

FOR PLANNING AND DEVELOPMENT APPLICATIONS



**STAGE 1**

COVER  
PAGE

The Surrey Sustainable Development Checklist (SSDC) is intended to:

- Supports the Vision, Goals and Actions of the Surrey Sustainability Charter;
- Encourage more sustainable land use and building design;
- Provide a consistent "sustainability-focused" review of development applications;
- Raise awareness in the development industry of the benefits applying sustainable "best management practices"; and
- Explore and document how and to what extent new developments in Surrey are incorporating sustainable design and technology.

The Checklist is separated into two parts related to two distinct stages of the development approval process. The first stage relates to land use applications and the second stage relates to building permit applications.

**Instructions for Use: (Stage 1 Applications)**

There are five steps related to the completion of the Stage I Sustainable Development Checklist process for the Planning and Development Department:

1. Applicant will attend a Pre-Application meeting with City staff: Development Planner will determine if a Checklist submission is required and discuss proposal with applicant;
2. If required, applicants will complete a Checklist and fill-in and/or tick-off appropriate questions that apply to the particular application;
3. Applicants will submit the completed Checklist (e-mail of PDF or hard copy submission) to the appropriate City staff along with a completed land use application;
4. Staff in various departments will review the completed Checklist and discuss the submission with applicant as part of the development application process;
5. A brief summary of the project Checklist will be attached to Land Use Planning Reports to Council highlighting the Sustainable Development features of the project.

If you would like further information on the Surrey Sustainability Checklist, please go to [www.surrey.ca/SDC](http://www.surrey.ca/SDC) for FAQs and submission details and/or contact the Planning and Development Department.

**What is the Sustainable Development Checklist?**

*The Sustainability Checklist is a quick way to evaluate the environmental and community benefits arising from a proposed property development, and to identify any economic social and environmental impacts or sustainable development features.*

*The Stage 1 Checklist includes 8 sections involving 24 questions that cover a multi-faceted range of sustainability issues, including:*

1. Context
2. Location
3. Density and Diversity
4. Ecology and Stewardship
5. Sustainable Transportation and Mobility
6. Accessibility and Safety
7. Green Certification
8. Education and Awareness

*Please note that the checklist identifies a wide range of sustainability issues, but does not prioritise these in any way.*

*The Checklist is not intended to act as a "pass" or "fail" test of development plans or proposals, but rather to assist project proponents in developing more sustainable high-quality buildings and neighbourhoods.*

**APPLICATION TYPE**

**CHECKLIST SECTIONS**

<b>STAGE</b>  <b>1</b>	OCP AMENDMENT	(1) Context (Office Use Only)	(6) Accessibility & Safety
	REZONING	(2) Location	(7) Buildings & Energy
	DEVELOPMENT PERMIT	(3) Density and Diversity	(8) Education and Awareness
	NCP AMENDMENT	(4) Ecology and Stewardship	
	SUBDIVISION (>3 LOTS)	(5) Sustainable Transportation & Mobility	

**INSTRUCTIONS:**

To complete this interactive Checklist Form, please check off and/or enter your responses directly into the fields below, beginning with (2) "Location" section. This form can be completed over multiple sessions – so you do not need to complete it all at once. Simply press the **Save Form** button at any time, and the form will be saved on your computer.

When you have completed the form, ensure you are connected to the internet, and press **Submit Form** button on the last page of the form and the completed form can be attached to an email. If you have any questions about the Checklist, please review the Frequently Asked Questions page on the City of Surrey website [www.surrey.ca/SDC](http://www.surrey.ca/SDC) or review the "Definitions Sheet" attached to this form. Once you have completed the checklist please submit it to the Development Planner assigned to your application. If you are unable to submit this Checklist Form via e-mail, please print and/or submit a hard copy version of this form to the Development Planner assigned to your application.

Note: Adobe Acrobat Reader 7.05 or greater is required to complete this form. Download or upgrade to the latest free version by visiting the [Adobe Website](#), or pick up a hard copy of this form from the Surrey Planning and Development Department.

