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2010 CitiesAlive Highlights

By Steven Peck

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The 8th Annual CitiesAlive 2010 Green Roof and Wall Conference in Vancouver, BC is a three-day celebration of green roofs and walls, and the only event in North America that is specifically designed to bring the international community together in an effort to address the issues of green roofs and walls as they relate to environmental, social and economic needs on a local, regional and global level. Urban food, energy savings, renewables, embodied energy, water-energy dynamics, biofuels, cost savings – all these subjects will be on the agenda.

CitiesAlive 2010 will include a formal reception, tours, networking sessions, training courses and Green Roof Professional (GRP) accreditation testing. The CitiesAlive Trade Show will be populated by industry leaders in the field of green infrastructure, a global village of green roof associations and leading-edge educational institutions. A carefully developed program for international guests will feature special green roof and sustainable design destinations in Vancouver and tourist activities.

Green Roof Professional Accreditation

CitiesAlive 2010 will offer delegates the opportunity to begin or complete the Green Roof Professional (GRP) accreditation program. Four core courses will be offered, covering everything from project management to installation, waterproofing and plant selection. There is also a scheduled exam, which must be passed in order to receive the GRP designation. Green Roof Professionals come from any number of professional backgrounds, including architects, landscape architects, landscape designers, engineers, contractors, horticulturalists, manufacturers and roofing consultants, to name a few. Current GRPs can take advantage of new courses on Advanced Maintenance, Integrated Water Management, Green Walls and Urban Agriculture, earning continuing education credits in Vancouver. ▶

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Cover Image: VANOC
Vancouver Convention Centre.

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Awards of Excellence

Each year's annual conference recognizes integrated design and installation excellence with the Green Roof Awards of Excellence. Outstanding contributions to the industry in research and policy are also recognized. The Green Roof Awards of Excellence program recognizes distinction in three areas: Research Awards, Design Awards and Civic Contribution. The Research Awards honour individuals or groups who have made outstanding contributions to the green roof industry in research. The Civic Awards honour individuals or groups who have made outstanding contributions to the green roof industry in policy development. The Design Awards acknowledge excellence in innovative and integrative green roof and wall design and raise awareness of the multiple benefits that green infrastructure can provide clients and the general public. There are seven

design award categories, including three for extensive green roofs (with six inches or less of growing medium throughout and three for intensive green roofs (with more than six inches of growing medium).

This year will celebrate and recognize the incredible contributions of landscape architects Cornelia Hahn Oberlander, LMBCSLA #029, FCSLA, FASLA, OC and the late Theodore Osmundson, FASLA, who will be receiving special Lifetime Achievement Awards at the Luncheon Awards Reception.

Green Roof Tours

CitiesAlive participants can visit some of the best green roof and wall projects in Vancouver on guided Green Roof Tours, each with a different theme, focusing on a unique aspect of green roof technology. Green Roof Tours



will feature projects that have endured or will capture the imaginations of future generations, sites that are examples of the research that is moving green roofs into the future and sites which were designed either to replicate a specific ecosystem or to provide food for birds, butterflies and bees.

The 8th Annual CitiesAlive Green Roof and Wall Conference will be in Vancouver, BC from November 30 to December 3. Visit www.citiesalive.com for more information. **SL**



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Great Project Managers *Evolve From Great Managers*



By Mark Healy

They may be employees, team members or even bosses, but whatever the level they always need to rely on others to succeed.

I just finished an engagement with a professional services firm, and the CEO and I were talking about project management. We were joking about Gantt charts, and how often Gantt charting becomes an exercise in moving coloured bars around. This happens more with small and medium-sized businesses (SMBs) than it does with enterprises running large, complex, multi-stakeholder projects. I think the gist of the issue is that too often with private businesses, project managers start with the Gantt chart, and not the team.

The most successful project managers I know – in small and large client organizations – understand that project management starts with talent management. To be a great project manager, you first need to be a great manager. This is a crucial concept for every up-and-coming project manager.

As David Maister, author of the seminal book *The Trusted Advisor*, so succinctly puts it, “The trouble with the work world is, it is full of people.”

I can't think of any projects where the project manager will not need to manage, or at least interface with people in order to finish. They may be employees or team members or even bosses, or they may be outside the organization – suppliers, consultants, customers. The point is the project manager is at least somewhat (and likely very) reliant on others to succeed.

