

NEW WAY OF LIFE



MARTIN TESSIER

VANCOUVER'S OLYMPIC VILLAGE REVEALS ITS BID FOR SUSTAINABILITY AND ITS TRANSFORMATIVE EFFECT ON SOUTHEAST FALSE CREEK.

PROJECT MILLENNIUM WATER—2010 ATHLETES' VILLAGE, VANCOUVER, BRITISH COLUMBIA

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TEXT HANNAH TEICHER

Conversations on building are often centred on sustainability these days, claims to LEED credits flying, either as one-upmanship or creative bluster. What is often lost in these conversations is a sense of the underlying transformation that any real bid for sustainability would require. The City of Vancouver and the Millennium Water design team set ambitious goals for the Olympic Village, alternatively referring to developing “new ways of living in the city” or more simply, developing “a sustainable community.” And there is a sense in much of the framing policy documents and design work that realizing this goal necessitates more than the sum of its technical parts. But when it is actually built, how does it work towards fostering the shift in attitudes or ways of living that it seeks?

The sanitary engineering movement of the 19th century made huge

ABOVE WORKERS RAPIDLY PUT TOGETHER THE FINAL ELEMENTS OF GBL ARCHITECTS' RESIDENTIAL PROJECTS ALONG WEST 1ST AVENUE—TWO OF THE MANY BUILDINGS THAT COMPRISE THE ATHLETES' VILLAGE FOR THE 2010 WINTER OLYMPICS.

strides in creating more livable, healthier cities, conducive to density. There's little question that anyone who has grown accustomed to its benefits would roll back the clock to a time when a hapless stroll down the street could involve the overturned contents of a chamber pot landing in unfortunate places. And it is hard to fathom the basic disconnect between “in here” and “out there” on the part of the person doing the overturning, a person who would surely be walking down that same street that same day. However, the sanitary sewer, the storm sewer and all their attendant advances have only served to reinforce that disconnect, fostering a convenient dependence on underground systems to hide the unpleasant realities of everyday life.

Intricately connected to those unpleasant realities is the more unpleasant reality which has now come to the fore, one which will inform urban engineering just as much if not more so than the 19th century's advances. The growing unease about climate change and resource depletion underlies the design team's stated goal of developing “new ways of living in the city.” While these unpleasant realities could inform the design but be incorporated to disappear, both the design team and the city seem to have strongly taken the side that they should be incorporated as a legible aspect of the development. In the Official Development Plan, this is stated very plainly.



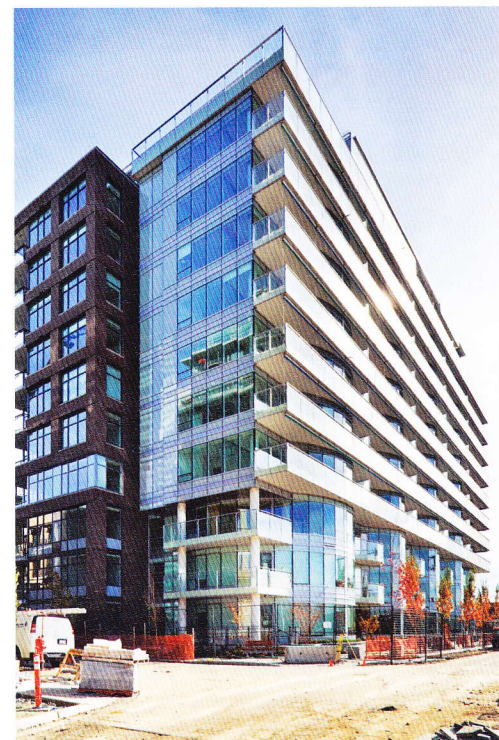
ABOVE LED BY DURANTE KREUK LANDSCAPE ARCHITECTS, SOME MARVELLOUS AND SURPRISING LANDSCAPE ELEMENTS HAVE BEEN INSERTED INTO THE ATHLETES' VILLAGE SITE. **RIGHT AND OPPOSITE** SEVERAL VIEWS ILLUSTRATING GBL ARCHITECTS' RESIDENTIAL PROJECTS THAT COMPRISE THE ATHLETES' VILLAGE.

"SEFC (Southeast False Creek) is to demonstrate a comprehensive approach to sustainability reflected in both open space and building design." This is a useful point of departure, but could still lead in a number of directions: displaying technical prowess, offering up the subtleties of passive design, or revealing the nuances of everyday systems deliberately manipulated to foster a more sustainable version of modern urban life.