**APPLICATION INFORMATION:**

**Date:**

**Checklist Completed by:**

**Applicant Email:**

**File #:**

**Site Address:**

**\*THIS SECTION FOR OFFICE USE ONLY\***

① CONTEXT	Query	Amenity Type	Amenity Name	Proximity (Meters) (As the crow flies)	Proximity (Meters) (As a pedestrian)
	Development sites proximity to nearest existing or planned Amenity:	<a href="#">Transit Route / Stop</a> Elementary School Secondary School <a href="#">Grocery Store</a> Shopping/Retail Centre Rail Line City or Neighbourhood Park Regional or Conservation Park Greenway City or Town Centre			

This Section to be filled in by Development Planner

**\*APPLICANTS TO FILL OUT THIS SECTION FORWARD\***

② LOCATION	Query	Check Those That Apply	Name / Explain
	A1 Development site is located within:	Surrey City Centre A Town Centre Area <a href="#">Urban Infill Area</a> <a href="#">Frequent Transit Development Area</a> Secondary Land Use Plan Area Suburban or Rural Area Other	
	A2 Development application is consistent with a Secondary Plan and/or the OCP?	Yes No N/A	

Query		Provide Density Below		
B1	Development Density	<p><i>*Units Per Hectare (UPH) for Residential and (Floor Area Ratio (FAR) for other Uses</i></p> <p><b>Permitted <a href="#">Gross Density</a></b> based on NCP/Town Centre Plan</p> <p><b>Proposed <a href="#">Gross Density</a></b></p>		
Query		Check Those That Apply	Describe Amounts/ Explain	
B2	Does the development include a mix of uses?	Yes No Not Permitted	<p><b>Use</b></p> <p>Residential Commercial Industrial <a href="#">Business Park</a> Park Agricultural</p>	<p><b>% of Total Floor Space</b></p> <p><b>% of Total Site Area</b></p>
B3	Does the development include a mix of housing types?	Yes No Not Permitted	<p><b>Housing Type</b></p> <p>Single Family (&lt;4000 sq ft lot) Single Family (&gt;4000 sq ft lot) Attached Residential (2-4 units) Ground Oriented Townhouses Low-Rise Apartment (≤ 6 Stories) High-Rise Apartment (&gt;6 Stories)</p>	<p><b># of Units</b></p> <p><b>% Housing Type</b></p>
B4	Does the development contain a range of unit sizes for a variety of household types?	Yes No Not Permitted N/A	<p><b>Unit Types</b></p> <p>Multi-bedroom (3+ bedrooms) Multi-bedroom (2 bedrooms) Single-bedroom (1 bedroom) Bachelor</p> <p><b>TOTAL # of UNITS</b></p>	<p><b># of Units</b></p> <p><b>% of Units</b></p>
B5	Does the development include purpose built market rental units or social housing?	Yes No Not Permitted N/A	<p><b>Housing Type</b></p> <p><a href="#">Market Rental</a> <a href="#">Social Housing</a> Secondary Suite Coach House</p>	<p><b># of Units</b></p>
B6	Does the project include heritage designation or protection on site /off site, and/or adaptive reuse of heritage features?	Yes No N/A		
B7	Does the development allocate opportunities / space for community or private gardens?	Yes No Not Permitted	<p><a href="#">Community "Public" Garden(s)</a> <a href="#">Community "Private" Garden(s)</a> Backyard Garden(s) <a href="#">Rooftop Garden(s)</a> Other:</p>	<p><b>Area (m2)</b></p>