I remember an episode of *The Apprentice* from the first season in which one of the contestants tried to manage a polo event with a spreadsheet. He rode to the event alone in a limo separated from his team, and he spent more time behind his laptop than he did with his team and his vendors. It didn't end well for him.

Tactical

At a tactical level, there are some very simple rules I have gathered from some very smart folks over the years, for top-notch talent management. All of them are excellent precursors to great project management, especially for SMBs:

- Give people the tools and resources they need, teach them what you can, then get out of the way.
- Start every statement with “we.”
- Give credit where credit is due: if things go well, share the glory with the team.
- Shoulder the responsibility: if things go off the rails, take the blame. It is your fault.
- Praise in public, punish in private.
- It is impossible to over-communicate. It is impossible to be too redundant. It is impossible to overcommunicate.
- Respect and take care of your team members – you will need them.

Strategic

My kindergarten teacher had a poster on the wall of our classroom with a picture of a dart sticking into a wall. The caption was: “If you aim at nothing, you'll probably hit it.” Project management is tough enough as it is – dealing with other people and their respective motivations and schedules, and dealing with time and money and lots of moving pieces. Things are going to go wrong. With that in mind, there are some strategic skills I've learned in engineering and consulting, which tie talent management to project management:

- Project planning.
- Communications planning.
- Day-to-day active team management.
- Documentation, tracking and reporting.

Project planning

I have seen many projects either fail outright, or be delivered late and/or over budget. Many of them fail in the planning stage. The basics are very simple, but so often ignored. Every project plan should consist of the same elements: a clearly defined and measurable objective, milestones and a deadline, a budget and a clearly laid out action plan including specific tasks where each task is assigned a due date and one champion.

To put a fine point on it, some project failures I've encountered were doomed by either an unclear objective or by having multiple people assigned to getting a task done. How does this tie to talent management? The great project managers I know involve team members and external parties in the project planning, to build a better plan, and to increase buy-in and longer-term chances of success. ▶

Communications planning

This is not only almost never done well, it is almost never done at all. Yet it can make or break a project. What good is it to have a solid work plan if the project sponsor (senior management or a client, for example) doesn't know what's going on? They will fret about it. They will check in. They will start to micro-manage. They may run interference and start asking team members directly for updates, or meddle in their tasks.

The best means to avoid this is to figure out how and when the project sponsor would like to be updated – e-mail, phone, daily, weekly – and then to pro-actively send out structured updates, the shorter the better. The same level of respect should be shown to team members. Clear, open, honest and regular communication with each person on the team is important, and it should be planned for at the start.

Day-to-day active team management

This is where the rubber hits the road. Whether motivating, coaching, brainstorming with, solving problems for, updating, questioning, pushing back on or seeking updates from team members – or just staying on top of tasks – this is where a project manager often builds the most value. Nearly all of these activities are related to talent management, not technical execution.

Documentation, tracking and reporting

Back to where we started: Gantt charts. Whatever the tracking tool, the goal is to manage the project, not the tool. Depending on the project scale and the project sponsor, documentation and reporting will be more or less important. But regardless of the amount of paperwork desired, it should always take a back seat to teamwork until milestones are approaching.

One rule around tracking tools is that simpler is better. Simple tools reduce the likelihood of constantly having to change or adjust the tool as the project inevitably morphs, and it increases the likelihood of reflecting the project changes in the reporting.

Mark Healy, P.Eng, MBA, is a partner at Satov Consultants – a management consultancy with practice areas in corporate strategy, customer strategy and operations strategy. Mark's focus areas inside the customer strategy practice include consumer insights, customer experience, innovation and go-to-market strategy. He is a regular speaker and media contributor on topics ranging from marketing to strategy, in telecom, retail and other sectors. Mark is known as much for his penchant for loud socks and a healthy NFL football obsession as he is for his commitment to Ivey and recent Ivey grads. He currently serves as chair of the Ivey Alumni Association board of directors. Mark lives with his wife Charlotte and their bulldog McDuff in Toronto. The article was first published in the Globe and Mail August 10th, 2010 and is reprinted with the permission of Mark Healy. st

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BCSLA DRAWING ON THE LAND:

Contemporary Landscape Architecture Exhibition

Mark your calendars! The BCSLA Drawing on the Land Exhibition will run from November 14 to December 3, 2010 at the Pendulum Gallery located at the HSBC Building Atrium, 885 West Georgia Street in Vancouver. The BCSLA Annual Festive Season Party will be held at the Gallery on November 26, 2010 from 6:00 pm to 9:00 pm.

