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Markham Built Form, Massing and Height Study

DSC Meeting
December 14 2009

Consulting Team

Sweeny Sterling Finlayson & Company Architects Inc - "&Co Architects" + GHK International

www.andco.com

Study Purpose.

- We first presented to you on April 14, 2009, then May 26, 2009
- We were hired to provide visual and policy tools to help Town Staff, Council and residents understand what built form could result from intensification objectives of the Growth Management Study.
- The study creates consistent, predictable, generic built form guidelines for areas that are not currently subject to other specific planning controls and to form the foundation for future area studies.

Context Discussion.

- Markham is undertaking a Growth Management Strategy (GMS)exercise. Part of the exercise is to create a better link between the overall GMS and a series of studies within a stronger policy context than currently exists.

- To accomplish this, Markham has to determine how it will grow over the next 25 years in order to determine what Future Markham will look like.

- This study assists in visualizing the intensification component of the Growth Management Strategy, and creates related built form guidelines that control and guide that growth using “best practices” and site testing.

- Markham will be revising their Official Plan, and area Secondary Plans and Zoning Bylaws in order to ensure conformity with the GMS

Study Outcome.

- As a “guideline”, this is a non-statutory document intended to inform public and focused future amendments undertaken by the Town
- This study will inform the necessary and statutory Official Plan, Secondary Plans, and Zoning By-laws revisions that will occur as a result of intensification, and can also form the basis of detailed Urban Design Guidelines for different intensification areas.
- We have “jumped ahead” of these revision processes by using 5 test sites to determine likely and recommended layouts of these areas
- This work can also be used as a negotiation tool or discussion item for future applications until the statutory amendments are made

Study Content and Structure.

We have produced a draft report called “Markham Built Form, Height and Massing Study: Built Form Principles”. The report is structured around several key principles.

Each development area will be assessed with respect to these key principles.

1 - Public Realm

2 - Streets and Blocks

3 - Building Location

4 - Built Form

5 - Tall Buildings

6 - Transition

7 - Parking and Loading

8 - Heritage

9 - Implementation

Demonstration Sites

In consultation with Town Staff, we investigated 5 sites that are representative of the larger community, and where intensification is directed in Markham:

- Markville(Key Development Area)
- Yonge-North (Key Development Area)
- Milliken (Local Centre)
- Cornell Centre (Key Development Area)
- Markham Centre (Urban Growth Centre)

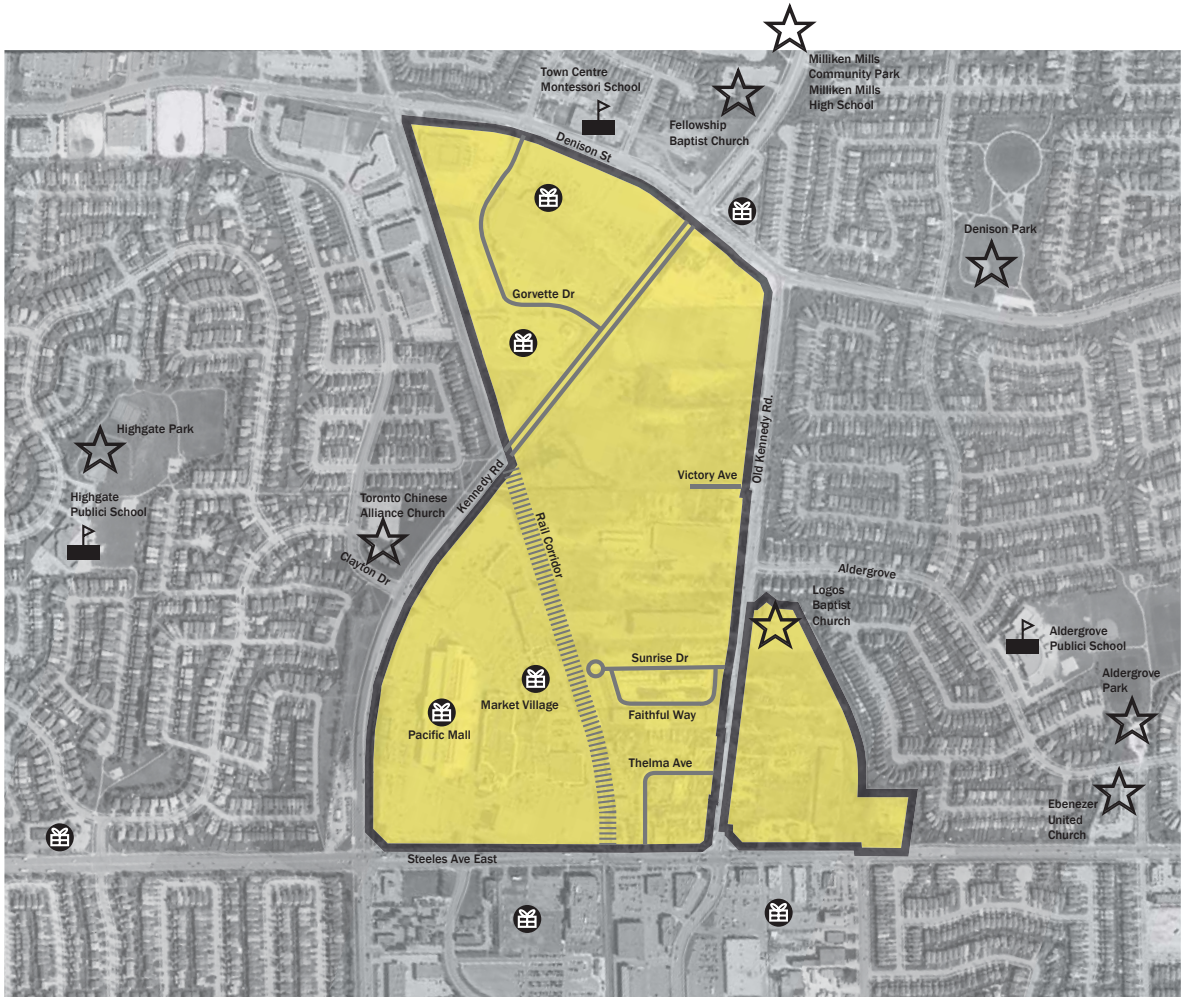
These site tests help us understand the general and individual considerations for each area and generate appropriate principles and tests to watch for.

We've done an initial assessment of study areas, major connections, intersections and special transition areas.

