. Another park will be located on Dudley Avenue between Morgan Avenue and Glen Cameron Road.
- The Town should investigate opportunities to acquire the Dudley Avenue linear parks and the two neighbourhood parks in advance of redevelopment. The publicly accessible open space east of Yonge Street and north of Meadowview Avenue will be negotiated by the Town as part of the redevelopment process.
- The Town will investigate opportunities for a new pedestrian bridge across the rail corridor to the north and south, and explore options for funding through the development process. The necessary easements for public access to the bridge crossing of the CN railway will be acquired through the development process.
- Provision of parkland and open space should be encouraged as part of the new development. All new parkland shall be adjacent to public roads and be publicly accessible.
- Parkland dedicated and conveyed to the Town as credit shall meet minimum size requirements. Cash-in-lieu parkland dedication is required where physical dedication is not possible. All other public amenity spaces will be classified as Open Space or Boulevard and not credited for parkland dedication.
- The Town should initiate a study of the east-west local streets in the existing residential neighbourhoods as green connecting linkages between the existing and new development areas.

- Public art is encouraged to locate in parklands, boulevards and public open spaces.
- The York Roman Catholic School Board site on Dudley Avenue should be retained in the public realm. The Town will investigate the opportunity to acquire this site for future community facilities.
- The Town shall work with local school boards to use existing open space for broader community purposes.

With intensification, resources available for open space become increasingly scarce. In urban settings, linear park systems like the Panhandle in San Francisco and the South Park Blocks in Portland, Oregon connect neighbourhoods and offer many environmental benefits.

The Dudley Avenue Linear Parks—although different in scale—will serve a similar function. They will connect through each block, providing a green transition between the new development and existing residential neighbourhoods. The large community parks will further buffer the low-rise housing to the east while providing a much needed open space amenity for both the local residents and the greater Thornhill area.



Public Space Improvements

Public parks or publicly accessible open spaces through property acquisition or as part of the redevelopment process

Required boulevard setback for Yonge Street Boulevard and Steeles Avenue or easements for the continuation of the Dudley Avenue Linear Park system

3.2.10 Design Complete Streets

Principle: All streets in the neighbourhood should be designed as public spaces that have a strong sense of spatial enclosure, meet the appropriate engineering standards, and have sufficient space and amenities to support a wide range of pedestrian social and recreational activities.

Background

It is often assumed that the main purpose of streets is to accommodate the movement of vehicles and to provide for the routing of public utility lines. Most current standards and criteria for the design of streets reflect those priorities.

Beyond their utilitarian purposes, streets have many other, equally important dimensions. Streets are highly valued civic spaces as settings for public social life and activity.

The best, most popular and thriving urban main streets are where there are narrow–fronted shops, with transparent display windows and entrances, set back sufficiently from the roadway to allow for canopies, street trees and furniture, and room for boulevard window shopping, outdoor eating and merchandizing, as well as the circulation of passing pedestrians. Parked vehicles at curbside also help to insulate walkers from moving traffic. These characteristics should be brought to this part of Markham.

The best local residential streets are more intimate in scale and detail, allowing residents to live at a slower pace. Buildings are appropriately designed and set back further from the roadway with lushly planted and well-maintained front yards. Traffic is slower, providing a higher sense of safety for cyclists and pedestrians. As with Yonge Street, on-street parking can influence driving speed and provide a buffer for pedestrians. On-street bike lanes would further promote a healthy lifestyle.

Guidelines

Streets as Public Spaces. Streets should be seen as 'urban rooms' with floors, walls, ceilings or canopies, and furnishings. The quality of this space relies heavily on the attention given to the design, materials and finishes applied to the area that is closest to the pedestrian:

- Provide coherent street walls, street trees, and other elements that give enclosure to the street spaces.

Vibrant main streets should serve as public spaces that allow for activities to mix and mingle, blurring the line between inside and out.

- Provide clear (and possibly subtle) indications of what is public and what is private, in the choice of paving, walls, steps, materials, planting, etc.

Streets as Engineering. Engineering standards should be appropriate to the type and use of the particular streets:

- Dimension traffic lanes, intersection geometries, and other vehicular traffic design standards to be consistent with the type and multi-purpose use of each street.
- Provide adequate street lighting for pedestrian safety.
- Provide a minimum sidewalk width free of obstacles for safe passage by two wheelchairs. Provide sidewalk ramps and reasonable sidewalk grades for wheelchair accessibility (per Town of Markham standard).
- Coordinate and consolidate underground utilities to ensure operational and maintenance efficiency and the protection of undisturbed areas for municipal tree planting.
- Avoid private under-ground structures below public property.

Streets as Settings. The best streets are supportive settings for a wide range of social and recreational activities - places for sidewalk games, cycling, strolling, walking the dog, porch sitting, people watching, window shopping and unplanned social encounters that make for good gossip, news gathering and conversation. Residents will often use their place on the street as a means of personal expression and a display of their horticultural prowess.

The first few metres back from the sidewalk provide the space to demonstrate the rich character and individuality of a residential local street.

The scale and detailing of the first couple of floors above street level greatly influence the quality and comfort of the pedestrian realm.

Merchants use displays to inform and entice potential customers. Restaurateurs expand their seating capacity in the summer months with outdoor café seating.

The necessary support for these kinds of activities requires careful design coordination for example:

- Allow for on-street parking wherever possible. Paid-parking is encouraged (i.e., metres and residential permits) with charges applied to encourage the use of other modes of transportation such as public transit.
- Provide minimum pavement dimensions on local residential streets to encourage low traffic speeds.
- Provide uninterrupted sidewalk dimensions that allow pedestrians to pass or to walk side by side.
- Provide paving surfaces, catch basins, grates, etc. that are not hazardous to pedestrians or cyclists.
- Provide canopy trees on sidewalks for summer shade.
- Provide stoops, porches, terraces, canopies etc. to encourage residents to linger and socialize outside the entrance to the homes.
- Maximize the number of front doors on all streets.
- Discourage access to loading and service areas from street frontages.

The First Few Metres. The area between the sidewalk and the building is where, in established residential neighbourhoods, one usually finds gardens and other elements that are, cumulatively, a source of richness and liveliness in the landscape of the street.

The design of the local streets should allow for many uses of the front yard setback areas, provide the opportunity for personal presentation, and perform the transition between the public and private realms.

The First Couple of Floors. The lower storeys are in the central cone of vision of a person on the street, and are the most critical in defining the quality and purpose of the buildings. The lower levels of the buildings should be well designed and executed with high quality materials and finishes. There should be many windows at the observable level of the street to provide 'eyes on the street', and there should be frequent private entrances to ensure the comings and goings of many 'feet on the street'.

3.2.11 Provide Grade-Related Uses

Principle: Continuous frontages of sidewalk-related, narrow fronted retail and commercial uses should be concentrated on the main street frontages within convenient walking distance of the Yonge/Steeles intersection. Elsewhere, frontages should have residential uses at grade with access from the public sidewalks.

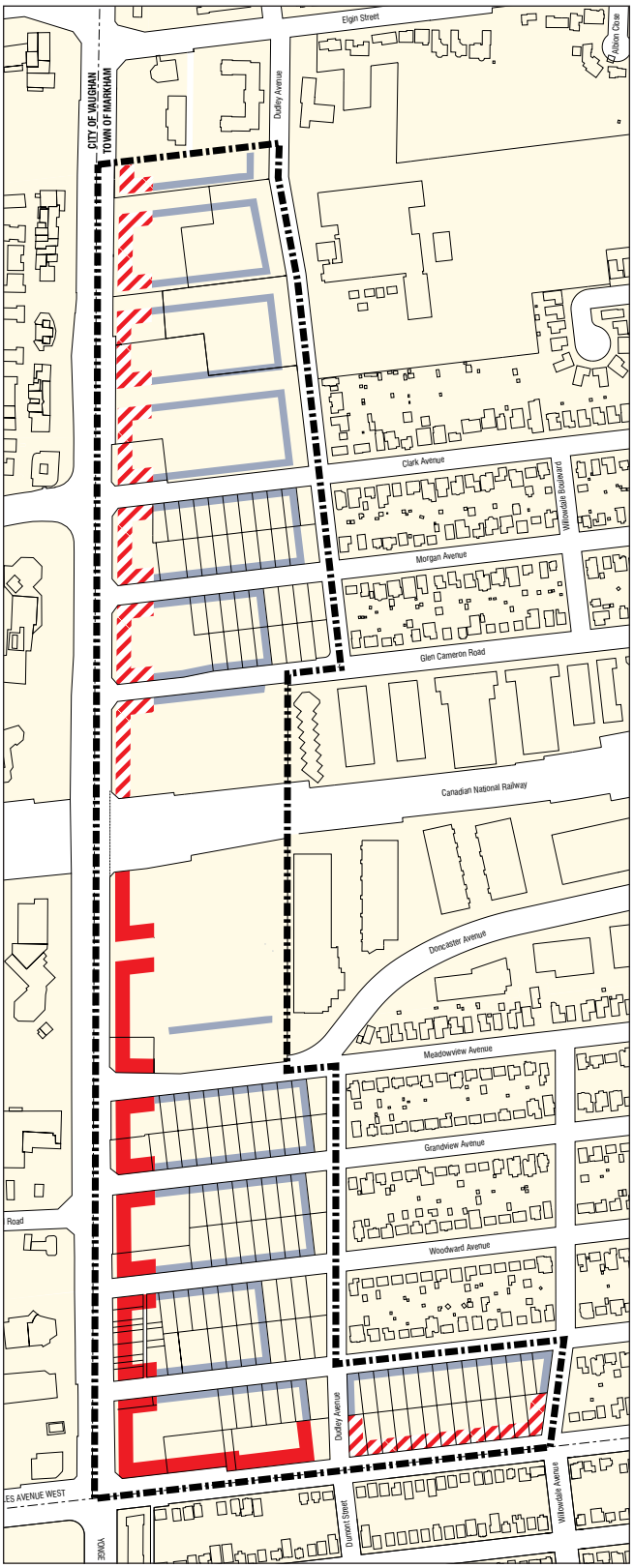
Background

With a corridor that has evolved into a regional arterial, the design of present-day Yonge Street is focused on the movement of vehicles, not pedestrians. Existing commercial development reflects this vehicular dominance in both form and function. With a shift towards a more pedestrian-friendly streetscape, commercial activities must follow. Shops, services and restaurants must relate to the sidewalk, taking advantage of and supporting the pedestrian activities—cafes can spill out onto the boulevard, restaurants can set up outdoor seating patios and passers-by can comfortably stroll and window shop.

The local residential streets are a further key to any successful neighbourhood. This is where most residents will live and for streets to feel safe and friendly, new buildings must be designed to allow for ground level uses that animate the pedestrian realm and provide opportunities for social interaction. Stoops, porches, front doors and gardens are simple and conventional means of connecting the inside with the outside, giving residents a proprietary sense of the street and fostering a greater sense of community.

Guidelines

- Retail uses are mandatory along the frontage of Yonge Street south of the CN Rail corridor and the frontage of Steeles Avenue (west of Dudley Avenue) for all redevelopment projects to encourage a fully active public realm. Retail entrances are required at the Boulevard Build-to Line.
- Retail uses are encouraged but not required along the frontage of Yonge Street north of the CN Rail corridor and the frontage of Steeles Avenue (east of Dudley Avenue). However, the ground floor for all buildings shall be designed with sufficient floor to ceiling heights to accommodate retail or other commercial uses.
- Residential buildings on local streets are required to have grade related entrances. Relatively continuous streetwall frontages with minimal interruptions for vehicular access are encouraged.



Grade Related Uses

- Retail required at street level for all development.
- Grade related residential units or entrance lobbies required.
- Street related retail is encouraged but not required for other Yonge Street and Steeles Avenue frontages.

note: New streets conceptual only. Will require coordination with Town.

3.3 Built Form Principles

3.3.1 Introduction

Good urban places are composed of many buildings varied in type and size. New buildings should help shape the pedestrian realm, respect existing land uses and incorporate the most recent advances in sustainable building and sound community development principles.

The proposed built form for the Yonge-Steeles Corridor study area is predominately in mid-rise buildings, or those between 4 and 9 storeys in height. This building type will define the Yonge Street frontages of the redevelopment blocks and provide a transition towards the low-rise buildings adjacent to the existing residential neighbourhoods. High-rise buildings, those above 9 storeys, will be situated closer to Yonge Street, and separated a considerable distance from the existing low-rise buildings.

Markham does not currently have many precedents for the built form character proposed in this document, but this is rapidly changing throughout the Town as well as along many of the avenues and corridors in the Greater Toronto Area. Historically, the study area began as farmsteads with few buildings. As the former Thornhill Village flourished and Yonge Street's importance heightened, the area expanded to include commercial uses fronting Yonge Street and detached single-format buildings. With the expansion of higher-order transit along Yonge Street to service the growing demand throughout York Region, the built form must once again change to support intensification.

This section discusses the low-rise, mid-rise and high rise building types with general urban design guidelines for each. Additionally, this section describes how the buildings define and relate to the public realm for each type of street in the study area.

3.3.2 Low and Mid-Rise Buildings

Principle: Most of the redevelopment should be in low and mid-rise buildings that line the streets and other public spaces to give shape and a source of enclosure to the public realm.

Background

Good urban streets are defined by the buildings that surround them. Mid-rise buildings and the base of taller buildings compose the street wall that defines the block perimeter. Building height should reflect the scale and importance of each street.

The majority of the proposed redevelopment is mid-rise buildings from 4 to 9 storeys in height. These will accommodate residential units, commercial offices or a mix of uses including retail, and represent the "base" built form condition in support of intensification objectives and the creation of a successful, livable and amenable urban environment. The greatest concentration and tallest of the mid-rise buildings should be on Yonge Street, with the lower buildings extending down the east-west local streets.

On the Yonge Street frontage, particularly south of the CN Rail corridor, the buildings should collectively provide a relatively consistent and contiguous street edge that gives a strong architectural identity to this particular part of the broadly scaled and "longest" street. Continuity in the built-up edge of the blocks on Yonge Street will strengthen a sense of place and vitality for the pedestrian boulevard and support a viable retail environment.

On the east-west local streets and community parks, the mid-rise buildings should be somewhat lower and set back from the property lines to ensure a strong sense of enclosure for the street as well as good solar access. Similarly, on the community parks the mid-rise buildings should line and give definition to the edges of the public space without overshadowing them.

Dudley Avenue is the 'seam' between the redevelopment area and the adjacent single-family housing areas. On the west side of Dudley, a 'Buffer Area' extending 75 metres from the nearest residential properties has been defined (this is measured from the 'Relevant Residential Property Line' or 'RRPL'). Within this Buffer Area, a continuous line of parks is proposed along Dudley with low-rise buildings facing the parks no higher than 12 metres (approximately 3 to 4 storeys).

Beyond the Buffer Area—and an additional 50 metres from the RRPL—is the Transition Zone within which mid-rise buildings no higher than 25 metres (approximately 5 to 7 storeys) can be built. These buildings are required to step down where they adjoin the side streets, the parks, and the low-rise buildings.

Beyond the 125-metre Transition Zone, the maximum base building should be no higher than a maximum 35 metres (7 to 9 storeys). Setbacks and step backs will vary, depending on the building's proximity to Yonge Street.

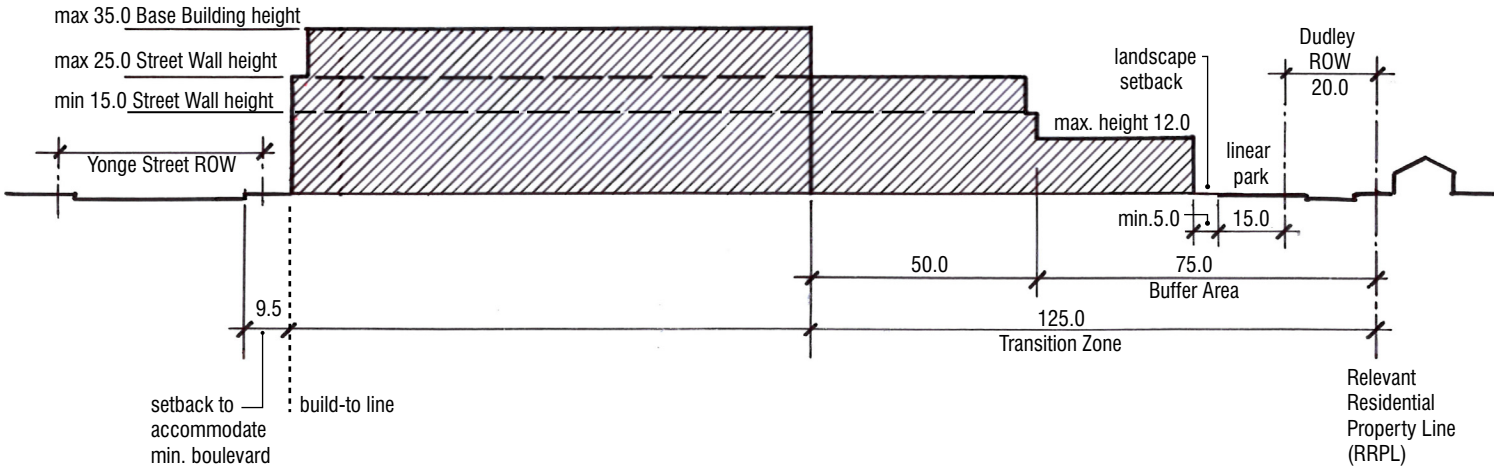
Guidelines

- Development within 75 metres from the RRPL—abutting the neighbouring low-density residential area and the Dudley Avenue linear park system—should be limited to a maximum height of 12 metres.
- Mid-rise development within the 125-metre Transition Zone and beyond the 75-metre Buffer Area should be limited to a maximum height of 25 metres with step backs at a maximum 16-metre high street wall.
- Mid-rise development beyond the 125-metre Transition Zone should be limited to a maximum height of 35 metres, with stepbacks of 2.5 metres at the maximum 16-metre high street wall and 25-metre high street edge building. Setbacks and step backs are similar to the local street built form guidelines (refer to Section 3.4.8).

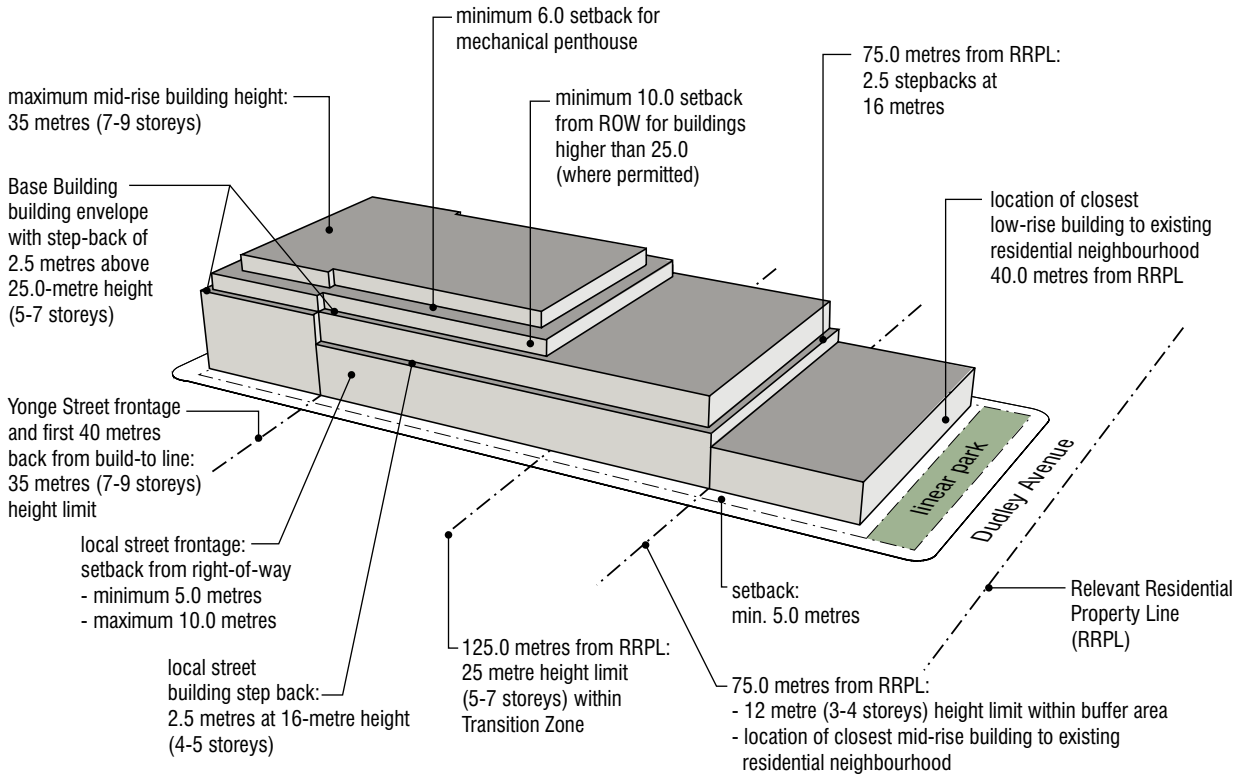
Mid-rise buildings that front the main streets will have generally have higher street walls with step backs at specific heights to reduce their bulk. Ground level frontages will include retail such as restaurants and shops to stimulate the pedestrian environment.

Mid-rise buildings that front the local streets will generally have lower street walls with greater step backs. Upper floors and higher buildings will set back further from the street to not overpower the more intimate residential setting. Residential units should have ground level entrances with well-defined, landscaped front yards.

- Development fronting on Yonge Street and the first 40 metres back from the build-to line should be limited to a maximum height of 35 metres inclusive of mechanical penthouse with a step-back of 2.5 metres at a maximum street wall height of 25 metres.
- The height of the building is measured to the top of the mechanical penthouse or other rooftop super-structure. Mechanical penthouses shall be setback a minimum 6.0 metres from the closest building face.



Building Envelope: Base Buildings



Mid-Rise Building Envelope
3-dimensional projection of the mid-rise building envelope for a typical development block: View from the Dudley Linear Park frontage

3.3.3 High-rise Buildings: Height Limits

Principle: The tallest high-rise buildings should be located the furthest distance from the low-rise neighbourhoods and the heights should be graduated down towards the neighbourhoods.

Background

For the purpose of the built-form guidelines, "High-rise buildings" are defined as those exceeding 35 metres in height (9 to 10 storeys).

In recent years, high-rise buildings, predominantly in the form of towers, have become the preferred form of buildings of residential condominium developers. Controversy has surrounded this trend, particularly in already built-up urban areas where the form and potential impact of redevelopment are central concerns.

The redevelopment and intensification of the Yonge Steeles area must acknowledge and plan for the inclusion of high-rise buildings at the same time ensuring that high-rise buildings be designed as fully integrated parts of the urban fabric of new neighbourhoods.

Most of the built form, within the permitted densities, should be mid-rise buildings which directly relate to and frame the pedestrian environment of the streets and other public spaces. Any High-rise buildings which are proposed should be integrated with these mid-rise base buildings so as to further support the ground-level environment of the pedestrian.

The visual impact of high-rise buildings on the existing low-rise residential areas should be minimized. Height limits should be based on a transitional or "angular plane" that is the lowest towards the low-rise neighbourhoods and increases in height with the distance away from the existing low-rise area.

No High-rise buildings should be permitted in the Transition Zone bordering the residential neighbourhoods.

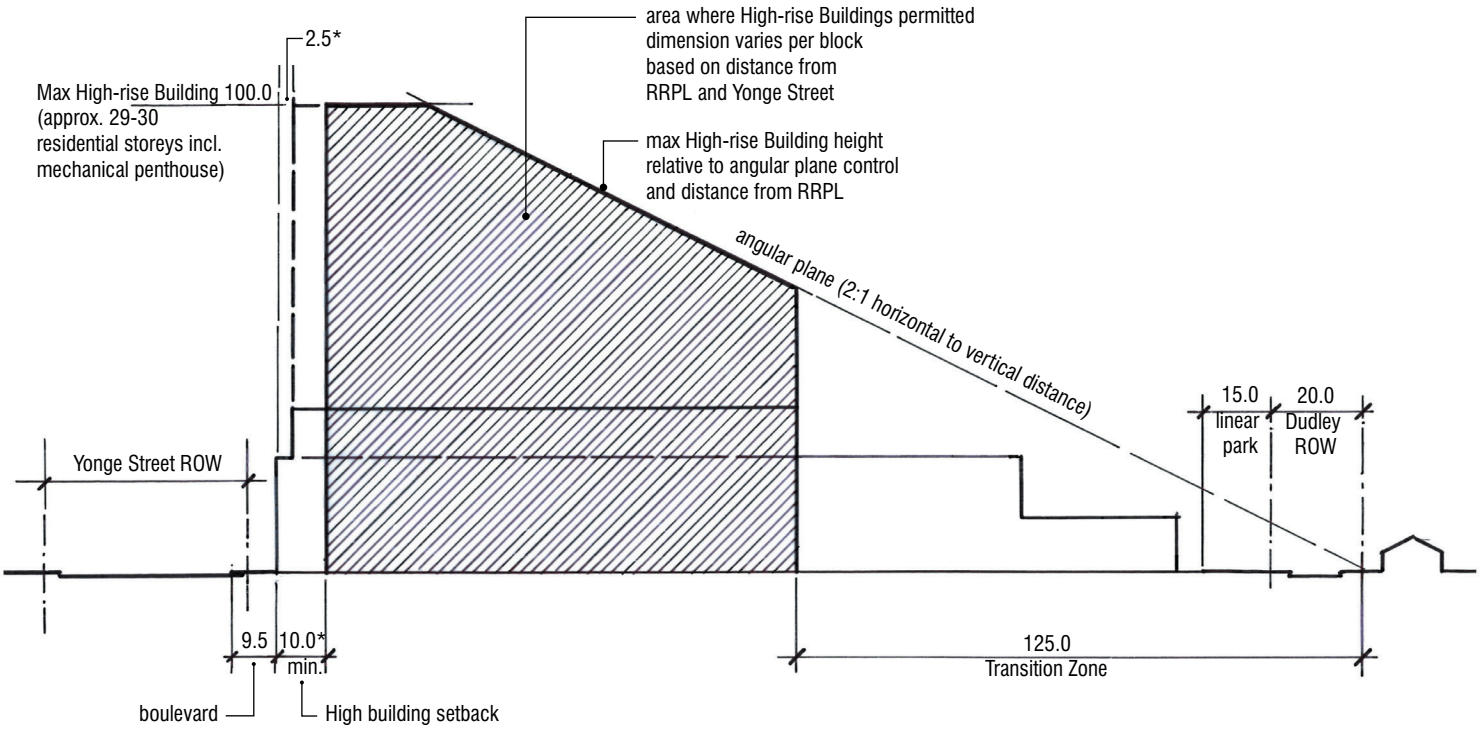
The height of high-rise buildings should be subject to angular control planes in order to reduce the visual impact and a sense of overwhelming the existing low-rise residential areas.

