SUSTAINABLE DEVELOPMENT GUIDELINES REPORT

The Brock Zents Partnership

Zoning By-law Amendment and Draft Plan of Subdivision

2660, 2670, and 2680 Brock Road
Part of Lot 19, Concession 3, Parts 3 and 4, Plan 40R-27228 and Part of Lots 1, 2, and 3, Registered Plan 585
City of Pickering

PREPARED BY



November 2022

	Guideline	Point Value	Points Achieved	Rationale
1.0	Pre-Consultation and On-Going Consultation	Value	Acilieved	
1.1	Completion of extensive Pre-Consultation on Sustainability Elements	O 3 pts		
1.2	On-Going Education Program	O 5 pts		
2.0	Environmental Protection			
2.1	Watershed and Sub-Watershed Planning	R		
2.2	Master Environmental Servicing Plan	R		A Functional Servicing Report has been provided as part of the submission requirements for these applications.
2.3	Conservation Authority Regulations	R		The western portion of the subject property is regulated due to the presence of unevaluated wetlands. The locations and extent of these wetlands were confirmed and the limits of contiguous vegetation were staked with TRCA in 2018. TRCA confirmed the regulated area on the subject property includes the wetlands and a 30 m buffer from the wetland limits. A permit will be required from TRCA for the proposed development and a compensation agreement has been executed for impacts to regulated areas by the proposed development.
2.4	Oak Ridges Moraine Plan	R		The subject property is not located within the ORM area.
2.5	Greenbelt Plan	R		The subject property is not located within the Greenbelt

2.6	Conformance to Provincial Policy Statements (PPS) for Building Strong Communities	R	Refer to the enclosed <i>Planning Justification Report</i> .
2.7	Conformance to Provincial Policy Statements (PPS) for Wise Use and Management of Resources	R	Refer to the enclosed Planning Justification Report.
2.8	Conformance to Provincial Policy Statements (PPS) for Protecting Public Health and Safety	R	Refer to the enclosed Planning Justification Report.
2.9	Stormwater Quality	R	A Stormwater Management Report has been provided as part of the submission requirements for this application. Stormwater quality will be achieved by the use of an oil-grit separator prior to release into the downstream clean water collector pipe, to achieve total 80% TSS removal for the site, as prescribed in the Stormwater Management Report (SWM) and Duffin Heights Environmental Servicing Plan (ESP) by Sernas Associates.
2.10	Maintain or Reduce Stormwater Runoff Rates	R	Stormwater runoff from the subject site has been reduced and controlled as prescribed in the SWM and ESP by Sernas Associates. Stormwater runoff is controlled to a unit flow rate of 6.91L/s/ha to the clean water collector pipe. A stormwater detention system and flow regulator has been designed to achieve this.
2.11	Water Balance and Source Water Protection	R	As per the SWM and ESP, and as discussed in the FSR, water balance for the subject site is achieved by the downstream stormwater management pond designed for the site and thus no infiltration targets are set for the subject site, provided that the site meets the allocated unit flow release rate of 6.91L/s/ha.

2.12	Ground Water Protection Plan	R		Based on the Pickering official plan, the Site is within a High Aquifer Vulnerability Area, but is not within a well head protection area. Drinking water in the City of Pickering is sourced from Lake Ontario. The proposal is residential in nature, and as the city provides piped drinking water, risks to the aquifer are low.
2.13	Integrated Environmental Protection Systems	O 3 pts	3 pts	Landscape: The planting palette will incorporate native, drought tolerant species that will contribute to surface and ground water balance targets. A diverse plant palette will be proposed contributing to the natural heritage values of the area while enhancing the aesthetics of the development. A detailed planting plan and plant schedule will be provided in the Site Plan Control Application.
2.14	Exceeding Regulatory Requirements	O 3 pts		
2.15	Biodiversity Protection and Enhancement	O 3 pts		There are no rare species or ecological communities present on the subject property as per the EIS included as part of this submission.
2.16	Natural Heritage Protection	O 3 pts		There are no significant PPS features present on the subject property as per the EIS included as part of this submission.
2.17	Required Residential Site Design to Maximize Permeability	R		Landscape areas have been maintained throughout the site to assist with overall permeability. Further details of the materials and measured utilized in these areas are to be reviewed as part of the future Site Plan Control application.