The 2010 Drawing on the Land: Contemporary Landscape Architecture Exhibition will feature works created by BCSLA Registered Landscape Architects, Landscape Architects, Interns and Student Members. This is an excellent and fun opportunity to highlight and promote the profession at a high traffic venue during the lead up to the busy holiday season. The goal is to raise the profile of the profession and our Members both within our Society and to a wider audience.



Park Concept Plan,
Vancouver, BC
Credits: Kim Perry,
Perry + Associates

You will be rewarded when the public, the media and allied professionals see your work on display. The BCSLA Board of Directors has appointed the following individuals to the Drawing on the Land Jury:

- 1) Larry Diamond, MBCSLA, Head Juror
- 2) Dylan Chernoff, MBCSLA Communications Sub-Committee Chair
- 3) Daniel Roehr, A MBCSLA Registered Landscape Architect

- 4) Alexandre Man-Bourdon, BCSLA Intern and
- 5) Tom Becher, Emily Carr University College of Art and Design Associate Professor, as the individual with an art background

Thank you to all those Members who have submitted projects for the Exhibition and to the Jurors for volunteering their time and expertise. SL

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Continuing Education CHEAT SHEET

If filing your Continuing Education Credits has you baffled, here's a quick guide to get you through in no time. Once you've logged in to BCSLA Members Services (if you've forgotten your password, the computer will e-mail it to you) go to the Continuing Education Annual Monitoring and Recognition Form. Here are the categories and some suggestions:

1. Work Experience: Anyone working full time can claim 6 credits, if you are working part time, adjust accordingly. Easy credits! **Maximum 6 credits**

2. Education Courses and Training Program: Here are some examples with credits attached:

Full (2 day) attendance at BCSLA Conference	4 credits
AGM only (free afternoon session)	1 credit
One full day attendance at AGM	2 credits
Full day conference (6 hour min.)	2 credits
Evening Lecture	1 credit
Self-Directed Study	up to 3 credits/year
University Courses	up to 3 credits/year

Maximum 20 credits

3. Professional Activities: Activities relating to Landscape Architecture are applicable Board Service on boards such as:

BCSLA, CSLA	5 credits
CSLA Volunteer	5 credits
Committee Chair	4 credits
Design Panel or similar committee	3 credits
Representative to a Government Agency	up to 2 credits/year

Maximum 20 credits

4. Personal Development: Activities outside the field of Landscape Architecture such as networking clubs and community service clubs.

Book published	5 credits
Article published	2 credits
Present a Lecture	1 credit
Committee Chair	4 credits
Committee Member	3 credits
Write a paper	1 credit

Maximum 20 credits

REMEMBER: When in doubt as to how many credits you can assign for an activity:

3 hours = 1 credit, 6 hours = 2 credits and observe the Maximums in each category.

NOTE: In each 3 year reporting cycle you will need 30 credits.

This article is courtesy of Nancy Paul, BCSLA Continuing Education Committee Chair.

IT'S EASY AND FUN.... Most members already have more credits than they realize.

BCSLA INTERN WORK EXPERIENCE

A reminder that all BCSLA Interns are required to complete and submit the Experience Summary Forms to the BCSLA office on a regular basis. Experience must be acquired with the guidance of a qualified mentor. Please keep a copy for your records.

Work experience must be obtained to provide sufficient experience to meet generally accepted standards of practical skill and an appropriate level of competence required to engage in the practice of the profession of landscape architecture. The experience requirement must be satisfied before Interns are eligible to appear before the Board of Examiners.

Online Reporting – NOW AVAILABLE!