The angular plane should be projected from the nearest existing low-rise property (the Relevant Residential Property Line - RRPL) at a 2:1 slope where the height is half the horizontal distance. Thus, a building 150 metres from the RRPL could be no higher than 75 metres high (approximately 23-24 storeys).

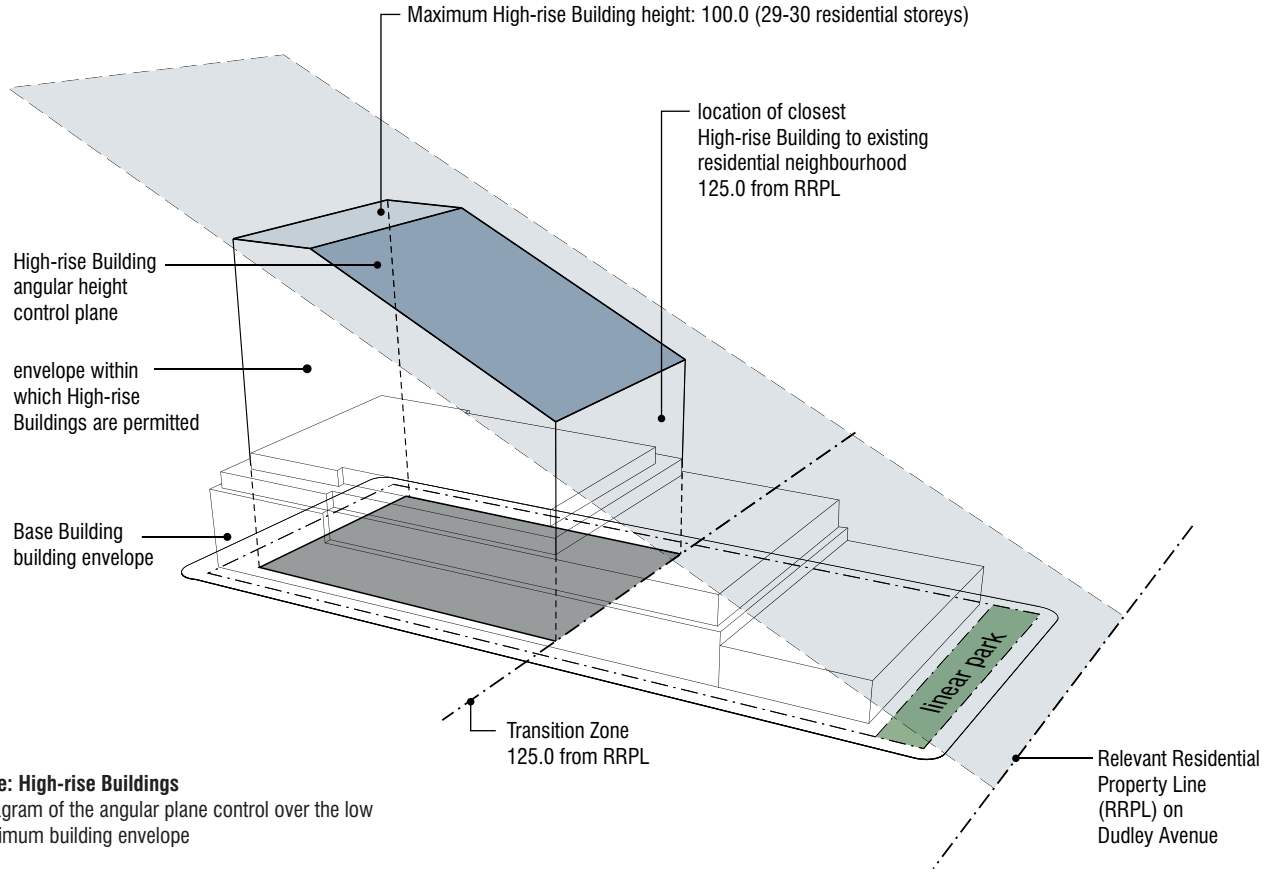
The diagrams on the facing page illustrate diagrammatically, in 2- and 3-dimensions, the Zone in which High-rise buildings may be sited, the angular plane and the absolute height limit of 100 metres—approximately 29 to 30 residential storeys.

Guidelines

- High-rise buildings are defined as those over 35 metres in height.
- The height of the building is measured to the top of the mechanical penthouse or other rooftop super-structure.
- No High-rise buildings will be permitted on sites within the Transition Zone.
- High-rise buildings are subject to an angular height control plane extended from the RRPL at ground level at an angle such that the vertical dimension (the maximum building height) is half the horizontal dimension from the RRPL (a 2:1 horizontal to vertical distance ratio).
- No building including the mechanical penthouse or other rooftop super-structure shall be higher than 100 metres above grade.
- To protect the Thornhill Heritage Conservation District, no building over 35 metres in height will be permitted within 125 metres of the District's southern boundary.



Building Envelope: High-rise Buildings



Building Envelope: High-rise Buildings
3-dimensional diagram of the angular plane control over the low and mid-rise maximum building envelope

3.3.4 High-rise Buildings: Other Controls

Principle: High-rise buildings should be subject to design standards that regulate their spacing as well as their girth (floor plate) relative to the height, in order to control their perceived bulk and the proportion of sky views.

Background

The height of high-rise buildings is only one of the dimensions that influences the ground level perception of their mass and bulk.

Much can be claimed for the singular tall slender tower that acts as a columnar landmark in an otherwise mid-rise area of a city. If, however, the one becomes many; the elegantly slender becomes bulky; and the spacing between them—the "sky view"—becomes restricted. The impact can be visually oppressive and overwhelming.

Basic design standards are required to control the number, spacing and proportion (width relative to height) in order to reduce the likelihood of the visual "overcrowding" of high-rise buildings.

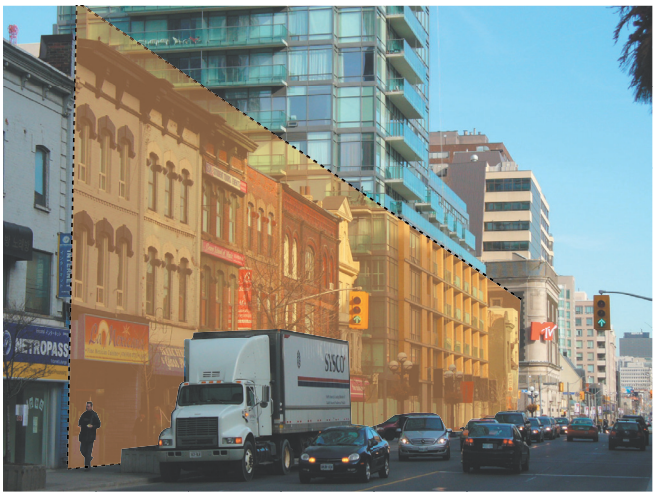
Buildings above the Base Buildings should be designed as towers, and articulated in a manner to reduce their perceived bulk.

Towers up to about 20 storeys will have less impact on sky views and particularly when combined with Base Buildings (up to 7 or 9 storeys) and can have a proportion of height to width of about 2:1 (approximately 1:1 above the Base Building height). The recommended proportion of a point tower is the height approximately 4 times the width of the floor plate.

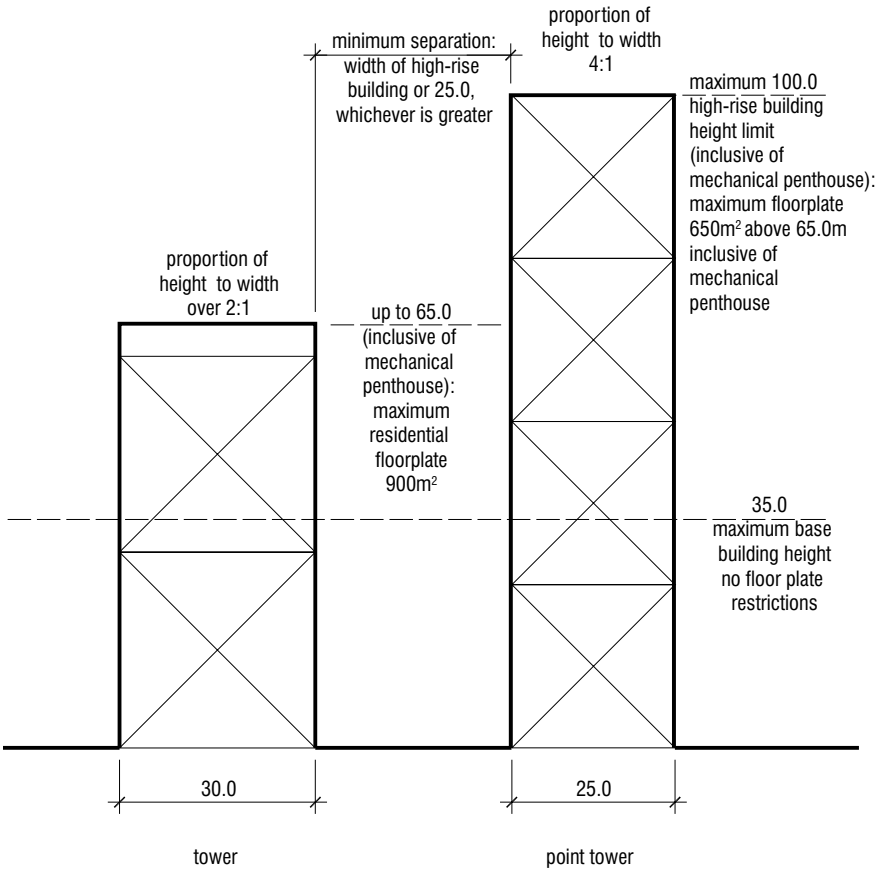
The spacing between high-rise buildings should be at least the same distance as they are wide.

Guidelines

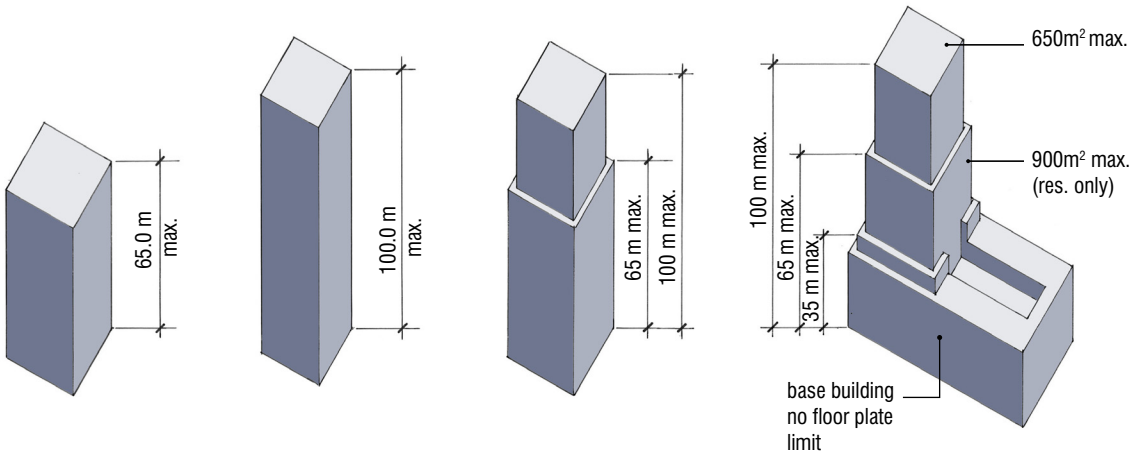
- No floor plate restrictions for buildings below the 35-metre maximum base building height.
- High-rise building floor plates for residential buildings shall be no greater than 900 square metres (gross floor area) up to maximum height of 65 metres.
- High-rise building floor plates shall be no greater than 650 square metres (gross floor area) above a height of 65 metres up to a maximum height of 100 metres.
- High-rise buildings should have articulated upper floors to reduce bulk and achieve a distinct skyline profile.
- High-rise buildings shall be separated by the width of the widest High-rise building or 25 metres, whichever is greater. Separation shall be measured perpendicularly to the building face of adjacent buildings (see High-rise Buildings: Basic Controls on following page).
- Residential units may wrap around the mechanical penthouse but must adhere to all built form guidelines.
- High-rise buildings with elongated floor plates should be oriented in a north-south alignment to reduce shadow impact.
- High-rise buildings should be located towards the south side of a block so that more of the shadow falls within the block rather than on the adjacent street.



The 18 Yorkville project at Yonge Street and Yorkville Avenue in Toronto is an example of a contemporary point tower. It clearly demonstrates how a high-rise building in combination with a mid-rise base building can fit in by strengthening the street wall, using a small floor plate to minimize shadows and present an elegant profile.



High-rise Buildings: Basic Controls - Heights, Floor Plates and Separation



High-rise Buildings: Basic Floor Plate Sizes and Possible Arrangements

3.4 The Streets: Built Form and Public Realm Guidelines

3.4.1 Introduction

The redevelopment study area is composed of a network of streets, each having distinct built-form and public realm characteristics. Both aspects of the street must work in tandem, supporting one another to create a complete urban place.

The built form follows the same basic principle as outlined previously within these guidelines: more intense building towards Yonge Street and transitioning down towards the existing low-density residential neighbourhoods. The buildings will shape and contain the public realm, the space between buildings will help define the character of the new neighbourhood, and redevelopment activities should improve the quality and character of the existing community.

This section discusses each street type within the study area, defining both built form and public realm guidelines for each. The streets include Yonge Street, Steeles Avenue, Dudley Avenue and the east-west local streets. The guidelines are intentionally non-prescriptive regarding architectural style and detailing to allow for the widest range of possible development.

3.4.2 Yonge Street: Built Form

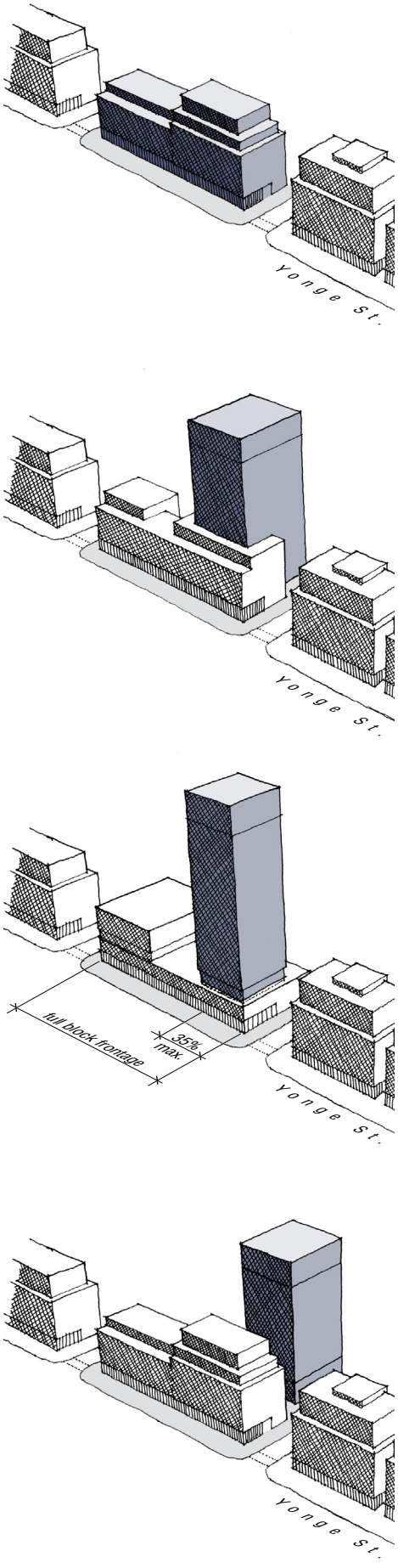
Principle: Yonge Street should have generally contiguous frontage of predominantly mid-rise buildings sited on a common build-to line. High-rise buildings should be set back from the frontage to maintain the street-wall profile.

Background

There should be a consistent pattern of street wall buildings along Yonge Street to provide spatial containment and reinforce its role as the pedestrian main street. The edges of the promenade should be lined with pedestrian scale mid-rise buildings that are tall enough to give a spatial edge to the street but low enough to avoid overpowering the pedestrian areas. On the frontages of the blocks between Steeles and the CN Rail bridge there should be contiguous storefronts along the full length of the frontages.

Guidelines

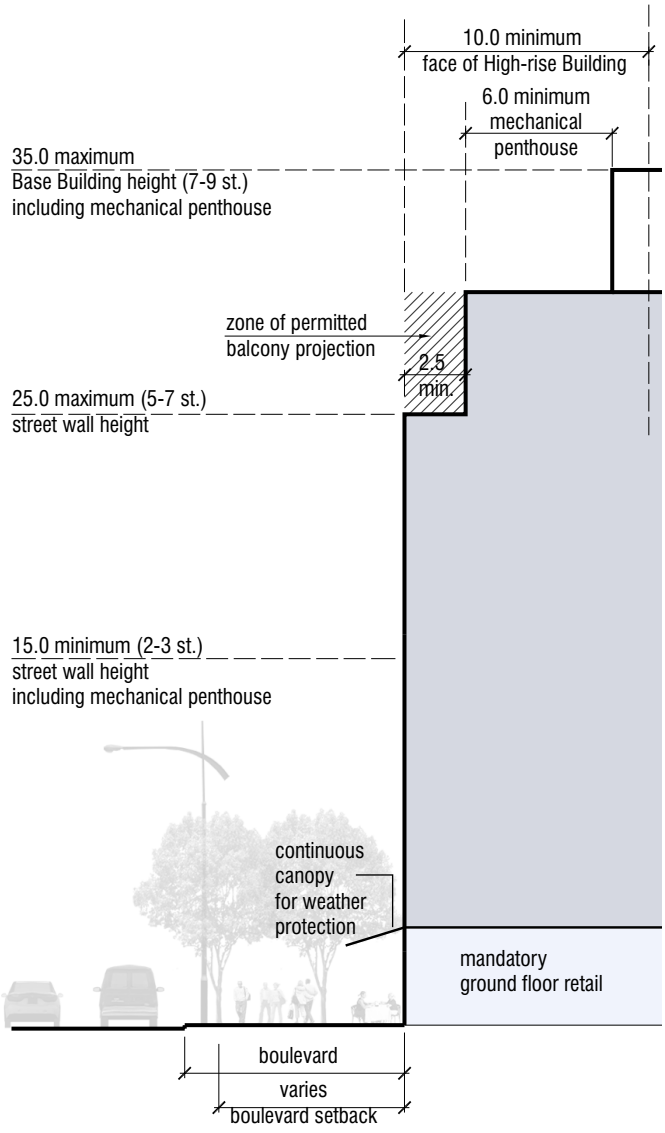
- A building setback is required to provide a 9.5 metre boulevard measured from the face of curb to the building face.
- South of the railway where street-related retail is required the setback is a mandatory build-to line. North of the railway the setback is considered a minimum setback requirement.
- The minimum height of streetwall buildings should be at least 15 metres up to a maximum of 25 metres.
- A step back of 2.5 metres is required above the 25-metre height.
- The maximum Base Building height shall be no greater than 35 metres inclusive of mechanical penthouse.
- The mechanical penthouse shall be setback a minimum of 6 metres from the closest building face.
- High-rise buildings shall be set back at least 10 metres from the face of the street wall.
- A high-rise building that occupies 35% or less of the Yonge Street frontage of the block may be sited a minimum of 2.5 metres from the build-to line.
- Continuous canopies extending at least 2.5 metres from the building face should be provided for weather protection.



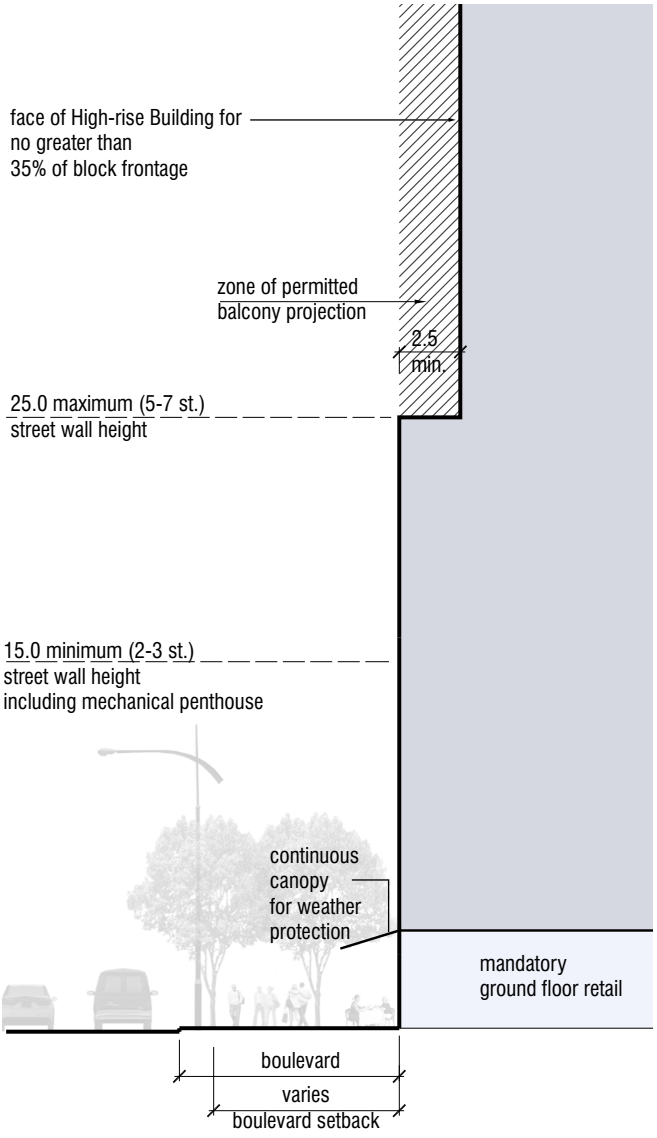
Potential Building Relationships with Yonge Street
top to bottom: street related base building; Set back from base building; relating to corner with shorter base building and minimum step-back; set back from Yonge Street with frontage addressing local street

Yonge Street's redeveloped character will have grade-related uses and a consistent street wall to comfortably enclose the pedestrian realm; high-rise buildings will punctuate the skyline without overwhelming it. The guidelines promote a built form similar to that of Church Street in Toronto, where the mix of old and new retains the same building tradition of facing the street.

The base buildings from block to block will collaborate to form the street wall. Well-defined heights and step-backs will ensure comfortable enclosure of the street, as these buildings do on College Street in Toronto.



Built Form - Yonge Street with High-rise Building set back from the Base Building frontage



Built Form - Yonge Street with High-Rise building addressing Yonge

3.4.3 Yonge Street: Public Realm

Principle: As the pedestrian focus for the present and future Thornhill communities, Yonge Street should have the principal promenades for the area. Pedestrians should feel at home and have the space and amenities for movement and socializing.

Background

Yonge Street has dual roles: it is the focal main street for the local residents and workers and a major traffic artery for the larger urban region. Both roles are important to the continuing success of Thornhill and the broader area.

Until recently, high priority was placed on increasing road capacity to accommodate regional traffic growth and low priority was given to pedestrian amenity of the street. Now, with higher-order transit and associated intensification planned for the corridor, the opportunity arises to re-balance towards the pedestrian and to fully integrate Yonge Street with the neighbourhoods to the east.

Present-day Yonge Street is not conducive to pedestrian use. Most of the sidewalks are narrow and too close to fast-moving traffic. It is difficult for pedestrians to cross the street—crosswalks are infrequent, light-phases are too short and median refuges are inadequate. Most of the buildings fronting the street are car-oriented—set well back from the sidewalk with intervening parking lots and driveways, making access on foot daunting. The street is rarely a pedestrian destination except for transit riders on their way to somewhere else.

The broad scale of Yonge Street as a vehicular space should be matched with pedestrian boulevards of equally generous proportion. There should be wide boulevards with repetitive tree plantings throughout, to create strong visual continuity and cohesion for the full length of the street, extending northward from Steeles Avenue and connecting with the south end of the planned boulevard in Thornhill Village.

Guidelines

- ***Yonge Street Boulevard south of the Rail:*** Yonge Street between Steeles Avenue and the bridge over the CN Rail should have a sufficent building setback to provide a consistent 9.5 metre boulevard (between curb and building face) – wide enough to accommodate two rows of deciduous shade trees, which will provide a sense of enclosure and wind protection. This dimension is similar to that proposed as part of the Thornhill Village Redevelopment Study (2006) to the north.

- ***Yonge Street Boulevard north of the Rail:*** Yonge Street north of the CN Rail should have a right-of-way and building setback sufficient to provide a consistent 9.5 metre wide boulevard. Residential frontage could have greater setbacks and forecourt/ front-yard areas with deciduous shade trees to extend the vegetated massing of the boulevard.

Yonge Street will be the main street for the neighbourhood. It will consist of generous walking surfaces, a comfortable scale of buildings, fine detailing and ample tree cover. A wide range of amenities and activities are welcome on the Boulevard, taking advantage of the people walking by while at the same time helping to activate the life between buildings.

- ***Street trees:*** The rows of trees should be spaced 4 metres apart with the first row set back 1.5 metres from the face of curb. This planting arrangement will help define two equal and parallel zones of 4 metres each along the promenades—one close to the building face which provides for window shopping, sidewalk cafes and merchandising and another, closer to the roadway which is primarily for pedestrian circulation.

