Mid to High-Rise Residential & Non-Residential

Instructions

The Pickering Integrated Sustainable Design Standards (ISDS) for Mid to High-Rise Residential & Non-Residential development, applies to residential buildings 4 storeys and higher, and all Industrial, Commercial and Institutional (ICI) buildings.

Tier 1 performance measures are required by the City of Pickering and must be included as part of your complete development application.

Tier 2 performance is encouraged, but optional.

Words and terms identified in bold in the Performance Criteria and Documentation cells are defined further in the Glossary of the User Guide. Performance criteria apply to all building types except where specified.

Applicant Information:

Applicant/Agent:	705 Kingston Road Ltd		
Name (First, Last Name):	Nik Papapetrou	Telephone Number:	416 358 7091
Email:	npapa@resident.ca		
Address of Subject Land (Street Number and Name):	705 Kingston Road	Registered Owner (First, Last Name):	705 Kingston Road Ltd.
Project Information:			
Project Name:	705 Kingston Road		
Date Checklist Completed (yyyy- mm-dd):	2024-10-31		
Is this checklist revised from an earlier submission (Yes/No):	No		
Gross Floor Area (square metres):	120,121 m2	Number of Storeys: 35	Non Residential Gross Floor Area (square metres):
Proposal Description (narrative of your pro	ject):		
is parkland, dedication of 0,102 m0 and multi		moroial analog is proposed, concentrated within the first of	storoy. One underground lovel of performing
ic parktanu lueurcation of 2,193 m2 and mutti	pie POPS spaces are proposed. Com	mercial space is proposed, concentrated within the first s	storey. One underground level of parking is

Pickering Integrated Sustainable Design Standards Mid to High-Rise Residential & Non-Residential Checklist:

EDUCATIO	DUCATION										
	Performance Measures	P	erformanc	e Criteria		For Sub	mission				
Number	DevelopmentFeature	Tier 1 Mandatory	Met	Tier 2 Optional	Met	Documentation	Comments				
E1	ResidentEducation	For residential buildings, provide a Resident Education Information Package (hardcopy or digital through website link) to residents that explains the use and maintenance of sustainable building features as well as sustainable lifestyle practices.		Meet Tier 1 and post signage and other education materials onsite to educate residents and visitors of sustainability features.		□ Educational package or other educational materials demonstrating compliance.	Resident Education Information Package is to be provided to all future residents as per Tier 1 mandatory requirements.				

ENERGY & RESILIENCE

Performance Measures		Performance Criteria			For Submission		
Number	DevelopmentFeature	Tier 1 Mandatory	Met	Tier 2 Optional	Met	Documentation	Comments
		Roof: For flat roofs (low slope					
		≤ 2:12) over 500 m^{2} , buildings					
		must provide.	\checkmark				
		1. Green roof for at least 50%					
		of available roof space;					
		• Where possible, green roof					

ER1	Urban Heat Island Reduction	area should be incorporated into visible or accessible locations such as podiums. • Where the green roof is accessible, the common outdoor amenity space may be reduced by no more than 25%. • Where green roof is edible landscaping, the whole garden area including pathways and adjacent terraces, may be counted as common outdoor amenity space. or 2. Cool roof installed for 90% of available roof space and if the roof is over 2,500 m^{2} a minimum of 1,000 m^{2} will be designated solar ready. or 3. A combination of a green roof, cool roof and solar PV installed for at least 75% of available roof space.		□ Roof plan indicating heat island reduction measures, including the SRI values(s) of roof materials.	BDPQ: 50% can be achieved, a clearer definition between landscape and green roof to be provided in future submissions. A roof plan indication SRI values of roof materials to be provided in future submissions. MHBC: Outdoor amenity space proposed directly adjacent to green roof areas on Podium. Unit pavers with higher SRI values will be proposed in the outdoor amenity areas. Please see A1 - Podium Amenity Plan.
		Non-Roof: Treat 50% of the hardscapes (i.e., roads, sidewalks, and driveways) with heat island reduction measures such as: • High-albedo paving materials with an initial solar reflectance of at least 0.33 or Solar Reflectance Index (SRI) of 29; •Open grid pavement with at least 50% perviousness; • Shade from existing tree canopy or new tree canopy within 10 years of landscape installation; • Shade from architectural structures that are vegetated or have an initial solar reflectance of at least 0.33 at installation or an SRI of 29; and • Shade from structures with energy generation.	Non-Roof: Treat 75% of the hardscapes (i.e., roads, sidewalks, and driveways) with heat island reduction measures.	Plan(s), drawing(s), or other documentation indicating heat island reduction measures measure(s).	MHBC: Outdoor amenity space proposed directly adjacent to green roof areas on Podium. Unit pavers with higher SRI values will be proposed in all the outdoor amenity areas, with a minimum of SRI value 29. Please see L1-L4 Landscape Plans, A1 - Podium Amenity Plan.
ER2	Building Energy Performance and Emissions	Design and construct all buildings to meet or exceed the Energy Performance Emissions' Total Energy Use Intensity (TEUI), Thermal Energy Demand Intensity (TEDI) and GHG Emission Intensity (GHGI) targets.	Design and construct all buildings to meet or exceed the Energy Performance Emissions' Total Energy Use Intensity (TEUI), Thermal Energy Demand Intensity (TEDI) and GHG Emission Intensity (GHGI) targets.	demonstrating compliance	TBG: Energy modelling will be conducted at the detailed design phase. Minimum requirements will be met.
ER3	Energy		Incorporate on-site renewable energy of power generation to meet 5% or more of the building energy needs. or Incorporate peak shaving devices like battery storage.	□ Drawings, plans, or other documentation demonstrating compliance.	TBG: No on-site power generation provided.
ER4	Building Resilience		For high-rise residential buildings greater than 12 storeys, provide: • A 72 hour minimum back-up power system, preferably using a non-fossil fuel source, to ensure power is provided to the refuge area, and to the ground floor or the first two floors as applicable to the building use, to supply power to: building security systems, domestic water pumps, sump pumps, at least one elevator, boilers and hot water pumps to enable access and egress and essential building functions during a prolonged power outage.	Drawings, plans, or other documentation demonstrating that the project incorporates resilient measures.	

