



City of Brampton
Measuring Sustainability of New Development
Metrics and Application Review Processes
Tuesday May 9, 2017

Purpose of Presentation

- Brampton's Green Development Standards
 - Guidelines
 - Metrics
 - Thresholds
- Overview of how Brampton Implements its Green Development Standards
- Implementation Lessons Learn



Phase 1: Sustainable Guidelines

- A **new chapter** of the City's **Development Design Guidelines**
- Applies to Secondary Plans; Block Plan, Plans of Subdivision & Site Plans.
- **Approved by Council** in September 2013
- **New development applications are required to demonstrate** how they integrate the SCDG's through their design submission (Urban Design Guidelines, Community Design Guidelines)

Built Environment

1. Compact Development
2. Community Form
3. Mix and Diversity of Land Uses
4. Housing Mix and Diversity
5. Walkability
6. Public Health
7. Cultural Heritage
8. Economy

Natural Environment and Open Space

1. Natural Heritage System
2. Parks
3. Stormwater Management Facilities
4. Urban Agriculture
5. Urban Forest

Mobility

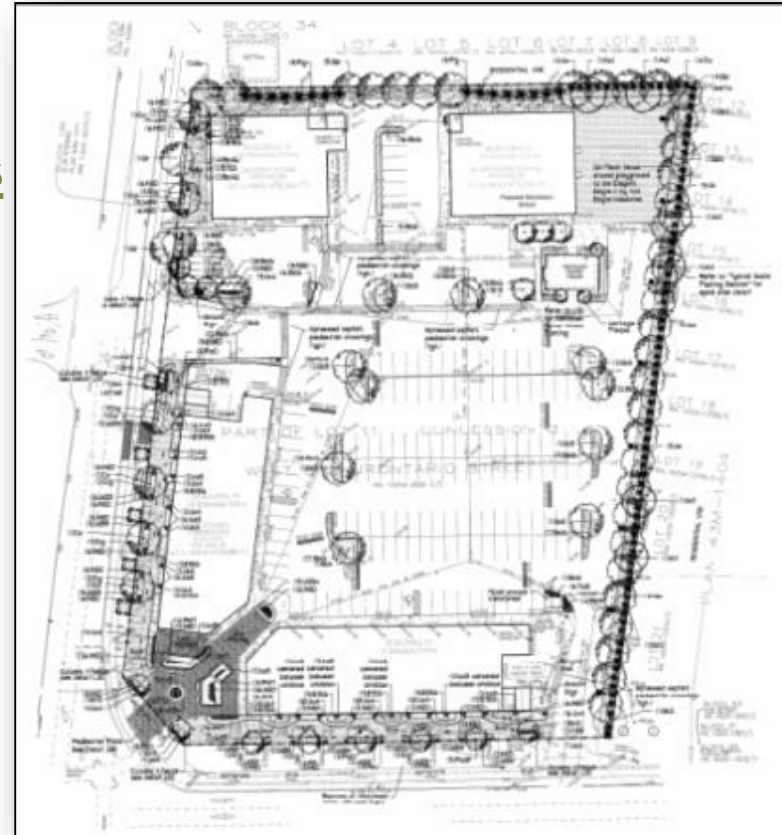
1. Street Network and Block Design
2. Transit Supportive
3. Active Transportation
4. Streetscape Elements/Pedestrian Supportive Design

Green Infrastructure and Building

1. Energy Conservation
2. Water Use and Management
3. Material Resources and Solid Waste
4. Air Quality
5. Lighting
6. Green Buildings/Green Sites
7. Stewardship and Education