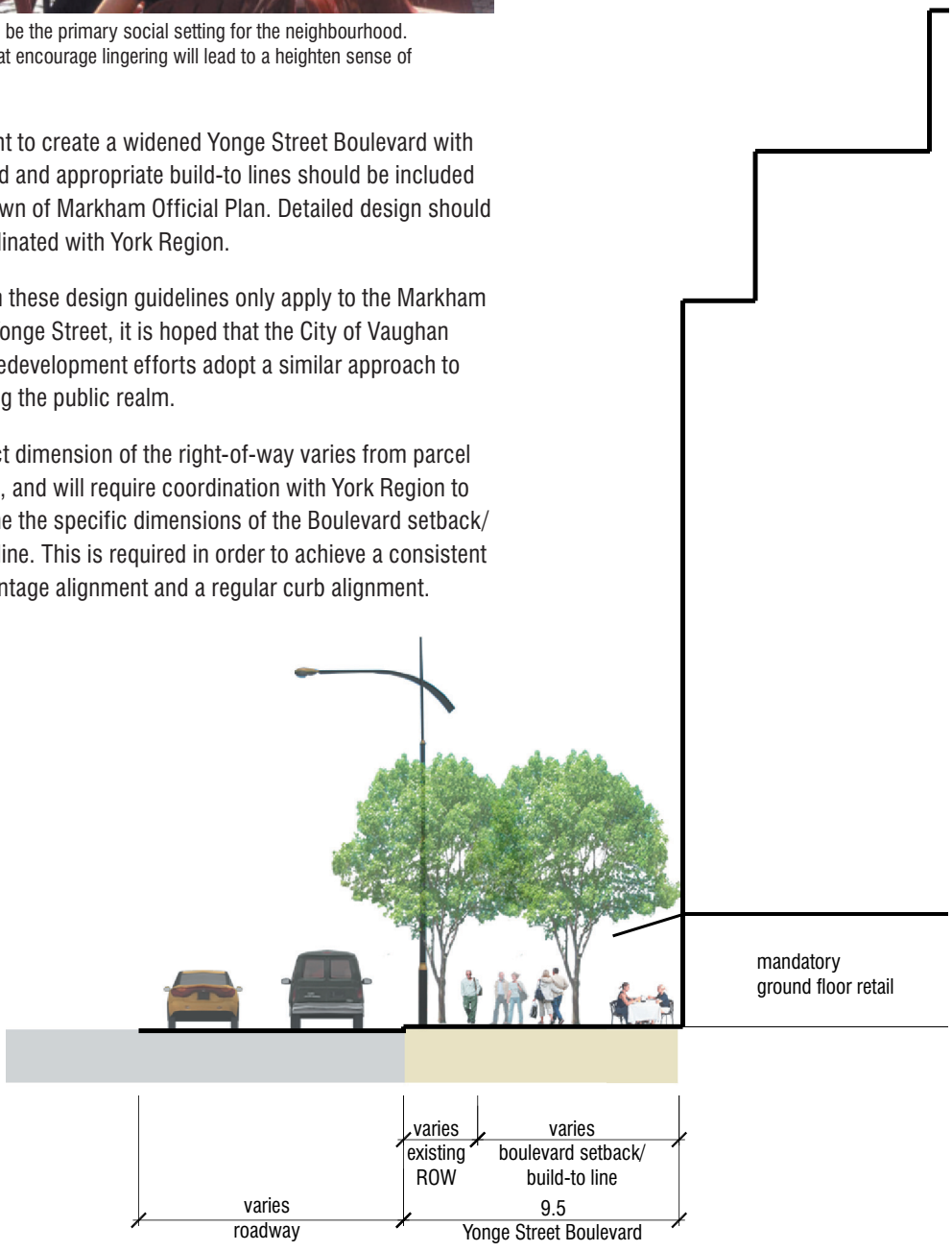
- ***Tree planting details:*** All trees on Yonge Street should be planted to ensure long-term sustainability. The detailed design of the tree planting zone should consider the size of the planting space and the specifics of the growing medium. The design should also consider defense against road salt intrusion and a zone free of utilities and other obstructions to healthy root growth. The paving should extend from the curb to the face of the buildings.

- ***Parking:*** Off-peak curbside parking should be provided wherever feasible for customers' convenience and to provide added insulation from moving traffic. Yonge Street is a regional road and any proposed changes on Yonge Street will require the Town to work and coordinate with the Region of York on the specific design criteria for bus lay-bys, bus stops, bicycle lanes, and on-street parking. Bicycle parking should also be provided.

- ***Build-to line:*** The building setback at the back of the 9.5-metre boulevard is a mandatory build-to line. The build-to line would indent where publicly accessible squares, plazas or parkettes are also provided. The boulevard dimension is measured from the face of curb to the face of the building.

Yonge Street will be the primary social setting for the neighbourhood. Opportunities that encourage lingering will lead to a heighten sense of community.

- The intent to create a widened Yonge Street Boulevard with enhanced and appropriate build-to lines should be included in the Town of Markham Official Plan. Detailed design should be coordinated with York Region.
- Although these design guidelines only apply to the Markham side of Yonge Street, it is hoped that the City of Vaughan in their redevelopment efforts adopt a similar approach to improving the public realm.
- The exact dimension of the right-of-way varies from parcel to parcel, and will require coordination with York Region to determine the specific dimensions of the Boulevard setback/ build-to line. This is required in order to achieve a consistent retail frontage alignment and a regular curb alignment.



Public Realm: Yonge Street Boulevard

3.4.4 Steeles Avenue: Built Form

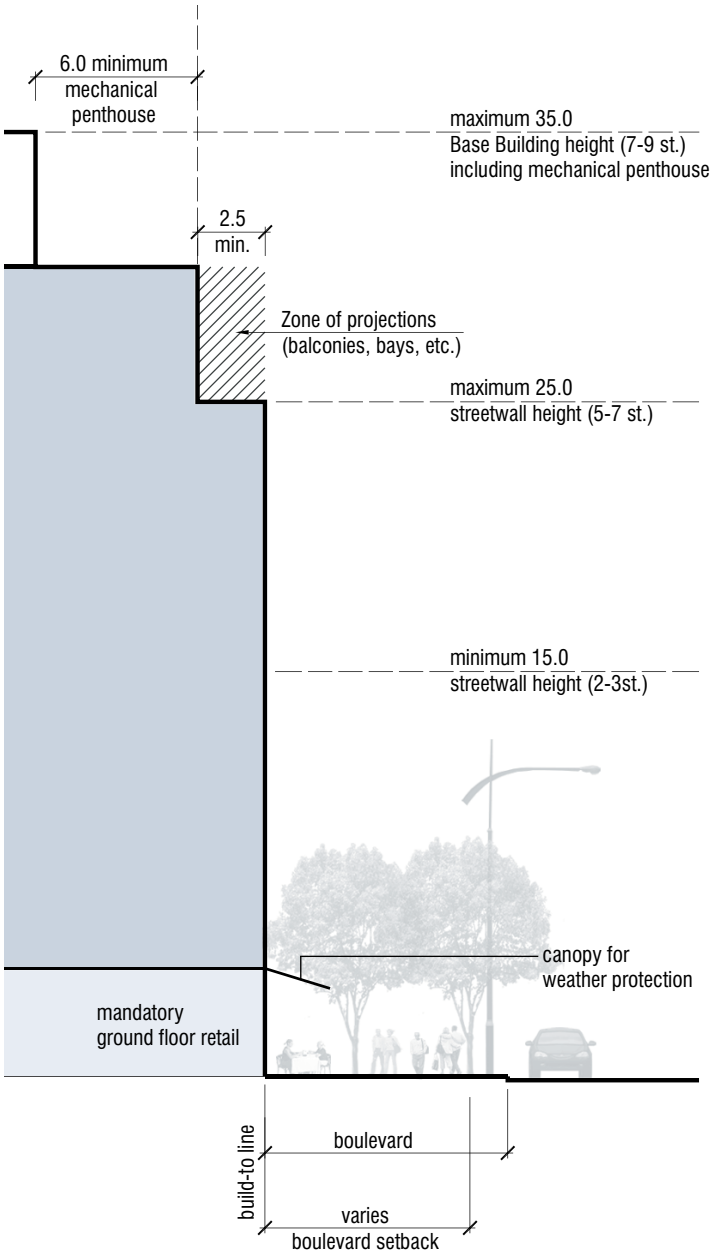
Principle: The boulevard widening and built form guidelines for the frontage of Yonge Street should turn the corner for the first block of Steeles Avenue. East of Dudley Avenue, mid-rise residential development with landscaped forecourts could set the pattern for further development of Steeles Avenue.

Background

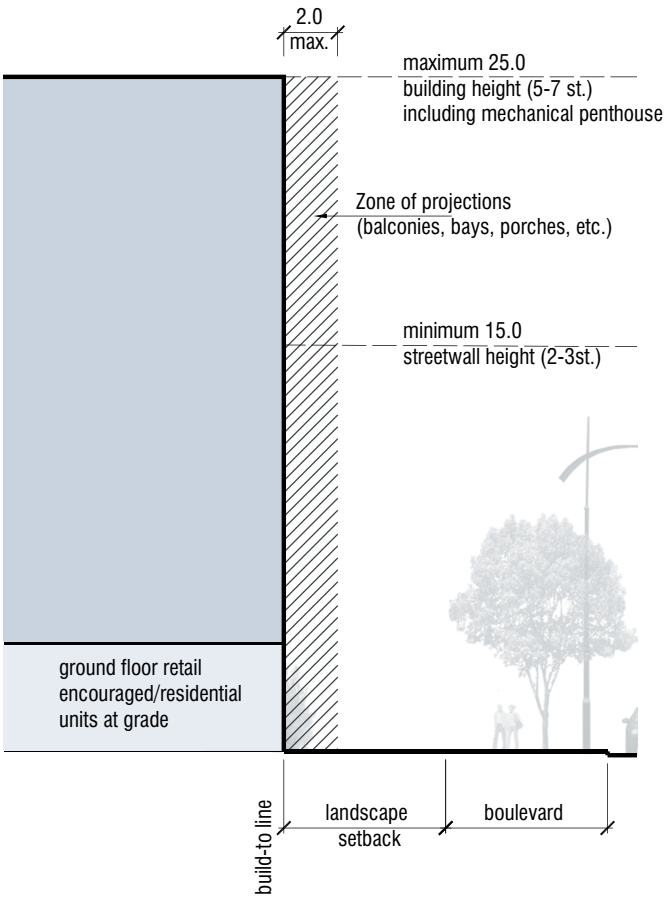
As Steeles and Yonge Street intersect, they should have a similar character and built form to signify this important gateway to Markham. As with Yonge Street, there should be a more consistent pattern of street wall buildings along Steeles Avenue close to the intersection to provide spatial containment and reinforce its role as a major regional street. The edges of the street should be lined with pedestrian scale mid-rise buildings that are tall enough to give a spatial edge to the street but low enough to avoid overpowering the pedestrian areas. On the prime frontages between Yonge Street and Dudley Avenue there should be contiguous retail storefronts along the full length of the frontage. On the block east of Dudley Avenue, Steeles Avenue where residential uses predominate, buildings should set back further from the street to allow for a more green and open streetscape.

Guidelines

- Between Yonge Street and Dudley Avenue, a setback is required to provide a 9.5 metre boulevard. The back of the boulevard is a mandatory build-to line.
- Between Yonge Street and Dudley Avenue, the built form and mandatory at-grade-retail will follow the same standards as Yonge Street (refer to Section 3.4.2).
- Between Dudley Avenue and Willowdale Boulevard, a setback is required to provide an improved boulevard (sidewalk and planted median) in combination with a building setback to provide a landscape setback. The reference for these setbacks must be determined first by any planned streetscape or roadway widening that may re-define the extent of the public right-of-way.
- Between Dudley Avenue and Willowdale Boulevard, the street wall height for new buildings should be 15 metres up to a maximum of 25 metres. A step back of 2.5 metres is required above the 25-metre height. The maximum building height is 35 metres. A 2.0-metre projection zone from the principal building face is permitted for balconies, porches, bays and stoops.



Built Form: Steeles Avenue - Yonge Street to Dudley Avenue



Built Form: Steeles Avenue - East of Dudley Avenue

3.4.5 Steeles Avenue: Public Realm

Principle: Steeles Avenue should have a spacious boulevard and urbane streetscape treatment similar to Yonge Street close to the intersection. The boulevard should transition to a landscape dominant treatment on the residential building frontages east of Dudley Avenue.

Background

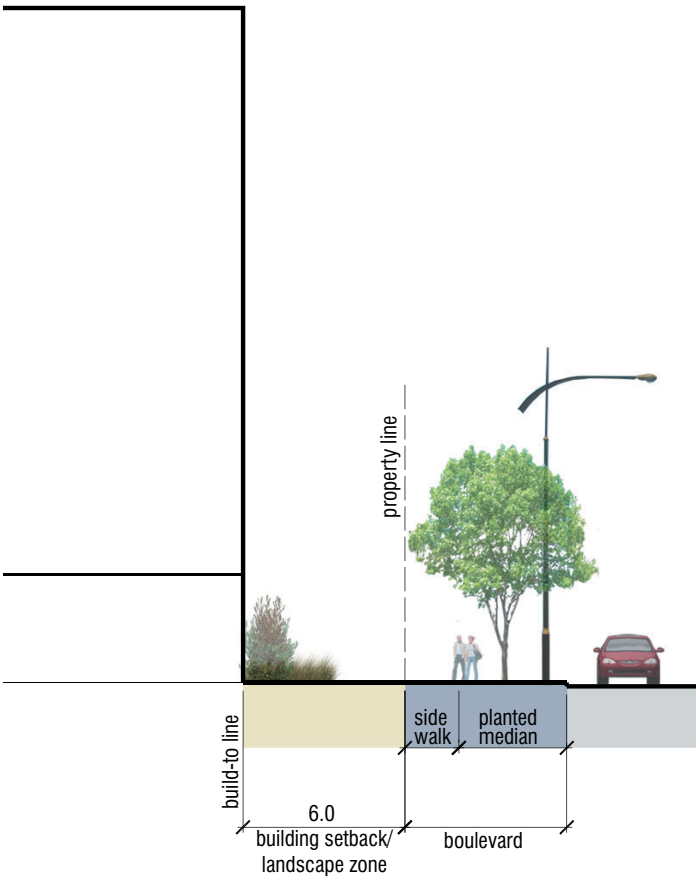
Steeles Avenue is a major regional east-west corridor within York Region and the City of Toronto and is the southern boundary for the Town of Markham. Like Yonge Street, a higher priority has been placed on transportation needs rather than for other users. The broad scale of Steeles Avenue as a vehicular space should be matched with pedestrian boulevards of equally generous proportion. Although the study area only includes two blocks of Steeles Avenue, the northern public boulevard should be widened and improved for pedestrians and should set the tone for the rest of Steeles Avenue.

There should be wide boulevards with repetitive tree plantings to create strong visual continuity and cohesion. The Yonge Street Boulevard design should wrap the corner for the first Steeles block, with a residentially scaled design for the second block to the east. With redevelopment, individual access driveways from Steeles Avenue should be relocated to a mid-block lane and thereby improve both streetscape quality and safety for pedestrians and vehicles.

With multiple jurisdictions having influence over Steeles Avenue and its increasing importance as a transit corridor, it is strongly recommended that Toronto, in consultation with Markham and Vaughan, develop a comprehensive streetscape improvement master plan to better accommodate all uses.

Guidelines

- ***Steeles Avenue west of Dudley Avenue:*** The Steeles Avenue right-of-way in the block between Yonge Street and Dudley Avenue should be combined with a boulevard setback to provide a consistent 9.5-metre wide boulevard, as on Yonge Street (refer to Section 3.4.3).
- ***Steeles Avenue east of Dudley Avenue:*** The Steeles Avenue right-of-way in the block between Dudley Avenue and Willowdale Boulevard should be combined with a setback to provide a generous boulevard (sidewalk and planted median) and combined with a 6.0-metre building setback to provide a landscape frontage zone.



Public Realm: Steeles Avenue East of Dudley Avenue

3.4.6 Dudley Avenue: Built Form

Principle: Development on Dudley Avenue should consist of parkland and low-rise buildings that face the existing low-rise neighbourhoods.

Background

Dudley Avenue, parallel to Yonge Street and the eastern boundary for most of the redevelopment area, is a major neighbourhood connection. It will be where higher density redevelopment and the existing low-rise residential neighbourhood interface. It should have a character that symbolizes the opportunity that redevelopment can bring to the community, and provide an open and green amenity for new and old residents alike.

Dudley Avenue will be framed by linear park spaces at the end of each redevelopment block with two larger community parks, one each to the north and south of the CN rail corridor.

In a 75-metre Buffer Area, low rise buildings are permitted to face the western edge of the linear park. They should have a minimum setback from the park to building face (refer to Section 3.3.2).

Mid-rise buildings are permitted outside the Buffer Area to face the western edge of the larger community parks. They are subject to the 125-metre Transition Zone from the existing residential properties. Buildings that face Dudley Avenue must adhere to the Mid-Rise Buildings and the Local Streets Built Form Guidelines.

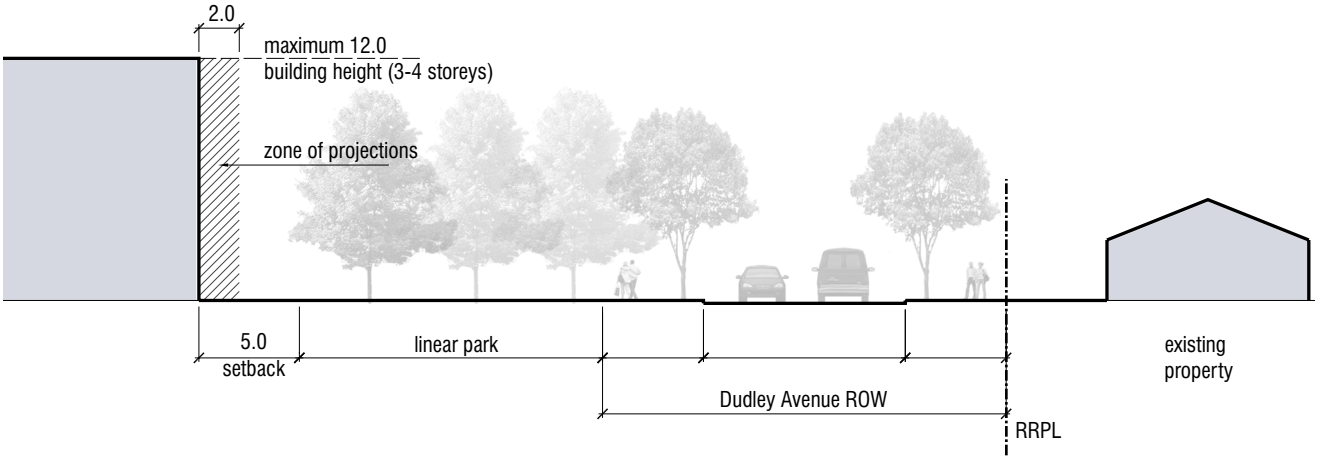
Buildings should front onto the park sidewalk. Residential units are encouraged to have grade related access, using the setback as a landscape zone that visually extends into the park

Guidelines

- No buildings are permitted within 40 metres of the Relevant Residential Property Line (RRPL). Refer to Section 3.2.3 Transition with Adjoining Neighbourhoods.
- Building setback requirements should be established in order to provide a minimum of 5 metres as a landscape zone between the building face and proposed public parks.
- The maximum height of buildings facing the proposed Dudley Avenue linear park and within the 75-metre Buffer Area should be restricted to 12 metres, inclusive of mechanical penthouse or other rooftop accessory elements. A 2.0-metre projection zone from the principal building face is permitted for balconies, porches, bays and stoops.
- The maximum height of buildings facing the proposed community parks, beyond the 75-metre Buffer Area yet within the 125-metre Transition Zone from the RRPL should be restricted to 25 metres, inclusive of mechanical penthouse or other rooftop accessory elements. The buildings in this area will adhere to the same design standards for building face, step backs and projections as the Local Streets (refer to Section 3.4.10).
- Buildings are required to have grade related entrances access from public sidewalks in the parks.
- No vehicle access will be permitted between the buildings and parks.
- No High-rise buildings are permitted within the 125-metre Transition Zone measured from of the RRPL.

Low-rise residential buildings will front the Dudley linear park and local streets within 75 metres of the existing residential neighbourhood. The building types will be residential in character and consist of townhouses, stacked townhouse and garden apartments. This townhouse development at Pape Avenue and Mortimer Street in Toronto's east end represents the scale and potential architectural quality outlined in these guidelines.

Although not common to have residential buildings front onto parks, this arrangement will present a special character to development along Dudley Avenue. Having porches, front doors, and gardens facing a public space other than a roadway will offer a unique condition. In Vancouver, townhouse condominiums in the False Creek neighbourhood are situated immediately on the City's primary promenade to take advantage of the views, not unlike the amenity offered by the proposed linear park system.



Built Form: Dudley Avenue with Buildings facing Linear Park

3.4.7 Dudley Avenue: Public Realm

Principle: Dudley Avenue and the parallel park system should provide a well-treed, green transition between the suburban single-family housing areas and the intensified redevelopment areas.

Dudley Avenue will have an asymmetrical cross-section with a linear park system bordering its western edge. It will have new sidewalks on both sides within the right-of-way as well as an equally dimensioned planted boulevard. It will also serve as a key north-south pedestrian and bicycle route parallel to Yonge Street.

Dudley Avenue will retain its existing 20-metre right-of-way. The curb-to-curb dimension should be wide enough to accommodate two through traffic lanes and one parking lane or on-street bicycle lanes. Boulevards on both sides should accommodate a sidewalk and planted boulevard with large caliper street trees between the curb and sidewalk. With the addition of the linear park system, a second row of street trees may be added to flank the western boulevard.

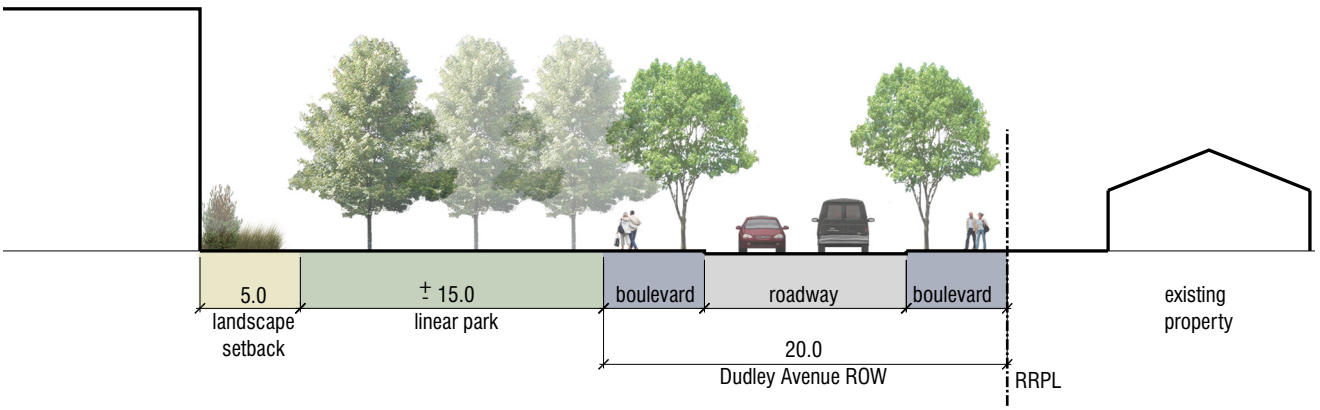
On blocks where parcels to complete the linear park are not attainable, easements should be acquired on the western side of Dudley to allow for the planting of a second row of street trees.

Two larger neighbourhood parks should be developed and distributed throughout the redevelopment area to further improve the open space allocation to an underserved community. These parks should be located at the eastern end of the Dudley Avenue blocks, one each to the north and south of the CN Rail corridor. A third publicly accessible open space will be developed as part of the larger development parcel north of Meadowview Avenue. See Section 3.2.8 Create Better Public Spaces and Parks for further reference.

The Dudley Avenue Linear Park will define the boundary between new development and the existing neighbourhood. It will provide a green north-south pedestrian and bicycle connection away from the busy traffic of Yonge Street. Although different in scale, it will serve a similar purpose as David Crombie Park along the Esplanade in Toronto's St. Lawrence neighbourhood.

Guidelines

- The Town should investigate opportunities to secure property to provide the Dudley Avenue Linear Park system and a north-south pedestrian/bicycle route.
- On existing developed sites, a sufficient easement is required to allow for the planting of a second row of large caliper deciduous street trees.
- On the larger redevelopment blocks immediately north and south of the railway, a publicly accessible easement—minimum 15 metres in width—is required to allow for a landscaped pedestrian and bicycle route to a replacement bridge over the rail corridor.



Public Realm: Dudley Avenue with Typical Linear Park

3.4.8 Local Streets: Built Form

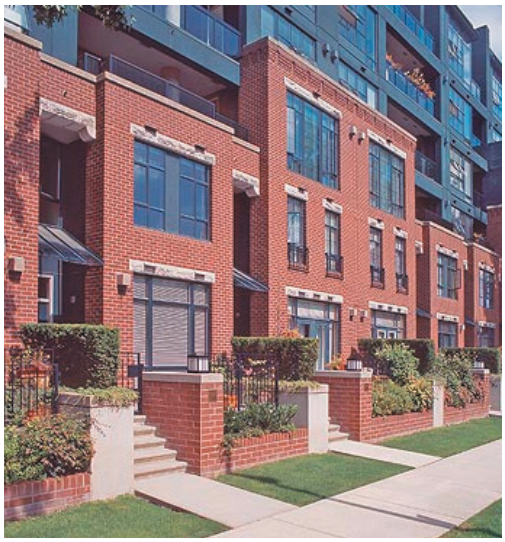
Principle: Local streets should have built-up frontages of predominantly mid-rise to low-rise residential buildings. High-rise buildings where permitted outside the Transition Zone should be set back from the frontage to maintain the street-wall profile.

Background

Local residential streets can provide a welcome change from the busy commercial oriented main street. If designed with the pedestrian in mind, they can offer an alternate walking or cycling route through a neighbourhood, one that is characterized by a greater amount of vegetation, more intimately scaled buildings and a sense of individual identities. Buildings should be designed to define and enclose the street, with front doors and porches to animate the street and foster a sense of community and safety.

