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# LANDSCAPES NORTH

NEWSLETTER

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## Landscape Sustainability

By Jay Lazzarin

One of the most commonly-used words today is "sustainability." The term can be used as it applies to landscape or some other form of development. It speaks to the desire to address important issues such as energy conservation, manageability, environmental impact and functionality.

This relates to land-

scaping in the work of creating a visually pleasing development. Sustainability, along with containing costs, is usually the most important consideration for clients.

In using a sustainable approach in landscape design clients appreciate that there are design choices. Having a landscape architect advise and

guide those choices is what makes the end product attractive and ensures it's cost effective. (continued on pg.2)



**Stormwater detention pond,  
Westgate Shopping Centre,  
Prince George, BC**

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## A Message from Jay Lazzarin

As we enter 2011, this is our first newsletter. We plan to publish twice a year. I hope you will find information and articles which interest you and your organization. Because we have a diverse client base, we intend to present an assortment of articles, pointers and announcements.

We welcome your comments and suggestions to assist us in forming content for succeeding issues. You can contact us by e-mail at [jayl@pgweb.com](mailto:jayl@pgweb.com). This newsletter, and all future issues, will be available on our website at [www.jl-landarch.com](http://www.jl-landarch.com).

For any who are unfamiliar with our firm this is the short version of our corporate biography: Jay Lazzarin Landscape Architect and support staff have provided professional consulting services to Northern British Columbia and beyond since 1984. As an award-winning design firm, we bring together a unique combination of skills enabling effective assessment, planning and implementation of projects relating to the broad spectrum of landscape design. Supported by the latest computer technology, our mission is to provide high quality design and prompt service with friendly professionalism.

# Landscape Sustainability (continued from pg. 1)

Good landscape design contributes to project development through choice of materials and configuration of space to achieve the best results.

Respecting the concepts of sustainability does not detract from or diminish the

importance of good looking or cost effective landscapes. Instead, respecting sustainability presents a challenge to the design process. Often, this leads to superior design. Landscape architects dedicated to sustainability tend to place high priority on func-

tionality, maintenance and the environment. None of these considerations is mutually exclusive in the design process. The development of any design requires each consideration to be evaluated several times. That ensures the best solution is reached.



Green roofs are increasing in popularity as a way to improve

- Energy efficiency
- Air quality
- Durability or longevity of roof structure
- Mitigation of urban heat island effect

## Principles & Techniques to Improve Sustainability

Well known principles you may wish to consider implementing to improve the sustainability of your landscape include the following:

### i) Enhance landscape microclimate

- Install shade devices and trees in outdoor living areas to offer protection from summer sun and heat.
- Installing windbreak and shelter belts to conserve energy, reduce impact of cold winds, control drifting snow and provide shade.
- Developing berms and raised beds to define landscape spaces as well as improve drainage and growing conditions, particularly in 'stiff' clayey soils.

### ii) Increase plant biodiversity

- Install indigenous and well adapted plants that are familiar with existing microclimate and soil conditions. These plants will be healthier, stronger, less prone to diseases, and less dependant on irrigation. In most instances it is recommended that drought tolerant species be selected to minimize a plant's dependence on irrigation.
- Reduce and/or replace high maintenance turfgrass in low use areas, with more water efficient ornamental grasses, rockscapes and perennial plantings.
- Group plants with similar water needs to avoid over and under watering.
- Create habitat that attracts

birds and insects that offer biological control of unwanted pests.

### iii) Reduce resource input and waste

- Install rain barrels to capture runoff from roof gutters.
- Establish a compost bin and reuse the decomposed organic matter to increase water retention, soil nutrient levels and improve soil structure.
- Where watering is necessary, (a) undertake in morning or evening to minimize evaporation, (b) minimize overspray to unwanted areas, and (c) consider installing an automatic irrigation system utilizing drip and sub-surface irrigation for shrub beds.
- Minimize the use of commercial fertilizer.

### iv) Storm water management

- For commercial and industrial sites, limit disruption of natural water flows by eliminating stormwater runoff, increasing on-site infiltration and eliminating contaminants.
- Various approved strategies to achieve this goal include (a) reducing the amount of impervious materials such as asphalt, (b) reducing the building footprint, (c) installing green roofs, (d) installing bioswales and temporary holding ponds, and (e) installing recharge chambers for storm runoff disbursement.