- Interns are required to make weekly entries on the Monthly Work Experience Record forms detailing the hours spent on each item.
- The Monthly Work Experience Record forms must be recorded neatly in ink on the official BCSLA form, or online (please see “Recording Monthly Experience Online” below for instructions). Although it is not required to send Monthly Work Experience Record forms to the BCSLA, please keep a hard copy of your Records with your Qualified Mentor’s stamp and signature as Interns may be asked to provide their Monthly Work Experience Records to the BCSLA upon request. Your employer must initial any alterations to the form after it is signed.
- Some work experience tasks can be completed as “Observer” where there is reluctance on the part of the employer to fully delegate certain work to inexperienced Interns.

- Every three months, the totals from the weekly entries must be transferred to the Three-Month Experience Summary sheet in the appropriate reporting period. Please see “Reviewing Three-Month Summary” below for instructions if you are recording online. The Mentor, Intern and Employer should all sign off on the applicable reports and summaries (even if hours are reported online).
- For each project completed Interns must fill out a form indicating the name of the project, date completed and experience obtained, along with the stamp and signature of their Mentor.
- Upon the completion of the minimum period in all mandatory experience areas, Interns should include the completed Three-Month Experience Summary sheets with their completed application for full membership. It is advised that Interns keep a copy for their own records, as the BCSLA assumes no responsibility for lost Experience Summary sheets.

Recording Monthly Experience Online

- Go to <http://www.bcsla.org/members/interns/help.asp>.
- Under “BCSLA Member Services”, click on “Login”.
- Enter your BCSLA Username and Password. If you are unsure of your Username and Password, please call or email the BCSLA office.
- Click on “Intern Work Experience Monitoring”.

Adding a New Monthly Experience Record

- Click on “New Record” tab.
- Under “Report Period”, select the appropriate month under the “Chose month to report” drop-down menu.

(Warning: be careful not to choose a reporting month that you have already recorded. This will add extra weeks to your already existing record. If you wish to make edits to an existing reporting month, click on “Review/edit Records” tab, and chose the reporting month you wish to edit.)

- Under “Qualified Mentor”, indicate your mentor under the “Chose your mentor” drop-down menu.
- Under “Employer Name”, indicate your employer under the “Chose your employer” drop-down menu.
- Click on “Next Step”.
- Insert the number of hours (partial hours are accepted, e.g. 0.5, 0.75, 1.25, 1.5, 1.75, etc.) worked on for each category, where appropriate. There should only be five (5) “Week” columns available for recording on the form. (If the form indicates more than 5 weeks for recording, then an error has occurred – see above Warning, and the current form will need to be deleted by clicking on “Review/edit Records” and selecting the appropriate recording period.)
- When finished, click on “Record Entries”.
- A message will show up to indicate that the experience has been successfully added to the database. Click on the link provided to review your newly added report.

Review/Editing A Monthly Experience Record

- Entries can be reviewed and edited at any time.
- Click on the “Review/edit Records” tab.
- Choose the desired recording month using the drop-down menu.
- (DO NOT create a new record for an existing Monthly Record if you want to make edits. This will create errors in your records – see above Warning.) ▶

Deleting a Monthly Experience Record

- Use this option if:
 - your form has more than five “Weeks” columns (which occurs if the same monthly period is reported more than once);
 - if your record is not responding to the “Edit this Record” button; or
 - if you have entered the incorrect information for the reporting period selected and want to start over.
- Monthly Records can be deleted by selecting the “Review/edit Records” tab.
- Under “Period”, select the reporting period that you want to delete, using the drop-down menu.
- Select “Delete this Record”.

Reviewing Three-Month Experience Summary Online

- Select the “3-Month Summary” tab.
- Under “Summary Beginning On”, select the month in which you want the three-month summary to begin on using the drop-down menu.
- The summary will automatically select the subsequent two months as part of the summary, even if the subsequent months have not been reported.

If you require assistance with the new reporting process please contact the BCSLA office. Many thanks to the Intern Members who assisted in testing the online reporting system. A special thanks to Jessica Tan, Administrative Assistant, for working hard on this project. sl

facebook

Have you checked out the British Columbia Society of Landscape Architect’s Facebook fan page yet? Become a fan and add “BC SLA” as a friend to receive invitations to events, to be “tagged” in your photos and other images submitted to the BCSLA, and to check out the latest videos, photos and news from the BCSLA all through Facebook!