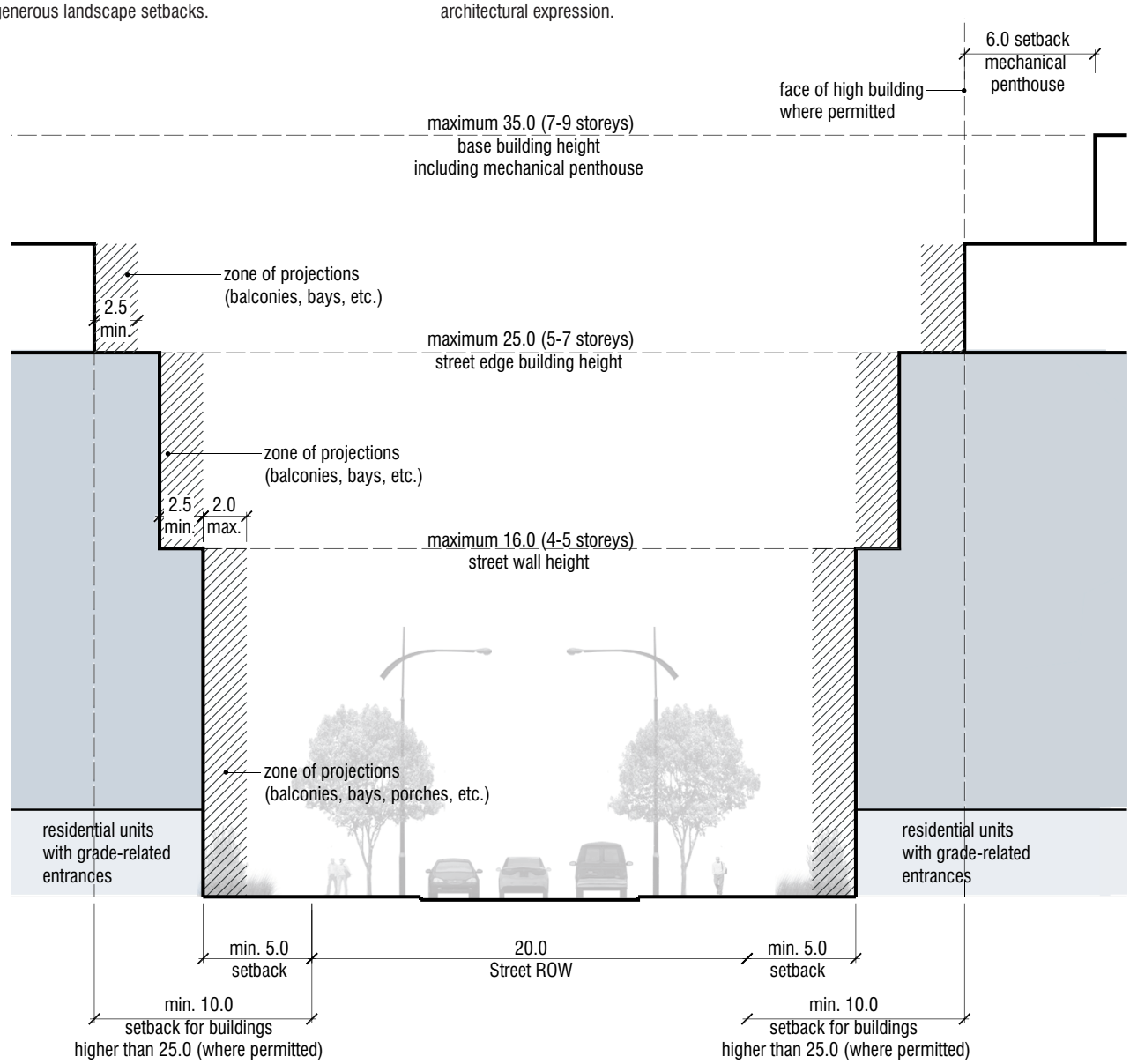
Guidelines

- A minimum 5-metre and maximum 10-metre building set-back is required to be developed as a front yard landscape zone between the building face and public right-of-way.
- The maximum street wall height of new buildings should be 16 metres.
- A 2.0-metre projection zone from the principal street wall face is permitted for balconies, porches, bays and stoops.
- A stepback of 2.5 metres is required above the 16-metre height up to a maximum street edge building of 25 metres inclusive of mechanical penthouse.
- A 2.5-metre balcony projection zone is permitted above the 16-metre height. This will encourage high quality residential design with individual building expression and articulation.
- The mechanical penthouse shall be setback a minimum of 6 metres from the closest building face.
- Buildings above a height of 25 metres to a maximum Base Building height of 35 metres are required to be set back a minimum of 10 metres from the public right-of-way.
- Where permitted, High-rise buildings are required to have a minimum setback of 10 metres from the right-of-way. (High-rise buildings are subject to the High-rise building guidelines, angular height control plane and Transition Zone defined in this document.)
- Residential units are encouraged to have grade related entrances on local streets.
- A continuous street frontage of at least two-thirds the length of the block is encouraged.



The local streets will be characterized by continuous frontages, a well-defined street wall, grade related entrances and generous landscape setbacks.

Projections—such as bays, balconies and stoops—away from the principal street wall face will provide variety and allow for individual architectural expression.



Built Form: Local Streets

3.4.9 Local Street - Highland Park Boulevard East of Dudley Avenue: Built Form

Principle: Highland Park Boulevard east of Dudley Avenue should respect the scale and character of the existing low-density residential neighbourhood on the north side of the street.

Background

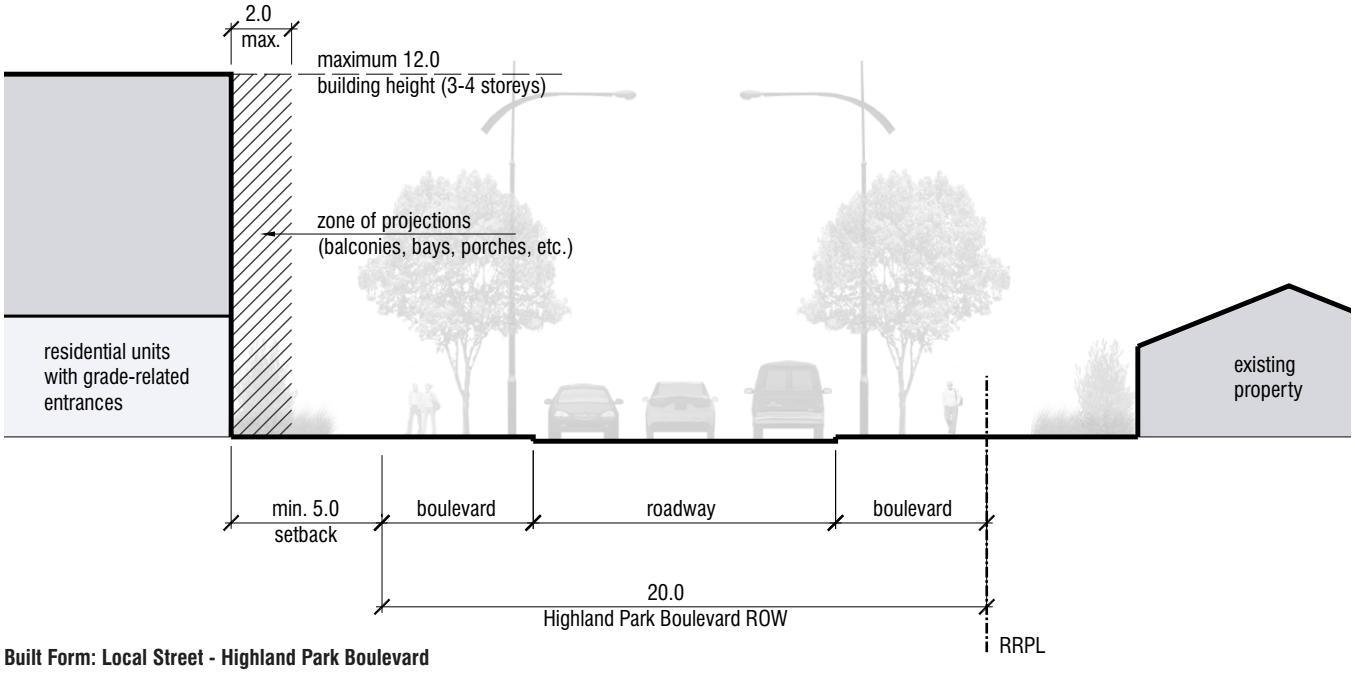
Highland Park Boulevard is the only east-west local street within the redevelopment area that extends east of Dudley Avenue. Due to its close proximity to the existing low-density residential neighbourhood and without a park buffer, the built form on the south side of this street should be limited to low-rise residential buildings. They should have landscaped front yards and grade access.

Projections such as balconies, porches, stoops and bays should be permitted in the setback areas. This will encourage high quality residential design with individual building expression and articulation.

New buildings facing Highland Park Boulevard will respect the residential character of the existing low-density neighbourhood. They will have generous front yards, entrances-at-grade and gracious scale as demonstrated by these Hazelton Avenue townhouses in Toronto.

Guidelines

- Building setback requirements of a minimum of 5 metres and a maximum of 10 metres as a landscape zone between the building face and public right-of-way.
- The maximum height of buildings facing Highland Park Boulevard should be limited to 12 metres, inclusive of mechanical penthouse or other rooftop accessory elements.
- A 2.0-metre projection zone from the principal building face is permitted for balconies, porches, bays and stoops.
- Residential units should have grade-related entrances.



Built Form: Local Street - Highland Park Boulevard

3.4.10 East-West Local Streets: Public Realm

Principle: The east-west local streets should be maintained and improved with the addition of wide sidewalks and large caliper trees in the boulevard verge. Continuity of the built-up edge but with variation in the dimension and the landscape treatment of the frontyard setbacks should be encouraged.

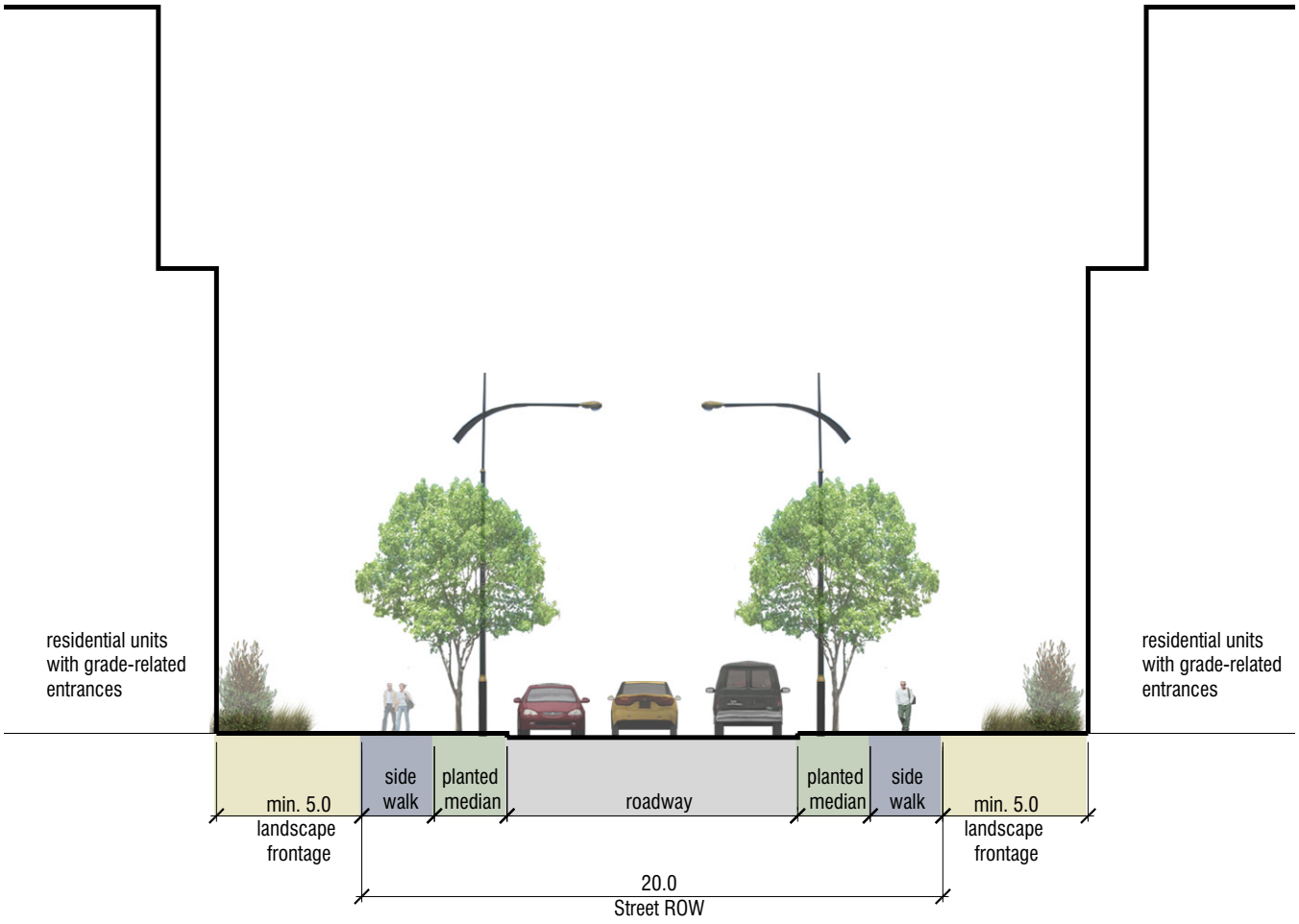
Background

The quality of the public realm of the local streets is critical to the success of the Yonge Steeles redevelopment area. They should be smaller and more intimate in scale than Yonge, become important components of the Town's pedestrian network and provide the setting for predominantly residential land uses.

The east-west local streets should retain their existing 20 metre rights-of-way. They should have a curb-to-curb dimension of sufficient width to accommodate two through travel lanes with one parking lane. The boulevards should consist of a planted median with large caliper street trees and an ample sidewalk. New buildings should be setback from the right-of-way, with opportunities for additional planting between the sidewalks and building face.

Guidelines

- The local streets will have a roadway with sidewalks and planted median on both sides. Specific details and dimensions are subject to future streetscape planning efforts.
- Building setback requirements will ensure a minimum 5-metre landscape frontage zone.



Public Realm: East-West Local Streets

3.5 Environmental Design and Sustainable Development

Principle: New development should improve the overall environmental quality of the Town of Markham and minimize ecological impacts.

Background

There are several opportunities to promote environmental sustainability on both private and public lands within the study area through the redevelopment process. Whether it is through more efficient site planning, pedestrian focused and transit oriented urban form, building materials, reduction of water usage and storm water runoff, or microclimatic amelioration, these techniques and more can influence the quality of life for residents, workers and visitors alike.

The Province of Ontario's recent smart growth planning initiative, *Places to Grow: Growth Plan for the Greater Golden Horseshoe (2006)*, promotes intensification with increased public transit use while reducing reliance on the automobile. Redevelopment of lower density areas into higher density, mixed-use walkable communities is central to meeting the objectives of the Plan.

The York Region Official Plan further supports smart growth by identifying Yonge Street as an intensification corridor with higher order transit improvements in either the form of a bus-rapid transit or subway extension. To take advantage of these planned improvements, redevelopment must occur to accommodate growth and support transit.

Where and how Markham can accommodate this future growth, in particular where people live and work, will help determine how effectively the transportation system can handle this growth. The more people who live, work and study in close proximity to public transit stations and corridors, the more likely they are to use the transit systems, and more transit riders means fewer vehicles competing for valuable road space.

Higher density redevelopment and a broader mix of vertically integrated land uses will better support proposed higher order transit improvements than the existing lower density residential neighbourhoods. Improved pedestrian environments and main street commercial revitalization will entice people out of their automobiles. New parks and open space will provide valuable amenity to existing and new residents.

Broad principles of environmental sustainability have permeated the municipal regulation of buildings, and many builders are voluntarily incorporating green materials and practices in their projects. Currently, the most advanced system for rating sustainability is the Canada Green Building Council's Leadership in Energy and Environmental Design (LEED®), an adaptation of a similar system from the United States. This is a rigorous voluntary assessment tool, on the cutting edge of environmental standards and processes. Practitioners and developers acknowledge the merits of sustainability and the increased marketing potential for incorporating environmentally responsible materials and processes in their projects.

The Verdale development will be part of Markham Centre— the largest LEED® rated project in North America—further promoting the Town's commitment to environmental design. *(The images above and the associated copyright and reproduction rights are owned by The Remington Group. Reproduction, use or modification of any of the images without the written consent of The Remington Group is strictly prohibited.)*

All new buildings should incorporate leading environmental standards for design and construction processes. They should incorporate energy efficient, environmentally friendly materials, systems and processes such as locally produced or recycled building material, solar energy systems, heat recovery, geothermal energy, roof top gardens, zero ozone depletion refrigerants, thermally efficient glazing, high efficiency heating systems, passive cooling systems, zone-controlled lighting, heating and cooling, light reflective surfaces, waste control and life cycle cost consideration to the extent that such systems and processes are required and being implemented within the Town of Markham.

Building heights must ensure a high quality surrounding environment. Building design should minimize the impact of wind and shadow on adjacent neighbourhoods. Buildings should be articulated to intercept or diffuse wind at pedestrian levels. Buildings should be designed to minimize shadow on public areas such as streets and parks. Setbacks for high-rise buildings above the base building height should sufficiently mitigate negative wind down draft.

Increasing the amount of permeable surfaces in urban areas can reduce the demand on constrained infrastructure and minimize impacts on natural hydrological systems. Permeable pavements should be incorporated where possible. Street trees and other

landscape elements should be included in all redevelopment efforts to help regulate air temperature, intercept rainfall and minimize storm water runoff. Storm water should be retained on site where possible, with the inclusion of storm water retention ponds, cisterns and detention basins. Grey water should be used for irrigation where required and permitted for other non-potable uses.

Guidelines

- Require wind and shadow technical reports for all buildings higher than the 35-metre Base Building limit.
- All new buildings required to meet a minimum Canada Green Building Council's LEED® Silver standard for sustainable design and construction.
- Consider:
  - the adoption and phasing in of Town-wide green building and site development standards,
  - the adoption of minimum standards for on-site energy generation from renewable sources,
  - the adoption of standards for on-site storm water retention and release,
  - the creation of a green roof strategy for new development
  - the development of innovative techniques for stormwater management within the public rights-of-way

The recently completed headquarters for a software company on King Street East in downtown Toronto is the first LEED®-rated commercial building in Canada (targeting LEED® Silver). By applying sustainable building principles and techniques, the projected energy consumption and cost will be 30 to 50% of a comparable building of typical design. (source: SAS Canada)

Recent residential tower development in the GTA indicates a growing commitment by the building industry to sustainable design. The two projects above are currently under construction in different parts of Toronto—one downtown and one midtown—and are committed to a minimum LEED® Gold standard. (source: Minto Urban Communities,Inc.)

The green roof at Mountain Equipment Co-op in downtown Toronto is one of the flagship projects for the sustainable building movement in North America. All new development within the Yonge-Steeles study area could incorporate similar techniques to reduce runoff, reduce heating and cooling costs, improve local air quality and normalize local microclimate.

Portland Oregon's Green Streets project makes use of planting areas to help reduce runoff by increasing the amount of permeable surface, thus becoming an important part of the City's green infrastructure.
(source: www.sitephocus.com)

3.6 Demonstration Plan

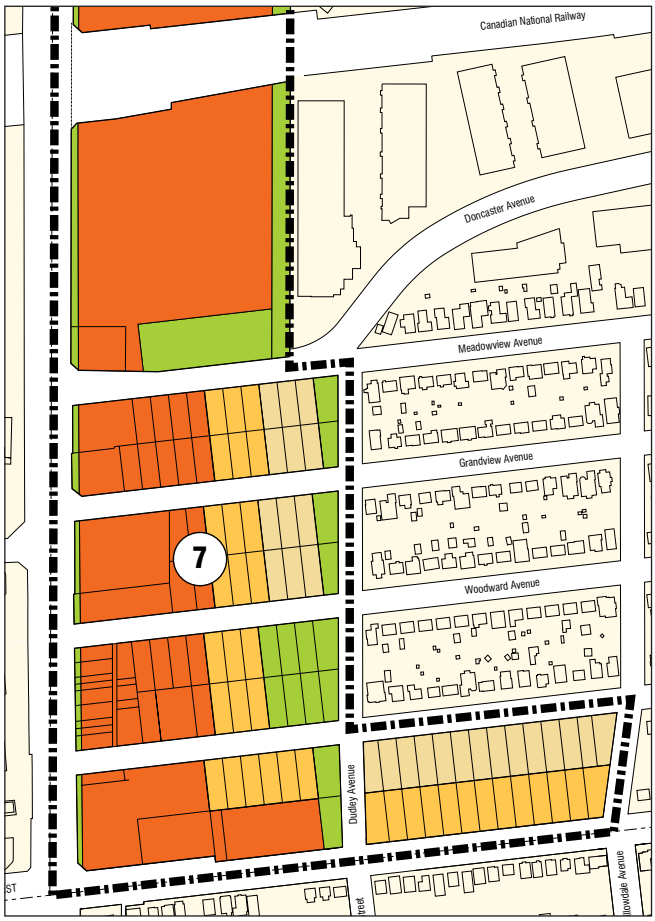
3.6.1 Built Form on a Typical Redevelopment Block

Demonstration massing models for a typical redevelopment (Block 7 framed by Yonge Street, Dudley Avenue, Grandview Avenue and Woodward Avenue) to illustrate the built-form possibilities that are consistent with the density, heights, massing and set-back policies of these urban design guidelines.

These demonstration models are illustrated:

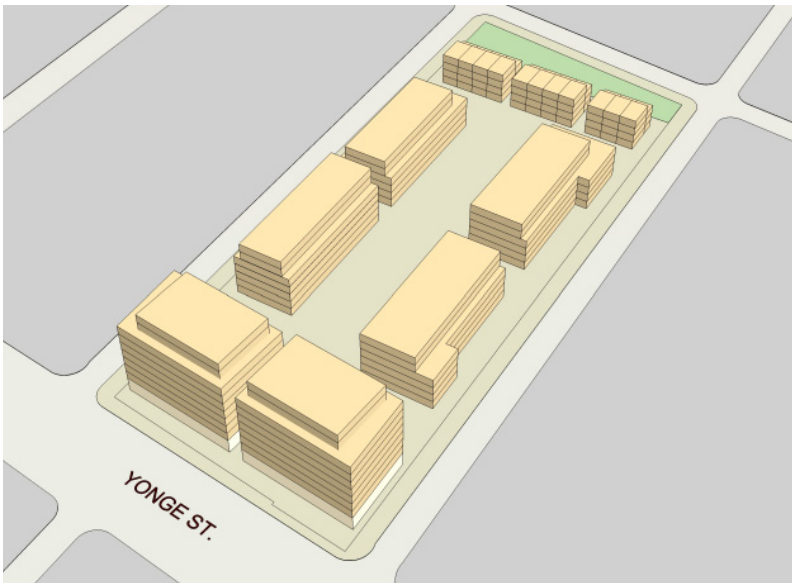
- A: The first assumes that the development of the block is entirely residential apart from the Yonge Street frontage that also includes the mandatory street related ground-floor retail.
- B and C: These models demonstrate two variations of block development that maximizes the residential commercial mixed-use Gross Floor Area (GFA) within the recommended density limits.

An important conclusion derived from these test demonstration models is that the built-form heights and massing controls including the 2:1 Angular Height Control Plane provide a high freedom of choice with regard to building types and forms of development that reflect the intensification densities. Furthermore, the built-form controls allow considerable flexibility for various redevelopment phasing and site planning scenarios.



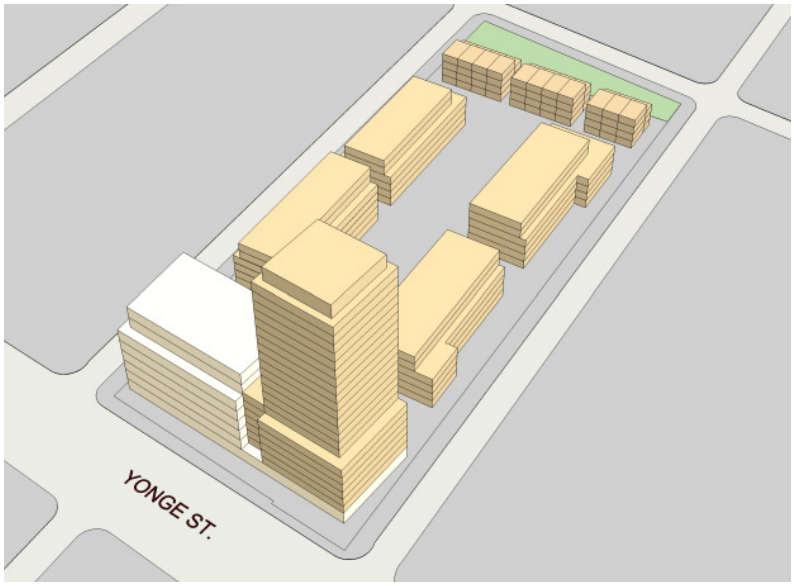
Demonstration A:
Maximizes residential densities

- Maximizes allowable residential density and includes mandatory retail on Yonge Street frontage
- low and mid-rise development only
- Yonge Street development: 9 storey residential buildings plus ground-floor retail (total: 10 storeys/35 metres in height)
- Local Streets development: 4 storey townhouses on linear park, 6 and 7 storey apartment buildings (with grade related units) on east-west streets
- Overall block densities (excluding linear park): Residential 2.28 FSI, Total residential and non-residential: 2.38 FSI



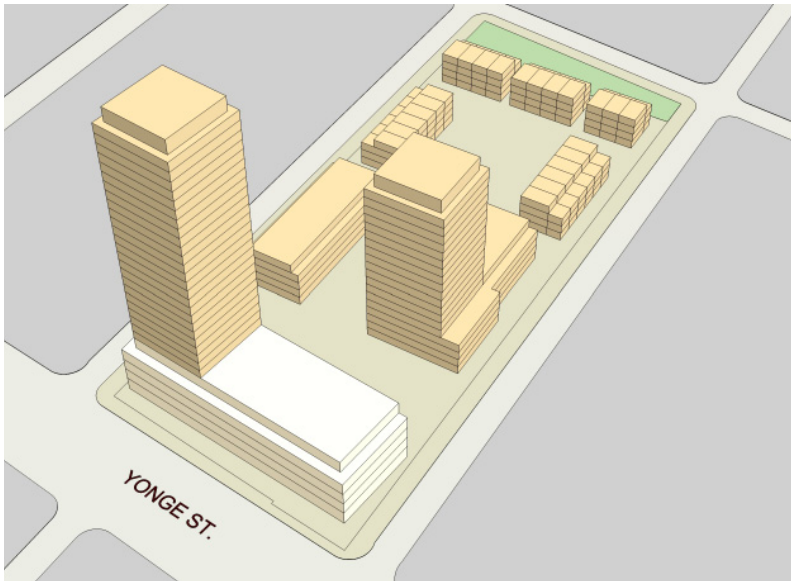
Demonstration B:
Maximizes allowable residential and non-residential densities

- Development of low-rise, mid-rise and one residential point tower
- Yonge Street development: 8 storey office building including ground floor retail and 23 storey residential point tower (625m^2 floor plate), including ground floor retail. (point tower is 7 storeys below maximum height permitted).
- Local Streets development: 4 storey townhouses on linear park, 6 and 7 storey apartment buildings (with grade related units) on east-west streets
- Overall block densities (excluding linear park): Residential 2.28 FSI, Total residential and non-residential: 2.83 FSI



Demonstration C:
Maximizes allowable residential and non-residential densities with two point towers

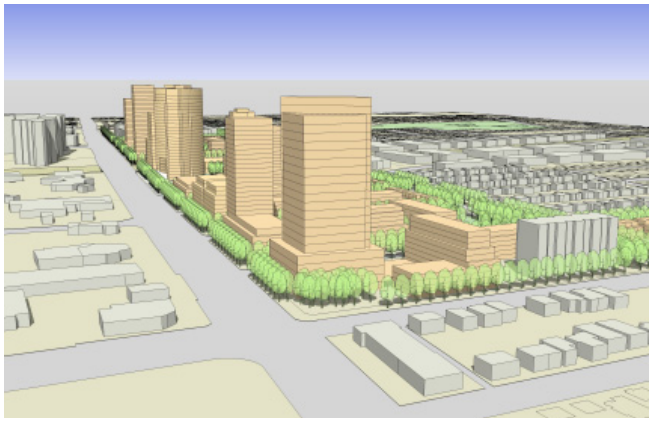
- Yonge Street development: mixed use building, 5-storey commercial podium with retail to grade below a 25-storey residential point tower (625m^2 floor plate) to the full 100.0 metre height limit
- Local Streets development: 4 storey townhouses on linear park on east end of the block; 5-storey base buildings and 20-storey residential point tower (625 m^2 floor plate) - point tower is 4 storeys below angular height control plane.
- Overall block densities (excluding linear park): Residential 2.28 FSI, Total residential and non-residential: 2.83 FSI



3.6.2 Yonge Steeles Redevelopment Area: Demonstration of Urban Design Guidelines

Overall Study Area

View towards the northwest with Dudley Linear Park between new development and existing residential neighbourhood



View north of the Yonge Steeles intersection with higher buildings fronting Yonge Street and lower buildings towards the existing neighbourhoods

Demonstration Plan - Overall Study Area

4. Phasing and Implementation Strategy

4.1 Introduction

The purpose of this Section is to outline the framework for implementation and phasing required for the realization of the Yonge Steeles Redevelopment Area.