Query		Check Those That Apply	
C1	Does the development incorporate in its design <a href="#">Low Impact Development Standards</a> (LIDS)?	Yes No Not Permitted N/A	<b>Rain water Management Design Considerations:</b>  <a href="#">Absorbent Soils ≥ 300 mm in depth</a> Roof Downspout Disconnection On-lot <a href="#">Infiltration trenches</a> or <a href="#">Sub-surface chambers</a> Cisterns / Rain Barrels Vegetated Swales/ Rain Gardens / Bio-swales <a href="#">Dry Swales</a> <a href="#">Natural landscaping</a> <a href="#">Xeriscaping</a> <a href="#">Green Roof(s)</a> <a href="#">Green Wall(s)</a> Sediment Control Devices Perforated Pipe Systems <a href="#">Permeable Pavement / Surfaces</a> Rain Water Wetlands / Detention areas Other:
C2	Does the project propose to preserve, enhance or compensate for site ecology on or off site?	Yes No Not Permitted N/A	<div style="text-align: right;"><i>% or Amount</i></div> Change in <a href="#">Impervious Area</a> (+/- ha) Change in <a href="#">Tree Canopy Coverage</a> (+/- %) # of <a href="#">Protected Trees</a> , retained # Trees planted on site # Trees planted off site Replacement Tree Ratio ( _ : 1) % Protected/Park areas added on site (ha)  Measures taken to enhance habitat or to compensate for habitat loss on or off site: <i>Explain:</i>
C3	Does the development site contain any environmentally sensitive features, Riparian Areas or <a href="#">Green Infrastructure Network</a> Opportunity areas as identified in the <a href="#">Surrey Biodiversity Conservation Strategy</a> (BCS)?	Yes No	<div style="text-align: right;"><i>Name</i></div> <b><a href="#">Riparian Area(s):</a></b> Red Coded Stream (Class A) Red Dashed Coded Stream (Class AO) Yellow Coded Stream (Class B) Green Coded Stream (Class C) Wetlands Ponds or Lakes Intertidal Areas  <b>Green Infrastructure Opportunities:</b> <a href="#">BCS Hub</a> <a href="#">BCS Corridor</a> <a href="#">BCS Site</a> <div style="text-align: right;"><i>GIN Label or #</i></div>
C4	Does the Development contain provisions for recycling and organic waste facilities or programs?	Yes No Not Permitted N/A	Composting areas provided on site Composting Pickup made available Recycling Pickup made available Organic Waste Pickup made available Other:

(5) SUSTAINABLE TRANSPORT & MOBILITY	Query		Check Those That Apply	Check those that Apply and/or indicate Amount
	D1	Does the project include private vehicle use reduction and emission reduction measures?	Yes No Not Permitted N/A	<a href="#">Shared Parking</a> Parking Allocation/Size (Amendments) Electric Vehicle Charging Station(s) Visible/secure all-weather bicycle parking provided Other:
D2	Does development design include pedestrian or cycling oriented Infrastructure/direct external network linkages?	Yes No Not Permitted N/A	Length of paths and sidewalks on site (m/ha) Connected to off-site pedestrian and multiuse paths Covered outdoor waiting areas Pedestrian-specific lighting Direct pedestrian linkages to transit stops Showers and Change Facilities Bike Racks and/or Lockers Preferential Carpool Parking Other:	

(6) ACCESSIBILITY & SAFETY	Query		Check Those That Apply	Check Those That Apply / Explain
	E1	Does the design of the site incorporate Crime Prevention Through Environmental Design "CPTED" principles?	Yes No N/A	
	E2	Does the Development design provide for adaptable and/or accessible units?	Yes No N/A	# of <a href="#">adaptable units</a> % of <a href="#">adaptable units</a>  # of <a href="#">accessible units</a> % of <a href="#">accessible units</a>
E3	Does the project provide spaces for different age groups and/or life stages?	Yes No Not Permitted N/A	<a href="#">Childcare /Daycare Space</a> Playground/Recreation Space Home Based Business Opportunities / Live-work space Adult Care or <a href="#">Assisted Living</a> Space Outdoor Community Gathering Space Indoor Community Amenity Space Independent <a href="#">Senior Living</a> Space Other(s):	

(7) BUILDINGS & ENERGY	Query		Check Those That Apply	Check Those That Apply / Explain
	F1	Is the development seeking <a href="#">green building certification</a> ?	Yes No N/A	<a href="#">Green Building Certification System</a>  <b>PART 9 BUILDINGS:</b> <a href="#">Built Green</a> <a href="#">Passive House</a> <a href="#">Energy Star</a> <a href="#">R-2000</a> <a href="#">LEED</a> Other:  <b>PART 3 BUILDINGS:</b> <a href="#">LEED</a> Other:

		Query	Check Those That Apply	Explain
<b>(8) EDUCATION AND AWARENESS</b>	G1	Are residents, community stakeholders and end-user groups involved in the planning process?	Yes No N/A	
	G2	Will a sustainable features document be created and given to new occupants/tenants at time of sale?	Yes No N/A	
	G3	Do any existing City regulations currently prevent you from implementing innovative or more Sustainable initiatives for this project?	Yes No	
	G4	Does the project include sustainability features not addressed in this (Stage 1) section of the checklist?	Yes No	

## Authorization:

The content of this checklist submission may be used in the preparation of project summaries, and can be viewed by the Public upon request to the Planning and Development Department.