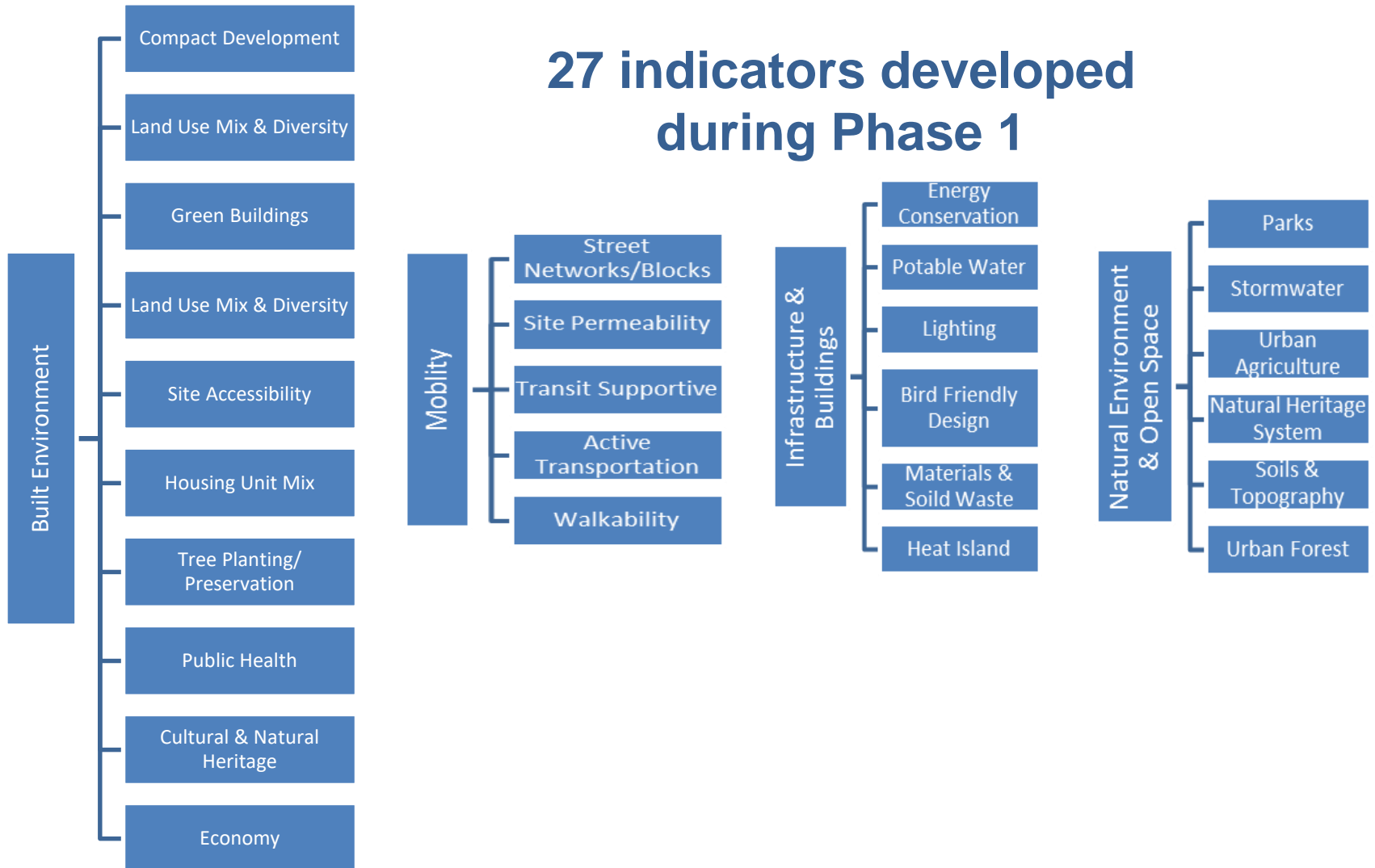
Phase 2: Sustainability Metrics

- Metrics focus on scales of development (e.g. Block Plan, Draft Plans, Site Plans)
- Metrics are applicable to Greenfield, Redevelopment and Intensification Areas
- **3 PERFORMANCE TIERS**
 - **Mandatory Requirements** – current Municipal Standards
 - ❖ NO POINTS AWARDED
 - **Recommended Minimum** – “doing better”
 - ❖ POINTS AWARDED
 - **Aspirational** – “best in class”
 - ❖ POINTS AWARDED



Sustainability Metrics:

**27 indicators developed
during Phase 1**



Sustainability Metrics:

- 27 Indicators transformed into 50 Metrics
- Extensive consultations with staff and external stakeholders
- 80% of Targets reflect Precedents (LEED ND, TGS, etc.)
- Points focused on exterior design elements (City control)
- Fewer points available for interior sustainability elements

Municipal Priorities	Point Breakdown (%)			
	Building	Site Plan	Draft Plan	Block Plan
Energy	30%	21%	8%	9%
Walkability	22%	39%	53%	60%
Water	20%	13%	9%	6%
Waste	7%	4%	4%	3%
Food	0%	2%	3%	3%
Natural Systems	3%	7%	9%	11%
Other	18%	14%	14%	8%
Total	100%	100%	100%	100%

Sustainability Metrics

Tools were developed to ensure a efficient and effective Development Review Process:

Block Plan (B) & Draft Plan (D) Metrics								
Category	Indicator	Applies To	Metric #	Metric	Mandatory Target	Minimum Target	Aspirational Target	Precedents
Built Environment	Compact Development	BAD	1	Persons & jobs per hectare Note: Each municipality defines density ranges by land use types within the Official Plan and the Secondary Plans	Places to Grow - 50 (min) ppl-jobs/ha or as further defined in the municipal Official Plan York Region - 70 (min) ppl-jobs/ha or as further defined in the municipal Official Plan and / or approved Secondary Plan			M
		B	2	Location Efficiency	Height and/or density conforms to the minimum or maximum targets established in the applicable Municipal Official Plan	Achieve a 50% increase in density along existing or planned mid block collectors, planned for transit (1 POINT)	Achieve a 100% increase in density along existing or planned mid block collectors planned for transit (2 POINTS)	3
	Land use Mix and	BAD	3	Proximity to Basic Amenities		50% of DU and jobs are within a 800m walking distance of at least 3 existing or planned Basic Amenities (Amenities listed below) Basic amenities include: 1. Grocery store/farmers market, place to buy fresh produce 2. Community/Recreation Centre 3. Pharmacy 4. Library (UP TO 4 POINTS)	75% of DU and jobs are within a 400m walking distance of at least 3 existing or planned Basic Amenities (Amenities listed below) Basic amenities include: 1. Grocery store/farmers market, place to buy fresh produce 2. Community/Recreation Centre 3. Pharmacy 4. Library (UP TO 4 POINTS)	Thinking Green Item 1, 2, 9 LEED NDPS3

Land Development Application

Browser Capability Information

Print this page

Print Only the Summary

General Information

User Name:* Mike
 Company Name:* Grow Green
 Project Name:* Greener Town
 City File Number:* C2W14.2
 Type of Development Site:* Greenfield
 Plan Type:* Block Plan

Type of Development Properties:

Ground Related Residential: Yes
 Multi-Unit Buildings (4 stories or greater): Yes
 Commercial / Retail / Institutional: Yes
 Email Address:* michael.hoy@brampton.ca
 Confirm Email Address:* michael.hoy@brampton.ca

Sustainability Score

12 of 12 Mandatory Metrics Are Satisfied
 47 of 59 Minimum Targets Are Satisfied
 23 of 59 Aspirational Targets Are Satisfied

Application

Overall: 57% (54 of 94)
 Energy: 25% (2 of 8)
 Water: 36% (4 of 11)
 Walkability: 75% (43 of 57)
 Natural Systems: 28% (2 of 7)

Community

Overall: 59% (70 of 118)
 Energy: 25% (2 of 8)
 Water: 36% (4 of 11)
 Walkability: 74% (57 of 77)
 Natural Systems: 28% (2 of 7)

- Static tables that outline City priorities
- Web-Based Sustainability Assessment Tool to score new applications

Sustainability Thresholds

- Approved by Council – March 30, 2015

Brampton Sustainability Thresholds

	Baseline		Minimum/Bronze		Silver		Aspirational /Gold
	Min	Max	Min	Max	Min	Max	
Site Plan	21	34	35	52	53	69	70+
Block Plan	23	29	30	38	39	48	49+
Draft Plan	21	28	29	39	40	50	51+

Richmond Hill Approved Thresholds

	Baseline		Minimum/Good		Very Good		Excellent
	Min	Max	Min	Max	Min	Max	
Site Plan	16	31	32	45	46	65	66+
Draft Plan	12	20	21	35	36	55	56+

Brampton Score of Recently Approved Site Plan Application:

Overall Score: 82/156

Performance Threshold: Gold

Energy:	25/54
Water:	12/19
Walkability:	26/38
Natural Systems:	2/9

Improvements:

- 100% of entrances and exists universally accessible (2 points Walkability)
- Carpool and efficient vehicle parking (2 points Overall)
- Energy Management Strategy (2 points Energy)
- Reduce potable water by 50% (3points Water)

CHAPELVIEWS APPARTMENTS *LEED Gold*



Downtown Brampton: John St & Main St N

Implementation:

Sustainable Design Review Process

Guiding Principles

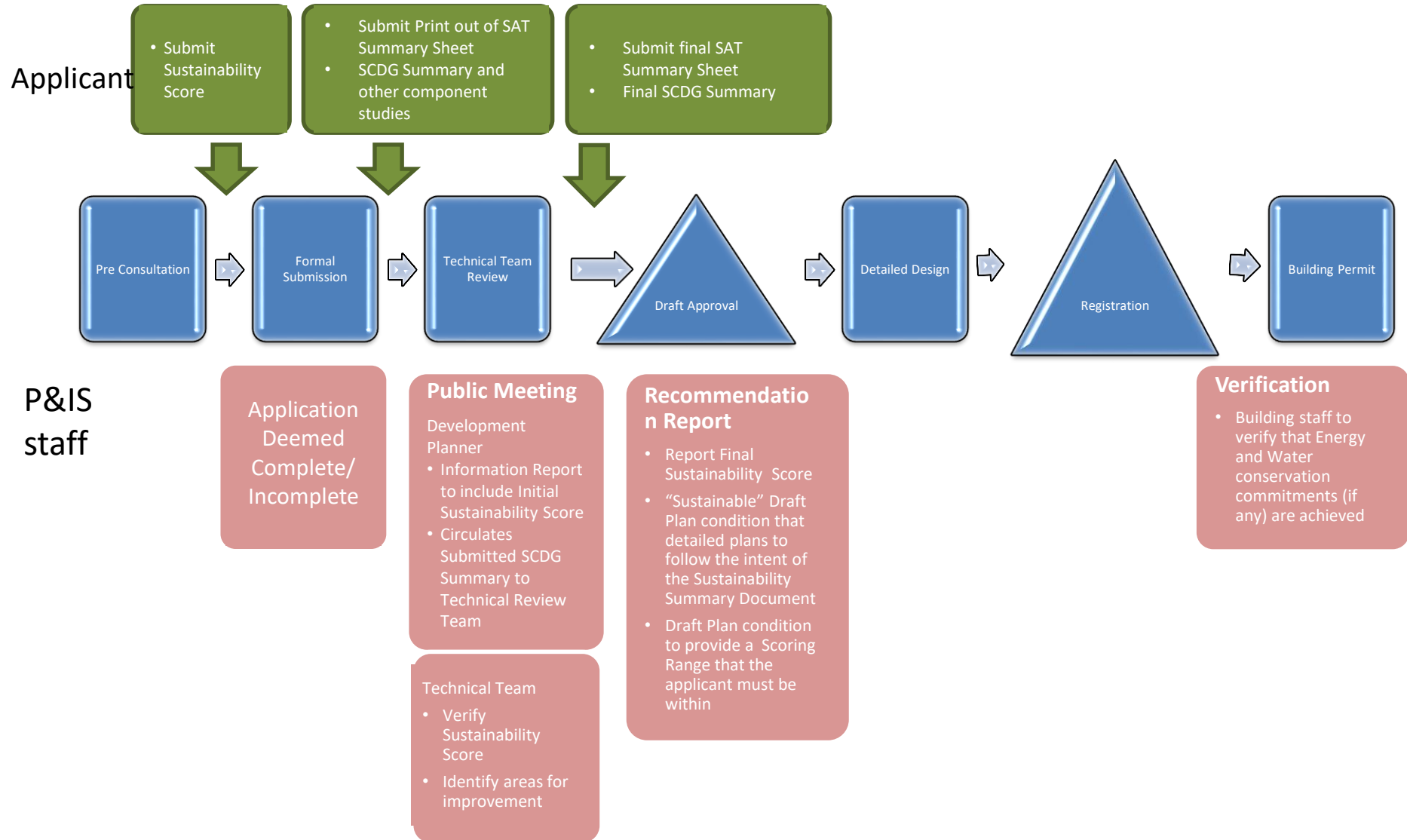
- Manage change
- Integrate with existing review/compliance processes as much as possible
- Minimize the need for additional submission material
- Make it easy for Development Team to review
- Make it easy for the Applicant to score application and demonstrate compliance

Implementation Tasks

- Establish a **Working Team**
- Update Existing **Development Review Processes**
- Define **Roles and Responsibilities**
- Develop Internal and External **Guidance Documents**
- Update **Policies, Submission Requirements,**
- **Communication and Engagement**