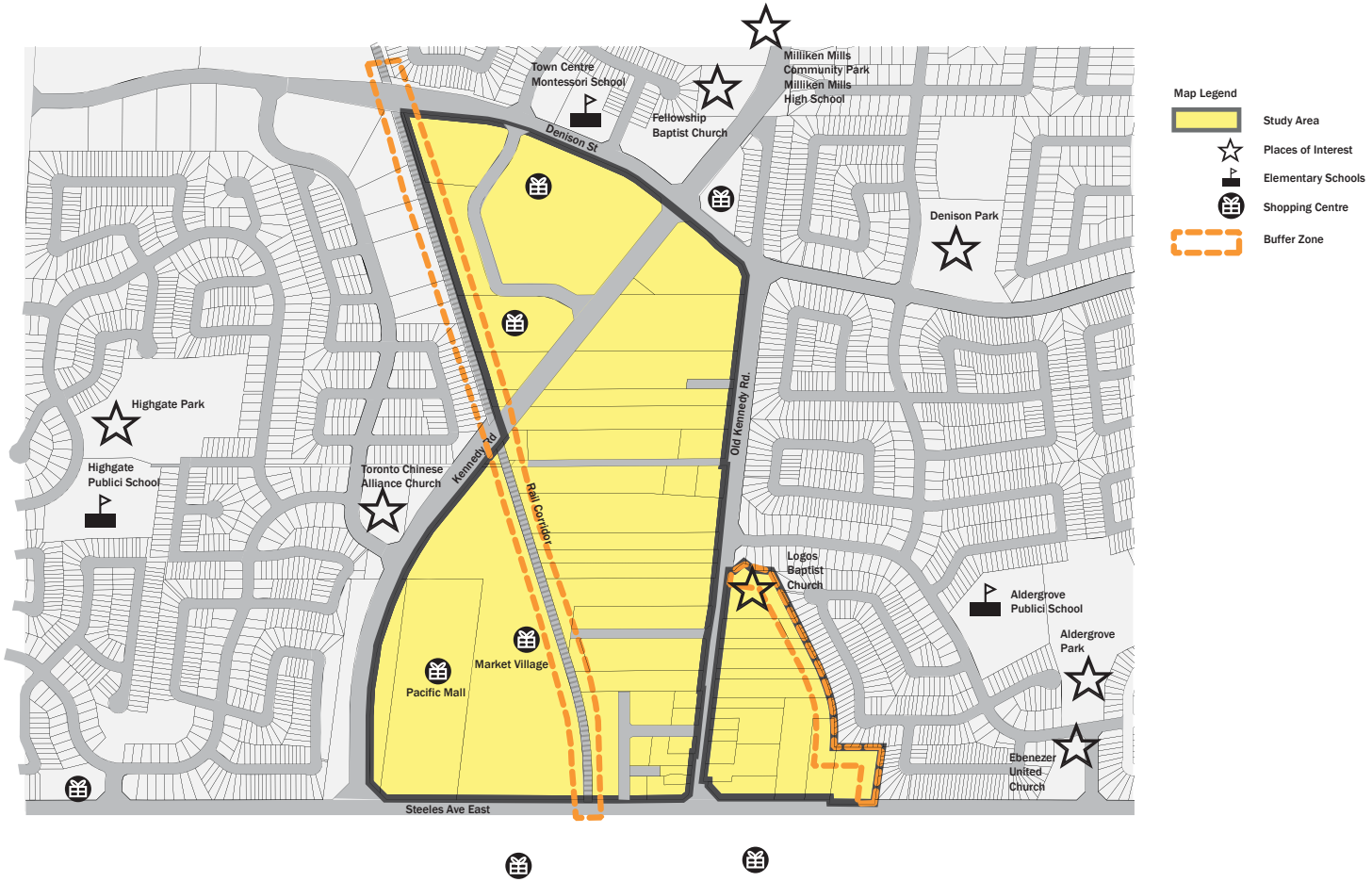
Demonstration Sites

We've used "Milliken" as a case study to present today in terms of applicability of the guidelines.

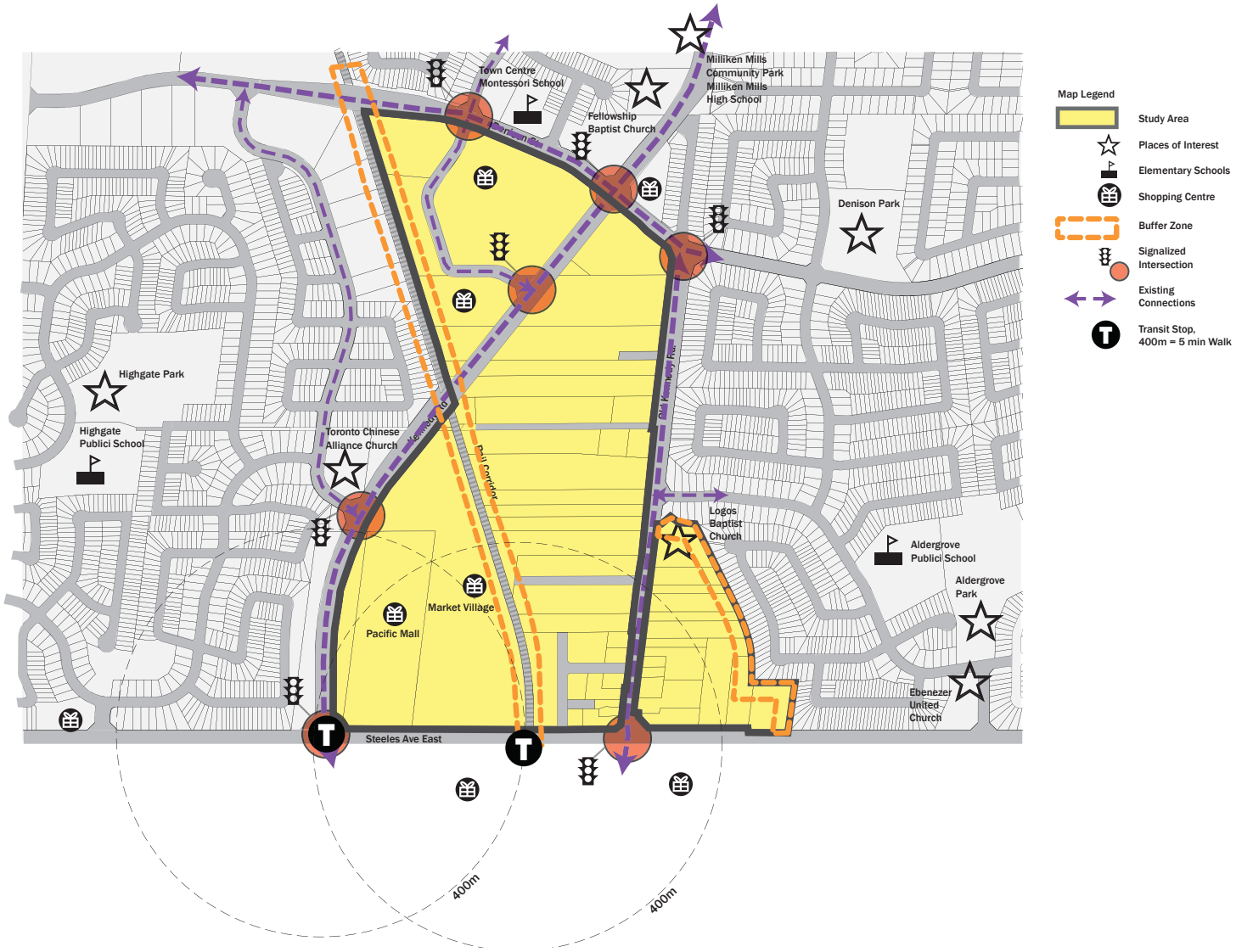
We will show how we conceptualized a plan plan for how the lands might develop when thought of comprehensively, and then how that informed the formulation of guidelines for general intensification.