There are many potential planning tools available from which the Town may choose to implement redevelopment. Strategically, the Town must decide whether the redevelopment will be primarily market driven whereby the Town will respond to development applications within the planning framework established in the Official Plan and zoning by-law or whether the Town is an active participant in achieving the development vision through some direct intervention. Although the latter more proactive strategy is not one that is generally the current practice in the Town, it is one that is perhaps needed in a redevelopment scenario such as this in order to better achieve the Town's long term goals for the area in a comprehensive and timely manner.

The implementation strategy should not be so rigid that alterative solutions cannot be achieved that result in the same ultimate redevelopment goals and vision expressed through the Official Plan and zoning framework. The consultants recommend a program whereby comprehensive assembly of a redevelopment block is encouraged, but not required. This will allow some incremental development that proceeds over the envisaged 20-year planning period. Development can be monitored and adjusted as required over that planning period in line with infrastructure and servicing improvements and capacities that will be phased in over time.

Generally, implementation of the Yonge Steeles Redevelopment Area will be through the proposed Official Plan Amendment (Secondary Plan) followed by the consultants recommendation for a more detailed Master Implementation Strategy, draft plans of subdivision, including consents, or plans of condominium, rezonings, and site plan approvals. Phasing strategy including the preparation of studies will be required at the various stages of approval in order to satisfy approval authorities that capacities exist or improvements will be made to ensure orderly development proceeds in line with infrastructure and community service requirements. Holding By-laws will also be used to provide for incremental development as transportation and municipal servicing allows. Monitoring will be required to ensure that the population and employment generated in the area are in line with projections and service requirements for both hard and soft and that required modal splits are being achieved through transit improvements.

The proposed Secondary Plan is anticipated to extend over a 20-year planning period. The incremental development and improvements should ensure that further intensification can occur when additional transit or municipal servicing capacity is available to the area. As such it will be important to review redevelopment applications on a comprehensive block basis as part of a larger Master Implementation Strategy, to ensure that future development opportunities are not impaired by an incremental, phased approach to build out over the entire planning period.

It is the consultants' recommendation that the Town, allow for incremental development given the extent of property assembly required within the development blocks. The recommendation for a detailed Master Implementation Strategy discussed below is viewed as a further next step including financial strategy needed to bridge the current gap between individual development applications and the proposed Official Plan amendment which will establish the overall vision and land use policies for the area. Without a more detailed assessment of the servicing and transportation infrastructure needs, phasing, parkland acquisition strategy and costs associated with the future redevelopment of the corridor, the Town will be negotiating on a development-by-development basis without the benefit of the overall economics of the redevelopment area.

4.2 Phasing

Phasing will be required to ensure that orderly, comprehensive development occurs over the 20-year planning period and that the development occurs in coordination with the provision of the necessary supporting infrastructure.

At the outset, phasing will be accomplished through the Town's review of supporting transportation and municipal servicing studies submitted by the applicant, which must not only address site specific considerations, but also the constraints affecting the surrounding neighbourhood as a whole. These studies must identify, to the Town's satisfaction, the amount of development that can be accommodated within the constraints of the existing transportation and servicing systems.

In addition to the standard requirements of a TIS or municipal servicing study, major development applications will be required to submit the following:

- Phasing plans showing the proposed interim phases of development and how these interim phases will be coordinated with the provision of the servicing and transportation infrastructure improvements needed to support the proposed development;
- Travel Demand Management studies (either as components of a traffic impact study or as a separate study) for major redevelopment applications. TDM's should include: opportunities for reduced parking supply; before and after studies for trip generation; exploration and assessment of a variety of TDM initiatives including bicycle parking, shuttle bus service to subway stations, automobile sharing co-op, enclosed bus shelters, and priority parking for carpooling among others;
- Block Plans (to be prepared initially by the first applicant in a block, and to be updated by subsequent applicants).

In terms of hard servicing infrastructure, there is insufficient data or an existing water distribution analysis to determine (flows and pressures) the capacity of the existing water supply system of the study area. On the basis of this finding, all of the development may need to await the outcome of a water supply study or the completion of a study prepared by an applicant subject to the Town's satisfaction prior to any development proceeding. It is recommended that these studies be done on a comprehensive basis, through the more detailed Master Implementation Strategy. Further amendment to the Official Plan may then be required to address the phasing of lands in accordance with water supply system upgrades and other infrastructure upgrades.

Similarly with the sanitary sewage system only a small portion of the Yonge Steeles Redevelopment Area has spare sanitary sewage capacity and further comprehensive review or site-specific study by an applicant is required subject to the Town's satisfaction. The findings of this review will determine the phasing pattern of development based on the sanitary sewer infrastructure improvement requirements.

Storm sewer problems exist for all redevelopment blocks within the amendment area except for those with near capacity existing developments (Block 1 bordered by Yonge Street, Dudley Avenue, and north of Clark Avenue). Again further comprehensive review is required and/or a site specific study by an applicant to the Town's satisfaction in order to determine the extent of infrastructure improvement necessary to the stormwater system prior to development occurring in this area. The phasing pattern of development can then be informed by the results provided by the comprehensive study. Together these future studies related to servicing capacity improvements will dictate the timing, sequence and direction of development.

The provision of community services and schools should be monitored through the development approvals process in terms of existing capacities and thresholds, population characteristics and yields. No specific need or site requirement has been identified given the current projections for employment and population amongst the school boards or other community service providers. While existing facilities are in place to service the existing mature community, improvements may be required in the future to these existing facilities with increases in population and employment. Many of these facilities are located outside or adjacent to the Yonge Steeles Redevelopment Area within the broader community of Thornhill.

It is also recommended that pending any unforeseen circumstance or need, the Town keep in contact with the Catholic School Board to determine if and when surplus lands/facilities become available (St. Luke) and review whether a community or cultural need is identified that could be fulfilled by this site over the long term. This could be done within the context of the Town's ongoing Parks, Recreation and Library Master Plan review process.

As with the parks and open space, the Town or Region may wish to front end certain infrastructure improvements to initiate development or encourage an advanced timeframe.

Constraints with regard to the existing transportation system already occur. Even with transit improvements (BRT) capacities will be close to their limits. A comprehensive traffic calming study is recommended for the lands south of Doncaster the details of

which are outlined in the traffic and transportation section. The overall phasing strategy will also need to take account of the findings and recommendations of this study to ensure that the proposed improvements are incorporated in conjunction with or ahead of any specific phasing plan, which is ultimately recommended for the Yonge Steeles Redevelopment Area. This would be set out within the Master Implementation Strategy.

The full extent of redevelopment within the Yonge Steeles Redevelopment Area may need to be delayed until site specific traffic studies demonstrate sufficient traffic and transportation capacity and/or the implementation of higher order rapid transit is in place. These studies will need to address among other things, the impact at major intersections within the Yonge Steeles Redevelopment Area, impact and mitigation of potential traffic infiltration eastwards into the low density community, turning limitations where possible on Yonge Street (right in/right out) and intra-site accessibility to limit traffic impacts on side streets and provide appropriate vehicular movement between sites.

4.3 Official Plan Amendment

An Official Plan amendment to the Thornhill Secondary Plan will be the main implementation tool to guide the development within the Yonge Steeles Redevelopment Area. The Official Plan Amendment will include the appropriate land use designations, permissions and policies to implement the vision established in the preferred development concept for the Yonge Steeles Redevelopment Area. It will also provide direction for urban design, servicing and further studies through a policy framework. The planning horizon will provide for a planning period of approximately 20 years and will ensure orderly, mixed use development at transit supportive densities over the long term to support the future rapid transit initiatives.

The major structuring elements of the Plan are based upon a transition in use and density away from Dudley Avenue and west to Yonge Street with highest densities in proximity to the Yonge and Steeles intersection. Furthermore, a similar transition of development north of the railway north towards the Thornhill Heritage District is proposed. A linear park and three larger park spaces are recommended throughout the study area which will provide a buffer, open space amenity and recreational functions. In addition, a proposed pedestrian and bicycle connection over the railway corridor will link the north and south portions of the study area.

The principles set out in the Official Plan Amendment will build on the former Thornhill Secondary Plan while recognizing recent transit initiatives, the current Provincial Policy Statement and Provincial Plans (the Growth Plan) and Regional context as set out in the Region of York Official Plan and its recent Centres and Corridors Amendment.

Principles set out in the Amendment will include the following for development of the Yonge Steeles Redevelopment Area:

- Mixed use, compact forms and vibrant Yonge Street frontages
- Transition to stable residential neighbourhoods to the east and appropriate consideration of compatible uses with the historic commercial core of Thornhill
- Appropriate built form that is transit supportive with highest densities along Yonge Street and within closest proximity of rapid transit stations
- Variety of forms and heights
- Emphasis on underground parking
- Pedestrian oriented streetscapes
- Services are developed concurrently or in advance of development
- Comprehensive development through property consolidation where possible
- Site accesses away from Yonge Street.

Policies in the Official Plan Amendment should encourage comprehensive redevelopment while making provision for incremental growth that will occur with increased transit improvements and servicing capacity. In addition, the protection of stable residential neighbourhoods should be an integral part of the redevelopment of the Yonge Steeles Redevelopment Area and reflected in the policies of the amendment so that the appropriate transition of uses and intensities can occur compatibly with lower intensity uses on adjacent lands to the east.

The Official Plan Amendment will designate the lands for specific land uses described in the preferred development concept. The designations and policies of the Official Plan Amendment will be implemented and regulated by a zoning by-law amendment. The Official Plan Amendment will guide the preparation of the zoning by-law by establishing specific land uses, heights, and other performance standards within portions of each development block of the study area as discussed further below.

The Urban Design Principles, Guidelines and Requirements prepared for the Yonge Steeles Redevelopment Area are recommended to be included as an Appendix within the implementing Official Plan Amendment. The urban design guidelines will address such matters as massing, transitions, streetscapes, landscaping, heights, minimum lot size and frontage, built to and setback limits, among others.

4.4 Zoning

It is recommended that all development within the Yonge Steeles Redevelopment Area should be zoned "mixed use" on a comprehensive basis in compliance with the provisions, permission and policies of the Official Plan amendment and in accordance with the urban design principles, guidelines and requirements established in the preferred development concept. These urban design principles, guidelines and requirements will also be used as the overall framework in which to establish the more detailed zoning by-law for the mixed use zones. This framework implements the urban design guidelines while providing for minimum non-residential land use components necessary to achieve the targets for employment within the proposed Secondary Plan.

The key element in the implementation strategy will be the use of two-stage Holding provisions. Under the H1 provision, no development would be permitted until the following conditions were met:

- Approved TIS
- Approved servicing study
- Approved phasing plan
- Approved TDM study
- Submission or update of comprehensive block plan
- Site plan approval

This process may allow some amount of development within the short term. Additional development could be approved in conjunction with implementation of the necessary improvements to the transportation system and municipal servicing. Upon lifting the H1, development could proceed up to the identified limits imposed by current servicing constraints (as indicated the approved TIS and servicing studies). A further H2 provision would remain in place, which would not be lifted until the following conditions were met:

- Completion of the key components of the Detailed Master Implementation Strategy (see subsection which would include a comprehensive strategy to address needed servicing/stormwater improvements in the area;
- Comprehensive traffic infiltration study;
- Completion of public works required to implement the servicing infrastructure improvement strategy and the traffic infiltration study recommendations
- Parkland acquisition strategy
- Construction of higher order transit system to service the Yonge Street corridor
- Development charges
- Site plan approval

Once these conditions are satisfied the H2 could be lifted to allow full development of the site.

4.5 Comprehensive Block Plans

Comprehensive block plans have a very useful role to play in coordinating development in this area. The first developers on a block should be required to prepare block plans, and these block plans will have to updated and revised to the Town's satisfaction by subsequent developers within the block. This requirement will ensure that there is a coordinated approach to such matters as internal circulation, parking garage access points, driveways and internal pedestrian walkways among other matters.

Block plans will be guided by the policies of the new Secondary Plan and the urban design principles and guidelines contained within this study.

4.6 Detailed Master Implementation Strategy

It is recommended that the Town undertake a more detailed Master Implementation Strategy upon completion of the Yonge Steeles Redevelopment Area Study which provides cost estimates, including a parkland acquisition strategy, timelines and sequencing for needed infrastructure improvements to fulfill the vision of the plan. As part of this study more detailed plans may be examined for the development blocks either individually or collectively and infrastructure costs associated with development determined. Parkland acquisition is discussed further below.

Another strategic decision is whether the Town becomes involved in any way to implement or oversee any cost sharing agreements among development interests or whether these are left to the private sector to negotiate among themselves. Given the property fabric and ownership patterns prevalent within the corridor, the opportunities for large-scale comprehensive assembly may be few. Therefore mechanisms that encourage redevelopment without extraordinary encumbrances are encouraged.

Investigations to date suggest that there will also be costs associated with upgrading certain area services to meet current municipal standards that also need to be determined through this

additional Master Implementation Strategy. Further, there are additional costs for future transit improvements whose benefits are attributed to a much larger regional area beyond the immediate study area.

This study will identify sanitary and stormwater servicing improvements and upgrades including transportation infrastructure for roads and transit services. This proposed Master Implementation Strategy may provide sufficient detail that further detailed comprehensive block plans, as described below, may not be necessary to proceed to incremental development. In the interests of encouraging development in a timely manner, a minimum development parcel should be determined which can meet the objectives of the proposed Official Plan and urban design vision while not undermining future development within the remaining lands or any particular redevelopment block. Once the development costs are determined, the consultants' recommendation is that the Town utilizes development charges to cover these costs. Without this mechanism in place, development costs may be negotiated on a site-by-site basis without full knowledge of their magnitude and impact on the overall infrastructure system requirements.

4.7 Plans of Subdivision and Plans of Condominium

Plans of Subdivision, including consents, and Plans of Condominium will be the primary means of subdividing land within the Yonge Steeles Redevelopment Area. Following completion of the Master Implementation Strategy, plans of subdivision or condominium plans may be submitted for approval. Approval of development applications will be conditional on the provision to the Town of various studies, reports and plans undertaken by qualified professionals and of sufficient detail to permit a full assessment of the development applications. Further, approvals will be contingent upon cost sharing agreements for costs determined through the more detailed Master Implementation Strategy as recommended.

Development by way of consent should only be permitted where the Town is satisfied that the consent will not prejudice the future development of the remaining lands within the block plan areas or the Yonge Steeles Redevelopment Area overall.

Prior to the approval of any draft plans of subdivision or plans of condominium, the Town should be satisfied that the draft plans conform to the principles and policies of the Official Plan Amendment, can be provided with full municipal services and facilities as required by the Town and the Region and are in accordance with the Master Implementation Strategy.

Required supporting information and studies may include the following:

- Functional Servicing Report
- Stormwater Management Report
- Traffic Impact Study
- Noise and Vibration Analysis if adjacent to the railway
- Open Space Plan
- Landscaping Plan
- Tree Inventory and Conservation Plan

4.8 Parks and Open Space

The parks and open space areas of the Plan will include public parkland and streetscapes as well as private open space areas, some of which may be open and accessible to the public. They are intended to have multi-purpose functions providing areas of buffer and transition, open space and recreational amenity. Total parkland proposed in both the linear parks system, the two larger park block and the publicly accessible open space on private property totals 2.3 ha (5.5 acres).

There are essentially three strategies available for acquiring public parkland within the Yonge Steeles Redevelopment Area. The Town can take the land for parks purposes through the development approvals process as a land dedication or the cash-in-lieu equivalent for purchase of the parks by the Town at other desired locations. Alternatively the Town can take a more active role and acquire the land in advance of some or all of the redevelopment recognizing that the costs of the lands will increase over time and acquisition through the development approvals process will only be achieved over the long term if and as development proceeds.

It is the intent that the density assigned to the proposed parkland (to a maximum of 1.5 FSI) may be transferred to alternative lands within the development block in which it is located subject to meeting all of the provisions of the Plan and implementing zoning by-law.

The Town may wish to consider alternative parkland conveyance standards for high density development.

It is the intent that the parkland be linked wherever possible with existing parks and open space areas on adjacent lands including those associated with school sites or other public institutions.

Based on the anticipated housing types and yields, a primarily non-family population is projected and as such open space needs will be more passive than active recreational. Proposed and on-going monitoring of the development applications, housing, population and employment characteristics and yields will assist in informing the Town parks planners about the future programming needs for public open spaces within the redevelopment area.

The Town may also consider the use of density incentives for the provision of private recreational facilities within developments that would offset the need for public recreational amenities. Most of the proposed housing form will not be geared to families with children and therefore this form of private recreational amenity may appropriately meet the needs of the future population within the Yonge Steeles Redevelopment Area. Agreements to secure these areas for long-term recreational use would need to be in place. Excluding the area of such space from the overall gross floor area or FSI calculations would act as an incentive for its provision.

The Town may wish to initiate parkland acquisition in advance of the development in order to ensure that the public amenities are in place early and to encourage private sector investment in the area. The preferred method of parkland acquisition and timing would be a desired outcome of the more detailed Master Implementation Strategy recommended above.

4.9 Bonus Zoning

Provisions relating to heights, density, landscaping, setbacks and use will be set out in the implementing zoning by-law for the area. The use of holding provisions "H" symbol may be applied to lands within the Yonge Steeles Redevelopment Area that are to be zoned in advance of a development application or that are identified as lands that cannot develop to the ultimate capacity identified in the Official Plan Amendment due to identified infrastructure or servicing capacity constraints. Conditions for the lifting of the holding by-law will be in accordance with Section 7.3 of the existing Markham Official Plan or established in the proposed Official Plan Amendment for the Yonge Steeles Redevelopment Area if additional conditions are required.

Incentives have been used in other municipalities whereby desirable amenities are not calculated as part of the FSI for purposes of density calculation. Bonusing provisions as provided by Section 37 of the Planning Act, may be used to allow for increased height and density within the Official Plan Amendment in return for the provision of community benefits as set out in the Official Plan. The Town may want to encourage the use of incentives (bonus provisions) with regard to the following matters:

- The provision of publicly accessible community services such as day care centres, community or recreation centres, libraries, health care, emergency services facilities
- The provision of municipal parking structures
- Provision of rental and affordable housing
- The provision of or improvement of parkland and open space
- The provision of local improvements to transit facilities including rapid transit and surface transit and pedestrian connections
- The provision of road bicycle facilities
- The provision of publicly accessible private open space areas
- The provision of commercial offices in order to enhance employment within the corridor.

In order to achieve the municipal objectives for overall employment targets, minimum non-residential standards may be required in the implementing zoning by-laws as well as in the Official Plan amendment. There may be other mechanisms or recommended incentives that result from the Master Implementation Study to promote non-residential development (particularly offices) within proximity of transit stations within the Yonge Steeles Redevelopment Area.

4.10 Site Plan Control

Site Plan control will apply to all of the redevelopment lands within the proposed amendment area.

4.11 Development Charges and Financial Agreements

Prior to any development approval by the Town within the Yonge Steeles Redevelopment Area, the Town should ensure that the costs from the required infrastructure improvements are provided for in the Town wide development charges by-law. Since some of the infrastructure improvements may require expenditures to regional facilities/systems, there may also be a need to assess and implement a regional levy for servicing improvements needed to implement the preferred development plan.

In addition, developers may also be required to enter into financial agreements for various common facilities and services that affect all of the lands within the development area to provide for

the equitable distribution of common public facilities, associated studies or other items not covered under the Development Charges Act. It is recommended that the Master Implementation Strategy study detail the infrastructure and servicing costs so that apportioning these costs within the re development area can occur prior to development applications being processed and a determination can be made about what costs will be covered by Development Charges and what costs will be the responsibility of individual developers.

4.12 Monitoring and Review

It is recommended that the Town monitor the redevelopment area so that the progression of development is paced in accordance with the provision of services, both hard and soft. Both the Master Implementation Strategy study and applications review plans will be circulated to the appropriate approval agencies, both internal and external, so that as the Yonge Steeles Redevelopment Area evolves the existing capacities can be monitored to determine the need for any capital or other improvements to community services such as schools, libraries, community centres, emergency services etc.

The current community infrastructure would appear to be adequate for at least an interim period in terms of school capacities, community centres and library resources. It is not recommended that any new capital infrastructure for community services be provided in advance of any redevelopment or that future sites for such uses be reserved. However, it is recommended that annual reviews be undertaken to monitor the applications to determine population characteristics and yields, dwelling types, employment, land use and mix, and other pertinent factors to determine if the overall densities, mix, population and employment targets are being met and any adjustments are undertaken that may be required to fulfill the plan as envisaged.

Recommendations arising from the Master Implementation Strategy may also include a more comprehensive program of monitoring and reporting related to development capacities and servicing or transportation improvements.

4.13 Recommendations

It is recommended that implementation of the Yonge Steeles Redevelopment Area be based on a number of tools including:

- An Official Plan Amendment that incorporates the preferred development concept and recommendations of this study;
- A comprehensive zoning by-law for mixed use zones that is based upon the urban design principles, guidelines and requirements;
- Approval of plans of subdivision, consents where appropriate and plans of condominium and site plans;
- A Master Implementation Strategy as a next step for determining servicing and transportation improvements, phasing, costs, and financial strategies;
- Comprehensive block plans will be prepared by the first applicant in a block and updated by subsequent applicants;
- Phasing will be required to coordinate development with the capacity of the transportation system and municipal services and with improvements over time. Studies will be required of applicants to demonstrate that capacity exists. The use of Holding By-laws will be required to coordinate the submission of appropriate studies from applicants and to determine the amount of development that can be approved on a phased basis.

Appendix A: Amendment To The Thornhill Secondary Plan (PD 3-1)

The Secondary Plan Amendment

The following text and maps, identified as Schedule 'C' Land Use Plan and Schedule 'D' Density Zones, Schedule E1: Base Building Height Limits, Schedule E2: Special Height Zones and Schedule F: Mandatory Street Related Retail attached hereto, constitute Amendment No. X to the Thornhill Secondary Plan (PD 3-1) – Official Plan Amendment No. 1 to the Official Plan of the Town of Markham (Revised 1987), as amended.

1: The designations shown on Schedule 'C' to this Amendment hereby replace the designations of the Thornhill Secondary Plan (PD 3-1) Schedule 'AA' – Land Use Plan.

2: Section 6.4.2 is hereby amended by adding "12.4.2" to the list of section numbers which are excepted from the Community Amenity policies.

3. The paragraph immediately under the title of Section 12 Specific Area Policies is hereby amended by replacing it with the following: In addition to the land use designations and policies of this Secondary Plan, the following areas within the Thornhill Planning District are boundaries of such areas."

4. The Thornhill Secondary Plan (PD 3-1) is hereby amended by the addition of a new section 12.4 The Yonge Steeles Redevelopment Area as follows:

6.4.3 Community Amenity Area – Yonge Steeles

6.4.3.1 Vision

The Yonge Steeles Redevelopment Area is intended to become a vibrant, mixed use, transit supportive area. Redevelopment and intensification will be promoted at key locations within the corridor to enhance residential, employment, and mixed commercial/residential opportunities that support the higher order transit planned along the corridor.

The vision for the corridor is guided by the following principles:

a) Mix of uses that create vibrant Yonge and Steeles street frontages in compact forms while providing appropriate transitions to low density, stable neighbourhoods to the east of Dudley Avenue, and uses complementary to the historic commercial core of Thornhill.

b) Built form and densities that support Regional and Provincial intensification policies, promote the greatest densities along Yonge Street and within proximity of rapid transit stations and provide variety of forms and heights.

c) All parking will be located in underground garages or accessed through internal rear lanes.

d) Streetscapes that create interesting, safe and active pedestrian environments.

e) The concurrent development of servicing infrastructure, including community services, facilities and parkland, to service the redevelopment.

f) Creation of a new linear park along the west side of Dudley Avenue, or other easterly limit of redevelopment, that connects with other publicly accessible open spaces both within the redevelopment area and within the broader community.

g) Sustainable building and site design.

h) Property consolidation.

i) Service and parking access should be from east-west streets and rear lanes and not from Yonge Street.

6.4.3.2 General Land Use Policies

6.4.3.2.1 The overall land use structure of the Yonge Steeles Redevelopment Area contemplates primarily residential uses for those blocks north of the CNR tracks and mixed use commercial/residential uses for the development blocks south of the CNR tracks. Institutional and public open space uses are permitted at various locations throughout the corridor.