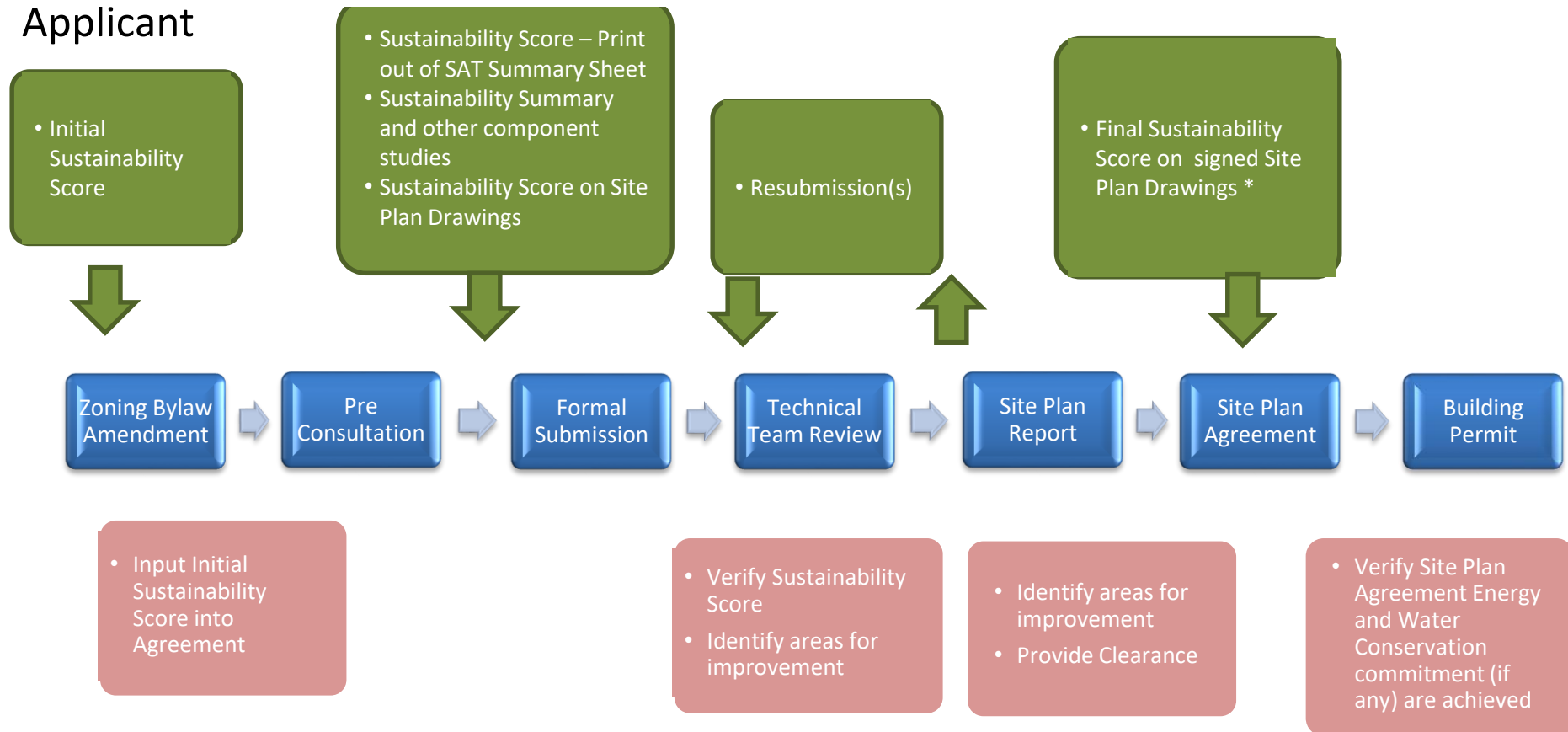


Sustainability Score and Summary Review Process: Block and Draft Plan



Sustainability Score and Summary Review Process: Site Plan

Applicant



P&IS
staff

*** Note only items on Site Plan are
considered applicable law**

Implementation: Delineate Roles

Council Role

- **Review Sustainability Section** of Information and Recommendation Reports to ensure applications are meeting Council's sustainability objectives; and

Applicant

- **Complete** Web Form and
- **Submit** Sustainability Score and Sustainability Summary and Letters of Intent, if applicable
- **Revise** Sustainability Score and Summary
- **Demonstrate Compliance** in Component Studies/Detailed Design Submissions



BUILDING A GREATER GTA
Building Industry and Land
Development Association


Implementation: Delineate Roles

Development Planner

- **Inform** Applicant at Pre App Stage of Submission Requirements
- **Circulate** To Design Team
- **Report To Council** – Information Report and Recommendation Report
- **Insert** Draft Plan/Site Plan condition to achieve Sustainability Score

Design Team (Eng, LA, UD, Parks, EnPI, Building)

- **Verify** Sustainability Score in Component Studies
- **Report** To Development Planner
- Provide **Clearance** to Development Planner prior to Registration
- **Confirm** compliance (site visits, assumption, etc) prior to assumption


Planning, Design and Development

Roles and Responsibilities Metric Checklist-Block Plan Review

Development Planning

Metric	Target			Number of Points	Document Compliance
	Mandatory	Min	Asp		
Urban Agriculture - Dedicate Land For Local Food Production - Block and Draft					
Has 80 sq. ft. of garden space been provided per development unit?	-	X	-	2 points	Letter of intent, Landscape drawing
Has the applicable growing space per development unit been satisfied? (refer to table)	-	-	X	2 points	Letter of intent, Landscape drawing
Soils and Topography - Restore and Enhance Soils					
Have recommendations from a Topsoil Fertility Test been implemented for the entire site? (Must satisfy this target to earn aspirational points)	-	X	-	1 point	Letter of intent, landscape plan
Energy Conservation - Energy Management					
Has an energy management strategy been developed for the development?	-	X	-	2 points	Letter of intent