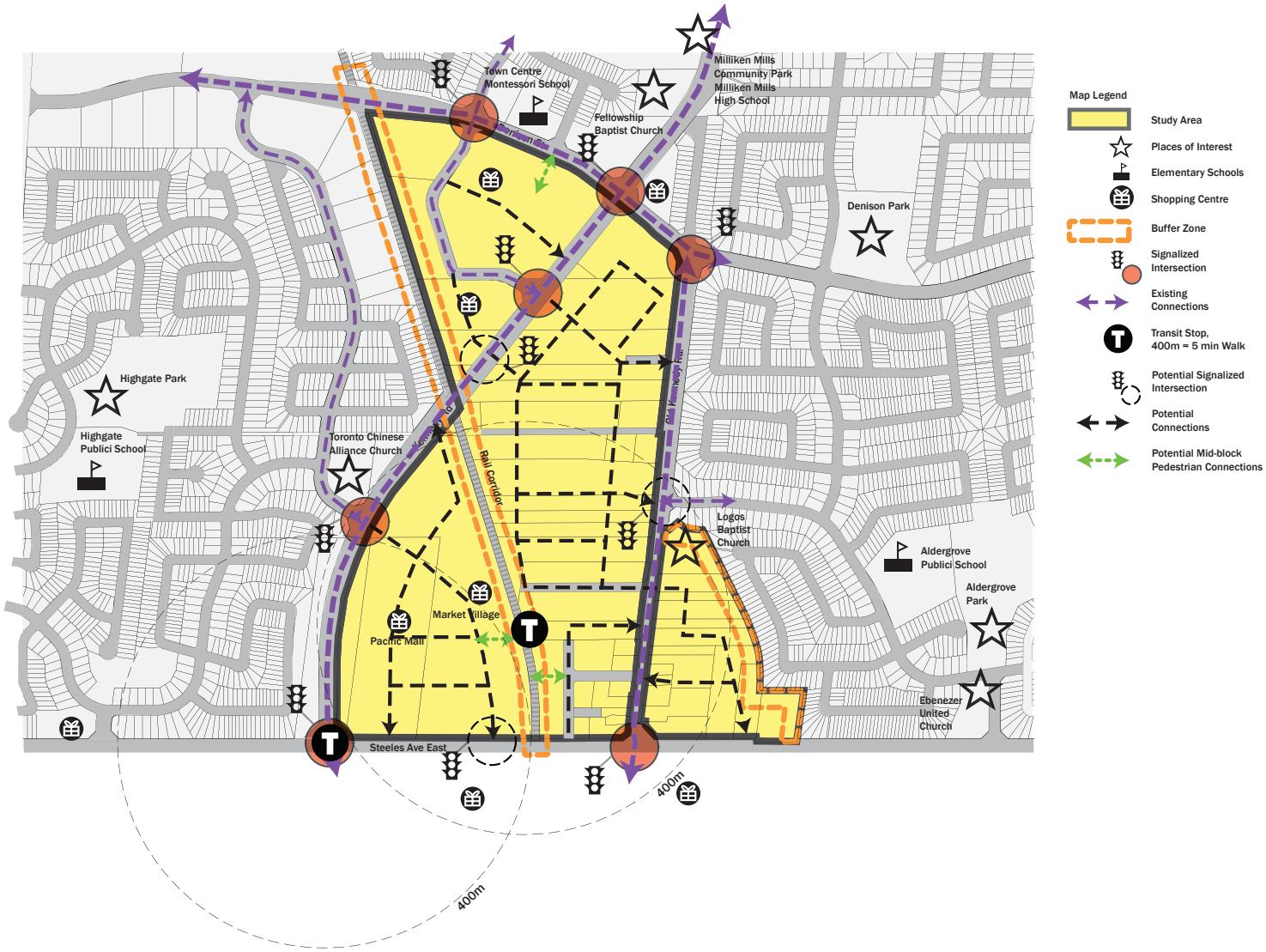
Milliken Centre



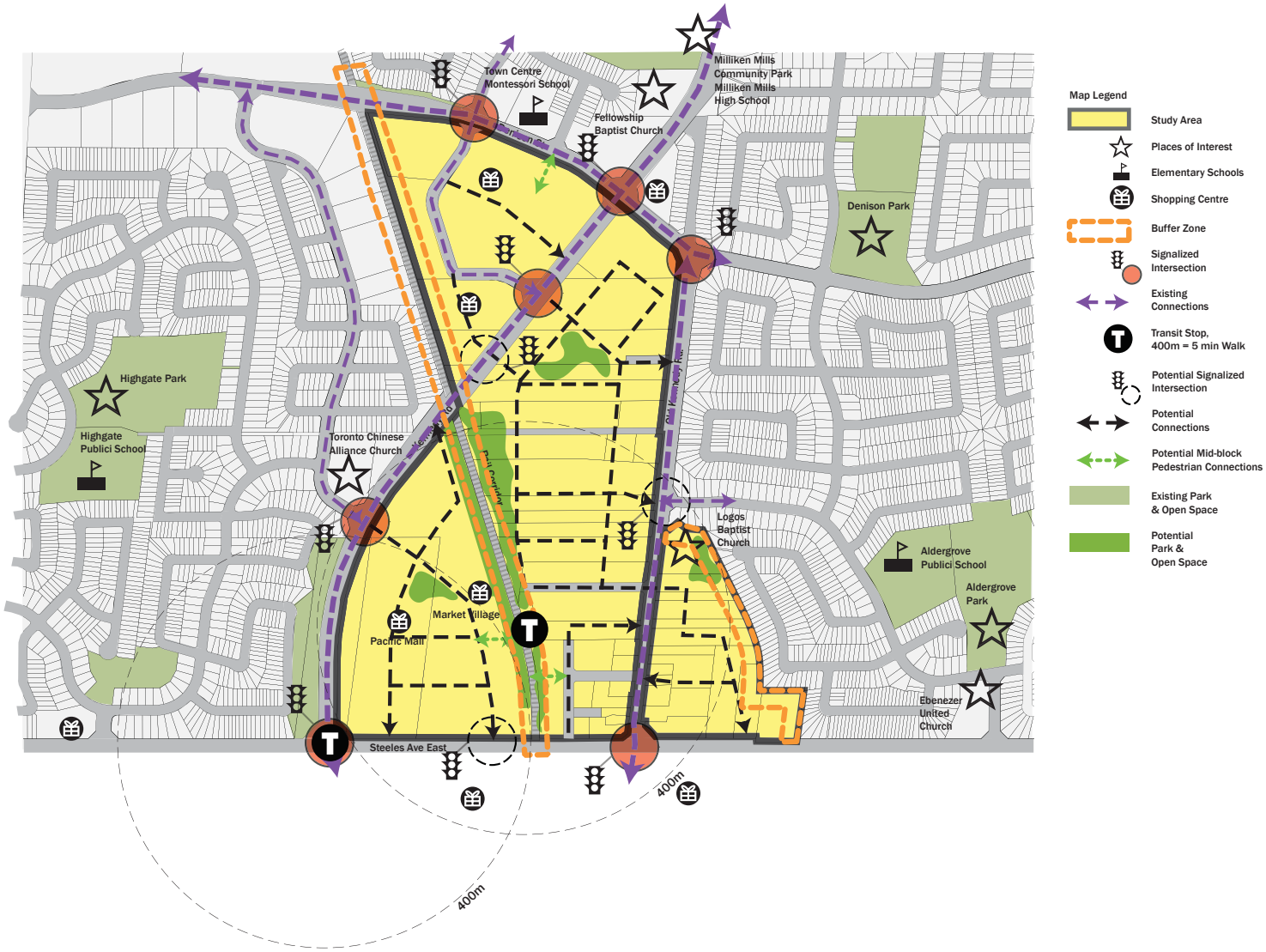
Milliken Centre



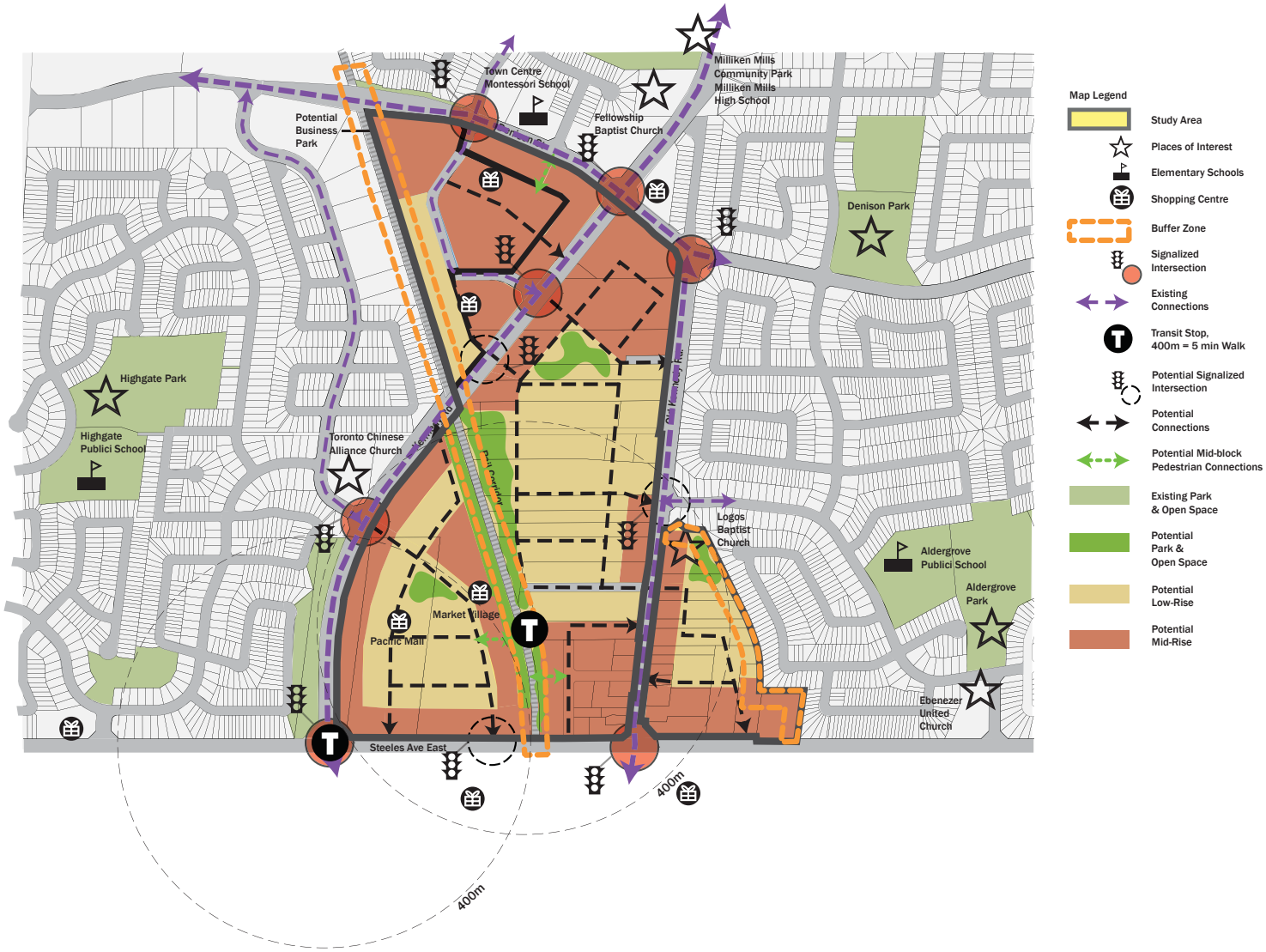