### v) Improve growing medium / topsoil

- Soil fertility is best enhanced by incorporating organic matter in the form of decomposed compost, manure, or peat. ....continued on pg.3

Ornamental grasses and rockscapes use less water and require less maintenance



## Principles & Techniques (continued from page 2)

- Soil quality is the foundation to a successful long-term garden. That is why we highly recommend a soil analysis be undertaken, by an approved soil laboratory, on all unknown and new sources to confirm nutrient availability, soil particle size, pH, organic matter content, and CEC (cation exchange capacity).
- Soil drainage is the other primary consideration in selecting / forming a growing medium composition. The particle size is to contain a prescribed percentage of fine as well as coarse particles to ensure sufficient moisture retention, (but not an excess of moisture), to develop healthy plants.



The ceremonial start to the world-renowned Iditarod sled dog race draws thousands to downtown Anchorage



The Carnaval de Quebec, Quebec City, Canada



The Kiruna, Sweden Centrum (downtown) is pedestrian and kick-led friendly

## Downtowns and Winter

Article and photos by: Patrick Coleman, Winter Cities Institute.  
From Winter Cities Newsletter, May 2010 [www.wintercities.com](http://www.wintercities.com)

When spring arrives in the north, many downtown districts in winter cities are sprucing up, putting out flower baskets and benches, and organizing warm weather events for the coming summer. But how does your downtown look and function in winter? Are shoppers and office workers welcomed in winter with the same enthusiasm as demonstrated in summer?

My guess is probably not. What can be done to make downtown as convenient and attractive in winter as during the warm season? Here are a few musings and ideas about the small details that can make a difference in your downtown.

Dace Koenigsknecht, State Director of the Michigan Main Street Program says “success in winter city downtowns can be defined in one word: relationships. It is a deliberate dance between businesses and customers, residents and the function of downtown, and the image of downtown”.

He goes on to say that “in winter, especially, promotional and retail events are necessary to extend current relationships. Residents need to understand that downtown is open for business, and visitors need to see downtown as vibrant and alive. Winter events, in downtown, are about relationship-building in a season often perceived as slow or inactive”.

More winter festivals and special events are being held in downtowns to attract people and boost sales. While some will not spend money during the event, many will return another day for shopping and services they discover while at the festival.

Many downtowns do dress up for the holiday season with banners, garland, and lighting treatments of buildings and street trees. Consider extending holiday visual treatments throughout winter by selecting banners and street lamp decorations more in tune with the entire winter season, rather than just focusing on the holidays. Lighting street trees all winter adds warmth and light to the extended dark nights.

Street furnishings, such as benches and bike racks, should be of appropriate materials and designed to be comfortable and usable in all seasons, and not put away during the winter months. Winter biking is becoming more common and downtowns should accommodate and even encourage this trend.

Maintenance of downtown walkways and parking lots must be a priority. (see **Winter Cities, Pg. 4**)

**“Winter events, in downtown, are about relationship-building in a season often perceived as slow or inactive”**

## Winter Cities (continued from page 3)



Handrails and good maintenance make this connecting walkway in downtown Marquette, Michigan a pleasure to use.

Removing snow berms along streets is expensive and many cities are cutting back on maintenance during these tough economic times. If less frequent snow removal is the policy, how about making more openings through the snow berm to enable easier access from on-street parking? Improving convenient and direct access in this way is a small effort that can improve retail sales.

Some communities have taken over downtown sidewalk maintenance, a task formerly done by individual property owners. Unfortunately, not all property owners maintain their sidewalk frontage to the same standard, resulting in "glaciers" that pedestrians have to negotiate to reach their destination. In today's competitive retail climate, unsafe walking conditions are unacceptable.

A few downtowns have installed large-scale snowmelt systems, including Holland, Michigan and Racine, Wisconsin. Anchorage, Alaska has several key pedestrian corridors with snowmelt systems.

New technology, including ground water heat pumps or capturing waste heat from large buildings and power plants, makes this approach more sustainable and cost effective. Major benefits from snowmelt systems include less interior flooring and mat maintenance for retailers, and the dry walking surface brings more people downtown to walk for exercise. In addition, reducing the use of de-icing salt is better for the environment. Major snowmelt systems are a capital intensive approach and only suited for some communities.