NEIGHBOURHOOD

F	Performance Measures	Р	erformance	Criteria		For Sub	mission
Number	DevelopmentFeature	Tier 1 Mandatory	Met	Tier 2 Optional	Met	Documentation	Comments
	Private Pedestrian Walkways	Provide on-site private pedestrian walkways from buildings to features outside of the development site, such as public sidewalks, multi-use trails, transit stops and adjacent buildings. All connections must be AODA compliant.				□ Site plan(s) highlighting on-site walkways.	BDPQ: Site Plan/B2 Plan/Ground Plan in coordination with landscape drawings MHBC: On-site private pedestrian walkways have considered AODA regulations, proposing a minimum 2.1m pedestrian walkway, and minimum 1.5m pedestrian circulation paths. Proposed ramps and slopes are AODA compliant. Please see L1-L4 Landscape Plans.
N2	Private Play Area & Structures	All private play areas and play structures must be AODA compliant.				□ Site plan(s) highlighting play areas with accessibility features.	MHBC: A facility fit plan has been submitted for provision of public play areas. A landscape plan will be finalized at future stages of the design process. Play areas are not currently proposed in private areas.
N3	Building Access	Provide the same means of entrance for all users to public entrances of buildings on site, or provide equivalent access when access by the same means is not possible.	Ŋ			□ Plan(s), drawing(s), or other documentation indicating building entrance(s).	BDPQ: All entrances on exterior (Ground and B2) as well as parking entrances (P1/B2/B1/Ground)
F	Performance Measures	Р	erformance	Criteria		For Sub	mission
Number	DevelopmentFeature	Tier 1 Mandatory	Met	Tier 2 Optional	Met	Documentation	Comments
N4	WayfindingSignage	Install AODA compliant wayfinding signage (e.g., braille and/or tactile signage) in all buildings and public spaces.	N			Plan(s), drawing(s), or other documentation indicating implemented measure(s).	TBG: Details on signage not available at this time, but this criteria will be complied with.
N5	CommunitySafety	Design the project using CPTED principles to create a safe space.				□ Report demonstrating community safety techniques.	TBG: Project has been designed with glazing directed to open spaces for natural surveillance, division between public and private spaces are clear, public spaces will be well-designed to ensure proper space management. Additional elements, such as lighting, will be detailed at the Site Plan stage.