Milliken Centre



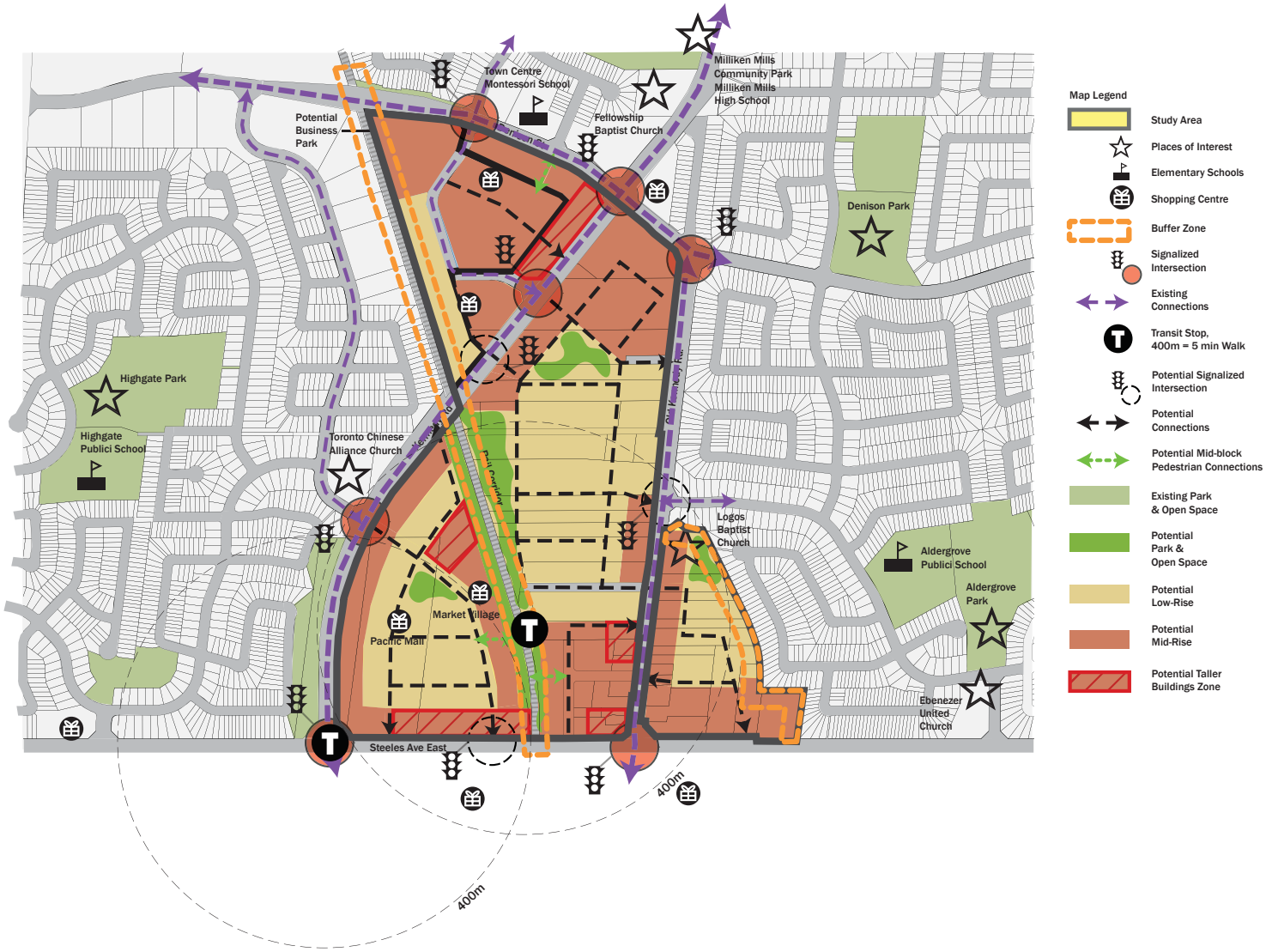
Milliken Centre



Milliken Centre



Milliken Centre



Milliken Centre

Lessons Learned:

- Phasing the demolition of existing built form and new development - this ensures that existing buildings remain active while new buildings are constructed and inhabited incrementally
- Connection of collector roads accros main streets
- Designation of park space in irregular areas within a block structure
- Designation of railway crash zone for park, structured parking, or non-residential buildings
- Designation of large irregular parcels for business-park and industrial uses
- Retention of existing employment uses

Other Demonstration Site Locations

- Markville
- Yonge North
- Markham Centre
- Cornell Centre

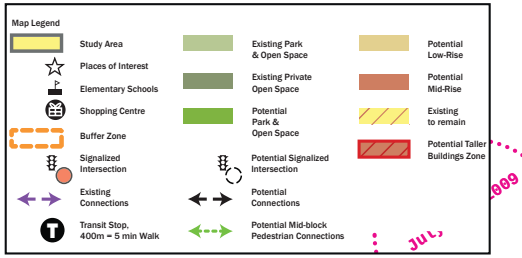
Markville Mall

Test Sites

Markville, Highway 7 & McCowan Road

Lessons Learned:

- Phasing the demolition of existing built form and new development - this ensures that existing buildings remain active while new buildings are constructed and inhabited incrementally
- Designation of a buffer zone in areas adjacent to existing single-family residential sites.
- Designation of park space in irregular areas within a block structure
- Designation of railway crash zone for park, structured parking, or non-residential buildings
- Commercial uses on east side of McCowan will require some lot consolidation
- Tall buildings can be designed in multiple locations with minimum impact on existing neighbourhoods.

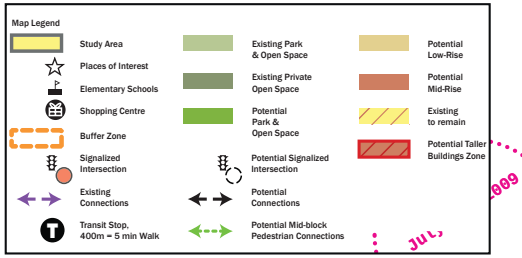


Yonge North

Test Sites
Yonge North, Yonge Street

Lessons Learned:

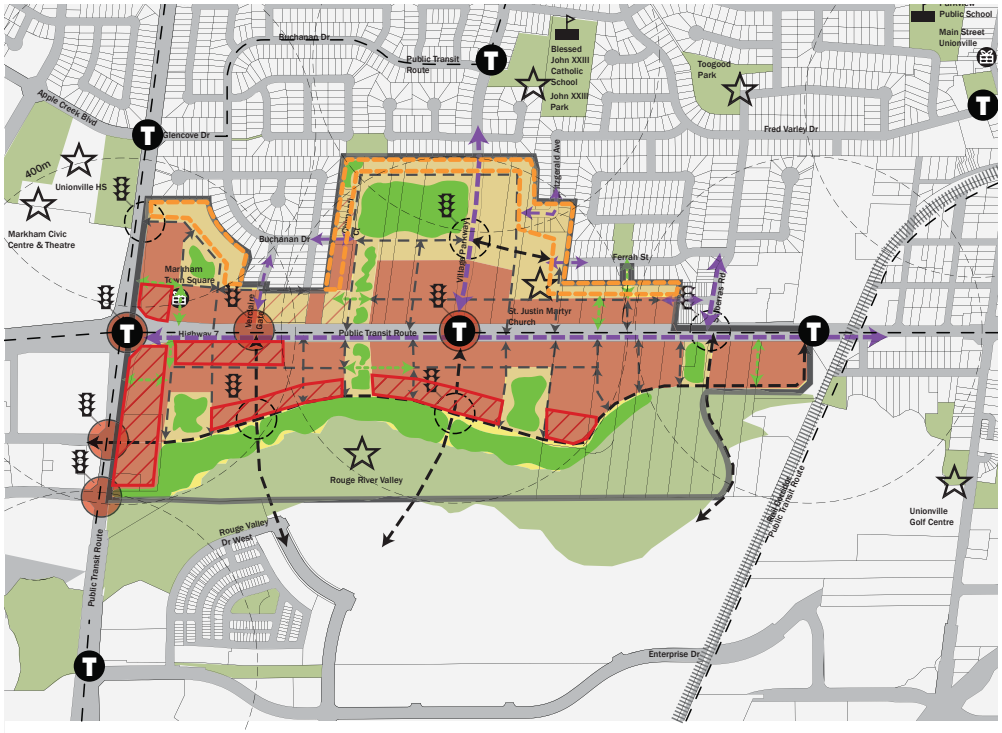
- Coordination between adjacent Municipalities
- Enforcement of transition strategies to accommodate high densities within a narrow development zone, adjacent to existing single-family neighbourhoods
- Designation of a buffer zone in areas adjacent to existing single-family residential sites.
- Connection of collector roads accros main streets
- Integration of existing high-rise into new development
- Subdivision of large irregular blocks with access lanes
- Land exchange between owners of existing and proposed development to create publicly accessible open space



Markham Centre

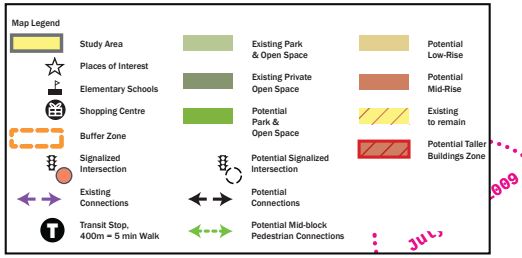
Test Sites

Markham Centre, Warden Avenue & Highway 7



Lessons Learned:

- Designation of a buffer zone in areas adjacent to existing single-family residential sites
- Enforcement of stringent transition strategies to existing single-family neighbourhoods
- Connection of collector roads accros main streets
- Co-location of schools with park space
- Connection of proposed parks; integration with existing ravine systems



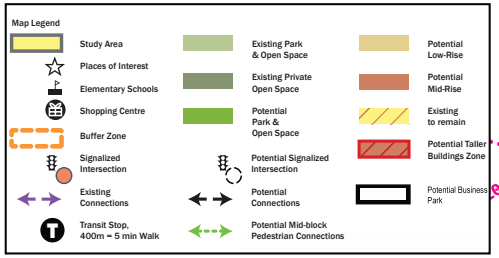
Cornell Centre

Test Sites

Cornell Centre, Highway 7 & 9th Line

Lessons Learned:

- Connection of collector roads accros main streets
- Designation of a buffer zone in areas adjacent to existing single-family residential sites
- Tall buildings can be located next to large open spaces.