Already a Friend and a Fan of the BCSLA on Facebook? Invite your friends to become a fan and help spread awareness of the BCSLA and the landscape architecture profession.sl

www.facebook.com/BCSocietyofLandscapeArchitects

Congratulations – Ian Wasson

Ian Wasson, MBCSLA, was elected as the Council of Landscape Architectural Registration Boards President on August 28, 2010. BCSLA was fortunate that Ian served two terms as the BCSLA Registrar from 2000/2001 and 2002/2003. He laid the foundation for many of the BCSLA Policy and Programs that are in place today and continues to offer his expertise to the BCSLA office any time he is called upon. Ian has tirelessly represented BCSLA as the BC Representative to CLARB. He has held several positions on the CLARB Board of Directors and other Committees. Ian is the first Canadian President of CLARB and he will represent BC and Canada well. sl

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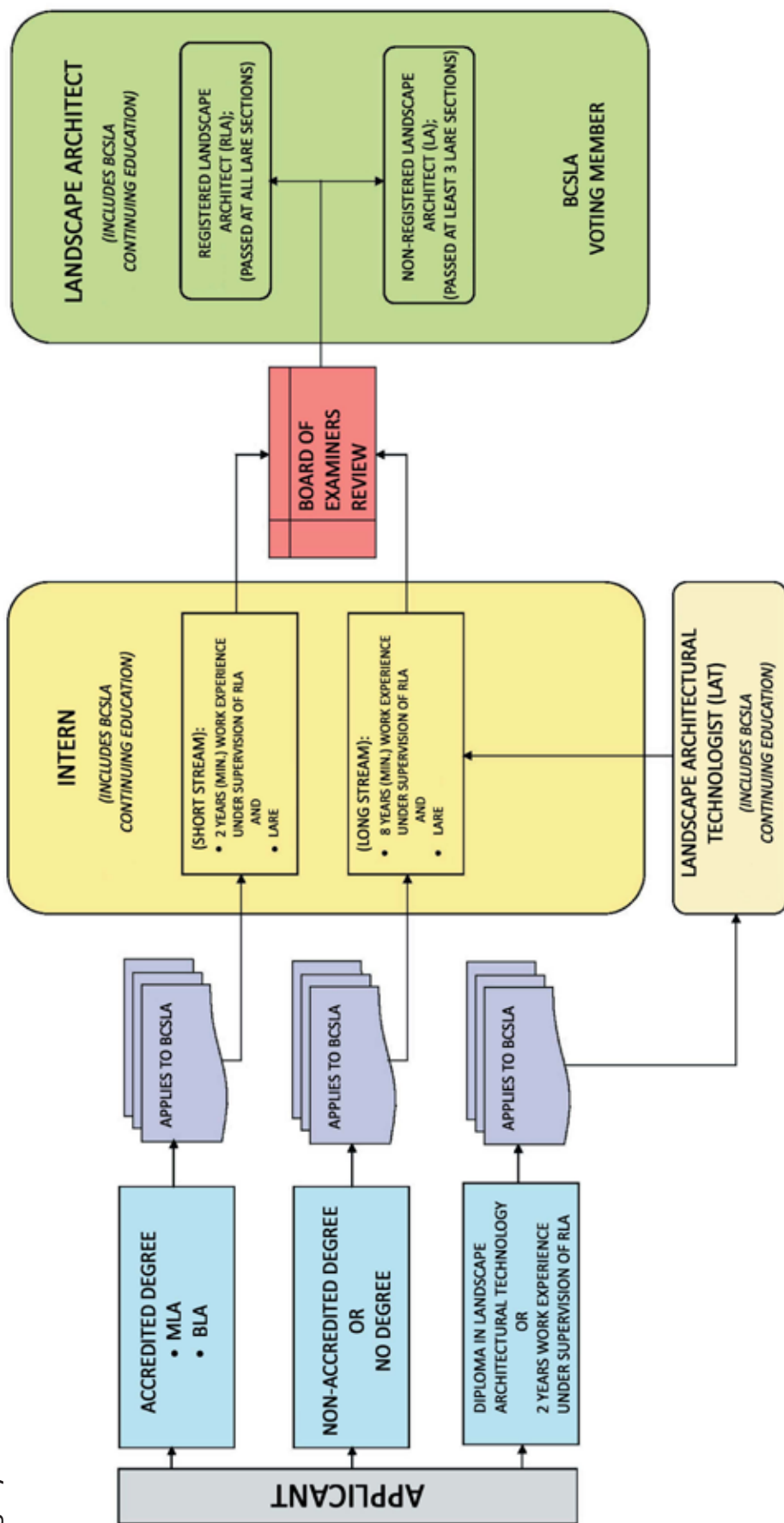


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This diagram explains the proposed minor changes to the membership categories.