LAND & NATURE

LAND & N	AND & NATURE										
F	Performance Measures	Р	erformance	e Criteria		For Submission					
Number	DevelopmentFeature	Tier 1 Mandatory	Met	Tier 2 Optional	Met	Documentation	Comments				
LN1	Topsoil	The topsoil layer should have a minimum depth of 30 cm for all turf areas, and a minimum depth of 45 cm of high quality topsoil for all planting beds and scarify hard packed subsoil in all soft landscape areas prior to placement of topsoil.		Meet Tier 1 and a minimum depth of 60 cm of high-quality topsoil for all planting beds.		□ Landscape Plan(s) and/or other documentation indicating applicable soil characteristics (depth, pH, organic matter content) and planting depth.	MHBC: A note on topsoil provision has been added to landscape plans. Please see L1-L4 Landscape Plans.				
	Light Pollution Reduction	Require all exterior lighting to be Dark Sky Compliant with the exemption of street lighting which is governed by the City's Street Lighting Requirements If a Dark Sky Fixture Seal of Approval is not available, fixtures must be full-cutoff and with a colour temperature rating of 3000K or less.		Meet Tier 1 and use motion sensors or timers for outdoor lights to maintain security without excessively lighting the building's exterior.		□ Exterior Lighting Plan, Schedule(s), or other documentation indicating lighting type, orientation and location.	TBG: Requirements regarding lighting will be met at Site Plan stage.				
LN3	Native and Non-Invasive Species	Plant 50% native plant species, including trees, shrubs and herbaceous plants preferably drought-tolerant and pollinator- friendly outside of the buffer area and within the development limit. Remaining non-native species must be non-invasive.		Plant 75% or greater with native plant species.		□ Landscape Plan(s), drawings or other documentation demonstrating the percentage of native plant species, preferably are drought-tolerant and pollinator-friendly.	MHBC: Planting plan will be provided at Site Plan Stage. 50% Native species will be met at that stage.				

LN4	Vegetated Buffers	The disturbed buffer area between the development limit and a key natural heritage feature shall be restored with 100% native plant species, including trees, shrubs and herbaceous plants, preferably drought-tolerant.				□ Landscape Plan(s), drawings or other documentation demonstrating that plant species are 100% native, drought-tolerant.	TBG: N/A as there are no key natural features on site.
LN5	Tree Preservation and Removal Compensation	Plant 60 mm caliper deciduous trees and 1.8 m high coniferous trees in accordance with the tree compensation requirements to ensure no net loss. This applies to the removal of any existing trees that are 15 cm or more in diameter at breast height.		Provide a site design solution that includes the preservation and protection of existing mature trees and a net gain of tree canopy through additional tree plantings in accordance with the tree compensation requirements.		□ A Tree Inventory Report and Preservation Plan that includes all trees on the development site and those on adjoining lands that may be affected by the proposed construction activities.	MHBC: A note has been added to Tree Inventory, Protection, and Removals plans. Please see TI-1 - TI-2.
Number	Performance Measures DevelopmentFeature	Tier 1 Mandatory	erformance Met	e Criteria Tier 2 Optional	Met	For Subr Documentation	Comments
LN6	Healthy Street Trees	Plant 60 mm caliper deciduous trees on both sides of private streets and in public boulevards at an interval rate of 1 tree per 8 m of street frontage or spaced appropriately having regard to site conditions; and Design, implement, and pay for a watering and fertilizing program for at least the first 2 years of planting.		Meet Tier 1 and provide 30 m^{3} high quality soil for street trees with a minimum top soil depth of 75 cm.		 Tree Planting Plan(s), drawings or other documentation demonstrating species, and quantity for each planting area. Watering program methods and watering schedule. 	MHBC: Proposed trees meet the standards outlined. A note has been added to landscape plans. Please see L1-L4 Landscape Plans.
l Number	Performance Measures DevelopmentFeature	Pi Tier 1 Mandatory	erformance Met	e Criteria Tier 2 Optional	Met	For Subr Documentation	mission Comments
LN7	Common Outdoor Amenity Space	For residential buildings with 20 or more dwelling units, provide 4.0 square metres of common outdoor amenity space per dwelling unit (a minimum contiguous area of 40.0 square metres must be provided in a common location). Where lot areas are constrained in some cases, flexibility on providing the common outdoor amenity space requirement may be provided at the discretion of the Director, City Development. and Where a green roof functions as an amenity space, no more than 25% of the outdoor component may be on the green roof.		For residential buildings with 20 or more dwelling units, provide 6.0 square metres of common outdoor amenity space per dwelling unit (a minimum contiguous area of 40.0 square metres must be provided in a common location).		□ Site Plan(s), drawing(s), or other documentation indicating size and location of outdoor amenity area.	BDPQ: Including balconies, 4.0sm per unit outdoor amenity space has been met, refer to stats and A203
R Number	Performance Measures DevelopmentFeature	Pi Tier 1 Mandatory	erformance Met	e Criteria Tier 2 Optional	Met	For Subr Documentation	mission Comments
LN8	Natural Heritage Features and Open Space Enhancement	Protect key natural heritage features and key hydrologic features on site. or Where all alternatives to protect and enhance key natural heritage features and open spaces on site have been evaluated and determined to not be feasible, provide compensation for the loss of ecosystem functions due to development impacts.		Maintain and enhance key natural heritage features and key natural hydrologic features on site and • Create new natural heritage features on or off-site. or • Restore and enhance connectivity among natural heritage features on or off-site.		□ Landscape Plan(s), drawing(s), or other documentation highlighting implemented feature(s) and/or an Ecosystem Compensation Report where required.	TBG: N/A as there are no key natural features on site.
	Bird-Friendly Design	For residential and non residential buildings, use a combination of bird-friendly design treatments for a minimum of 90% of all exterior glazing within the first 16 m of the building above grade or the height of the mature tree canopy (including all balcony railings, clear glass corners, parallel glass and glazing surrounding interior courtyards and other glass surfaces).				including treated area, type of treatment, density of visual markers, etc. Summary table of treated glazing areas for each elevation.	BDPQ: Bird Friendly Frits to be applied to windows, affected areas highlighted in elevations (A400 series)
		Where green roof is constructed with adjacent glass surfaces, glass is to be treated within 12 metres above green roof surface.					BDPQ: Bird Friendly Frits to be applied to windows, affected areas highlighted in elevations (A400 series)