6.4.3.2.2 The target housing range for the Yonge Steeles Redevelopment Area is approximately 4,900 new residential units or 9,700 people and approximately 3,600 new jobs.

6.4.3.2.3 It is intended that the Yonge Steeles Redevelopment Area will provide a range of high and medium density development forms with highest densities in proximity to the Yonge and Steeles intersection and those sites removed from stable, low density residential areas as shown on **Schedule C: Land Use Plan** and **Schedule D: Density Zones**.

6.4.3.2.4 Density provisions for new development by block are provided on Schedule D: Density Zones. The average net density target for new residential development within the Yonge Steeles Redevelopment Area shall be 2.5 FSI. In accordance with Schedule D: Density Zones, an additional 1.0 FSI shall be permitted for commercial buildings or commercial floor space within mixed residential/commercial buildings. Therefore, the maximum density for a mixed use building shall be 3.5 FSI. Conversion of potential commercial floor area to residential use shall not be permitted. Generally, a minimum density of 1.0 FSI shall be required.

6.4.3.2.5 Heights shall generally grade from west to east through the Community Amenity Area and transition down to the nearby low density residential neighbourhood to the east. Schedule E1: Base Building Height Limits indicates various requirements for base buildings within the blocks. **Schedule E2: Special Height Zones** indicates where additional height may be permitted in High-rise Buildings subject to angular height control planes, floorplate restrictions and tower separation requirements (refer to Section 6.4.3.7.3).

6.4.3.2.6 Minimum heights for all buildings shall be three storeys .

6.4.3.2.7 Ground floor area for buildings located south of the CNR railway line fronting Yonge Street and Steeles Avenue west of Dudley Avenue (and 40 metres back from the Yonge Street Build-to Line) shall be exclusively used for commercial use as shown on **Schedule F: Mandatory Street Related Uses**.

6.4.3.2.8 Properties to the north of the CNR railway line fronting Yonge Street and along Steeles Avenue east of Dudley Avenue are encouraged to integrate street related retail where possible as shown on Schedule F: Mandatory Street Related Uses.

6.4.3.2.9 North of the CNR railway line, the ground floor for buildings fronting Yonge Street and along Steeles Avenue east of Dudley Avenue shall provide a sufficient floor-to-ceiling height to accommodate commercial land uses.

6.4.3.2.10 Minimum building heights on all east-west street frontages and those facing the Dudley Avenue linear park as shown on Schedule F: Mandatory Street Related Uses shall be three storeys and generally only residential uses shall be permitted on the ground floor. Residential units are encouraged to have grade related entrances. Non-residential uses at grade other than lobbies are prohibited.

6.4.3.2.11 High-rise Buildings as permitted on Schedule E2: Special Height Zones are defined as buildings over 35 metres in height to a maximum height of 100 metres including mechanical penthouses, subject to angular plane and other high-rise building controls. For High-rise Buildings up to 65 metres in height, the maximum building footprint shall be 900 m^2, and for High-rise Buildings up to 100 metres, the maximum building footprint shall be 650 m^2.

6.4.3.2.12 Comprehensive assembly within redevelopment blocks identified in Schedule C: Land Use Plan is encouraged. Where substantial comprehensive assembly is not achieved, Council shall consider development applications only where such incremental development does not jeopardize the orderly future assembly and redevelopment of the remaining lands in the block over the long term.

6.4.3.2.13 Existing apartment buildings located in Blocks 1A and 9 are excluded from Section 6.4.3.2.2.

6.4.3.2.14 Development shall comply with the Urban Design Policies set out in Section 6.4.3.7.

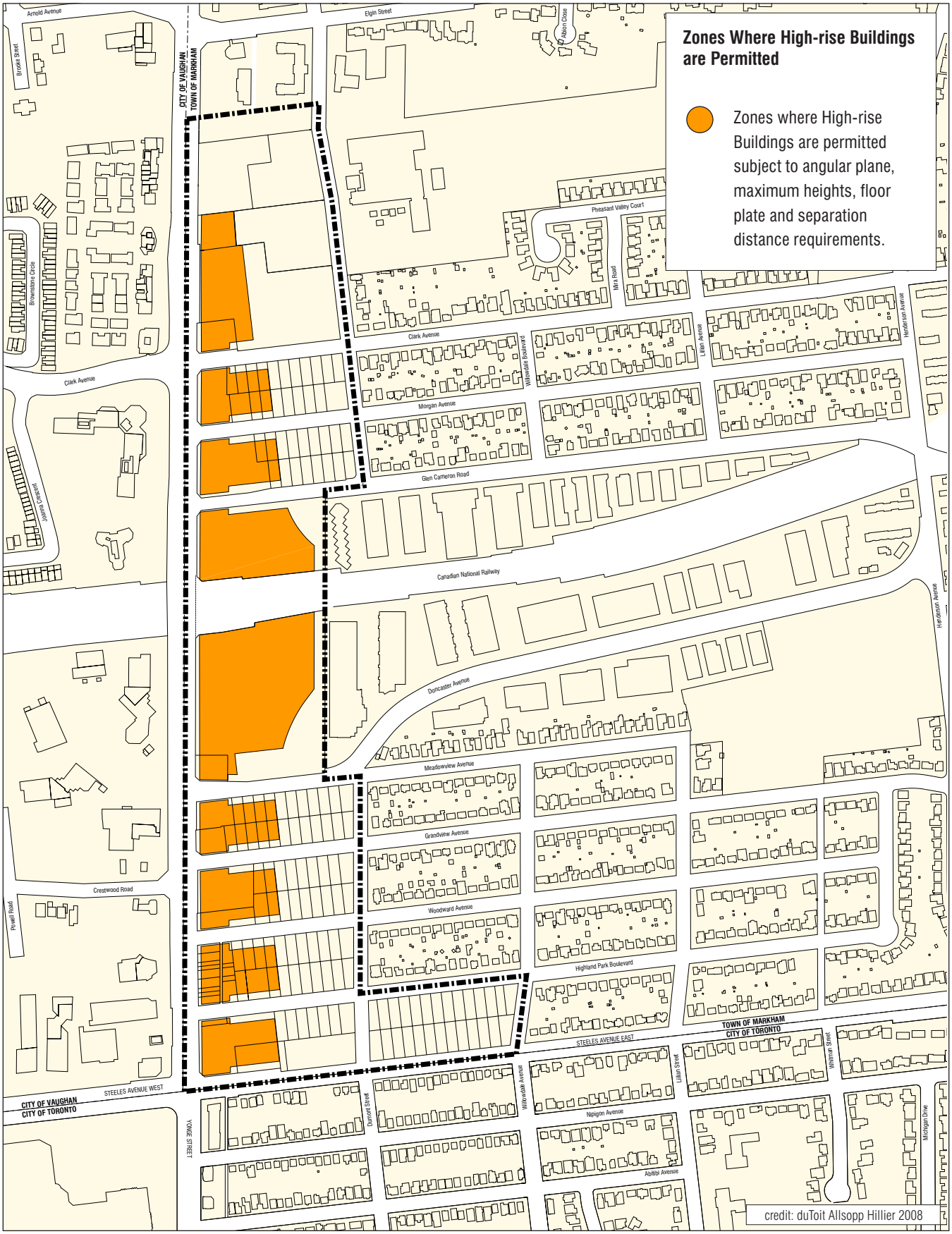
6.4.3.2.15 In order to assist in obtaining the dedication of additional lands which are required for public purposes, the density attributable to such lands may be transferred, subject to compliance with all policies in the Plan, to development permitted on another parcel within the same development block as shown on Schedule C: Land Use Plan when the lands from which the density is transferred are conveyed at no cost to the Town for either publicly owned parkland or required roads or road widenings.

6.4.3.2.16 In order to obtain community facilities such as public community space, day care centre, transit terminal, or pedestrian connections to transit within the Yonge Steeles Redevelopment Area, the gross floor area of such facilities shall be exempted from the calculation of densities. These density incentives are to be achieved through rezoning and the scale of the incentive

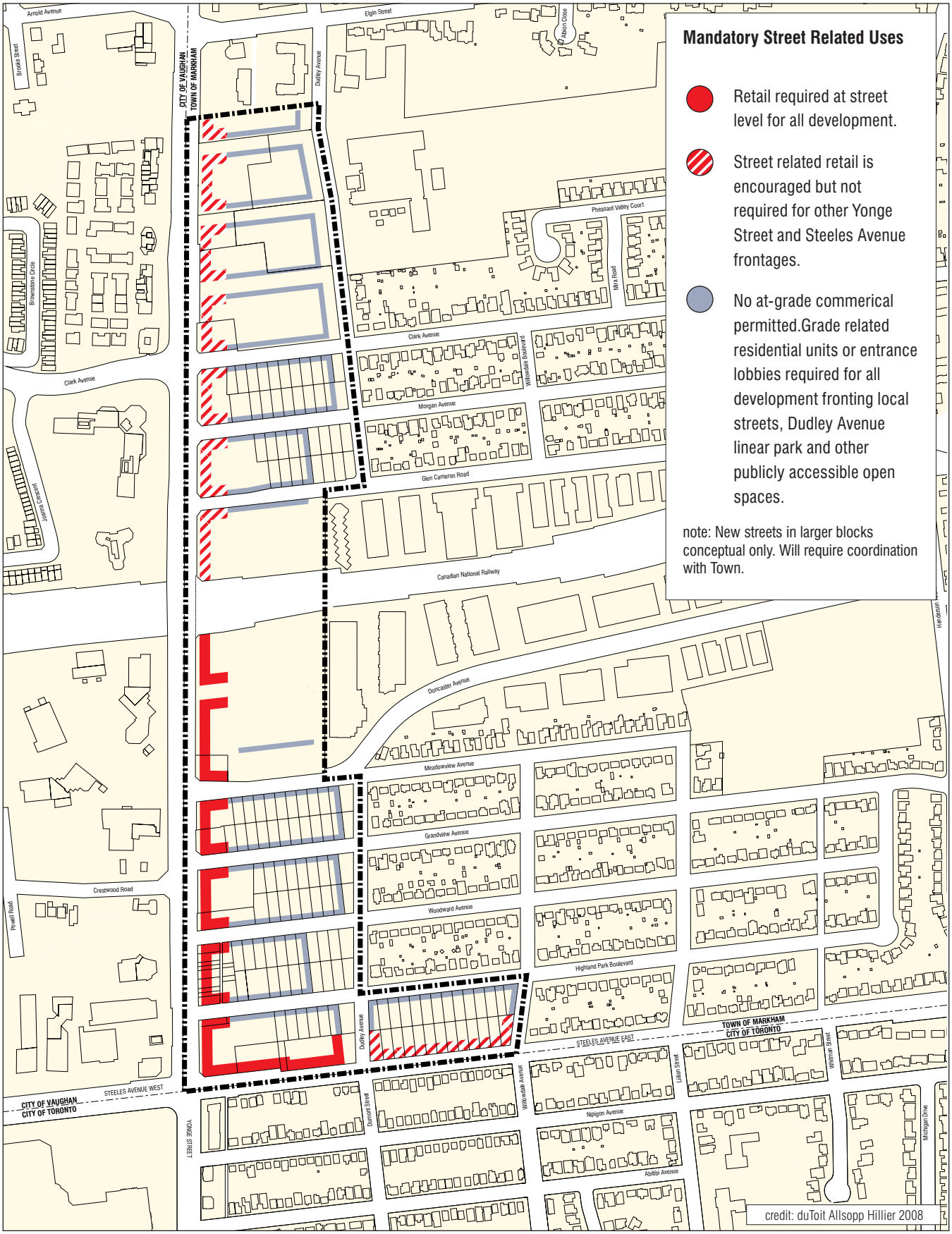
Schedule C: Land Use Plan

Schedule D: Density Zones

Schedule E-1: Base Building Height Limits



Schedule E-2: Special Height Zones



Schedule F: Mandatory Street Related Uses

requested and the implications in terms of built form, infrastructure, and public benefit will be assessed on the basis of individual development applications.

6.4.3.3 Land Use

6.4.3.3.1 Lands may be zoned to permit the following uses:

a) A full range of multiple dwelling types including townhouses, stacked townhouses and apartments;

b) Retail uses;

c) Service commercial uses;

d) Offices;

e) Banks and financial institutions;

f) Sports, health and fitness recreational uses;

g) Institutional facilities including community services and government services;

h) Day care centres;

i) Commercial schools;

j) Restaurants;

k) Entertainment uses;

l) Medical offices; and,

m) Hotels.

6.4.3.3.2 For all new development, permitted at grade-related uses along the Yonge Street frontages shall be controlled as per Schedule F: Mandatory Street Related Retail. The following uses shall be permitted as grade-related uses:

a) Retail uses;

b) Service commercial uses;

c) Offices;

d) Banks and financial institutions;

e) Sports, health and fitness recreational uses;

f) Institutional facilities including community services and government services;

g) Restaurants;

h) Hotels; and,

i) Accessory residential uses such as lobbies (no greater than 15 metres in width), or associated small scale recreational uses within residential buildings in mixed use buildings.

6.4.3.3.3 The following grade-related uses in mixed use buildings or stand alone uses shall be prohibited:

a) Retail stores and restaurants requiring individual premises above 1,000m^2;

b) Free standing, single storey commercial retail buildings;

c) Drive-through facilities of any kind;

d) Gas bars/service stations, either stand alone or associated with any permitted use;

e) Car dealerships; and,

f) Any use that requires outdoor storage, excluding outdoor parking areas and small scale sidewalk display areas for retail uses.

8.3.6 Institutional (note: to be relocated in other section of OP)

8.3.6.1 Land occupied by St. Lukes School is currently designated Institutional and used by the Catholic School Board for adult education. These lands offer opportunities to connect the redevelopment lands within the Yonge Steeles Redevelopment Area to the existing publicly accessible open space system and the future linear park. The site also has the potential, if declared surplus by the Catholic School Board, to become a key community amenity focus for the Community Amenity Area.

8.3.6.2 Permitted uses on lands designated Institutional shall include the existing institutional use and any new publicly owned and accessible community recreational or cultural institutional uses such as community and recreation centres, civic arenas, libraries, art galleries, theatres and museums or similar cultural centres and day care centres, new educational institutions and public open spaces.

8.3.6.3 Other Institutional uses as set out in Section 3.6.1 of the Official Plan (Revised 1987) shall only be considered after determining that there is no need for recreational, educational or cultural institutional uses over the long term as the area redevelops.

8.3.6.4 Where a school site is deemed to be surplus to the needs of the school board, the Town should attempt to acquire the site for future public amenity uses with monies acquired through development charges accrued through the redevelopment process.

6.4.3.4 Parks and Open Space

6.4.3.4.1 The Yonge Steeles Redevelopment Area shall be linked by a continuous public open space system generally running parallel to and west of Dudley Avenue. The easterly development of Blocks 3, 5 and 8 will also contain a community park and connect with the linear park. This parkland area will connect with other parks and other publicly accessible open space areas on both public and private lands. This parkland will serve as a primarily passive recreational area, but will also provide for specific linear activities such as cycling, walking and in-line skating along its length as well as activity nodes such as playgrounds. The minimum width of the linear park will be approximately 15m.

6.4.3.4.2 Permitted uses and policies of Section 3.9 of the Official Plan (Revised 1987) shall apply except as noted in this amendment.

6.4.3.4.3 In order to provide for a continuous connection from north to south within the Yonge Steeles Redevelopment Area, a pedestrian bridge is proposed to connect the park links on both sides of the CNR railway line. Furthermore, this linear park is intended to connect with a more significant community amenity focus both north (St. Lukes site and new community park) and south of the CNR railway line (two new community scale parks).

6.4.3.4.4 It is the intent of Council to provide for streetscape improvements and amenities that add to the beautification, safety, pedestrian enjoyment and public accessibility of open spaces of the area.

6.4.3.4.5 Pathways and connections that link the Public Open Spaces with private open spaces, pedestrian systems and public roads will be encouraged.

6.4.3.4.6 In order to achieve the parkland contribution provided under the Planning Act, and as revised by Council as set out in Section 12.4.5.1, Council may also accept cash-in-lieu of parkland in order to consolidate parklands and develop a linked open space system.

6.4.3.4.7 Landowners shall be encouraged to develop privately-owned, but publicly accessible parks and squares fronting on Yonge Street and other public roads.

6.4.3.5 Services and Utilities

6.4.3.5.1 The Yonge Steeles Redevelopment Area shall be serviced with municipal stormwater, water and sewer improvements.

6.4.3.5.2 Agreements shall be executed among the Town, the Region and the development proponents to ensure that the costs of providing servicing upgrades shall be borne by the proponents of development with appropriate cost sharing among benefiting parties as required.

6.4.3.5.3 Individual development proposals will be required to prepare Functional Servicing and Stormwater Management Reports that address the provision of water, sanitary and stormwater services, including technical and financial requirements and phasing.

6.4.3.5.4 Assignment of sewage flow and treatment capacity and water capacity shall be determined by the Town in consultation with the Region of York.

6.4.3.5.5 On-site stormwater run-off, water quality, quantity and storage shall be considered for any new development proposal.

6.4.3.5.6 The use of Holding provisions in the implementing zoning by-law will be required in order to phase the development concurrent with servicing and other infrastructure improvements.

6.4.3.6 Transportation

6.4.3.6.1 The Town shall encourage and support the Regional Transitway improvements along Yonge Street as an interim step prior to the extension of the subway.

6.4.3.6.2 Development blocks shall be serviced by internal lanes and service entrances from side streets wherever practical with limited direct access and egress onto Yonge Street.

6.4.3.6.3 Development proposals shall require the incorporation of underground parking facilities to accommodate the majority of the parking for new developments with only certain exceptions for disabled and visitor parking spaces.

6.4.3.6.4 Parking standards may be revised throughout the Yonge Steeles Redevelopment Area to encourage transit ridership. This will be reviewed in the implementing zoning by-law.

6.4.3.6.5 Individual development applications shall be supported by Traffic, Transportation and Parking Studies including technical and financial requirements and phasing if applicable.

6.4.3.6.6 The use of Holding provisions in the implementing zoning by-law will be required in order to phase the development concurrent with transportation improvements, particularly the staging of the Rapid Transitway to Subway Station.

6.4.3.6.7 Adequate and sheltered public bicycle parking should be provided for residents and employees within residential and commercial buildings.

6.4.3.6.8 Pedestrian connections to subway station via grade separation or linkage will be provided. The Town will consider the York Region Pedestrian and Cycling Master Plan for pedestrian and cycling facilities and connections on Yonge and Steeles Corridor.

6.4.3.7 Urban Design Policies

6.4.3.7.1 In order to create a vibrant redevelopment area that successfully integrates with the existing community, all development applications shall be guided by sound urban design principles, and objectives that have been specifically prepared for the Yonge Steeles Redevelopment Area as set out below.

6.4.3.7.2 The main urban design objectives to be achieved include the following:

a) encourage a well-integrated rich and varied urban form;

b) strengthen the historic pattern of streets and blocks;

c) improve the pedestrian realm;

d) transition and compatibility with existing low density residential.

6.4.3.7.3 The key urban design principles shall be based on the following:

a) Redevelopment should include a broad mix of housing, commercial and employment uses, with the higher densities and greater building height and massing focused closer to Yonge Street with transitions down towards the low-rise residential areas;

b) The existing street system should be retained and extended into large redevelopment sites to ensure a distributed pattern of access movements. Through-traffic issues should be resolved by traffic management rather than street closures or diversions;

c) A vibrant public realm will set the stage for and be framed by redevelopment, with streets, new parks and publicly- accessible open spaces supporting a range of local, social, and recreation activities;

d) All streets in the neighbourhood should be designed as public spaces that have a strong sense of spatial enclosure, meet the appropriate engineering standards, and have sufficient space and amenities to support a wide range of pedestrian social and recreational activities;

e) Continuous frontages of sidewalk-related retail and commercial uses should be concentrated on the main street frontages within convenient walking distance of the Yonge/Steeles intersection and other frontages should have residential uses at grade with access from the public sidewalks;

f) As the pedestrian focus for the present and future Thornhill communities, Yonge Street should have the principal promenades for the area, and pedestrians should feel comfortable and have the space and amenities for movement and socializing;

g) Steeles Avenue should have a spacious boulevard and urbane streetscape treatment close to the Yonge Street intersection, and the boulevard should transition to a landscape dominant treatment adjoining the residential buildings located further to the east;

h) Dudley Avenue and the parallel new linear park should provide a well-treed, green transition between the suburban single-family housing areas and the intensified redevelopment areas;

i) The east-west local streets should be maintained and improved with the addition of wide sidewalks and large caliper trees in the boulevard. Continuity of the built-up edge and landscape treatment of the front yards should be encouraged;

j) New public parks, promenades, pedestrian bridge, streetscape improvements, and privately-owned parkettes should be combined to form a coherent, publicly accessible pedestrian and bicycle green space system;

k) The interface between the redevelopment sites and the adjoining neighbourhoods should minimize adverse impacts and respect the character of the single-family residential areas by creating a comfortable transition in the built form;

l) The height and location of High-rise Buildings should be based upon zoning controls including angular planes that consider an appropriate relationship to built form outside of the redevelopment area and in accordance with the policies of this Plan.

m) The angular plane control shall be projected from the nearest property outside of the study area—defined as the Relevant Residential Property Line (RRPL)—at an angle such that the vertical dimension is half of the horizontal dimension;

n) No High-rise Building shall located within 125 metres of the RRPL;

o) The maximum height of High-rise Buildings, subject to angular plane and other zoning controls, shall be 100 metres (refer to Section 6.4.3.2.11);

p) Most of the redevelopment should be in mid-rise buildings that line the streets and other public spaces to give shape and a sense of enclosure to the public realm;

q) The tallest High-rise Buildings should be located the furthest distance from the low-rise neighbourhoods and the heights should be graduated down towards the neighbourhoods;

r) Yonge Street should have generally contiguous frontage of predominately mid-rise buildings sited on a common build-to line. High-rise Buildings should be set back from the frontage to maintain the street-wall profile;

s) Steeles Avenue should have two characters. The block related to Yonge Street should have generally contiguous frontage of predominately mid-rise buildings sited on a common build-to line. High-rise Buildings should be setback from the frontage to maintain the street-wall profile. The block to the east of Dudley Avenue should have generally contiguous frontage of predominately mid-rise buildings on a common build-to line with no High-rise Buildings permitted above the base building height;

t) Local streets should have contiguous built-up frontage of predominately mid-rise to low-rise residential buildings sited on a common/build-to line. High-rise Buildings where permitted should be setback from the frontage to maintain the street-wall profile;

u) Minimize the impact of vehicular circulation, access and parking in the public realm by locating parking in underground structures, reducing the number of vehicle access points into each redevelopment block and by siting service vehicle areas behind buildings within the interior of blocks;

v) New development should improve the overall environmental quality of the Town of Markham and minimize ecological impacts.

6.4.3.7.4 Detailed urban design principles, guidelines and requirements (including figures, cross-sections, diagrams and representative photographs) are contained in the Appendix "A" and do not form part of the operative section of this Plan. Notwithstanding, this information will form the basis for the implementing zoning by-law for the Yonge Steeles Redevelopment Area, and will be used in the assessment of future development applications.

6.4.3.8 Implementation

6.4.3.8.1 Development within the Yonge Steeles Redevelopment Area shall be permitted in accordance with the applicable policies of the Official Plan (Revised 1987) and the applicable policies within this Secondary Plan; the implementing zoning by-law and agreements among the Town, Region, other approval authorities and the development proponents.

6.4.3.8.2 The use of Holding symbols pursuant to Section 7.3c) of the Official Plan (Revised 1987) may be required to ensure that adequate infrastructure is available for the development and that the phasing of development is concurrent with infrastructure and community facility improvements.

6.4.3.8.3 The use of Section 37 of the Planning Act, R.S.O. 1990, c. P.13, s amended, shall also be used by Council in accordance with the provisions of Section 7.3 d) of the Official Plan (Revised 1987).

6.4.3.8.4 Notwithstanding Section 12.4.9.3, as an incentive to achieving certain forms of community services and facilities that are identified as a public benefit to either the existing or future residents, Council may exempt the gross floor area of these facilities in the calculation of densities.

6.4.3.8.5 Council may consider the use of a Community Improvement Plan to stimulate and direct growth to this area in advance of transit improvements in accordance with Section 2.12 of the Official Plan (Revised 1987).

6.4.3.8.6 Site plan approval shall be required for all development within the Yonge Steeles Redevelopment Area.

6.4.3.8.7 Monitoring of community facilities and services, servicing infrastructure, traffic and transportation systems shall be required as development proceeds to ensure that capacity allocations are sufficient to meet demands of the redevelopment area.

6.4.3.8.8 Parking supply and demand shall be monitored by the Town as development proceeds to ensue that parking supply meets the proposed demand.

Appendix B: Community Services, Recreation and Open Space Report

1.0 Introduction

The Yonge Steeles Corridor Study includes a community services component that examines the adequacy of the existing inventory and determines the needs and mechanisms for achieving additional services and facilities

Community services and facilities are shown on **Figure 1.1** for the Context Study Area which extends to just east of Bayview Avenue in the east, south to Cummer Avenue in Toronto, approximately 1 km west of Yonge in Vaughan and north to approximately the Thornhill Golf and Country Club. Facilities are depicted within the three adjacent municipalities namely Markham, the City of Vaughan, west of Yonge Street and the City of Toronto south of Steeles Avenue.

For the purposes of this review, the proposed intensification of the Yonge Steeles Corridor for Markham anticipates a potential population growth of approximately 9,700 people in primarily high density housing forms within an estimated 4,900 units in the long term. The area may also generate approximately 3,600 employment opportunities primarily in the office and retail sectors.

1.1 Demographic Overview

Census tracts (CTs) 402.02 and 402.06 are coincident with the traffic zones used by the Region of York being 1147 and 1148, respectively as shown in **Figure 1.2**. CT 402.02 is bounded by Bayview Avenue on the east, Steeles Avenue on the south, Yonge Street on the west and the CNR tracks on the north. CT 402.06 to the north is bounded by the CNR tracks on the south and east, Yonge Street on the west, and a branch of the East Don River to the north. These two census tracts combined will be referred to as the Study Area for purposes of demographic description.

According to the Statistics Canada data, the population in 2001 for the Study Area described above was 9,491 in approximately 3,535 residential units – See **Table 1.1**. In 2001, this represented approximately 20% of the population of the Thornhill Community (46,900) and 4.5% of the Town of Markham population (208,615).