The one category that requires immediate clarification is the Associate membership category, which will need to be amended to include the Landscape Architectural Technologist category that exists in Alberta.



West Coast Integrated Design

By Lucas Nightingale

How an integrative process created innovative green roofs in Vancouver

In the world of sustainable architecture, Vancouver is making a statement. While Vancouverites admire the boulevards of summer foliage around their city and the new sod in post-Olympic David Lam Park, PWL Partnership Landscape Architects Inc., they may have also noticed something else that has made this characteristically verdant city even greener. Two of the City's newest developments, the Vancouver Convention Centre expansion and the 2010 Vancouver Olympic Village, have added over 12 acres of green space in and around the City's downtown through a multifaceted, integrated design approach that did not require the displacement of a single podium-tower.

The Vancouver Convention Centre

One of the best places to appreciate the Vancouver Convention Centre's (VCC) enormous 261,000-plus square-foot green roof is from two kilometers away. Looking east from the seawall with the Vancouver Rowing Club to your right, you first feel the presence of iconic Stanley Park at your back. As the park wraps around you, heading in the direction of downtown, your eye follows the stroke of green that the garden-infused seawall creates. This line continues unbroken along the water's edge and ends at the slopes of the VCC green roof, a broad meadow rising effortlessly from the shore. The visual weight of the roof balances one end of the greenbelt against the massive park on

“Twenty-seven miles of irrigation tubing was required to service the entire [Vancouver Convention Centre] green roof.”

the other; Western Canada's largest city fills the spaces between, making this connection simply remarkable.

The VCC expansion, completed in April 2009, served as the International Broadcast Centre for the Vancouver 2010 Olympic Games. Located at the eastern extreme of Coal Harbour, it is the final touch to a 20-year transformation of this previously industrial neighborhood. Designed by Seattle-based LMN Architects in conjunction with two Vancouver firms, MCM Partnership and DA Architects + Planners, the VCC expansion effectively tripled the existing conference centre's functional capacity. The size of the project



Top Left: Vancouver Olympic and Paralympic Village

Image Credit: Xero Flor Canada

Bottom Left: Aerial view of the 261,000 square foot Vancouver Convention Centre green roof.

Bottom Right: The VCC roof includes over 400,000 plugs, 80,000 bulbs and 128 kilograms of seed.

Images Credit: Flynn Canada Ltd



team was similarly impressive, so much so that several conference rooms at the VCC East facility, more commonly known as Canada Place, had to be rented to accommodate the 50 to 60 consultants required at any one time for design meetings. It was during these charrettes, says Mark Reddington, design partner at LMN Architects, where the VCC green roof was first conceived.

“The idea of the green roof came about as the result of integrated thinking because it could address many different issues simultaneously,” Reddington explains. By gathering all of the experts into one room, issues from energy efficiency to water management to float-plane noise arising from the adjacent Burrard Inlet terminal could be evaluated by everyone.

“During the design process, you look for intersections,” says Reddington. “The way you solve one issue might be able to solve another. If you can solve them all by a single gesture, then it really is an integrated result.” While the conceptual idea of a green roof was one thing, the actual practicalities were quite another.

Robert Simpson, senior engineer of Glotman-Simpson Consulting Engineers, reflects on the first hurdle the team had to overcome: “[The green roof] required buy-in and understanding from a very wide range of project participants. As a prominent component of the building, every consultant had some connection with this roof solution.” Once everyone was on board, more in-depth problem solving among team-members could begin. For example, Glotman-Simpson’s recommendation to use an extensive system with six-inch compacted soil depth could not be made by the engineers alone: all players needed to be involved as this one decision would inform the rest of the project.