Understanding the Guidelines

how to read the guidelines.

We've tried to set up the Guidelines so that they are visually compelling, easy to understand and helpful in describing the intended consequence.

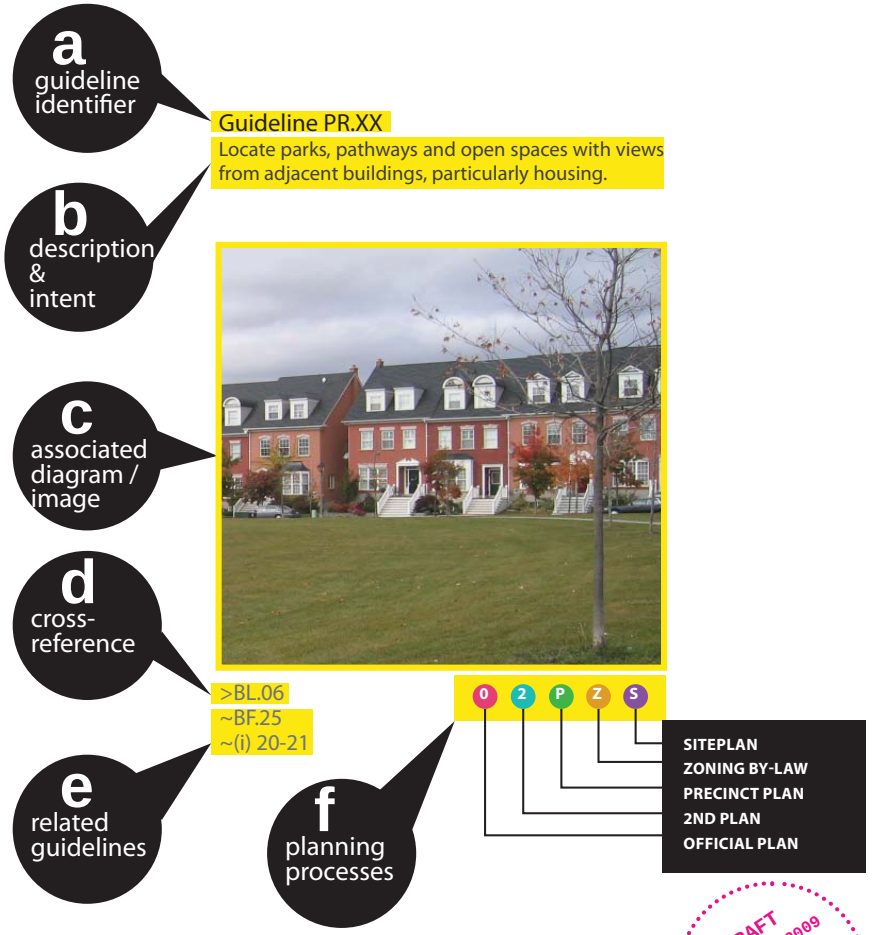
This document is non-statutory. It is not intended to be a zoning by-law. It is intended to inform developers, Town officials, staff and residents on the ways in which future intensification can best achieve community and municipal goals.

The Guideline document is meant to be read in its entirety (including Appendices). It explores a variety of scenarios that are anticipated within the Intensification Areas identified in Appendix B, and to provide guidance on how best to respond to specific conditions.

Each guideline has a section-specific identifier. The guidelines are usually accompanied with a photo or diagram which helps to clarify the intent.

Some guidelines are cross-referenced (see bullets d and e, right). These references are found beneath the photo or diagram, indicated with the symbol ">" (directly related) or "~" (indirectly related). Some guidelines are tagged with the symbol "(i) ", which points to sections in the document that describe certain issues in more detail. Each guideline is referenced with the applicable planning process(es).

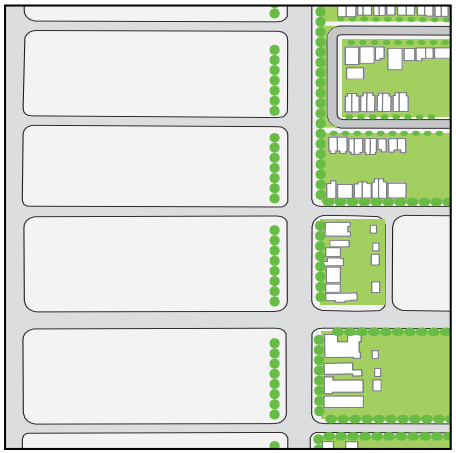
In situations where there is conflict between applicable *Key Principles*, the more prescriptive guideline(s) should be followed.



Streets and Blocks

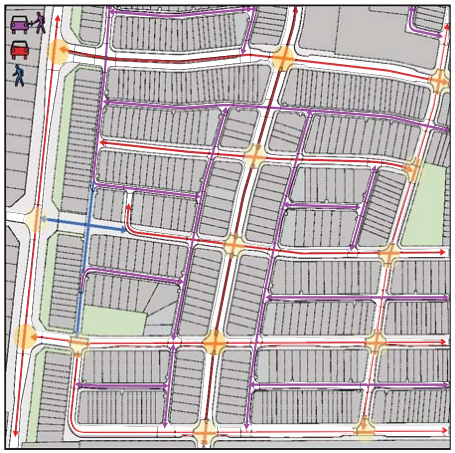
Key principles
Streets

Guideline SB.01
Align local streets on either side of major arterials to allow for future crossing points and connectivity between neighbourhoods. Avoid dead-end streets and culs-de-sac, which isolate parts of the neigbourhood and fragment pedestrian movement.



0 2 P S

Guideline SB.02
Develop a fine grain street grid, which offers choices for pedestrian and vehicular movements, and creates more intersections for passive traffic control.



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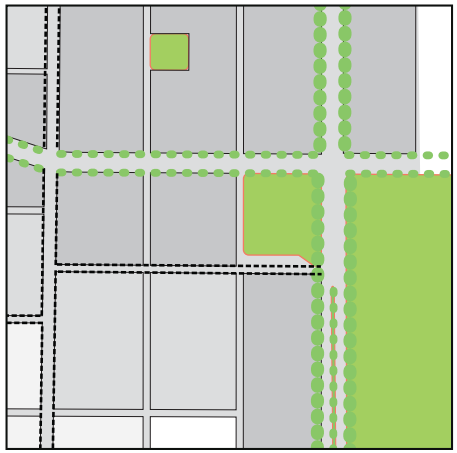
Guideline SB.03
Use streets to define parks and public open space. This stimulates public access and promotes security within the park.