TRANSPO	RTATION						
	Performance Measures		Performanc	e Criteria		For Su	bmission
Number	DevelopmentFeature	Tier 1 Mandatory	Met	Tier 2 Optional	Met	Documentation	Comments
T1	Electric Vehicles including plug in hybrid vehicles	For multi residential buildings, require 40% EV Rough-in & 10% EV Ready charging infrastructure or equivalent electric vehicle energy management systems (load sharing/circuit sharing) capable of providing Level 2 or higher charging for the resident parking spaces; or Require EV Ready charging infrastructure capable of providing Level 2 charging or higher for 50% of the resident parking spaces.		For multi-residential buildings, require EV Ready charging infrastructure capable of providing Level 2 charging or higher for 100% of the parking spaces excluding visitor parking.		 Parking plan(s) indicating the location of EV Rough-in or EV Ready parking spaces. Electric Vehicle (EV) Charging Infrastructure Plan, drawings or other documentation. 	BDPQ: Parking layouts and EV ready/rough in spaces noted in plan and tables as found o A151.S, A152.S, A153.S, and A201.S
T2		For non-residential buildings, require EV Rough-in charging infrastructure for 20% of the parking spaces.		For non-residential buildings, require EV Ready charging infrastructure for 20% of the parking spaces.		 Parking plan(s) indicating the location of EV Rough-in or EV Ready parking spaces. 	BDPQ: Parking layouts and EV ready/rough in spaces noted in plan and tables as found or A151.S, A152.S, A153.S, and A201.S
Number	Performance Measures DevelopmentFeature	Tier 1 Mandatory	Performanc Met	e Criteria Tier 2 Optional	Met	For Su Documentation	bmission Comments
		For residential buildings, provide 0.5 long-term bicycle parking spaces (includes adaptive bikes, trikes, and scooters for people with disabilities) in weather protected areas located within a secure area of the building or common garage for each dwelling unit. and At least 15% of the required long-term bicycle parking spaces, or one parking space, whichever is greater, shall include an Energized Outlet (120 V) adjacent to the bicycle rack or parking space. For residential buildings,		For residential buildings, provide 0.75 long-term bicycle parking spaces (includes adaptive bikes, trikes, and scooters for people with disabilities) in weather protected areas located within a secure area of the building or common garage for each dwelling unit. and At least 15% of the required long-term bicycle parking spaces, or one parking space, whichever is greater, shall include an Energized Outlet (120 V) adjacent to the bicycle rack or parking space.		□ Plan(s) indicating location, number and type (long-term) of bicycle parking spaces.	BDPQ: All bicycle parking provided on P1, B2 and B1. See A152, A153, A201, and statistic legend on each of these sheets
T3	Bicycle Parking and Storage Facilities	provide 0.1 short-term bicycle parking spaces per dwelling unit in locations that are highly visible and in close proximity to primary entrances. For non-residential buildings and mixed use buildings, provide long-term bicycle parking spaces at a rate of 1.0 bicycle parking space for each				 Plan(s) indicating location, number and type (short-term) of bicycle parking spaces. Plan(s) indicating location, number and 	BDPQ: All bicyvle parking provided on P1, B2 and B1. See A152, A153, A201, and statistic legend on each of these sheets BDPQ: All bicyvle parking provided on P1,
		 1,000 square metres of gross leasable floor area and at least one bicycle rack shall be installed for short-term bicycle parking. For non-residential buildings and mixed use buildings, provide two trip-end facilities (i.e., showers and a change room) for every 60 long term bicycle parking spaces (minimum of 1 facility when more than 5 bicycle parking 				type (long-term) of bicycle parking spaces. □ Plan(s) indicating trip-end facilities.	B2 and B1. See A152, A153, A201, and statistic legend on each of these sheets BDPQ: Only 5 non-residential bicycle spaces required and provided. Facilities no required.