Develop Guidance Documents

Metric Guidebook

Instruction Manual

Responsibility Checklists

METRIC Community and Neighbourhood Scale	INDICATOR Community Form
APPLIES TO Block Plan - Greenfields	METRIC TYPE Applicant Score
METRIC INTENT	
Focus retail, personal, human and community services within community core areas (neighbourhood centre and mixed-use node) so that people can meet their daily needs within their own communities.	
POINT ALLOCATION - 4 POINTS	
Minimum - Meet all metric requirements (4 points)	
DOCUMENT COMPLIANCE	
Included in Planning Justification Report and/or Urban Design Submission.	
Submission requirements:	

- 1) Highlight the community form (typically a cluster of neighbourhoods to sustain a viable mixed use node and public transit)
- 2) Highlight the various neighbourhoods in the community and confirm that each neighbourhood is defined by a 400m walk, from centre to perimeter edge (see Figure below)



400m Neighbourhood Radius

Sustainability Performance Metrics:

Sustainability Assessment Tool (SAT) Instructions for Applicant

Introduction:

The [Sustainability Assessment Tool \(SAT\)](#) was developed to help quantify, rank and inform the sustainability score of proposed development applications. The SAT is based on the sustainability performance metrics ([Block Plan/Draft Plan](#) and [Site Plan](#)) developed by the Brampton, Vaughn and Richmond Hill. The intent of the SAT is to provide an efficient platform for applicants to fill out the appropriate fields indicating the target level achieved for applicable sustainability performance metrics. The order of the metrics presented in the dynamic tool, for the most part, align with the order and grouping that is presented in the sustainability metrics tables.

Getting Started:

Step 1: Pre-Consultation for new Development Application

Visit the City's [Measuring Sustainability](#) webpage and access the [Sustainability Assessment Tool](#).

Step 2: Complete the required fields.

Completing these fields assists with City records and to filter the tool to specifically tailor the questions to your particular application.

- a) The first four fields are for information purposes. If you have not been assigned a file number, just re-enter the Project Name.
- b) The following five fields require the applicant to answer various questions about the proposed development application by selecting from a drop-down menu, including:
 - Type of Development (greenfield, intensification, employment lands)
 - i. "Greenfield" should be selected where the proposed plan/project is located outside of or on the edge of the existing built-up area of the municipality.
 - ii. "Intensification" should be selected where the proposed plan/project is for the development of lands at a higher density than currently exists. Examples include: redevelopment of a site, including brownfields or greyfields; development of vacant or underutilized lands in the built up area of the municipality; infill developments; and the expansion or conversion of existing buildings. -

Roles and Responsibilities Checklist- Block Plan Review Urban Design

	Metric	Target			Number of Points	Document Compliance
		Mandatory	Min	Max		
Land use Diversity Mix: Proximity to Basic Amenities						
	Select amenities which are within 800m walking distance of 50% or more of the Dwelling Units (DU) and/or jobs (2 Points each) (This minimum metric must be satisfied to earn aspirational points)	-	X	-	2 points for each up to 6	Planning Justification Report, Urban Design Submission or Site Plan Drawings
	Select amenities which are within 400m walking distance of 75% or more of the Dwelling Units (DU) and/or jobs (2 Points each)	-	-	X	2 points for each up to 6	
Land use Diversity Mix: Proximity to Lifestyle Amenities						
	Select amenities which are within 800m walking distance of 50% or more of the Dwelling Units (DU) and/or jobs (1 Point each) (This minimum metric must be satisfied to earn aspirational points)	-	X	-	1 point each up to 3	Planning Justification Report, Urban Design Submission or Site Plan Drawings
	Select amenities which are within 400m walking distance of 75% or more of the Dwelling Units (DU) and/or jobs (1 Point each)	-	-	X	1 point each up to 3	
Community Form - Community and Neighborhood Scale						
	Has the community form been based on a hierarchy of the following: (must meet all four)	-	X	-	4 points	Planning Justification Report, Urban Design Submission
	Community - formed by a clustering of neighborhoods, typically 6 to 9 (depending on topography and natural					

Update OP Policies

- Residential Policies
- Commercial Policies
- ICI Policies
- Open and Parks Policies
- Transportation Policies
- Urban Design Policies
- Environmental Management Policies
- Implementation Policies