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>PR.05
~BL.06

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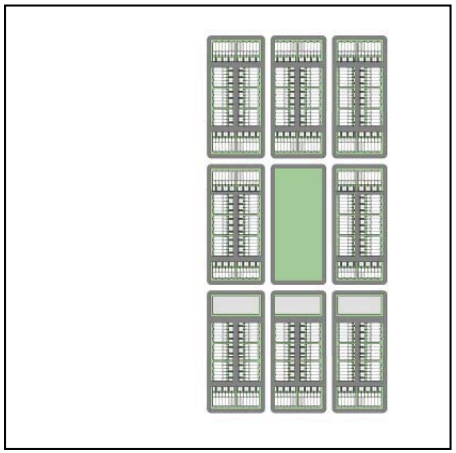
Streets and Blocks

Streets and blocks.
Blocks

Guideline SB.14
A variety of open space configurations is anticipated in new Markham neighbourhoods. Where possible, plan for park spaces to be surrounded by streets to facilitate public access and surveillance. Avoid creating parks adjacent to the rear yards of existing or proposed development.



>PR.05
~PR.15

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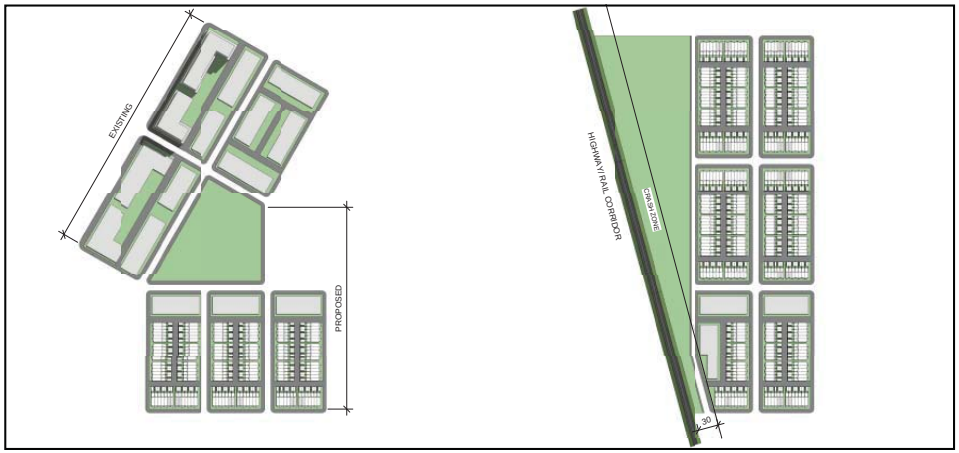
Guideline SB.15
Where appropriate, design park space as a transition zone in areas where there is a shift in the street and block grid, or where other irregular geometries are formed.



~PR.15

2 P

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Building Location

Key principles

Guideline BL.01
Coordinate building setback with adjacent properties. Consistent setbacks will help create a uniform street edge.

~APPENDIX A -RETAIL p80 0 2 P Z S

Guideline BL.02
Locate building entrance(s) on the street edge to encourage security and public activity at street level.

~APPENDIX A -RETAIL p80 0 P S

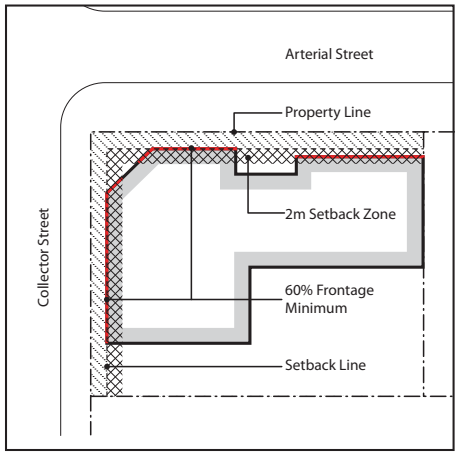
Guideline BL.03
On a corner lot, design the building to front onto both streets, to maximize views and maintain an animated street edge.

~APPENDIX A -RETAIL p80 0 P S

Built Form

Built form.

Guideline BF.04
Establish build-to requirements for buildings facing arterial and collector streets. This may be desirable on local streets in some circumstances.



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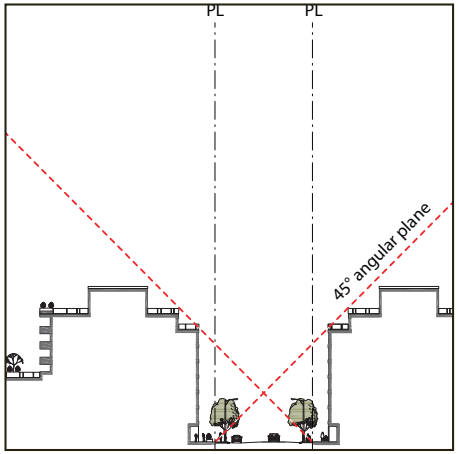
Guideline BF.05
Mid-rise buildings and mid-rise podiums with taller buildings above, are those which range from 4 to 8 storeys. Building or podium height depends on the correlating street relationship and scale desired.

~APPENDIX A -RETAIL p80 O 2 P S

Guideline BF.06
On streets defined by mid-rise buildings, or mid-rise podiums with taller buildings above, the proportion of height to street width for the mid-rise building or podium should not exceed a 1:1 ratio. This scale creates a comfortable pedestrian environment in an urban neighbourhood. Building mass above the eighth storey should be set back from the edge of the mid-rise podium. In special conditions and subject to aspecific public realm approach, other lower ratios may be appropriate.



>TB.01 O 2 P Z S

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Tall Buildings

Key principles

Guideline TB.01
In residential developments, set back tall buildings from the street edge. Locate low-rise building edges to define the street.

>BF.06

P Z S

Guideline TB.02
Within the general approach to block dimensions described in SB.10, SB.11, SB.12, generally limit the distribution of tall buildings to one tower per block. This will allow views and sunlight onto adjacent open spaces and streets, and allow for skyview and a comfortable pedestrian realm.

~PR.01
~SB.10
~SB.11
~SB.12

P Z S

Guideline TB.03
Design tall buildings to minimize shadows cast on public open spaces. Town to define the terms through Official Plan or Zoning By-law.

~PR.01
~PR.06

O Z

Transition

Key principles
Existing Low-Rise Residential

Guideline TR.01
Where new development is adjacent to the back yards and shared property lines of existing single-family or other low-rise residential neighbourhoods, provide a matching block depth that will accommodate a similar low-rise built form, ranging from 2 – 3 storeys where possible. This would allow for the creation of new single detached, semi-detached, duplexes, triplexes, and townhouses forms, and generate frontage on a new or existing street, such that a backyard – backyard relationship is created.

2 P S

Guideline TR.02
Where new development is proposed opposite an existing low-rise residential neighbourhood, provide a sympathetic low-rise built form, ranging from 2- 4 storeys. This allows for single detached, semi-detached, duplexes, triplexes, townhouses, stacked townhouses and 4-storey apartment forms to face the existing residential context across a street.