Paul Kephart, of Rana Creek Habitat Restoration in California, said to the VCC team at the outset of the design charrettes, “This project is all about water.” Climate is always a consideration for green roof

design, but water management on a six-acre roof between Vancouver’s drought-and-downpour conditions became an exceptional challenge for the VCC team. The key-line drainage system that was chosen, designed in conjunction with PWL Partnership Landscape Architects Inc. in Vancouver, consists of aluminum-edged, rock-filled runnels that crisscross the roof diagonally, slowing stormwater and directing it into a conventional drainage system. The drip-irrigation system, which utilizes treated VCC blackwater from an onsite facility as its main water source, is activated only when moisture sensors in the roof reach a predetermined level. Twenty-seven miles of irrigation tubing was required to service the entire green roof.

Another active player in these charrettes, Bruce Hemstock, MBCSLA #203, lead landscape architect for the expansion, recognized an opportunity for the VCC roof to create and replace habitat that had been lost through Vancouver’s rapid urban expansion, while also affecting people’s perception of nature and the city. “The idea that natural habitat has been lost or is being lost in the urban environment is not a new idea,” says Hemstock, principle of PWL Partnership Landscape Architects Inc. in Vancouver, “Especially in Vancouver where there are so many people who live downtown, you can create a more positive urban experience by understanding that nature is also a part of it.”

Capitalizing on Kephart’s ecological insight to create a habitat based on a local ecosystem on the green roof, Hemstock fully designed a roofscape that replicated a Garry oak coastal bluff ecosystem. The choice was fitting as this type of ecosystem is found almost exclusively in Canada among the Gulf Islands and along the southeast coast of Vancouver Island. As a result, the vegetation mix on the roof consists primarily of native grass and other local plants including common thrift and beach strawberry (click on “Living Architecture Monitor” at www.greenroofs.org for the complete plant list). Honeybees

inhabiting four colonies on the roof help sustain the flowering plants by pollinating them seasonally – the bees were one of the first residents to this new downtown habitat, with each hive able to keep approximately 60,000 bees.

Growing the plants presented a unique challenge for Angela Anderson, head grower at Langley-based N.A.T.S. Nursery Ltd., the contract grower for the project. The integrated VCC team was committed to using sustainable materials in all areas of the project, including organic materials used on the green roof. The team decided that incorporating peat moss in the roof’s growing medium was not a sustainable option as peat-harvesting often disrupts delicate wetland habitats. The final substrate mix for the roof was a combination of sand, lava rock and organic material from the VCC’s own garden and kitchen waste and, as with Anderson’s propagation medium, did not contain peat. N.A.T.S. Nursery Ltd. produced over 400,000 plugs and 80,000 bulbs over a 12-month period to accommodate the VCC’s staggered shipping and planting schedule, as well as 128 kilograms of seed which was hydroseeded after the plugs and bulbs were planted.

The sheer number of plants involved posed some practical issues. Namely, how could the plantings be random enough to give a natural appearance but regular enough to accurately estimate the number of plants required? A solution was devised by VCC planting supervisor, Reece Rehm of Holland Landscapers Ltd.. Rehm created a maneuverable planting template that consisted of a simple string-and-ribbon grid stretched between a two-by-two metre frame made from irrigation tubing. With the help of Holland Landscapers Ltd.’s Operations Manager, Jim O’Brien, who built the first prototype with his wife, Lynne, in their Langley, British Columbia living room. Rehm’s system could be easily moved and rotated to create a random planting pattern while also ensuring accurate planting proportions. “It’s hard to convey how important evenness and ▶

proportion were to the project,” Rehm says. “That the frame was a success[,] is the thing I am most proud of.”

Over a year after the initial planting of the VCC green roof, Hemstock is also pleased with the final result, “The fact that the project turned out so well is a testament to the cooperation from all the consultants and that the integrated design process really does work when it’s properly managed.”

The Olympic Village

The story of the 2010 Vancouver Olympic Village’s combined 287,000 square feet of green roof began collaboratively over 20 years ago and involved consultation with a wide spectrum of the community. With the successful redevelopment of North East False Creek after Expo ’86, Vancouver City Council set their sights on the Creek’s southeast banks for the City’s next big transformation; in 1991, the Council decided that the new neighborhood would be, “the model of sustainability, incorporating forward-thinking infrastructure, strategic energy reduction, high-performance buildings and high transit access.”

