

## Sustainable Urban Landscapes – Tool Summary

### Authors

Name	Organisation	Origin
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### Info

**Date:**

2003 – Version 1.5

**Place of origin:**

Vancouver, Canada

**Homepage:**

<http://www.jtc.sala.ubc.ca/projects/DesignManual.html>

**References:**

- Condon, P.M., 2003. *Sustainable Urban Landscapes: The Site Design Manual for B.C. Communities*, Vancouver, Canada: University of British Columbia.

**Latest use:**

Several neighbourhood design charettes from 1996 to 2003.

**Download:**

<http://www.jtc.sala.ubc.ca/projects/DesignManual.html>

### Description

“The Site Design Manual for BC Communities is rooted in several recent and extensive efforts to develop alternative development and engineering standards for the design of new (and for the retrofit of existing) communities in British Columbia. With the cooperation of citizens, government organizations, and related agencies, these efforts have been motivated by a shared belief that integrated processes and principles are crucial ingredients in the development of more sustainable communities and urban regions. It is within our reach to create regions that can be maintained in the future and that are healthy for all living things. Certain new and, in some cases, revived practices are all that are required. Government and citizens are cognizant of this need for change and are making it happen. Provincial, federal, and regional jurisdictions, along with concerned citizens and public interest groups, have come together to implement an important shift in the way our new and revived neighbourhoods are built.”

“This manual is intended for people interested in making better communities: citizens, elected officials, government regulators, NGOs, and those who plan and build new homes and communities. Unlike traditional design and engineering manuals whose treatments of site development, environmental protection, and drainage guidelines are presented separately and often in language exclusive to their intended audience, this manual tries to keep all of the pieces of the urban design puzzle together. We do this in order to avoid problems that have arisen when issues have been “disintegrated”; that is, when transportation planning has been discussed without reference to land-use; when storm drainage engineering has been discussed without reference to stream habitat protection; and when engineering and subdivision standards have been discussed without reference to economics.

This manual “re-integrates” these pieces of the sustainable urban region. As many of us now know, a sustainable community is one that balances ecology, economy, and equity. We have tried to maintain this balance in the way we have developed and organized this manual.”

## Key Theoretical Background

Local (British Columbia) policy on sustainable urban development.

“Part One begins with a review of current development trends and their effects on the interrelated components of our regional landscapes: water, air, and people. This is followed by a brief overview of the emerging policy and legislative context for sustainability within British Columbia.”

The basis for the design guidelines comes from practice in a series of charrettes.

“This section features four case studies of community design charrettes that have incorporated sustainable principles. [...] These four case studies are intended to show that there is no single formula for achieving more sustainable communities. Rather, just as there are many types of sites, so are there many potential solutions.”

“Together, the charrette Strategies and Taxonomy provide the methodological basis for Six Overarching Principles of sustainable community design, outlined in Part Three. These Principles were reverse engineered from the charrette Strategies and the years of policy development and research that preceded them. Together, they constitute a valid and defensible “first set” of principles for rethinking how our communities are designed.”

Strong influence from US neo-traditional development principles: new urbanism, TOD, smart growth.

## SUD Framework

“In culling the scores of design ideas emerging from the four charrettes, we developed a Taxonomy of Urban Sites, which became the means for first organizing, and then communicating, the various components that make a sustainable community. The Taxonomy is informed by four tenets of sustainability – **green infrastructure, social infrastructure, movement, and cost** – and by four scales of urban design – **district, corridor, block, and parcel**.”

“The district, corridor, block and parcel taxonomy is based on functional principles of urban design. Together and in pieces these units can be organized and configured in many ways to produce either more or less sustainable results. For each scale there are many different types of units. For instance, orthogonal blocks that form gridiron street patterns are one type of block, polygonal blocks that form radial webs are another, and green centered large blocks that allow natural landscapes to penetrate deeply into the fabric of the community are a third. In this and other respects, application of functional principles overrides adherence to any one stylistic urban design pattern.”



“While the word sustainability defies absolute definition, it has commonly come to represent that which balances social, ecological, and economic imperatives. When we apply sustainable thinking to problems of urban design, these imperatives translate into the interrelated categories of ecological infrastructure, movement, social infrastructure and cost.”