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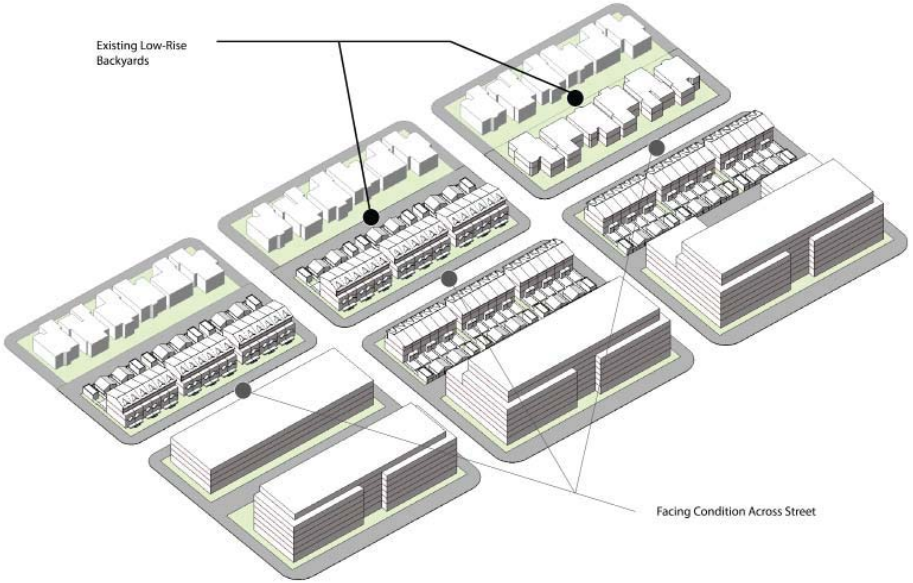

Diagrams showing options for transition from new main street mid-rise forms to an existing low-rise neighbourhood.

>SB.04

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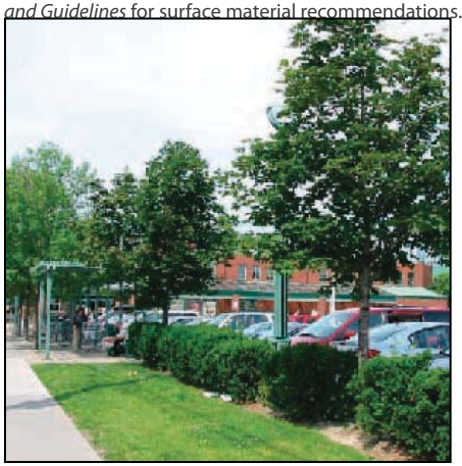
Parking and Loading

Guideline PL.01

Where surface parking is permitted, locate lots to the rear of buildings to maintain consistent street frontage. Any surface lots should be adequately screened. Examples of permitted surface parking are visitor parking areas and lots associated with public facilities. Refer to *Markham Sustainable Development Standards and Guidelines* for surface material recommendations.



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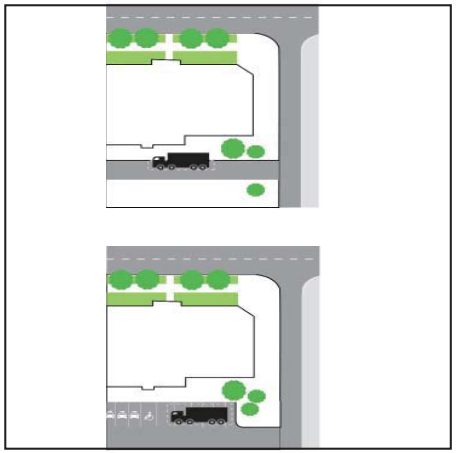
Guideline PL.02

Do not locate access to loading areas directly off of primary streets.



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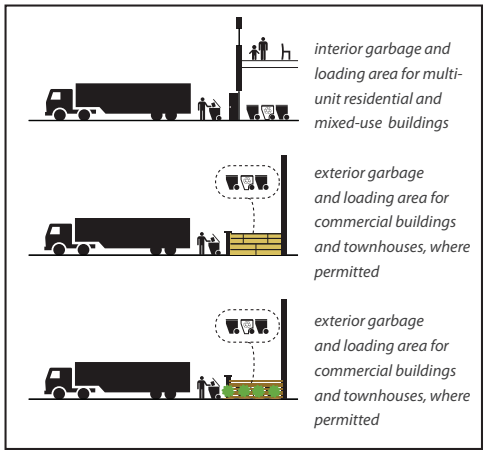
Guideline PL.03

Provide loading, garbage, and recycling areas within multi-unit residential and mixed use buildings. Commercial buildings and townhouse developments should incorporate screened exterior garbage and loading areas.



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Heritage

Heritage.

The term *Heritage* is often misused to describe things that are simply old or existing. The inclusion of *Heritage* as a key principle is intended to provide clarity to what constitutes heritage in Markham. *Heritage* can be used to describe buildings, land features or relationships that provide culturally significant value. In Markham, *Heritage* is comprised of two main elements, Built Heritage and Natural Heritage. Both elements should be used to identify important landmarks for the Town and its residents, and to highlight their importance and value.

Built Heritage references buildings that have historical value for the development of the Town, whether it reflects an architectural style, the relationship of the building to open space or other buildings, or the importance of its inhabitants. Built heritage is the more common and understood type of heritage, and is recognized through the Ontario Heritage Act for listed and designated buildings and areas.

Natural Heritage pertains to landscape, natural elements (trees, woodlots), and natural forms and processes (drumlins, river courses) that have influenced or continue to influence the topography and fabric of the Town.

Both elements should be considered in the development of a site or an area.

The following is a list of significant built heritage principles to be considered in all applicable new developments:

Retention on Site

A heritage building should not be relocated from its original site unless there is no other means to preserve it. Change in site diminishes cultural heritage value

Setback

New development should be setback from the heritage resource, if feasible, to allow a view of the principal façade(s). An appropriate setback should be created between an existing heritage building and new development to emphasize the importance and prominence of the heritage resource.

Massing and Height

Massing and height of new development should respond to and/or respect an adjacent heritage building. The height of a new building immediately adjacent to a heritage building should transition down to one storey above the height of the heritage building.

Legibility

Generally, a heritage building should not be integrated within higher density development and should exist as a significant and independent pavilion structure intended to be experienced and seen in the round.

New work, such as an addition to a heritage building, should be compatible, but distinguishable from the old. Heritage buildings or structures should be recognized as products of their own time.

Refer to the *Provincial Policy Statement* for details.

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Cross Reference

- We've taken each guideline and cross-referenced them in respect of each other, and the planning process in which they would apply

- This is meant to aid in ensuring these guidelines get brought into the review of the appropriate planning process

			Official Plan	Secondary Plan	Precinct Plan	Zoning By-law	Site Plan/Plan of Sub	
Chapter	Guideline #		OP	SP	PP	ZBL	SPA/POS	**Related Guideline**
Public Realm	PR.01	New development can affect microclimate. Ensure favourable shade and/or wind conditions.			●	●	●	~TB.02, ~TB.03, ~TB.05
	PR.02	Connect new open space to existing natural resources		●	●	●	●	
	PR.03	Create a hierarchy of parks and gathering spaces		●	●	●	●	
	PR.04	Create neighbourhood focal points with open and public spaces	●	●	●		●	
	PR.05	Define park boundaries with street edges and/or activated street frontages		●	●		●	>SB.03, >SB.15, ~BL.06
	PR.06	Maximize the opportunity for views from buildings adjacent to parks and open spaces		●	●		●	>BL.06, ~TB.02
	PR.07	Design new open spaces to provide a variety of options for residents and visitors		●	●		●	

Next Steps.

The final report will articulate consistent and predictable built-form guidelines for:

- precinct plans

- secondary plans

- master plans and development reviews

- planning processes already underway

Staff are reviewing a draft report

&Co and Staff will coordinate comments into a FINAL report for end of 2009/early 2010.

QUESTIONS?