Update Submission Requirements:

Revise Preliminary Application Letters to require:

Sustainability Score

Sustainability Summary

Land Development Application
Print this pagePrint Only the Summary

General Information User Name: m Company Name: m Project Name: m City File Number: Type of Development: Greenfield Site: Plan Type: Draft Plan Type of Development Properties: Ground Related Residential: Yes Multi-Unit Buildings (4 stories or greater): Yes Commercial/Retail/Institutional: Yes E-Mail Address: michael.hoy@brampton.ca Confirm E-Mail Address: michael.hoy@brampton.ca Last Modified: Aug 08, 2014	Sustainability Score 17 of 17 Mandatory Metrics Are Satisfied 35 of 61 Minimum Targets Are Satisfied 16 of 57 Aspirational Targets Are Satisfied Application Overall: 40% 40 of 98 Energy: 33% 6 of 17 Water: 0% 0 of 11 Walkability: 59% 27 of 48 Natural Systems: 44% 4 of 9 Community Overall: 51 of 118 Energy: 33% 6 of 17 Water: 0% 0 of 11 Walkability: 59% 38 of 64 Natural Systems: 44% 4 of 9
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SUSTAINABILITY SUMMARY

**STEELES AVENUE EAST AND TOMKEN ROAD
BRAMPTON**

OUR FILE 101580

Date: December 2015

Prepared for: Slotegraf Limited

Prepared by: MacNaughton Hermesen Britton Clarkson Planning Limited (MHBC)
540 Brimley's Centre Drive
Kitchener
T: 519-579-3650

Sustainability Summary
Steeles Avenue East & Tomken Road

Update Submission Requirements: Component Studies

Design Review

- EIS/MESP/EIR
- FSR/Stormwater Management Plan
- Transportation Study
- Community Design Guidelines/Urban Design Brief
- Planning Justification Report

Detailed Design

- Engineering Drawings
- Landscape Drawings


Sustainability Summary – Categories/Themes

- A. Built Environment-** Provide a brief description on how the application addresses Mandatory, Recommended Minimum and Aspirational Built Environment targets.
- i. Mandatory Requirement**
- a) Does the development proposal achieve all the City's **Mandatory Requirements**
- YES**
- ii. Recommended Minimum**
- a) Identify all Recommended Minimum Targets achieved by development proposal. For each Recommended Minimum Target identify the relevant component study and applicable section where the target can be verified.
- 1. Land use Diversity Mix: Proximity to Basic Amenities**
- **Community Design Guidelines**
- 2. Land use Diversity Mix: Proximity to Lifestyle Amenities**
- **Community Design Guidelines**
- iii. Aspirational Targets**
- a) Identify all Aspirational Targets achieved by development proposal.
- 1. No Aspiration Targets Achieved**

Update Submission Requirements: Letter of Intent

Required for Metrics that
cannot be enforced by the
City:

- Green Buildings
- Energy Water Conservation
- Lighting Standards

 **BRAMPTON**
Flower City
brampton.ca
Planning, Design and Development
Planning and Land Development Services

LETTER OF INTENT- SITE PLAN SUBMISSIONS

Energy & Lighting

*Note that the following letter of intent relates solely to commitments expressed by the applicant through the completion of the Sustainability Assessment Tool (SAT).

1. APPLICANT/AGENT AND OWNER INFORMATION

APPLICANT/AGENT

Name: _____

Address: _____

Telephone: _____ E-mail: _____

Contact Person: _____ Tel: _____ Fax: _____

OWNER

Name: _____

Address: _____

Telephone: _____ E-mail: _____

Contact Person: _____ Tel: _____ Fax: _____

2. SITE INFORMATION

Street Address: _____

Lot (Block): _____ Registered Plan (Concession): _____

Part: _____ Reference Plan 43R: _____

2 Wellington Street West, 3rd Floor
Brampton, Ontario L6Y 4R2
Fax (905) 874-2099

Communication & Engagement

- Developer (BILD) Workshops
- Internal workshops
- Ongoing Internal training sessions
- Brochures
- Web Page
- Municipal Presentations

Planning & Development

Central Area
Development Application Process
Development Charges Environment
Growth Management Heritage
Maps
Parks Planning & Construction
Plans & Policies
Projects & Studies
Subdivision Construction
Transportation
Customer Care
Applications
Guidelines & Manuals
Planning FAQs
Brampton Urban Design Awards
Contact Planning & Infrastructure Services

Measuring the Sustainability Performance of New Development

The City of Brampton takes a comprehensive approach to planning and designing sustainable communities. The Sustainable Community Development Guidelines and the Sustainability Assessment Tool are designed to measure the environmental sustainability performance of new development applications.