I hereby authorize the above Checklist Submission to the City of Surrey, and certify the authenticity of the information provided.

Thank you for taking the time to complete the City of Surrey Sustainable Development Checklist. Please email the completed checklist to the Development Planner assigned to your application by clicking the “Submit Button” above with your planning application; or returns a hard copy by fax or mail to:

**City of Surrey**  
**Planning & Development Department**  
 10000 130th Ave, Surrey, B.C. \* ( \* \*

**Phone: 604-591-4441**  
**Fax: 604-591-2507**

## DEFINITIONS: Glossary of Terms

**Absorbent Soils:** land designed to retain precipitation within a porous soil layer and associated vegetation. Runoff volumes and frequencies are reduced due to infiltration and evapotranspiration. Absorbent landscaping measures include a minimum 300 mm layer of absorbent landscaping soils for vegetated surfaces, and minimization of disruption to existing permeable soils.

**Accessible unit:** a dwelling unit that complies with the BC Housing Management Commission's "[ILBC Design & Construction Standards](#)" or an equivalent standard. Accessible units are designed and constructed to be barrier-free for people of all physical abilities (including those who use a wheelchair), to the greatest extent possible, without the need for adaptation or specialized design. For example, an accessible unit typically has fixtures and equipment installed that meet the needs of wheelchair users or hearing impaired (e.g., lowered kitchen and bathroom counter with open knee space below, grab bars installed in the bathroom at the toilet and bathtub or shower, and in-suite strobe lights to signal fire alarm activation).

**Adaptable unit:** an apartment unit that complies with the BC Building Code's "[Adaptable Housing Standards](#)". These are design standards that will allow the unit to be easily and economically converted to a fully accessible unit. For example, an adaptable unit typically meets all the spatial requirements for wheelchair users (e.g., wider door openings and manoeuvring spaces), accessible equipment installed that would require costly retrofit if done later (e.g., lever handles for doors, rocker type light switches, wood backing for future grab bars, electrical rough in for fire alarm strobes), and accessible mounting heights for all operable equipment (e.g., light switches, electrical outlets, and window latches).

**Biomass production:** the use of energy stored in non-fossil organic materials such as wood, straw, vegetable oils and wastes from the forest, agricultural and industrial sectors, food-processing residues, municipal sewage waste or household garbage. Biomass Energy-from-waste projects include steam production for industrial or commercial use or electricity.

**Bio-retention cells:** landscaped areas consisting of excavation backfill with a sand/soil mixture and plated with native vegetation, oriented and designed to receive and filter rainwater runoff and reduce and improve water quality for a limited drainage area through various physical, chemical and biological processes.

**Business Park:** consists of mixed light impact industrial uses, office-type uses and industrial service uses in a business park setting as defined in [Surrey Zoning Bylaw No. 12000](#).

**CPTED (Crime Prevention through Environmental Design):** an approach to planning and development that reduces opportunities for crime; emphasizing design modifications which can be applied to identify and remove potential problems in proposed developments.

**Community "Public" Garden:** gardens located on public lands and/or a garden where at least 50% of garden has open membership and garden is open to the public at least 50% of the time). They are often offered in partnership between City of Surrey Parks and community-based organizations.

**Community "Private" Garden:** is characterized by a series of garden plots rented out to individual within a Residential complex. Often they are offered for the purpose of food production and may be developed to support local food security. In private strata gardens, the parcels are cultivated individually, and the common areas (pathways) are often managed by a Community Group or Strata Corporation.

**Dry Swales:** a type of open vegetated channel use to treat and attenuate the water volume of rainwater runoff as well as convey excess rainwater downstream. Dry swales are typically located in a drainage easement at the back of a residential lot or along roadsides in place of curb and gutter.