## Input

“A DESIGN APPROACH The Charrette Strategies from Part Two revealed scores of ways to design more sustainable districts, corridors, blocks and parcels. In this section, we have distilled the Strategies, and grouped them into Six Overarching Principles. Each of the six principles address a range community and site design objectives (from capitalizing on natural assets, to creating vibrant urban centres) and each make up an essential piece of a unified whole. Flowing from these principles are a series of site and community Design Guidelines (beginning on page 86). The Design Guidelines are organized first, according to the four scales of urban design, and second, according to the Six Overarching Principles.” The guide has a simple qualitative checklist to support the implementation of the guidelines.

District

## sustainability checklist

	Yes	No	Take Action
1 Do site development, engineering and subdivision requirements reflect the purpose and goals of the regional growth strategy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Do site development, engineering and subdivision requirements reflect Official Community Plan principles?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Does the development reflect the goals/objectives of regional Liquid Waste Management, pollution management, and/or watershed plans and strategies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 Does the development utilize existing infrastructure networks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 Does the development support a coordination between land-use and transportation ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 Are residents and community stakeholders involved in the planning and design process?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 Does the development reflect an understanding of watershed forms and processes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

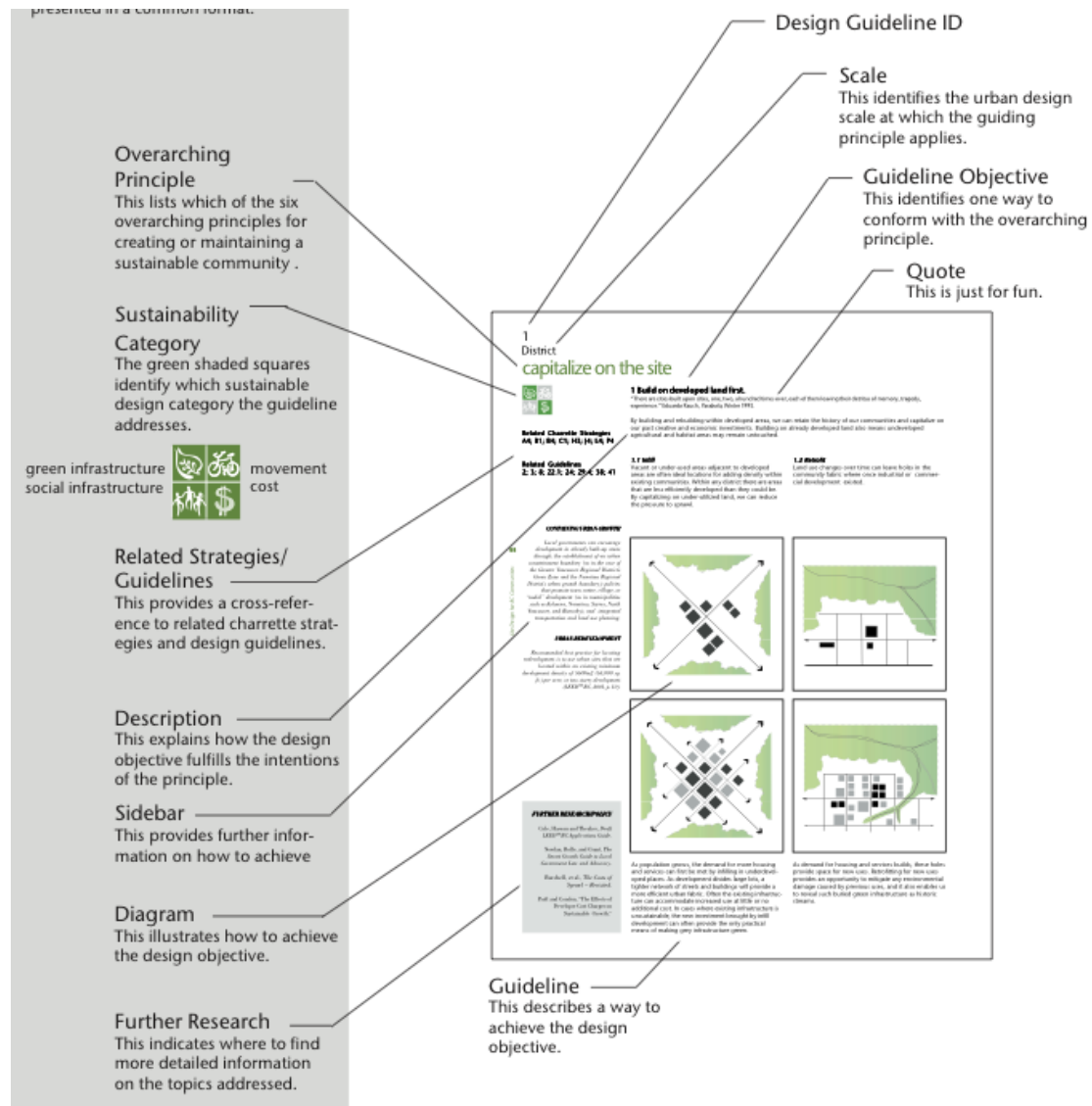
## Methods

“It is important to emphasize that in order to achieve the highest degree of balance between ecological and urban systems, the Design Guidelines are not presented as fixed, prescriptive sets of instructions, but rather as a menu of options for adapting to each distinct site type and situation at the scales of the district, corridor, block, and parcel.” Each guideline follows a template which includes links to sustainability dimensions, other guidelines, and design strategies.



**Related Charrette Strategies**  
A3; A4; B3; I4; J4; P3

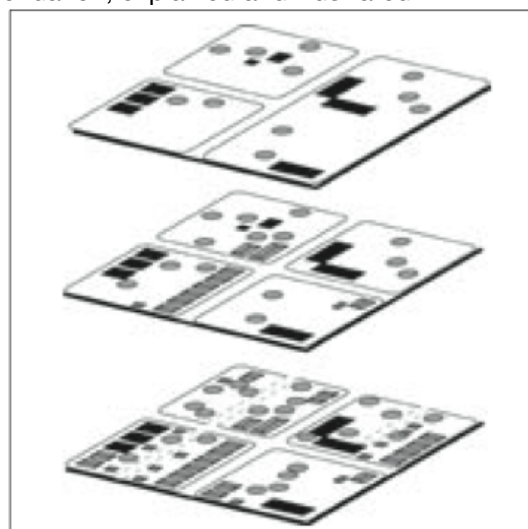
**Related Guidelines**  
9; 32; 37; 41; 42



Each indicator is not a calculation but a recommendation, explained and illustrated.



**2.2.2 Grow incrementally**  
Change works best when it occurs one step at a time. Incremental development is the best way to allow new uses to grow around existing ones, keeping jobs and services within the expanding community. Look for ways to add new homes to existing structures, new structures to existing lots, and new lots to existing communities. Resident opposition to change is often a function of the extent of that change. Existing residents can more easily embrace incremental, respectful, and organic growth.