After a highly anticipated announcement in July 2003 by the International Olympic Committee, the South East False Creek (SEFC) Development Plan suddenly became the plan for the Olympic Village of the Vancouver 2010 Winter Olympic and Paralympic Games. Arguably, this deadline would become the single greatest challenge of the project, making collaboration among stakeholders that much more vital. On top of the time constraints, the City enacted the SEFC Green Building Strategy in 2004 which set out sustainable goals for the village including LEED® silver minimum/ LEED® gold preferable standard for all buildings. Part of that policy required 50 percent of all roof surfaces to have green roofs; considering the Village’s eight city-block footprint (600,000 square feet), meeting this requirement was no small undertaking.

For Vancouver landscape architecture firm, Durante Kreuk Ltd., the Olympic Village was the largest extensive green roof project they had ever undertaken. Landscape archi-

tect, Jennifer Stamp, MBCSLA #310, describes how an integrative design process prepared the Olympic Village team for the challenge, “It started with everyone in the room. We had geotechnical engineers, contamination engineers, people from Millennium [Olympic Village developer], people from the city, Phillips Farevaag Smalberg and several other landscape architectural firms; we had every cast and crew member that could be gathered when we kicked this off.”

Durante Kreuk’s green roof design incorporated a mix of intensive and extensive systems, both to comply with the 50 percent rule and to provide areas for urban agriculture to occur. The Michigan-based Live Roof® pre-vegetated module system, again propagated by N.A.T.S. Nursery, was used on the community centre parcel alone, while the rest of the roofs incorporated Xero Flor’s extensive mat system. The Xero Flor

system was chosen as it provided the benefits of a fast installation, instant establishment and was flexible enough to accommodate Durante Kreuk’s unique design: in order to remind future residents of the village’s Olympic heritage, huge profiles of athletes in action were carefully planted in contrasting red among the green and yellow sedum mats. Karen Liu, Xero Flor’s director of research and development, admires the landscape architects’ creative touch: “A green roof is not always *green*.”

Langley-based Horizon Landscape Contractors were responsible for installing both systems. General Manager, Brian Dougherty, who was familiar with the challenges of green roof installation, felt an increased amount of pressure working on the Olympic Village: “It’s not exactly an easy gig to be the last trade in on such a time-constrained project, but we anticipated [those challenges] and with some good project manage-



Top Left: The Olympic Village features over 287,000 square feet of green roofs.

Top Right: Sustainable goals for the village included LEED® Silver minimum and LEED® Gold preferable.

Images Credits Xero Flor Canada

ment we were able to get a head start in some areas.” Part of that head start included taking advantage of module-installation training sessions offered by N.A.T.S. Nursery before the Olympic Village plantings began. “Horizon Landscapes were diligent in preparing well in advance,” says Andrea Martinello, marketing manager and green roof specialist at N.A.T.S. Nursery. “It was just another example of how collaboration amongst trades improves the process.”

Olympic-Sized Profile



Of course, this past winter, one could hardly turn on the television without seeing not only one, but two, of the most innovative green roof projects in the world – the Vancouver Convention Centre and Olympic Village. Such profile, says Paul Kephart, is invaluable toward the widespread adoption of green roof technology. “[The 2010 Winter Olympics] put living systems and vegetated rooftops into an everyday occurrence to where it’s just part of our community and part of our architecture. It showed the world what was possible.”

The integrated design process has helped bring functionally integrated, sustainable design out of the realm of anomaly and into the accessible mainstream. Further study on the impact green roof systems can have within urban environments will most certainly yield even more innovative and integrated solutions. Simply put by the

Durante Kreuk team: “We multiply our thinking through collaboration.”

Lucas Nightingale, LEED® AP (CI), is currently completing his bachelor’s degree in interior design at Kwantlen Polytechnic University in Richmond, British Columbia. sl

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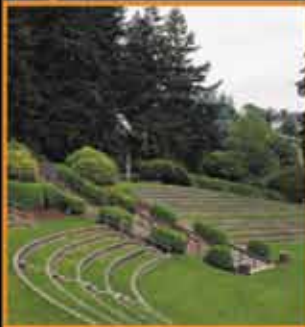
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