The 2006 Statistics Canada census indicates that the Study Area has declined in population to 9,174 a reduction of almost 3.5% since 2001. The overall residential units over the same time period increased to 3,666 approximately 3.7%. The persons per unit (ppu) in 2001 for the Study Area was 2.68, which fell to 2.5 ppu by 2006. However, the Town grew from a population of 208,615 in 2001 to 261,573 or over 25%. Residential units within the Town over the same time period grew by almost 32%. The persons per units for Markham overall was about 3.38 in 2001 which has remained the same in 2006 as indicated in Table 1.1A.

Table 1.2 provides a detailed breakdown of age cohorts for the Study Area and the Town of Markham for the census years 2001 and 2006. It can be seen that generally the demographics are aging but it is more pronounced for the Study Area than for Markham overall.

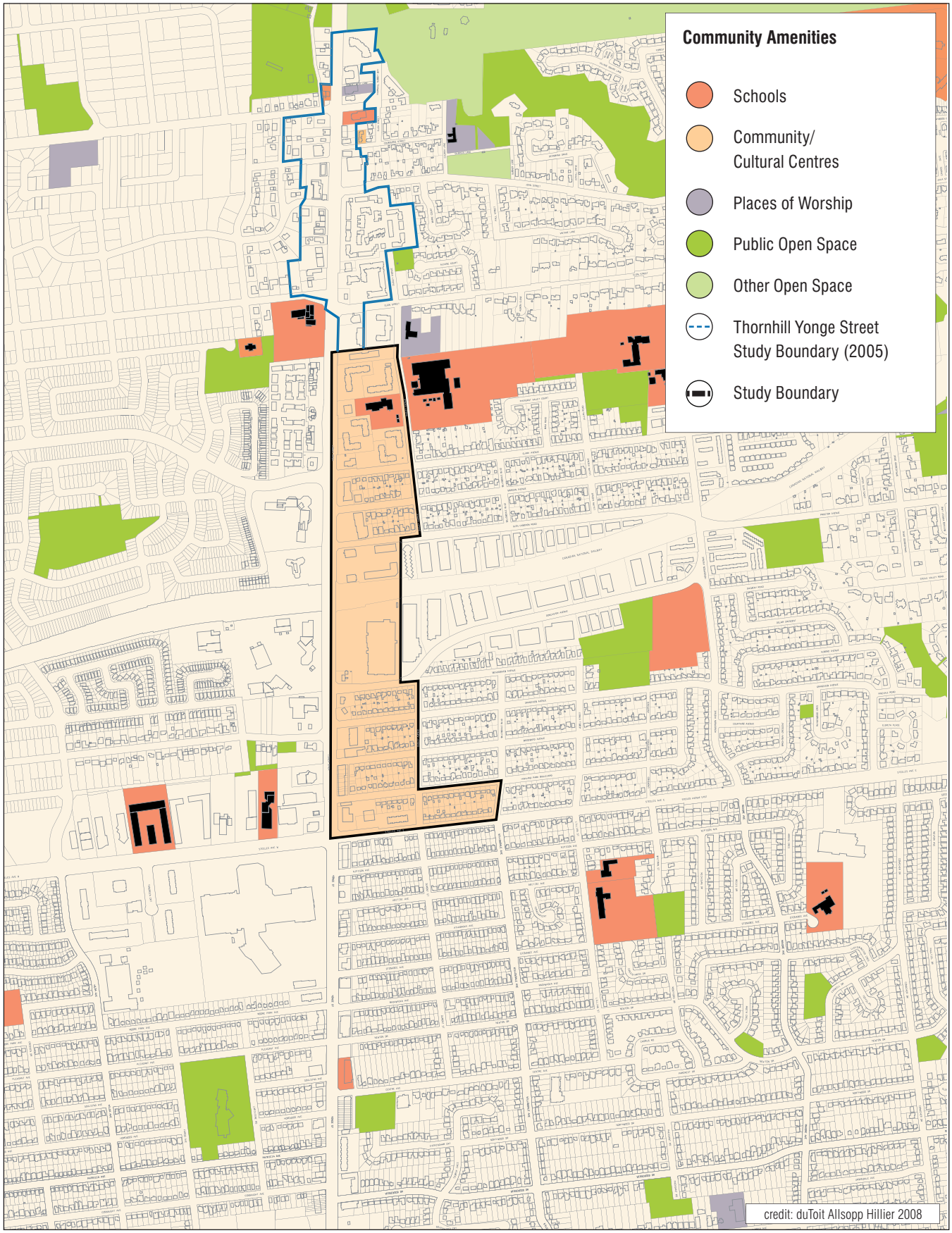
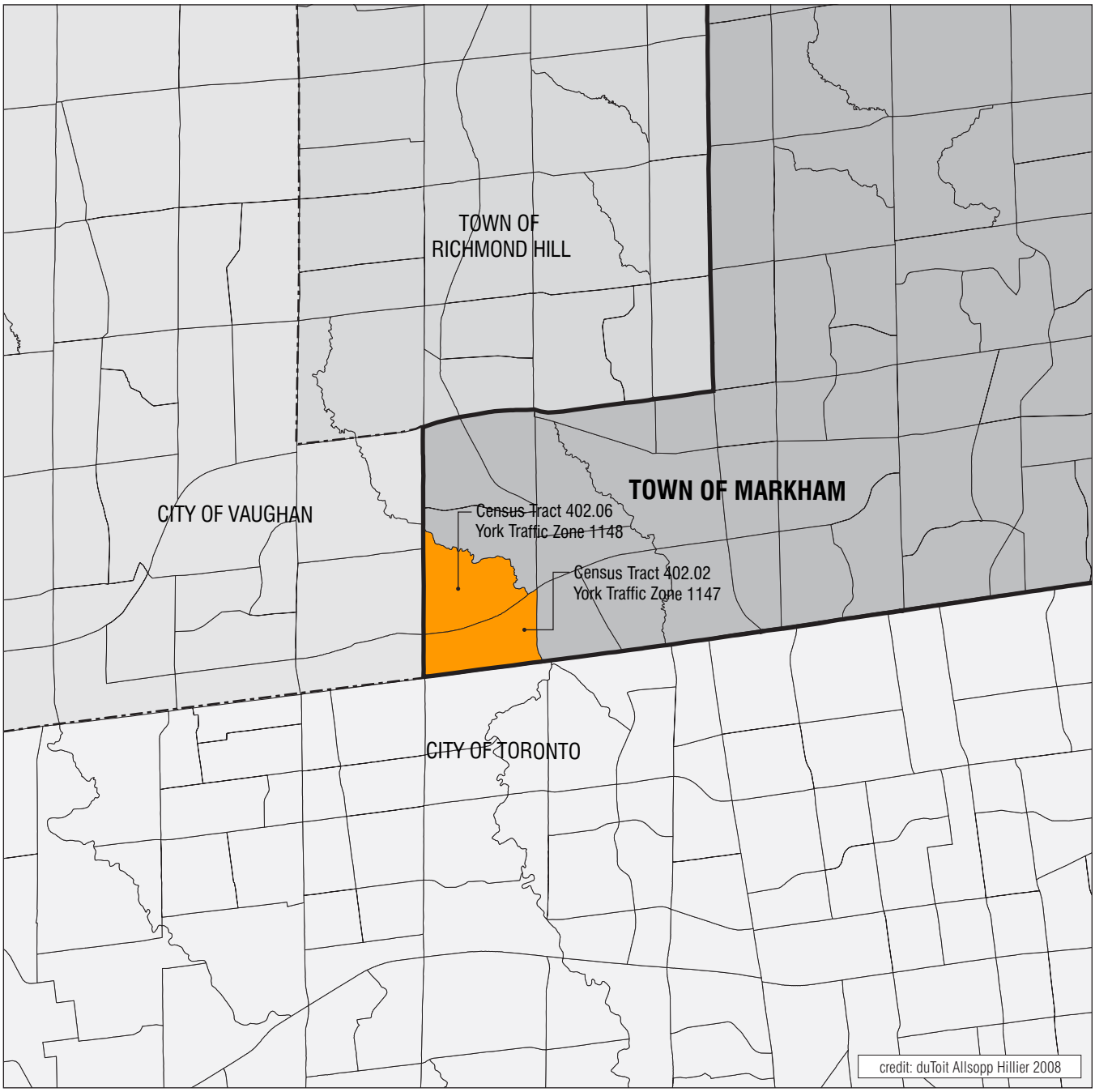


Figure 1.1: Community Services and Facilities



source: 2001 Traffic Zone Boundaries,
Transportation Information Steering Committee

Figure 1.2: Study Area as Defined by Census Tracts and York Region Traffic Zones

Table 1.1 Population

Study Area Population	SA 2001	SA 2006	Change	Markham 2001	Markham 2006	Change
Total Population	9,491	9,174	-317	208,615	261,573	52,958
Population Change			-3.50%			25.4%
SA % of Markham				4.5	3.5	
Residential Units	3,535	3,666	131	61,618	81,181	19,563
Residential Unit Increase			3.70%			31.7%
Persons Per Unit	2.68	2.5	-0.18	3.38	3.38	0

Table 1.2 Detailed Age Breakdowns 2001-2006
Study Area* & Markham

	2001 Study Area		2006 Study Area		2001 Markham		2006 Markham	
Total Pop.	9,491		9,174		208, 615		261, 573	
Age Range	#	%	#	%	#	%	#	%
0 to 4	430	4.5	365	4.0	10,670	5.1	14,165	5.4
5 to 14	1,080	11.4	995	10.8	28,770	13.8	33,485	12.8
15 to 19	600	6.3	660	7.2	17,220	8.3	19,395	7.4
20 to 24	625	6.6	615	6.7	15,580	7.5	19,250	7.4
25 to 44	2,780	29.3	2,410	26.3	60,065	28.8	73,775	28.2
45 to 54	1,495	15.8	1,510	16.5	36,270	17.4	43,180	16.5
55 to 64	1,015	10.7	1,130	12.3	20,315	9.7	30,460	11.6
65 to 74	860	9.1	785	8.6	2,025	5.8	16,325	6.2
75 to 84	510	5.4	565	6.2	5,970	2.9	8,915	3.4
85 and Over	130	1.4	140	1.5	1,725	0.8	2,625	1.0
		100.4		100.0				
Median Age			42.25		37.2		38.1	

* Study Area is CT402.02 and 402.06 combined

Table 1.3 Aggregate Age Breakdown 2006 Study Area & Markham

2006	Study Area	Markham
Age Group	%	%
0-14	15	18
15-24	14	15
25-64	55	56
65+	16	11
Total	100	100

Table 1.4 Aggregate Age Breakdown 2001 Study Area & Markham

2001	Study Area	Markham
Age Group	%	%
0-14	16	15
15-24	13	14
25-64	56	55
65+	16	16
Total	100	100

The largest segments of the population for the Study Area (26%) and Markham (28%) in 2006, were the 25-44 age groups followed by 45-54 age groups. The median age for Markham overall has increased from 37 to 38 between 2001 and 2006, however, it is still younger than the median age of 42 for the Study Area.

As seen in **Table 1.3**, in 2006, approximately 55% of the population of the Study Area was working aged between the ages of 25-64. Seniors over 65 were approximately 16% of the population and children under 14 and youth aged 15-24 represented approximately 15% and 14%, respectively.

Comparatively, the Town had approximately the same proportion of working aged people in 2006 (56%), significantly fewer seniors over 65 (11%), a higher proportion of children (18%) and approximately the same proportion of youth (15%).

Between 2001 and 2006, the Town saw an increase in the proportion of children between the ages of 0 to 14 (**Table 1.4**), while the Study Area saw a slight decrease during that same period. As well the proportions of seniors over 65 increased in the Town overall from 11% to 16%, but stayed the same in the Study Area at 16%.

Approximately 60% of the residential units in the Study Area are owned and 40% rented according to the 2001 census. The 2006 data are not available at the present time. Over 60% of the housing in the Study Area was constructed between 1961 and 1980. Over 50% of the households contain either 1 or 2 people. In 2001 approximately 48% of the housing in the area was single detached housing, followed by 38% for apartments with less than 5 storeys.

Almost 60% of the population had English as a mother tongue with approximately 40% having other languages. The top languages by mother tongue included Chinese (Cantonese, Mandarin and Chinese unspecified - 17%), followed by Russian (15%) and Persian (Farsi – 12%). The most recent period of immigration 1996-2001 was the greatest period of immigration (23%) followed by 20% between 1981 and 1990. Top recent immigrant groups include Hong Kong (27%), Russia (15%) and South Korea (8%).

The Regional population estimates starting in the base year of 2001, are somewhat higher based on the use of person per unit factors for Markham overall, but project a decline in population for this area to 2031. It is noted that these estimates are still preliminary and that to date no residential intensification was factored into the Region's preliminary numbers for the Thornhill Yonge Steeles Corridor.

The population for the Thornhill Community in 2001, was 46,900 projected to increase to 48,700 by 2031, an increase of approximately 3.8%, based on the Parks and Recreation Master Plan.

2.0 Parks and Recreation Services

Parks within the Context Study Area for the various municipalities are indicated in **Tables 2.1**, **2.2** and **2.3**. They indicate a total of approximately 42 ha within the Context Study Area in the Town of Markham.

2.1 Markham Parks

The Parks, Recreation, Culture and Library Master Plan for the Town of Markham dated January 2007, was undertaken for the period 2005-2021. Although not adopted by Council, it is the working document that is used by staff to assess needs and priorities.

The Thornhill Community was examined in its entirety, which extends from Yonge Street in the west, to Highway 7 in the north, Bayview Avenue in the east and Steeles Avenue in the south. For purposes of the study, the southwest was considered a stable community with little growth potential reaching its build out potential by about 2011. The Thornhill Community was anticipated to grow from its 2001 population of 46,900 to approximately 48,700 by 2031, or approximately a 3.8% increase. Comparisons were made for each of the four communities in the Master Plan.

Since the last Master Plan review in 1999, the Thornhill Community Centre at Bayview Avenue and John Street underwent a 27,000 sq. ft. expansion (2005). Expansion and renovation of the Library at this location is under consideration.

The Thornhill Community had a higher provision of parkland than the Town did overall. Thornhill had a provision rate of 4.1 ha/1000 population compared to the Markham's overall average of 3.4 ha/1000.

There are 11 parks in Markham Thornhill that fall within the Context Study Area. Three of the parks are classified as District Parks with sports fields and the remaining eight are classified as Neighbourhood Parks. Eight of the parks have natural amenities, many of which are associated with the valleylands in which they are located. Four of these parks also have pathways. Four of the parks have playgrounds and two each have tennis, soccer, and ball diamonds. Pomona Mills is the largest park, but is located outside of the immediate study area boundaries.

Woodland and Grandview Parks are located adjacent to school sites and are more active parks than many of the valleyland parks in Thornhill that are primarily used for more passive pursuits. It was noted in the Master Plan that the community requested that there be more trails and pathways and that they be continuous and linked to pathways and open spaces in adjacent municipalities. This may be an opportunity to obtain cash-in-lieu of parkland through the redevelopment process to secure the needed links in this community to add to the inventory of continuous pathways and open space network.

The parks and outdoor facilities needs assessment reviewed the needs over the projected periods by community. The Thornhill Community is a priority in the short term (2005-2010) and medium term (2011-2016) for one basketball court, potentially in conjunction with a school property. A skateboard park is recommended in the medium term to be located in a community focal point. An additional recommendation is that the Town review the opportunity to reconfigure some of the existing outdoor tennis courts in Thornhill for other uses (skateboard park or basketball) and to redistribute public courts to other areas of the Town where feasible.

Playground locations are recommended to be within 400 metres of all households. None of the Yonge Steeles Study Area is within 400 m of a playground. However, the study area is all within 1 km of the three nearby district parks, a typical catchment area for this parkland type.

The Master Plan also recommends a minimum standard for future development of 1.2 ha (3 acres) of parkland per 1000 residents or 1ha of parkland per 300 units whichever is less, which is consistent with Planning Department practice. All areas of the Town are meeting this standard and according to the draft Master Plan, the projection is that all areas will continue to exceed the standard through the time span of the Plan. There is an existing supply of approximately 3.4 ha per 1000 residents of municipally-owned parkland and open space. However, this figure includes a significant amount of land that is not developable for active recreation as it is in environmentally sensitive area and flood prone areas.

The short term recommendations also call for the development of a trail master plan to provide an interconnected system within Markham that also provides for connections to key trail systems to the south and north of the Town.

The Thornhill Community Centre located at 7755 Bayview Ave., Markham, L37 4P1, (905-944-3800) is a 168,100 sq. ft. major multi-purpose centre serving the community. Enhancements were recommended in the Master Plan for the short term (2005-2010) for the Thornhill Community Centre located at the intersec-

Table 2.1 Parks- Markham

Name	Location/Address	Ha/Classification	Amenities/Facilities
1. Pomona Mills Park	North of John Street	20.96 District	Playground, soccer, tennis, pathways and natural areas
2. Don Valley Park	South of John Street west of Bayview – East Don River Valley	4.7 Neighbourhood	Natural areas
3. Sprucewood Park	33 John St.	.7 Neighbourhood	Playground
4. Woodland Park	West of Henderson north of Clarke, adjacent to Woodland PES	1.8 District	Ball diamond, pathways, natural areas
5. Charlie Clifford Park	East Don River Valley, west of Bayview, south of railway	4.6 Neighbourhood	Natural areas
6. Annswell Park	North of Elgin, east of Yonge	.3 Neighbourhood	No amenities
7. Cricklewood Park	Cicklewood Cres., north of John, east of Yonge	1.9 Neighbourhood	Pathways , natural areas
8. Grandview Park	South of Doncaster, west of Henderson, adjacent to Henderson PES	3.2 District	Ball diamond, soccer, tennis, pathways, natural areas
9. Proctor Park	South of Proctor, east of Doncaster, valleyland	2 Neighbourhood	Playground, natural areas
10. Almond Park	Valleyland, north of Steeles, west of Bayview	1.8 Neighbourhood	Natural areas
11. Rayneswood Park	Rayneswood Cr. North of Steeles	1.4 Neighbourhood	Playground
Total		42.1 ha	

tion of Bayview Avenue and John Street, including gym space and dedicated space for seniors and youth which are now complete. The 25,000 sq. ft. addition included a seniors centre (5,000 sq. ft.) completed in June 2004, and a gym, renovated/relocated fitness centre and therapeutic pool, totalling 20,000 sq. ft. Facilities include three community halls with capacity from 150-500; a fireside lounge with capacity of 65; three boardrooms with capacity of 40; a craft room with capacity of 20; two ice pads with pro shop with seating capacity for 1,000 and 300; a fully equipped fitness centre. Despite the recent addition, staff notes that the facility is nearing capacity particularly related to rental rooms and parking availability.

The Town currently has four indoor swimming pools and two more proposed in the Central East and South East Community Centres over the short and long term. Thornlea Pool is located at 8075 Bayview Avenue south of Highway 407 adjacent to Thornlea Secondary School and is associated with the Thornhill Community Centre and operated in conjunction with the school board.

As a complement to the public open space system is the proximity of three private golf courses, including the Ladies Golf Club of Toronto located within Markham east of Yonge just north of the Study Area; Thornhill Golf and Country Club and Uplands Golf and Ski Club both located west of Yonge Street in Vaughan.

Some of the gaps identified in the Markham draft Master Plan include the desire for more continuous trails and bike paths, a community sports park (20+ acres) for organized sports/festivals/gathering place, more books and computers in libraries, and provision for more ice pads.

Table 2.2 Parks- Vaughan

Name	Location/Address	Ha/Classification	Amenities/Facilities
1. Winding Lane Park	580 Yorkhill Blvd.	4.18 Neighbourhood	Senior Playground Basketball Court
2. Gallanough Park	21 Springfield Way.	2.17 Neighbourhood	Mini Soccer, Mini-mini Soccer Senior Playground and Softball
3. Oakbank Park	250 Oakhurst Park.	3.75 Neighbourhood	Pond and observation Deck
4. Thornhill Outdoor Swimming Pool (Facility)	26 Center St.	N/A Neighbourhood	2 outdoor pools
5. Percy Bone Parkette	26 Old Yonge St.	0.27 Neighbourhood	Senior softball
6. Yonge Mill Parkette	N/A	0.49 Neighbourhood	No amenities
7. Riverside Park	2 Riverside Blvd.	0.85 Neighbourhood	Senior Playground
8. Concord Thornhill Regional Park	299 Racco Parkway	26.50 District	2 Senior Baseball, 2 Senior Soccer, 2 Senior Playground 2 Softball, Water play
9. Vaughancrest Park		Neighbourhood	Seniors centre
Total		38.21 ha	

A2.2 Vaughan Parks

In the City of Vaughan there are eight parks located in the Context Study Area all of which are Neighbourhood Parks, totally approximately 12 ha as indicated in **Table 2.2**. Facilities include three playgrounds, one basketball court, one mini soccer field and one mini-mini soccer field, two outdoor pools, two tennis courts, a softball diamond and senior softball diamond.

The District Park serving the Thornhill area of Vaughan is Concord Thornhill Regional Park a 26.5 ha park located near Dufferin Street south of Highway 407. This multi-functional facility includes the following recreational amenities: two senior baseball diamonds; two senior soccer fields; two softball diamonds; a waterplay area and playground. Currently there are no plans for capital improvements/expansions to facilities/parks in this area as the area is considered well served with parks and recreational amenities.

A2.3 Toronto Parks

In the City of Toronto there are 8 parks located within the Context Study Area totalling 43.57 ha as indicated in **Table 2.3**. All of the parks are local except for the Goulding Community Centre which is classified as a district park. The Goulding Centre is located 2 blocks south of Steeles Avenue and one block west of Yonge Street within easy access to the Yonge Steeles Study Area by transit.

Table 2.3 Parks – Toronto

Name	Location/Address	Ha/Classification	Amenities/Facilities
1. Lillian Park	227 Otonabee Avenue North York	1.02 Local	3 Ball Diamonds Outdoor Tennis – 3 Lit 3 Pathways/Roadways Picnic Areas Playground
2. Caswell Park	18 Caswell Drive North York	1.952 Local	Playground
3. Aneta Circle Park	184 Newton Drive North York	0.864 Local	Playground
4. Centre Park	15 Centre Avenue North York	3.014 Local	Ball Diamond Pathways/Roadways Picnic Areas Playground
5. Goulding Community Centre	45 Goulding Avenue Toronto 416-395-7826	11.44 District	Arena – 1 Pad 2 Ball Diamonds - Lit Community Centre/Recreation - Gymnasium - Kitchen - Multipurpose Room - Snack Bar/Concession - Offices - Change Rooms Outdoor Bocci Outdoor Parking Outdoor Pool Outdoor Tennis - 3 Pathways/Roadways Playground
6. Moore Park	110 Cactus Avenue North York	9.81 Local	4 Jr. Soccer Naturalized/Meadow Outdoor Tennis - 3 Pathways/Roadways Picnic Areas Playground
7. Wedgewood Park	14 Wedgewood Drive North York	2.891 Local	Multipurpose Court Naturalized/Meadow Outdoor Tennis - 2 Picnic Areas 2 Playgrounds
8. Newtonbrook Park	935 Willowdale Avenue North York	12.58 Local	Pathways/Roadways
Total		43.57 ha	

2.4 Summary

Although the Thornhill Community in total as identified in the most recent Master Plan, exceeds the overall Town's parkland, there is little parkland in and near the Yonge Steeles Study Area. Currently, there are no playgrounds within 400m of the Study Area within Markham. Other deficiencies noted in the Master Plan with regard to provision of specific recreational facilities for the Thornhill Community are recommended for various timeframes within the study however none of these facilities is recommended for this location in particular as it is likely too distant from the majority of potential users within the rest of the Thornhill Community.

Not all parks will offer equal accessibility in the area regardless of distance, given the barrier effects of the arterial roads such as Yonge Street and Steeles Avenue. Therefore the development of a linear parkland system adjacent to the development lands is proposed to support the recreational and open space needs of the projected population in addition to added improvements to existing community facilities in the Thornhill Community.

The development envisaged for the Yonge Steeles Corridor is not proposed as a largely family oriented area. With primarily high and medium density forms of development, the demographics will likely be a combination of singles, professional couples and empty nesters with different recreational demands and needs. Many of the sites will also offer private recreational facilities within the development complexes geared to the market demographic they are seeking.

Redevelopment of the area offers opportunities to increase the parkland supply in this particular area of Thornhill. It is recommended that lands be acquired for a new linear park adjacent to the easterly development limits, generally parallel to Dudley Avenue through the development approvals process. This parkland will meet several complementary objectives by adding open space and recreational amenities to the area; providing opportunities to connect the study area along its entire length, north to south; ensuring an appropriate transition and buffer to the low density residential lands to the east and to connect with other publicly accessible open spaces within the broader community.

The proposed park is seen as a passive urban park rather than an active programmed park and will provide areas for sitting, walking, cycling, playground areas. Further, it is recommended that additional public parkland nodes be created both south and north of the tracks that could accommodate a wider range of recreational and amenity areas that are directly linked to the linear park. With the increasing urbanization of the corridor, the format of single use parks is replaced with the concept of multi-functional parks and open spaces. In addition, with limited ability to acquire additional parkland up to the standards recommended in the Master Plan and provided under Planning Act, the municipality must also explore opportunities to complement the parkland and recreation system through creative responses and approaches that use publicly accessible public and or private lands with some of the school boards, other public agencies or private landowners.

It will be necessary for the Town to undertake ongoing facility audits, monitoring and assessments of need/preferences to further inform any future strategy to augment the quality and capacity of existing parkland/recreational facilities where additional land may not be available in offsetting needs. However, a potential opportunity may exist for the municipality to purchase a school site, St. Luke, should it be declared surplus, for such recreational, cultural or institutional uses needed to support redevelopment over the long term. In addition, Section 37 agreements may be used to acquire monies to improve existing recreational and parkland facilities where needed elsewhere in the Thornhill Community that would also service this redevelopment area.

3.0 Schools

3.1 York Region District School Board

Schools servicing the Study Area are depicted below in **Table 3.1**.

The respective school boundaries and descriptions are depicted in **Figure 3.1**. The Thornhill Secondary School services the entire Study Area and beyond to lands west of Yonge Street in Vaughan. All of the YRDSB elementary schools service areas are east of Yonge Street. Henderson Avenue PS was recently constructed in 1999.

Markham Thornhill is the geographic area that the YRDSB uses for planning purposes and this area is coincident with the Thornhill Community of Markham bounded by Highway 7 in the north, Highway 404 in the east, Steeles Avenue in the south and Yonge Street in the west. Currently there are 10 elementary schools in the Thornhill Community, three of which are located just east of the Yonge Steeles Corridor Study Area. Overall projections are stable to declining from 2006 to 2011, and below capacity for the schools combined. School enrolments peaked in 2002 and exceeded capacities until recently. There are no capital strategy projects planned in the 2007-2011 period for this area.