## Output

No standardised output.

## Sustainable Urban Landscapes – Tool Review

### General

#### Background

The references are not structured but they are clearly indicated throughout the document and there is an introduction explaining the sources. Very much based on local policy, which reduces its relevance for wider application, and also on new urbanist principles. Makes it somewhat similar to LEED-ND, but pre-dates it so it's not so up-to-date even.

#### Application (Scale and Design Phase)

Recognises the interaction between different scales from the outset, and includes criteria specific to different scales.

There's a very strong focus on landscaping and the natural environment, not just in terms of areas and resources, but also aesthetic qualities.

#### Sustainability Principles

Gives great importance to mobility and its impact on sustainability creating a dimension for it. However the framework is design oriented and the sustainability principles do not dictate the structure, instead are the spatial scales who organise the guidelines and the checklist. Makes it clear that design measures can impact on more than one sustainability dimension and as such these are clearly indicated in each guideline.

#### Assessment Criteria

Indicates where there are links (dependency or synergy) between different indicators, breaking the boundaries of the classification across scales.

This is by far the most networked guide book. Barton's is as well but is not so explicit and clear. It is there and is apparent through the difficulty in disentangling the document into a "neat" structure.

Some guidelines might be questionable because they are tending towards a design code, instead of a more general principle, and a systematic method to test it. For example, placing the centre in the geographic centre, creating alleys for access to back gardens and off street parking. One might agree or disagree, these can be good solutions in some places but not in others.

Overall there's his idealistic sense and exclusive common in neo-traditionalist propaganda.

Whilst the guidelines are fine, the finer detail (and if it were to move to indicators) is questionable. There is no evidence to support many claims, other than policy.

E.g. live-work spaces are good for people with young children to reduce childcare costs!

Unless the work is a nursery...

#### Indicators and Calculation Methods

There aren't any really, they are more like recommended typologies, and as such they are patterns. It doesn't aim to achieve ratings, is not quantitative. Only makes lots of recommendations, well illustrated.

The evidence behind them is not clear, and the way to measure and confirm their implementation and effectiveness neither. Because they are not basic principles.

No methods suggested, no use of GIS or Excel, or statistics.

#### Output

No output. The only things we see is pretty diagrams and illustrations of neo traditional developments.