Where the Olympic Village achieves the latter, it is most successful in laying the groundwork for a new way forward for development in Vancouver, another stated goal of the ODP. "SEFC is to promote the implementation of sustainable development principles in an urban setting, and thereby contribute to improving the mainstream practices of urban development throughout the region." This occurs most strongly on an infrastructural level; both the stormwater manage-

ment system and the neighbourhood energy utility bring the bowels of the city to the surface, affording selective glimpses of systems at work, hints of the messy realities behind comfortable, convenient human inhabitation.

Though incentives for disconnecting downspouts are taken up in a haphazard fashion around Vancouver, most stormwater goes directly into the combined stormwater and sanitary system with the result that in heavy rainfall events, sewage overflows into False Creek. This untenable situation has added to the impetus for alternative approaches to stormwater management, relieving the burden on the combined system by allowing rainwater to infiltrate where it hits the ground. Within the Olympic Village's building parcels, rainwater is collected in cisterns to provide irrigation and feed a greywater system for toilet flushing, a feature which required an ardu-

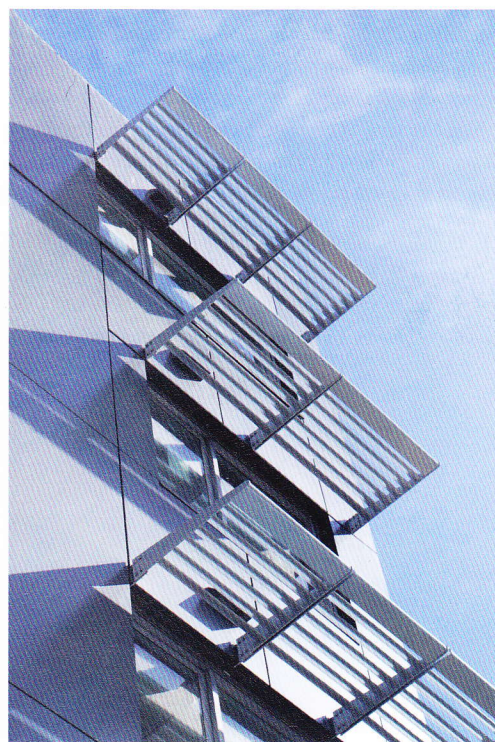




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ous negotiation process with the Engineering Department due to concerns over non-potable water in residential units. This is a significant accomplishment which could begin to have an impact city-wide by establishing a precedent; for good and for bad, nobody using the facilities would give a second thought to where the water in the toilet came from.

In the public realm, on the other hand, stormwater management is made highly visible. Rather than sloping toward the curb, the streets slope toward the middle. A narrow, open runnel carries water to pipes at the end of the street, which then drain into a bioswale on one side of the site and a wetland on the other. The meandering wetland with its habitat shelves and dark water provides a glimpse of a water system at work for anyone who cares to pause and consider it, and a picturesque diversion for anyone who doesn't. More subtle, and perhaps more powerful, are the direct rainwater outfalls which punctuate the boarded slips protruding from the seawall. Where groupings of large granite blocks step down to the water in between the slips, steel channels protrude from the level of the seawall promenade. If someone with an affinity for the rain happened to be sitting on the granite blocks appreciating a wet day, they just might be surprised by a sudden waterfall as the rain reached a critical mass in the channel above. More than the other visible stormwater strategies, this episodic event stitches together the constructed system branching through the site and the large body of water which absorbs the effluvia of its urban surround. At the edge, it cracks open a reveal. It viscerally challenges the lingering notion that the city is functionally distinct from an unconstructed "nature." This seemingly minor moment has the potential to act as a catalyst, transforming attitudes about

the city's relationship to the resources it draws in and discharges.