The same planning area is used to determine projections for the secondary schools. The two secondary schools in Thornhill, Thornhill Secondary School and Thornlea Secondary School are currently at capacity in terms of existing enrolment. This enrolment is projected to decline below existing school capacities to the period 2011.

The School Board advises that a minimum of 300 children is required to open a new elementary school with an elementary school having a capacity approximately 500 students. A secondary school would require 350 grade 9-10 students to open a new school and secondary school capacities are typically between 1300-1500 students.

Based on a preliminary assessment of yields, the YRDSB advises that depending on the actual ppu/tenure, students generated from the proposed residential units could potentially be accommodated at existing schools in the area. If enrolment decline occurs at the elementary schools in the Yonge/Steeles area, then new development would help to sustain a viable enrolment. It was also suggested that students generated by some developments along Yonge Street could also potentially be accommodated at Thornhill Public School in Vaughan depending on the capacities and enrolments at the time of occupancy.

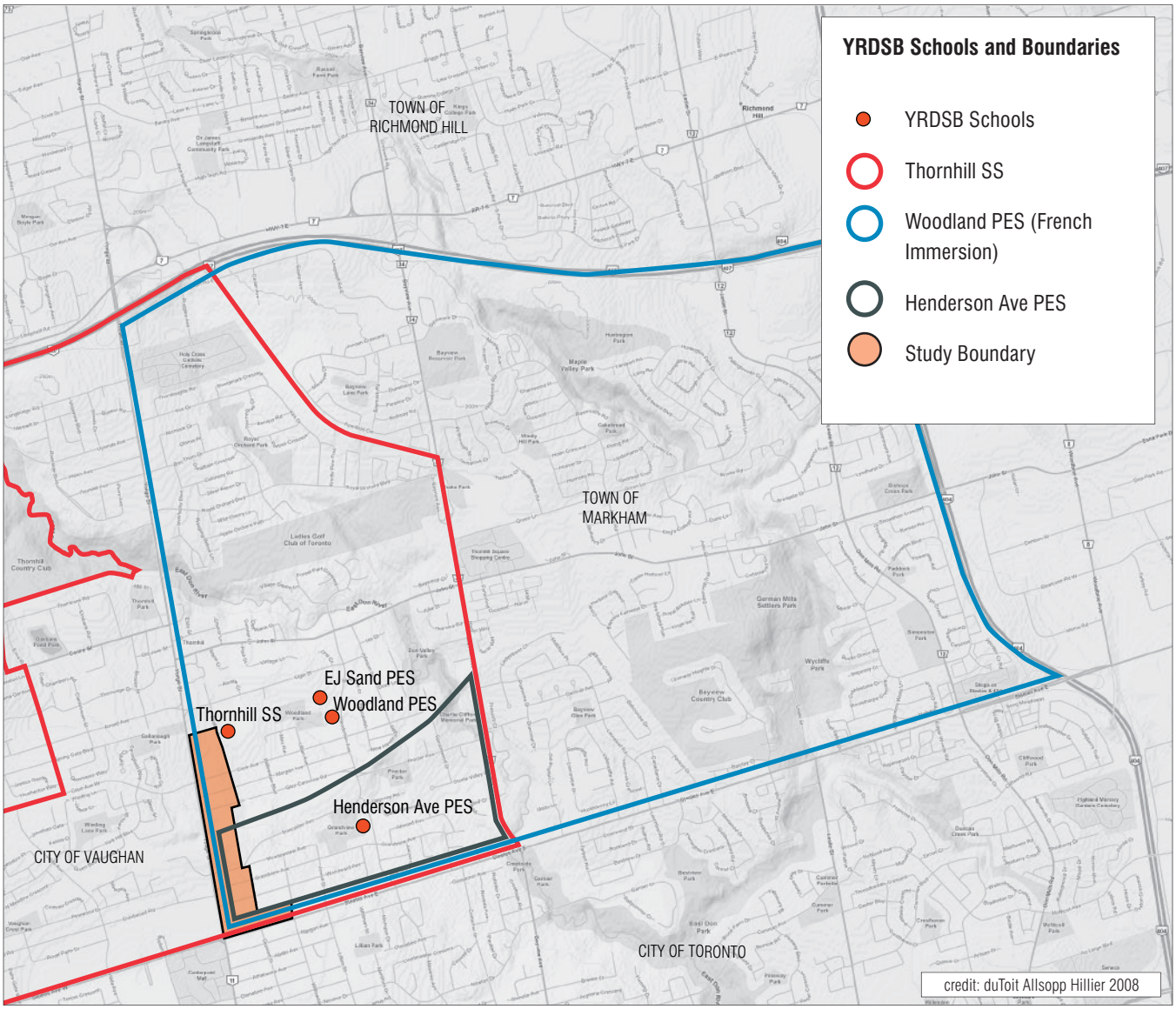
A3.2 York Catholic District School Board

The Thornhill Community planning area boundaries are also used by the Catholic board for projection purposes. This planning area is served currently by three elementary schools and one secondary school as shown in **Table 3.2** and the servicing boundaries are shown in **Figure 3.2**.

St. Rene Goupil-St. Luke is the school serving the Yonge Steeles Corridor Study Area and is currently under capacity. However it is expected to exceed current capacity in 2009, and is projected to have an enrolment of approximately 240 students by 2016.

Table 3.1 YRDSB Servicing Schools

Name	Address	Phone	Enrolment/Capacity
Thornhill PSS (gifted 9-10)	167 Dudley Avenue	905-889-5453	1,277/1,014 10 portables
E.J. Sand PES	160 Henderson Avenue	905-889-2753	351/332
Woodland PES (French Immersion)	150 Henderson Avenue	905-889-4910	286/236 4 portables
Henderson Avenue PES (gifted 4-8)	66 Henderson Avenue	905-889-3132	391/274 3 portables



source: York Region District School Board
image credit: Google.com

Figure 3.1: Servicing Schools - York Region District School Board

Table 3.2 YCDSB Servicing Schools

Name	Address	Phone	Enrolment/Capacity
St. Anthony ES (PACE)	141 Kirk Dr., Thornhill, L3T 3L3	905-889-7420	288/337
St. Michael Academy ES (Arts)	41 Simonston Blvd., Thornhill, L3T 4R6	905-889-4816	394/233 6 portables
St. Rene Goupil-St. Luke ES	135 Green Lane Thornhill, L3T 6K7	905-881-2300	197/219
St. Robert CHS	8101 Leslie St., Thornhill, L3T 7P4	905-889-4982	1445/1104 13 portables plus a 12 classroom Port-a-Pak
St. Luke Learning Centre (Adult Education)	160 Dudley Ave., Markham, L3T 2E6	905-889-3882	Not applicable

The schools within this area have experienced an enrolment decline due to their location within maturing, established communities and a changing demographic make-up. Enrolment has been sustained through special programs (PACE and Arts Programs). From an accommodation perspective, the Board recommends that no additional pupil spaces be added to this review area. However, it should be noted that in October 2006, approximately 300 students or over 30% of the elementary students attending schools in the Thornhill Community lived outside of the area.

The overall projected enrolment of the Thornhill Community to the year 2016 is 753 students marginally below the capacity of 789 students. Currently, all of the children from the Yonge Steeles Study Area are bussed to St. Rene Goupil/ St. Luke.

Bussing policy with the Catholic board provides for bussing of students within the following distances from a school: from JK-grade 3 for a distance over 1.2 km; grades 4-8 over 1.6 km; and over 4.8 km for grade 9-12.

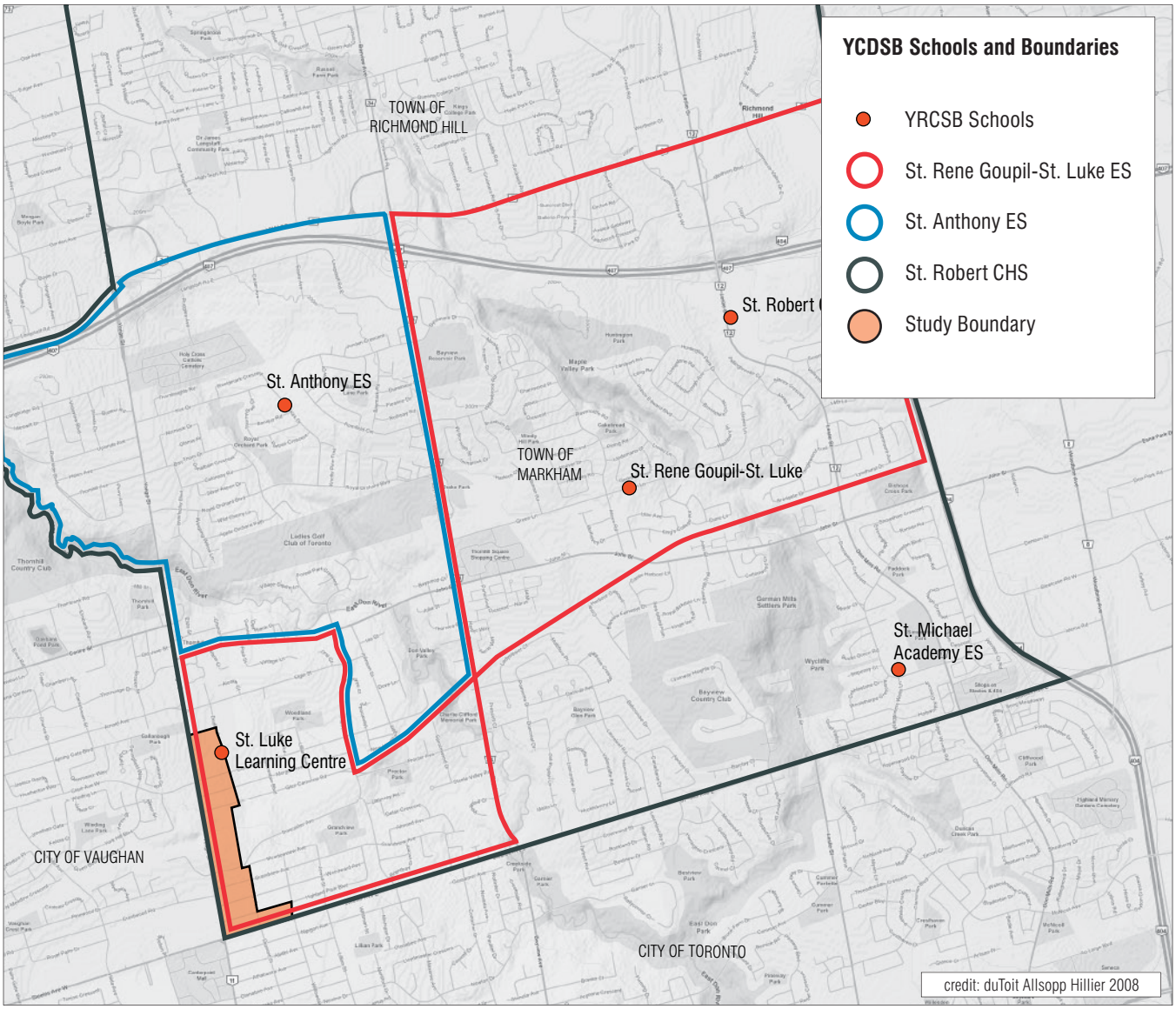
The Catholic high school for the Thornhill Community, St. Robert, is located on Leslie Street just south of Highway 407. The review area has experienced an enrolment decline in recent years as a result of a maturing, established community and the opening of other nearby schools. The International Baccalaureate and ESL are specialized programs offered at St. Robert. Currently students within the southern portion of Richmond Hill are being accommodated in this school. The opening of the new school in Richmond Hill will affect enrolment. There is currently a 12-Pak and 13 portables at St. Robert which effectively increases the pupil capacity of the facility to 1,356. Looking ahead, it would appear that the projections anticipate the enrolment peaking in 2008 to 1,468 students and declining to 1,161 students by 2016.

Based on the assumed population projections for the Yonge Steeles Study Area, the YCDSB estimates a generation of approximately 115 Catholic elementary students and approximately 85 secondary students. These student counts are based on existing yields from the Thornhill Community. As the Board notes, these yields have the potential to be positively influenced by a number of factors including the size and price points of the units, enhancements to public transit routes along the Yonge Street corridor and future immigration patterns in the area. The Board will review applications as they are submitted to determine area needs in terms of future enrolment projections and assess this in light of the current planning areas, programs and yields. It would generally appear with the projected declining enrolment patterns, that the school yields for the Yonge Steeles Corridor redevelopment will be able to be accommodated in the existing Thornhill Catholic Schools at least over the mid-term.

A3.3 Summary

Using the pupil yields given by the YCDSB the development of the corridor could generate at approximately 115 Catholic elementary students and approximately 85 secondary students. Although the YRDSB has not provided yield figures, there are usually 2 public school students for every Catholic school student so that total students generated from the development is estimated at 345 elementary students and approximately 255 secondary school students. School thresholds can be altered based on a number of things including administrative boundaries, programming and various capital improvements that can increase physical capacities of facilities. In addition, bussing is also an option either short or long term where facilities may exceed capacities at local schools. Given the generally declining enrolments within the Thornhill area with the aging population, it is anticipated that students generated over the planning period will be able to be accommodated within area schools.

The respective school boards will have to monitor yields and capacities at a time closer to occupancy of individual projects and as development applications are circulated. It is recommended that the Town acquire any surplus schools in the area, such as St. Luke, so that the property remains in public ownership in order to determine if additional schools or other publicly accessible community services and facilities or institutions are need to be accommodated over the long term.



source: York Catholic District School Board
image credit: Google.com

Figure 3.2: Servicing Schools - York Region Catholic School Board

4.0 Libraries

Libraries by municipality within and near the Context Study Area are depicted in the following table. Two of the six library branches in Markham are located within or close to the Context Study Area including the Thornhill Centre Community Library adjacent to the Thornhill Community Centre on Bayview Avenue and the Thornhill Village Library just east of Yonge Street at Colborne Street.

4.1 Markham Libraries

The provision plan is designed to provide a standard of 600 sq. ft. of library space per 1000 residents or .6 sq. ft. per capita. The Library Board has endorsed an enhancement program to the Thornhill Centre Community Library over the short term (1,000 sq. ft. expansion proposed in 2006). The Thornhill Centre Community Library is a 23,000 sq. ft. facility including over 132,000 books and audiovisual materials. It also includes an auditorium for rental use and a black and white photocopier. Services include a new and improved computer lab with internet and online database access, CD-ROM workstation, CNIB Library access, interlibrary loan, internet search services and electronic databases, programs for children and adults and shut in services provided by volunteers. The proposed enhancements to the library have not occurred as yet, but involve a reorganization of existing space, which will enhance the capacity of the library and provide 4 study rooms that will also be available as rental rooms.

The Thornhill Village Library is a much smaller facility or approximately 3,190 sq. ft. with about 30,000 books and audiovisual materials in the collection and includes access to a black and white photocopier. Other services include CNIB Library access, interlibrary loans, internet search service and electronic databases and shut in services.

4.2 Vaughan Libraries

On the Vaughan side of the context area there is one small resource library the Gallanough Resource Centre. The facility is owned by the City and the library is operated by a board of community volunteers on a non-profit basis. The collection includes approximately 35,000 items including books and movies and had a circulation of over 26,000 people in 2006.

4.3 Toronto Libraries

The North York Central Library is a Research and Reference Library located in the City of Toronto to the south on Yonge Street within easy access of the Study Area. The library is over 168,000 sq. ft. with a collection size of over 524,000 materials. Services and facilities are extensive and include a Computer Centre for children with 9 terminal, 104 internet workstations, seating for 774, 11 workstations at the Learning Centre, language lab, piano practise room and enclosed study booths among others. Collections and programs include literacy and youth programs and multilingual collections in many languages for both children and adults. The auditorium has a capacity of 125 including overhead projector and piano. There are two additional rental rooms with a seating capacity of 80 and 60 respectively and there is also a fully equipped kitchen.

Table 4.1 Area Libraries

Name	Address	Phone Number
Thornhill Centre Community Library	7755 Bayview Avenue Markham, L3T 4P1	905-513-7977
Thornhill Village Library	10 Colborne St., Markham, L3T 4P1	905-513-7977
Gallanough Resource Centre	1 Brooke St., Vaughan	905-881-2828
North York Central Library	5120 Yonge St. Toronto, M2N 5N9	416-395-5535

5.0 Child Care

Licensed child care is available in the three municipalities as depicted in **Tables 5.1, 5.2 and 5.3**. Capacity and vacancy information is incomplete at this time. The Thornhill Community includes 17 licensed daycare facilities of which all but 3 have subsidization.

Waiting lists for child care subsidies are maintained by the Region of York, while subsidies are determined by the Province. The wait lists for York Region for child care assistance currently exceeds 2,400 children. The wait lists per facility are not an accurate indication of demand as families may put their children on wait lists at several facilities throughout the Region at the same time.

The Region of York, Family and Children's Services has determined that licensed child care is available for about 22% of all children aged 0-12 years with both or lone parents working. This indicates that the majority of children of working parents are cared for outside of the licensed child care system.

The Province of Ontario is responsible for approving and licensing premises at child care facilities and can be contacted through their Central East office in Newmarket (905-868-8900).

The Region notes that the average growth rate in the child population of York Region was approximately 14% between the 2001 and 2006 census. The child population growth in the same time period was much higher in Markham at almost 21%. The study area census tracts are not typical of the overall Markham demographic and indicate more seniors and less children.

The Region estimates that based on current projections of growth to the year 2031 that a minimum of 728 new child care spaces will be required each year in York Region just to maintain the status quo.

Table 5.1 Child Care Centres - City of Toronto

Name	Address	Age Groups	Capacity	Vacancy
Subsidized Licensed				
North Toronto Christian	172 Drewry Ave. 416-221-0401	Preschool	40	
Pleasant	288 Pleasant Ave. 416-733-2280	Preschool, School Age	65	None
St. Paschal Babylon	15 St. Paschal Crt. 416-733-2280	Preschool	20	11
Kaleidoscope	1087 Lillian St. St. Patrick's Anglican Church 416-226-1380	Toddler, Preschool, School Age	73	11
Non-Subsidized Licensed				
Toronto French Montessori	53 Cummer Ave. 416-250-9952	Preschool	48	
Tiki's Day Care	20 Tangreen Crt. 905-889=9252	Toddler, Preschool	47	

Table 5.2 Child Care Centres - Thornhill Community, Markham

Name	Address/Phone	Age Groups	Capacity	Vacancy
Subsidized Licensed				
Advanced Learning Day Care	8403 Yonge Street 905-889-8898	Infant, Toddler, Pre-school, School Age	150	None
Baythorn Childcare Centre	201 Baythorn Ave. 905-889-7436	School Age	30	
Stornoway Child Care	Stornoway Cres. PS 36 Stornoway Cres. 905-707-6805	Preschool, School Age	76	None
Le Club Child Care	E.J. Sands PS 160 Henderson Ave. 905-881-8585	School Age	30	
Le Club Child Care	Woodland PS 150 Henderson Ave. 905-881-8585	School Age	55	
Johnsview School Age Program	Johnsview Village PS 41 Porterfield Cres. 905-881-8904	School Age	24	
Thornhill Child Care Centre	7755 Bayview Ave. 905-881-3129	Toddler, Preschool, School Age		
Willowbrook School Age Program	Willowbrook PS 45 Willowbrook Ave. 416-300-4444	School Age	28	
St. Rene Child Care	135 Green Lane 905-889-1627	Preschool, School Age	78	7
Bayview Fairways B & A School Program	255 Bayview Fairways Dr. 905-881-3129	School Age	30	
Flowervale Children's Academy	35 Flowervale Rd. 905-7470709	Preschool, School Age	23	4
German Mills Children's Academy	German Mills PS 61 Simonston Blvd. 905-709-3484	Preschool, School Age	54	
Lyndhurst Day Nursery	1 Lyndhurst Dr., 905-886-7455	Infant, Toddler, Preschool	51	2
Rocking Horse Day Nursery	21 Guardsman Road 905-764-3933	Infant, Toddler, Preschool, School Age	99	
Non-Subsidized Licensed				
Doncrest Early Learning Centre	300 Steeles Ave. East, 905-889-2353	Preschool	48	10
Temple Har Zion Nursery School	7360 Bayview Avenue 905-889-2252 ext. 231	Preschool		
Torah Tots Nursery	83 Green Lane 905-886-0420	Preschool		

Table 5.3 Child Care Centres - City of Vaughan

Name	Address	Age Groups	Capacity	Vacancy
Subsidized Licensed				
Alef-Bet Daycare	7555 Bathurst St. 905-731-2797	Toddler, Preschool	41	4
Loving Care Centre	601 Clark Ave., 905-764-6663	Toddler, Preschool, Kindergarten	80	6
Macklin House Kidzone-Thornhill Public School	7554 Yonge St. 905-472-6201	School Age	30	0
North Meadow Child Care Centre	290 Yorkhill Blvd. 905-889-5270	Toddler, Preschool, Kindergarten, School Age	110	0
Polka Dot Preschool	271 Centre St. 905-370-0014	Toddler, Preschool, School Age	52	3
Rosedale North Childcare Centre	Rosedale Heights PS 300 Rosedale Heights Dr. 905-771-6820	Preschool, School Age	95	0
Thornhill Nursery School and Kindergarten	Thornhill PS 140 Brooke St. 905-889- 453?	Preschool	30	
Vaughan Child Care Centre	501 Clarke Ave. West 905-731-1226	Toddler, Preschool, School Age		
Yorkhill YMCA Childcare	Yorkhill ES 350 Hilda Ave. 905-482-2242	Kindergarten, School Age	50	5
Zareinu Educational Centre of Metropolitan Toronto	7026 Bathurst St. Suite 108 905-738-5542	Preschool		
Non-Subsidized Licensed				
Central Montessori Schools of Thornhill	72 Steeles Ave. 905-889-0012	Toddler, Preschool	250	15
Funtime	300 Atkinson Ave. 416-783-5751	Kindergarten, School Age		
The Rose Schwartz Nursery School	8001 Bathurst St. 905-763-4040	Toddler, Preschool		
Yip's Music and Montessori	8100 Yonge St. 905-881-9333	Toddler, Preschool, School Age	50	10

6.0 Emergency Services

6.1 Police

Police Services to the Study Area are provided through York Region and serviced by District 2, bounded by Steeles Avenue on the south, Bathurst Street on the west, Bloomington Road on the north and Highway 404 on the east. District 2 Headquarters is located at 171 Major MacKenzie Drive W. in Richmond Hill. There is also a Police Community Resource Centre located within Hillcrest Mall at 9350 Yonge Street, Richmond Hill, L4C 5G2.

6.2 Emergency Services

Fire Station 91, operated by Markham Fire, is located at 7801 Bayview Avenue and services the Study Area. In addition Station 92, located at 438 John Street in Thornhill is a joint project, which opened in 2004 between Markham Fire and York Region Emergency Medical Services (EMS) providing both fire protection and ambulance services to the area.

7.0 Places of Worship

There are 7 places of worship located in the Context Study Area within Markham. They are indicated in **Table 7.1** below.

The Town recently completed a Places of Worship Study and Future Policy Directions Report. The background study provides inventories of places of worship throughout the Town by location and denomination.

There are also two places of worship located within Vaughan in the context area as noted in **Table 7.1**.

Table 7.1 Places of Worship

Name	Address	Phone
Markham		
Thornhill United Church	25 Elgin Street	905-889-2131
Temple Har Zion	7360 Bayview Avenue	905-889-2252
Ja'ffari Islamic Centre	7340 Bayview Avenue	905-881-1763
Cham Shan Temple	7254 Bayview Avenue	905-886-1522
Vineyard Christian Fellowship	7771 Yonge Street	905-707-8463
St. Germain Foundation	234 Steeles Avenue East	
St. Volodymyr Ukranian Catholic Church	15 Church Lane	905-889-0187
Vaughan		
Thornhill Presbyterian Church	271 Centre Street	905-889-5391
St. Paschal Baylon Church	92 Steeles Avenue West	905-889-9021
Toronto		
St. Patrick's	1087 Lillian Street	416-225-5151
Korean Mission Church	1087 Lillian Street	416-221-0530
Willowdale Pentecostal Church	288 Cummer Avenue	416-222-1631

Acknowledgements

Town of Markham

Jim Jones, Regional Councillor
Valerie Burke, Councillor, Ward One

Jim Baird, Commissioner, Development Services
Valerie Shuttleworth, Director of Planning & Urban Design
Ronji Borooah, Town Architect
Ron Blake, Manager, Development – West
Elizabeth Wimmer, Senior Planner, Urban Design
Doris Cheng, Planner, West District
Sabrina Bordone, Planner, West District
Murray Boyce, Senior Project Co-ordinator, Policy & Special Projects
Laurie Wheeler, Senior Planner, Policy and Research
Brian Lee, Manager, Development Engineering
Allen Wu, Senior Development Engineer
Prasenjit Roy, Senior Transportation Engineer

Community Working Group

Jerry Ambrozic
Mara Canale
Evelin Ellison
Scott Harris
George Jenkyn
Aphrodite Liaghat
Stephen Lerner
Chi Hing Ma
Larry Martin
Marion Mathias
Nancy Miller
Bill O'Donnell
John O'Gorman
Farah Willison
Rod Snyder
Jeff Stone
Lance Taylor

Steering Committee

Paul Robinson, City of Vaughan
Diana Birchall, City of Vaughan
Paul Byrne, City of Toronto
Mark Chlon, City of Toronto
Richard Hui, York Region
Augustine Ko, York Region
Paul May, York Region
David Clark, York Region Rapid Transit Corporation

Consultant Team

du Toit Allsopp Hillier, Project Lead, Urban Design
- Robert N. Allsopp, Principal, Project Director
- Joe Lobko, Principal
- Brent Raymond, Project Manager
- Gerardo-Paez Alonso
- Tayna Brown
- Edward J. Martin
- James Twine

Butler Group Consultants Inc., Planning and OPA
- David Butler
- Susan Kier

UMA|AECOM, Servicing and Transportation
- George Horning
- Bryan Larkin
- James Bacchus
- Bryan Avison
- Seymore Gan

N. Barry Lyon Consultants, Real Estate
- N. Barry Lyon
- Mark Conway

DTAH urban design | landscape architecture

du Toit Allsopp Hillier
50 Park Road
Toronto, Ontario M4W 2N5
t. 416.968.9479
f.416.968.0687
www.dtah.com