**BCS Corridor:** include linear habitat areas identified in the [Surrey Biodiversity Conservation Strategy \(BCS\)](#) that offer possible species and ecological process connections between fragmented hubs.

**BCS Hub:** large contiguous or near contiguous areas of natural vegetation with complex ecological processes identified in the [Surrey Biodiversity Conservation Strategy \(BCS\)](#) that are at least 10 hectares in size.

**BCS Site:** smaller areas of natural vegetation with complex ecological processes identified in the [Surrey Biodiversity Conservation Strategy](#) that are between 0.25 and 10 hectares in size.

**Ecosystem Management:** is a process that aims to conserve major ecological services and restore natural resources while meeting the socioeconomic, political and cultural needs of current and future generations. The principal objective of ecosystem management is the efficient maintenance, and ethical use of natural resources.

**Edible Landscaping:** the practices of using food-bearing plants for landscaping purposes in place of more commonly used ornamental plants.

**FAR (Floor Area Ratio):** a density measure expressing the ratio between a building's total floor area and its site coverage. To calculate F.A.R., the gross square footage of a building is divided by the total area of its lot. F.A.R. conveys a sense of the bulk or mass of a structure, and is useful in measuring non-residential and mixed-use density. As a formula:

$$\text{Floor area ratio} = \frac{\text{(Total site coverage area on all floors of all buildings)}}{\text{(Total Area of the Site)}}$$

**Frequent Transit Area:** priority locations to accommodate concentrated growth in higher density forms of development. They are located at appropriate locations along [TransLink's Frequent Transit Network](#). Frequent Transit Development Areas complement the network of Urban Centres, and are characterized by higher density residential, commercial and mixed uses, and may contain community, cultural and institutional uses. Urban design for these areas promotes transit-oriented communities where transit, cycling and walking are the preferred modes of transportation. Service on the FTN is at least every 15 minutes, 15 hours per day, 7 days a week.

**Fuel Cells:** a device in which a fuel, such as hydrogen gas, is combined with oxygen to produce electricity, water, and heat by oxidation of fuel (hydrogen and oxygen or zinc and air) without combustion;

**Geo-Exchange:** a 'heat pump' or central heating and/or cooling system that pumps heat to or from the ground. It uses the earth as a heat source (in the winter) or a heat sink (in the summer).

**Geothermal Energy:** heat energy generated and stored in the Earth. Geothermal energy uses the escaping heat from Earth's core as a means to heat water and produce electricity.

**Greenhouse Gas (GHG).** any atmospheric gas that contributes to the greenhouse effect by absorbing infrared radiation produced by solar warming of the Earth's surface. They may include carbon dioxide, methane, nitrous oxide, and water vapour.

**Green Infrastructure Network (GIN):** an interconnected system of natural areas and open space that conserves ecosystems and functions, while providing benefits to both wildlife and people.



**Green Roof:** a roof of a building that is partially or completely covered with vegetation and a growing medium, planted over a waterproof membrane. It may also include additional layers such as root barrier and drainage and irrigations systems.

**Green Wall:** a wall, either free-standing or part of a building that is partially or completely covered with self sufficient vertical vegetation and, in some cases, soil or an inorganic growing medium. They differ from green façades (e.g. ivy walls) in that the plants root in a structural support which is fastened to the wall itself. The plants receive water and nutrients from within the vertical support instead of from the ground.

**Grocery Store:** a store established primarily for the retailing of food and household goods, and includes the sale of fresh produce.

**Gross Density:** a units-per-hectare density measurement that includes in the calculation, land occupied by public rights-of-way, recreational, civic, commercial and other uses. As a formula:

$$\text{Gross Density} = \frac{\text{(Total residential units)}}{\text{(Total Area in Hectares of the Site)}}$$

**Heat exchanger:** a device built for efficient heat transfer from one medium to another. The media may be separated by a solid wall, so that they never mix, or they may be in direct contact within a system of hot water pipes mounted above the boiler combustion chamber that uses the combustion gases thermal energy to create hot water. For example heat could be transferred, in a geothermal heat pump system, from water-to-air or from water-to-water and visa versa

**Infiltration trenches:** a rock-filled trench with no outlet that receives rainwater runoff. Rainwater runoff passes through some combination of pre-treatment measures, such as a swale or sediment basin, before entering the trench. Runoff is then stored in the voids of the stones, slowly infiltrated through the bottom and into the soil matrix over a few days.