2.18	Optional Residential Site Design to Maximize Permeability	0		Measures to increase the overall permeability of the proposed development will be explored as part of the
	1. 25% increase in permeability	2 pts		future Site Plan Control application.
	2. 50% increase in permeability	3 pts		i'
2.19	Required	R		The proposed development does not contain
	Commercial/Employment/Institutional Site			Commercial/Employment/Institutional uses
	Design to Maximize Permeability			
2.20	Required			The proposed development does not contain
	Commercial/Employment/Institutional Site			Commercial/Employment/Institutional uses
	Design to Maximize Permeability			
2.21	Native Species & Planting	0		The planting palette will incorporate native, drought
	1. Native species for 50% landscaped area	2 pts	2 pts	tolerant species where possible; it is anticipated that
	2. Native species for 75% landscaped area	3 pts		the proposed landscape plan will meet a minimum of
	3. Native species for 100% landscaped area	4 pts		50% coverage of native species within the landscaped
	4. Incorporates a site design for native	2 pts		areas. Landscape plan will propose specific species at
	species documented in a Landscape			the Site Plan Application stage.
	Master Plan			
2.22	Landform Conservation	R		The subject property is not located within a Landform
				Conservation area.
2.23	Net Environmental Gain	0		
		3 pts		
2.24	Pesticide and Fertilizer Use	0		
		2 pts		
2.25	Minimize Construction Related	R		Mitigation measures to limit environmental impacts
	Environmental Impacts			due to construction are detailed in Section 8 of the EIS
				provided as part of this application.
2.26	Compensation for Unavailable Impacts	0	3 pts	A compensation agreement has been executed with
		3 pts		TRCA for regulated lands within the proposed
				development.

2.27	Erosion and Sedimentation Control	R		Compensation for tree removal outside of TRCA regulated lands has been determined in accordance with the City of Pickering guidelines and is detailed in Section 6 of the Arborist Report.
2.27	Erosion and Sedimentation Control	K		Section 2.0 of the Functional Servicing and Stormwater Management Report has addressed, in general terms, the sediment and erosion control requirements for the site. A detailed Erosion and Sediment Control plan will be prepared as part of the future Site Plan Control Application.
3.0	Location of Development/Selection of Lands			
3.1	Site Typology:	0		
	Previously developed lands at a higher density	3 pts	3 pts	Site was currently supports multiple single detached dwellings which will be removed prior to development.
	Greenfield site adjacent to existing development	5 pts		dwellings which will be removed prior to development.
	3. Vacant infill site	3 pts		
	4. On a brownfield site that was either			
	undeveloped or previously developed and	3 pts		
4.0	may be contaminated Design of Development – Land Use and Distri	hution		
4.1	Diversity of Uses	R		The property is less than 2 ha (7 as) and considered a
4.1	Diversity of oses			The property is less than 3 ha (7 ac) and considered a small development
4.2	Construction Phasing	R		The proposed development does not include a non-residential component. The number of potential phases has not yet been determined.
4.3	Residential & Non-Residential Phasing	0		The proposed development does not include a non-
		3 pts		residential component.

4.4	Proximity to Schools	R		 The Duffin Heights Neighbourhood Tertiary Plan indicates two Future Elementary School sites: 1. Southwest of the property at the intersection of Dersan Street and Tillings Road – just beyond a 400 metre radius of the property 2. East of the property at the intersection of William Jackson Drive and Rex Heath Drive – approx. 250 metres
4.5	Provision of Mixed Uses and Commercial Streetscape Environments	R		The subject property is located approximately 760 metres (+/-10 minutes) north of the commercial development at the corner of Brock Road and Palmer's Sawmill Road. Further a Medical Office Building is proposed to be constructed on the north side of Dersan Street, approximately 240 metres south of the subject property.
4.6	Enhanced Access to Amenities	0		Refer to enclosed Amenities Map. Amenities include:
	1. At least 4 listed amenities	3 pts	3 pts	Elementary School, Medical Offices, Parks, Place of
	2. At least 5 listed amenities	5 pts		Worship
4.7	Enhanced Housing Diversity	R		Multiple townhouse dwelling types are proposed on the property, and available off-site throughout the Duffin Heights Neighbourhood
4.8	Rental and For-Sale Housing Affordability	0		
	1. At least 20% of units priced for 50% of area median income	3 pts		
	2. At least 40% of units are priced for up to 80% of area median income	3 pts		
	3. At least 10% of for sale housing priced for households up to 100% of the area median income	3 pts		

	4. At least 20% for sale housing priced for households up to 120% of the area median income	3 pts	
4.9	Retail Parcel Sizes	R	This section is not applicable to the proposed development as non-residential uses are not proposed.
4.10	Commercial Concentration	R	This section is not applicable to the proposed development as non-residential uses are not proposed.
4.11	Mixed Use Commercial Concentration 1. Street related commercial nodes within a 5-10 min walk from residential areas 2. Street related retail components are provided at the ground floor of mixed-use	O 1 pts	This section is not applicable to the proposed development as non-residential uses are not proposed.
	multi-storey structures with residential, office or institutional uses at upper storeys	3 pt3	
4.12	Proximity to Public Spaces	R	The Duffin Heights Neighbourhood Tertiary Plan shows multiple community amenities (village green, neighbourhood park, community facility) within 800m of the property.
4.13	Apply Region Precedents in Urbanism and Architecture	0	
	Plan integrates or reflects local and regional historical patterns of neighbourhood development	2 pts	
	Incorporate into the project one or more buildings that have been designated as historic and rehabilitate the buildings	2 pts	
5.0	Design of Development – Density and Compa	ct Built F	Form