Sustainable Community Development Guidelines (SCDG)

The SCDGs form a new chapter to the City's Development Design Guidelines. They establish qualitative measures to guide the planning and development of new communities and buildings, forming an integral part of secondary and block planning, plans of subdivision and site plans.

Measuring the Sustainability Performance of New Development

Cities of Brampton and Vaughan and the Town of Richmond Hill worked together to produce a consolidated set of Sustainability Metrics to evaluate and score the environmental sustainability performance of new Block Plans, plans of subdivision and site plan applications. The Final Comprehensive Report includes background information on the Phase 2 project, information on the chosen performance metrics and an incentive strategy.

Brampton's Threshold Scores

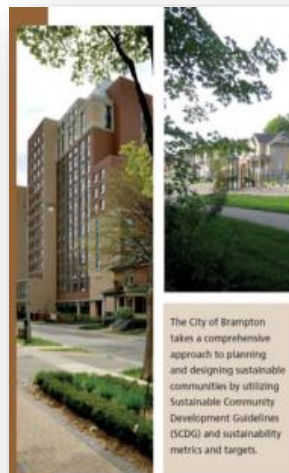
SAT Guidebook



Sustainability Assessment Tool (SAT)



Developer Brochure



Sustainable Community Development Guidelines

The SCDG form a new chapter of the City's Development Design Guidelines, and will guide the planning and design of new communities and buildings.

Sustainable Community Development Guidelines Measuring the Sustainability of New Development Development Review Process



www.brampton.ca/measuring-sustainability
Michael Hogg, Environmental Planner
michael.hogg@brampton.ca



Sustainable Community Development Guidelines Measuring the Sustainability of New Development Development Review Process



Background Information: Performance Metrics

Sustainability Performance Metrics are organized into Block Plan/Draft Plan and Site Plan tables. Both tables identify the indicators, metrics, targets, precedents and point allocation for each metric. The tables are included below to provide a more detailed explanation behind the Sustainability Score.

- o Block Plan and Draft Plan
- o Site Plan

Contact Us

For questions regarding the Sustainable Community Development Guidelines

SAT Admin Page

Planning & Development

[Central Area](#)[Development Application Process](#)[Development Charges](#)[Environment](#)[Growth Management](#)[Heritage](#)[Maps](#)[Parks Planning & Construction](#)[Plans & Policies](#)[Projects & Studies](#)[Subdivision Construction](#)[Transportation](#)

Customer Care

[Applications](#)[Guidelines & Manuals](#)[Planning FAQs](#)[Brampton Urban Design Awards](#)[Contact Planning & Infrastructure Services](#)[Land Development Application](#)[Lists](#)

Land Development Application Admin View

Search: Sort By:

City File	Project	Company	Score	User	Modified
C01E18.017	Highwood and Hurontario	MMM Group Ltd.		ggilber3	Mar 25, 2015
			<input type="button" value="Edit"/>	<input type="button" value="Delete"/>	<input type="button" value="View Application"/>
C03E15.010	Neighbourhood 601	KLM Planning Partners Inc.		Keith MacKinnon	Mar 23, 2015
			<input type="button" value="Edit"/>	<input type="button" value="Delete"/>	<input type="button" value="View Application"/>

Update Profile Data

Development Site: Greenfield

Plan Type: Draft Plan

Ground Related Residential: Yes

Multi-Unit Buildings (4 stories or greater): Yes

Commercial / Retail / Institutional: Yes

City File Number: Planner Assigned: Is Submitted?: ☐Send Email?: ☐

kmackinnon@klmplanning.com

Lessons Learned

1. You are already implementing sustainability

- Track/measure/coordinate these actions and have a plan to improve performance
- Need to QUANTIFY the sustainability performance of new development

2. Manage Change

- Do not overwhelm staff, implementing new practices is a process
- Aim for small successes to build a base for an ideal future

3. Build on an Existing Process

- Understand your current practices, the good, bad and ugly
- Weave green development standards into an existing planning process

4. Clearly Define Processes and Roles

- Involve a diverse array of staff early in the implementation process
- Clearly articulate internal and external roles

5. Test Real Applications with Staff

- Build trust and credibility for the changes
- Give people a reason to become comfortable with the changes

Thank You.

Questions?

**Measuring Sustainability of New Development in Cities of Brampton,
Vaughan and Town of Richmond Hill**

APA's 2015 Award for Excellence in Sustainability for Best Policy, Law or Plan



OPPI's 2014 Excellence in Planning Award Research and New Direction