Think about your downtown and how it functions and looks in winter from the viewpoint of the customer. It's the small details that can make your winter city downtown more successful!

## Featured Plant

### Fall Colours

*The bursts of vibrant fall colours in the landscape are something we anticipate. From rows of uniform trees to a single stand-alone specimen tree, the bright reds, oranges and soft yellows draw our attention. These are examples which bring the welcome sight of autumn to any landscape.*



*Acer rubrum* (Red Maples) are well known for their fall colours. Their green foliage changes through a spectrum of intense reds and oranges. *Populus* (Aspens) have beautiful yellow fall colours.

***Acer rubrum* 'Red Rocket' (Red Rocket Maple)** Zone 3 - Tight, narrow upright habit. A cold hardy variety. Fall colour is bright orange-red to red. 11.5M/38' tall by 4.5M/15' wide. (Pictured at top left.)

***Acer rubrum* 'Red Sunset' (Red Sunset Maple)** Zone 4 - Sturdy, symmetrical upright branching with an oval habit. One of the best fall colours of red maples; shades of red to orange-red in the fall. 13.5M/45' tall by 10.5M/35' wide. (Pictured at right.)



***Populus tremula erecta* (Upright European Aspen)** Zone 2 - Very narrow, upright canopy with dense branching, which provides good screening in winter. Leaves are dark green above, grey-green below turning a beautiful golden colour in fall. 12M/40' tall by 3M/10' wide. (Pictured left.)

***Acer x freemanii* 'Autumn Blaze' (Autumn Blaze Maple)** Zone 3 - Broadly oval shape with an upright habit. Medium green leaves turn radiant orange-red for fall. 15M/50' tall by 12M/40' wide. (Pictured at bottom right.)



Reprinted with permission from Specimen Trees Wholesale Nurseries Newsletter, Nov/Dec 2010



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Featured Project

# Heritage Village and Museum Landscaping

## District of Vanderhoof

For the past three years we have been working with the District of Vanderhoof council and staff in the planning, design, and construction of site improvements and park development adjacent to the District's Heritage Village. This is part of the community's ongoing goal to provide a first-class heritage, tourist attraction. In the past few years, improvements to the heritage buildings have been the primary focus.



- The primary objectives of this particular project were five-fold:
- (i) improve the appearance of the western gateway to the community, along Highway 16;
  - (ii) increase the interest in the Heritage Village with the development of exhibit pads for the display of historical agricultural, forestry, railroad and First Nations artifacts / equipment utilized by local pioneers;
  - (iii) enhance the character and park-like setting of the site with strategically located planting beds, shade trees and native grasses;
  - (iv) enhanced recreational opportunities for visitors of all ages include a children's playground, walking trails and a lookout viewing platform, and
  - (v) improved parking facilities for tourist vehicles of all sizes.

With available funding and government grants totalling approximately \$500,000, most of the project was able to be completed in the fall of 2010. Additional parking lot improvements and playground equipment will be added in future Phase II. Historical artifacts and equipment are being donated by local pioneers and are scheduled to be in place for the park's opening in spring 2011.



# Questions & Answers

## 1. What is a Landscape Architect and what services are offered?

Landscape architects offer professional landscape planning and design services. Beyond the design stage, their involvement may extend into construction review or project management. It is unusual for a landscape architect to become directly involved as a contractor.

In Canada, the term “landscape architect” is protected. To practice landscape architecture, one requires licensure or registration, similar to that required of architects and engineers.

## 2. I cannot afford the services of a landscape architect, therefore can I retain a landscape contractor to provide design as well as construction services?

There are some landscape contractors who provide design services.

But, for complex projects, it may be to your advantage to retain a professional who can provide a full range of services from initiation to completion. Depending on the project, this could involve long-range planning, conceptual design, detailed designs, tender documents, and cost estimates, and construction review.

## 3. Who in Canada administers licences to landscape architects?

The Canadian Society of Landscape Architects consists of provincial organizations, each administering registration and membership bylaws in their province.

In British Columbia, the BC Society of Landscape Architects (incorporated in 1960 under the Society Act) has been given authority under the provincial Architects (Landscape) Act – Chapter 20, to administer and promote the profession of landscape architecture in BC.



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