WASTE MANAGEMENT

	Performance Measures	Р	erformance	e Criteria	For Submission			
Number	DevelopmentFeature	Tier 1 Mandatory	Met	Tier 2 Optional	Met	Documentation	Comments	
WM1	Construction Waste Reduction	Divert 50% or more of all non- hazardous construction, demolition, and land clearing waste from landfill.		Divert 75% or more of all non-hazardous construction, demolition, and land clearing waste from landfill.		□ Commitment letter to divert waste through a third-party hauler.	The details on construction related waste will be provided at a later date.	
	On-Site Storage	For multi-storey residential buildings, provide a tri-sorter or separate chutes to direct and separate materials into either recyclables, organics or waste. Ensure there is adequate storage space for accumulated recyclables, waste and organics generated between collection days and be designed to minimize litter and pests.		Meet Tier 1 and include a dedicated space for materials such as textiles, batteries and electronics is provided.		□ Drawing(s) demonstrating compliance.	BDPQ: All waste recepticles and tri sorters provided for each building and reflected on Level B2 - see A152	

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WATER

	Performance Measures	Р	erformanc	e Criteria		For Sul	bmission
lumber	Development Feature	Tier 1 Mandatory Requirement	Met	Tier 2 Optional Requirement	Met	Documentation	Comments
W1	Stormwater Management	Achieve a level one/enhanced stormwater treatment for all stormwater, and achieve runoff reduction of a minimum 5 mm of rainfall depth; and Demonstrate that the applicable groundwater recharge targets are met based on site-specific water balance/budget studies, in accordance with the CTC Source Protection Plan; and Provide an enhanced level of protection for water quality through the long-term average removal of 80% of Total Suspended Solids (TSS) on an annual loading basis from all runoff leaving the site, in accordance with the City of Pickering Stormwater Management Design Guidelines.		In a manner best replicating natural site hydrology processes, manage on-site runoff using at least two of the following low-impact development (LID) and green infrastructure: • permeable pavement • bioswales • soakaways • rain gardens • filtered strips • infiltration trenches or Achieve post-development runoff reductions to no more than 50% of annual precipitation (approx. 10 mm of rainfall event retention from all site surfaces) through infiltration, evapotranspiration, water harvesting and reuse.		□ Stormwater Management Report, Plan(s), and drawing(s) to verify compliance.	CPE: The site is desinged to treat stormwater to a Level One Enhanced lev of protection. This will be achived by treating runoff from dirty surfaces, like vehicuar areas, using a treatment unit to achive 80% TSS removal from the sites stormwater runoff. The site is also desing to capturr and retain the 5mm rainfall ev onsite and be re-used/reintroduced back into the enviroment onsite. The 5mm rainfall even is calulated in the FSR and to volume will be stored in retention tanks of site and used for irrigation and infiltrition Details of the reuse techniqires will be provided at SPA stage. Refer to the FSR f details.
Number	Development Feature	Tier 1 Mandatory Requirement	Met	Tier 2 Optional Requirement	Met	Documentation	Comments
W2	Building Water Efficiency	Install WaterSense® labeled water fixtures.		All buildings reduce indoor aggregate potable water consumption (not including irrigation) by 30% better than the Ontario Building Code baseline.		 Plumbing fixture specifications or other documentation demonstrating WaterSense® labelling and flush/flow rates. Calculations demonstrating water use reduction. or Third party verification of water reductions with systems like Home 	TBG: To be addressed at Site Plan stage.

				systems like Home	
				Energy Rating System	
				H2O or WaterSense®	
				labeling. Hand	
				calculations could be done	
				according to LEED version	
				4.1 approach.	
			For mid to high-rise residential		
			development, each building	Plan(s), drawing(s), or	
	Rainwater		includes a separate, non-potable	other documentation	
W3					
	Harvesting		subsurface watering	indicating non-potable	
			system for irrigation and	water system.	
			outdoor–reuse purposes.		