**Impervious Area:** any portion of the buildable parcel that has a covering, which does not permit water to percolate into the natural soil. Impervious surface shall include, but not be limited to, buildings, all driveways and parking areas (whether paved or not), sidewalks, patios, swimming pools, tennis and basketball courts, covered decks, porches, and other structures. Open, uncovered decks are not considered impervious. The use of patio blocks, paver bricks or compacted gravel material are considered impervious surfaces as a majority of water runoff the surface rather than being absorbed into natural soils underneath.

**Low Impact Development Standards (LIDS):** An approach to land development that uses various land planning and design practices and technologies for simultaneously conserving and protecting natural resource systems and reducing infrastructure costs.

**Market Rental:** a private single-ownership apartment or townhouse building with three or more rental units; excludes strata developments and cooperatives.

**Multi-use Pathway:** pathways or greenways for pedestrians, cyclists and other non-motorized users. Multi-use pathways provide Surrey residents with an opportunity to walk or cycle to destinations within their community and throughout the city. The City's conceptual [Greenways Map](#) identifies some of Surry's Multi-use pathways.

**Natural Landscaping:** the use of native plants, including trees, shrubs, groundcover, and grasses which are indigenous to the geographic area of the garden. Indigenous plants that grow locally are suited to grow in the natural climate without the addition of artificial assistance, such as fertilizers and regular watering. Native species also tend not to be invasive, meaning that they don't encroach upon and replace other native plant species.

**Permeable Pavement:** pervious pavements consist of a variety of types of pavement, pavers and other devices that provide rainwater infiltration while serving as a structural surface.

**Protected Tree:** as defined in [Surrey Tree Protection Bylaw, 2066 No. 16100](#).

**Rain Water Management:** an integrated system of practices and techniques for managing the safe and efficient handling of post-development hydrological cycle.

**Ride Share:** carpooling and vanpooling, in which vehicles carry additional passengers. Rideshare programs typically provide carpool matching, vanpool sponsorship, marketing programs, and incentives to reduce driving.

**Riparian Area:** of or pertaining to stream systems or stream corridors. Riparian areas usually include a stream channel, its banks, the floodplain, and associated vegetated buffers.

**Rooftop Garden:** A rooftop garden is any garden on the roof of a building. Besides the decorative benefit, roof plantings may provide food, temperature control, hydrological benefits, architectural enhancement, habitats or corridors for wildlife, and recreational opportunities.

**Shared Parking:** parking spaces that are shared by more than one user, and allow parking facilities to be used more efficiently. Shared Parking takes advantage of the fact that most parking spaces are only used part time by a particular motorist or group, and many parking facilities have a significant portion of unused spaces, with utilization patterns that follow predictable daily, weekly and annual cycles.

**Social Housing:** rental housing owned and managed by a government agency and/or non-profit organization, typically provided for low and moderate income households. Some social housing is targeted to special populations such as seniors, aboriginal people, people with mental health issues, or other vulnerable population and some is rented at market or low-end of market rates

**Sub-surface collection facilities:** underground detention facilities such as vaults, pipes, tanks, and other subsurface structures designed to temporarily store rainwater runoff for water quantity control; and are designed to drain completely between runoff events, thereby providing storage capacity for subsequent events.

**Thermal Storage:** comprises a number of technologies that store thermal energy in energy storage reservoirs for later use.

**Tree Canopy Coverage:** the percentage of the total site area occupied by trees.

**Urban Infill:** the development or redevelopment of vacant or underutilized land within the Urban or Town/City Centre designated areas of Surrey's Official Community Plan "OCP"; where enhancement or rehabilitation of existing structures or infrastructure maintains the continuity of the original community fabric.

**Xeriscaping:** refers to landscaping and gardening in ways that reduce or eliminate the need for supplemental water from irrigation.

**Disclaimer:**

These definitions are provided for informational purposes ONLY and do not constitute official text of bylaws or regulations, and are not intended for legal use or direction. Please be sure to check with the Surrey Planning and Development Department where an interpretation is needed.