5.1	Residential Density	R		The proposed density will exceed the minimum density provisions of the 'Mixed Use Area - Mixed Corridor' designation of the City of Pickering Official Plan.
5.2	Increased Residential Density 1. 25-30 uph for low density areas 2. 60-80 uph for medium density areas 3. 120+ uph for high density areas	O 2 pts 4 pts 6 pts	4 pts	The density proposed for the subject property is 74.14 units per hectare.
5.3	Commercial Density	R		This section is not applicable to the proposed development as it does not contain a commercial component.
5.4	Increased Density and Mixed-Use Project exceed minimum to achieve residential density of min. 100uph, and: For a mixed-use development exceeds a combined residential/commercial density of 1.4 FSI with a min 0.25 FSI of commercial	O 5 pts		
5.5	Future Intensification	R		The proposed development envisions the construction of medium density residential uses at a focal point of the Duffin Heights Neighbourhood. The proposed Zoning Amendment will allow for the intensification of underutilized lands. If multiple phases are contemplated, essential infrastructure will be installed as part of the first phase of development.
6.0	Design of Development - Connections	•		
6.1	Open and Connected Communities	R		Internal lanes and pedestrian mews are all to be privately owned common elements of a condominium corporation.

6.2	Protect Linked Open Space System	R		A series of internal mews and parkettes provides circulation through site to the public rights of way adjacent to the subject property.
6.3	Provision of Interconnected Transportation Network	R		The property is immediately adjacent to a bus stop on Zents Drive. The internal pedestrian mews provides multiple routes for pedestrian and active transportation traffic to access the public realm on all adjacent public roads.
6.4	Support for Alternative Transportation 1. Includes provision for or promotes refuelling for alternative transportation	O 3 pts		Long term bicycle storage spaces are provided for residents. Short term visitor bicycle parking spaces are similarly to be provided at grade.
	Contains or promotes trip end facilities such as bike storage and showers in commercial buildings	3 pts		
	3. Promotes the use of neighbourhood electric vehicles	5 pts		
6.5	Street Network	R		The plan provides for pedestrian and vehicular connections to the surrounding streets. The location of buildings serve to frame the streets with active uses (i.e. entries to dwellings)
6.6	Block Perimeter	R		The plan does not alter the existing block plan of Brock Road, Zents Drive, and the planned extension of Four Seasons Lane.
6.7	Lanes 1. Plan includes lanes in residential areas at primary locations such as major streets and open spaces to provide streetscapes uninterrupted by garages	O 3 pts	3 pts	The internal laneway system provides a built form along all three road frontages, Brock Road, Zents Drive Street, and the extension of Four Seasons Lane, which are uninterrupted by garages.

	2. Plan is designed to include lanes or private drives in mixed-use or retail areas at the rear of street related retail for service and loadings	3 pts		
6.8	Cycling Network	R		Proposal is adjacent to Brock Road and Zents Drive.
6.9	Transit Amenities 1. Plan accommodates transit stops at 200 to 250m intervals	O 3 pts		No new roads are proposed as part of the development concept. However, the proposal would redevelop a property along a Transit Spine adjacent to existing
	Plan promotes/requires all bus stops on major and minor transit spines to have shelters with benches	3 pts		transit stops with transit supportive densities, and provide the opportunity for pedestrian amenities and landscaping.
	3. Provides for enhanced transit amenities	3 pts		
6.10	 Transit Oriented Compactness Plan locates 2/3rds of proposed intensity within 250m of a transit stop/planned transit stop Design enables 90% of proposed residents, jobs and services within 400m of an existing transit stop 50% within 250m of transit stop 66% within 250m Short sides of blocks are oriented along 	O 2pts 1 pts 2 pts 3 pts 3 pts	2 pts 1 pt 3 pts	A transit stop for Route 112 (Valley Farm) is located on the north side of Zents Drive, opposite the subject property.
6.44	transit route streets			
6.11	Parking Management 1. Utilizes transit proximity, and pedestrian and cycling modes of transportation to encourage alternate modes of transportation allowing reduction of vehicular parking requirements.	O 2 pts	2 pts	The development utilizes transit proximity, and site design to encourage alternate modes of transportation allowing reduction of vehicular parking requirements.

	Transportation modelling that supports such reductions has been provided 2. Project includes on-street parking, such parking is contributing to provision of parking requirements	2 pts	2 pts	Parking is distributed throughout the site as visitor parking.
	3. Project defines priority parking for green vehicles (i.e. alternate fuel or car share)4. Project provides cash in lieu of parking	2 pts 2 pts		
	(high density and mixed-use)	2 pts		
6.12	Parking Location	R		To the extent possible, surface parking will be provided at the interior of the site, or screened through the use of landscaping and other measures.
6.13	Corridor Frontage	R		The proposed townhouse dwellings are aligned with Brock Road to create a consistent streetscape
7.0	Design of Development – Pedestrian Oriente	d Commu	inity	
7.1	Amenities in Proximity	R		The subject property is located approximately 760 metres (+/-10 minutes) north of the commercial development at the corner of Brock Road and Palmers Sawmill Road.
7.2	Pedestrian Network	R		Sidewalks are located on Brock Rd and will be provided along Zents Drive, and the future Four Seasons Lane. Further, a 1.5m sidewalk is provided on at least one side of the internal private laneway in all locations.
7.3	Pedestrian Safety and Comfort	R		The details of Four Seasons Lane have been coordinated with adjacent landowners and the City of Pickering.
7.4	Pedestrian Oriented Streetscapes	R		Each boundary street is directly addressed by entrances to individual dwelling units.
8.0	Resource Efficiency	•		

8.1	Energy Performance for Residential Buildings	0		Energy performance for proposed dwellings has not yet
	Dwellings meet Energy Star ratings as			been determined.
	follows:	2		
	1. Energuide 80	4		
	2. Energuide 82	6		
	3. Energuide 84	8		
	4. Energuide 86			
8.2	Energy Performance for Commercial	0		This section is not applicable as the proposed
	Buildings			development does not include non-residential uses.
	Part 3 buildings comply with LEED NC			
	prerequisite 2 to provide a reduction in			
	energy consumption relative to a reference			
	building as follows:	2		
	1. 30% reduction	3		
	2. 35% reduction	4		
	3. 40% reduction	5		
	4. 45% reduction	6		
	5. 50% reduction	7		
	6. 55% reduction	8		
	7. 60% reduction			
8.3	Energy Efficient Appliances	0	3 pts	Energy efficient appliances will be provided in all
		3 pts		proposed dwellings.
8.4	Passive Solar Gain	R		The project will be designed to reduce passive solar
				gain heating, where appropriate
8.5	Private Outdoor Lighting	R		Details of site lighting are to be provided as part of the
				future Site Plan Control Application stage.
8.6	Required Water Efficiency in Buildings	R		Details of the proposed metering and water fixtures are
				to be provided as part of the future Site Plan Control
				Application stage.

8.7	Optional Water Efficiency in Buildings	0	Details of potential water efficiency will be provided as
	1. Achieve 30% water savings using provided calculator	4 pts	part of the future Site Plan Control Application stage.
	2. Achieve 40% water savings using provided calculator	8 pts	
8.8	Waste Management - Operations	R	The proposed development has been designed in accordance with the waste collection policies of the Region of Durham.
8.9	Waste Reduction - Construction	R	A Waste Reduction Plan for the construction phase will be prepared in partnership with the contractor at the appropriate time.
8.10	Required Material Selection	R	Details of the proposed building materials are to be provided as part of the future Site Plan Control Application stage.
8.11	Optional Material Selection	0	
	Plan incorporates 8 optional items from the materials selection	3 pts	
8.12	Green Upgrades Available to Home Buyers	0	A suite of sustainability measures and upgrades are to
	1. 1 item	1 pts	be provided. Details to be provided as part of the
	2. 3 items	3 pts	future Site Plan Control Application stage.
	3. 3+ items	5 pts	
8.13	On-Site Power Generation	0	
		4pts	
8.14	On-Site Renewable Power Generation	0	
		8pts	
8.15	District Energy	0	
		4 pts	
8.16	Green Building Certification	0	

8.17	Waste Water Management	0					
	Capture and reuse 25% of greywater and stormwater	2 pts					
	2. Capture and reuse 50% of greywater and stormwater	5 pts					
	3. Capture and reuse 75% of greywater and stormwater	7 pts					
8.18	Heat Island Reduction	O 3 pts	3 pts	The landscape concept proposes large & medium canopy trees to provide shade and reduce the Urban Heat Island Effect. All pedestrian walkways have been proposed to be high albedo surfacing/colours, exceeding 28 SRI value. Details and materials will be provided at the Site Plan Control Application Stage.			
8.19	Heat Island Reduction (Roofing)	O 3 pts					
8.20	Durable Buildings			Wall assemblies will be designed with drainage planes as required by OBC and manufacturer's specifications. Cladding will include full bed masonry units at the exterior.			
9.0	Monitoring and Process to Address Exceptions						
9.1	Monitoring Plan	O 3 pts					
9.2	Exceptions	0					
	Tot	al Score	37 pts				