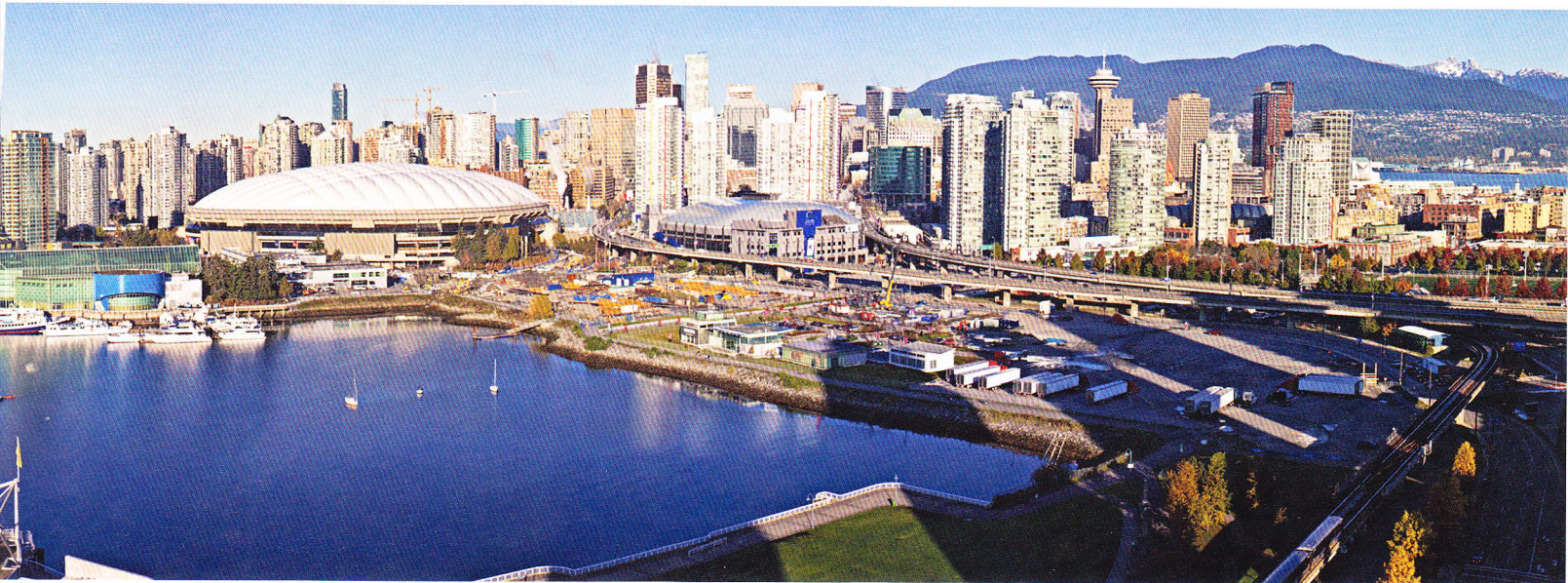
Expressing this interface of water systems could have been taken further, exposing the stream that had been boarded over during the site's industrial period. Restoring it would have created a practical challenge for the developer by cutting the site in two, but could have offered an opportunity to preserve a piece of ecological heritage in a city whose small streams have been lost to development. It might also have provided a unique site constraint for the residential buildings, pushing the quest for a new form of development beyond the adoption of a mid-rise form.

Filling in the stream did give rise to one distinct feature. Though the stream's habitat value had been low as a consequence of being covered over for 60 years, the Department of Fisheries and Oceans required 2 to 1 compensation for filling it in. The result has taken the form of reconstructed fish habitat along the length of the foreshore and a "Habitat Compensation Island." This highly visible reshaping of the interface of land and water in just one single instance reveals the possibility of many more such constructive operations in the future. Imagine an altered False Creek dotted with habitat compensation islands, peninsulas and spits.

Where "the reveal" in architecture operates in a limited manner, expressing the junction of two materials, here it operates instrumentally, at a larger scale, expressing the interface of multiple systems and even multiple times.

Mapping character-defining elements of the Olympic Village—or Shipyard—neighbourhood, the public realm plan identifies the progression of shorelines from the 1889 foreshore through multiple iterations of a ship-





DANNY SINGER

building, working waterfront. On this map, the new sustainable community incarnation of the area with its own shoreline alterations represents the latest iteration in a changing waterfront. It only requires a small leap to imagine that just as the rise and fall of shipbuilding were inscribed into the physical built character of the area, future economic changes linked to climate change and resource pressures will inscribe themselves. Given such evident physical evolution, development on the site is uniquely situated to capture and convey this sense of change unfolding over time, not only as “history,” but as an adapting, shifting future.

The Salt Building, the sole industrial building retained on the Shipyard portion of the site, fulfills its heritage mandate through the refurbished cladding and exposed wood trusses which recall its industrial function and time period. But this static representation of history is upended by a simple move in the ground plane. The building was raised in order to meet the new plaza level at the north end, presenting the opportunity to leave a gap where the plaza meets the building at the south end. Passersby on the south side catch a glimpse of piles and pile extensions while on the north side, those who happen to use the public washrooms descend from the current landscape to the historic one, coming face to face with the original piles, a built consequence of the 1889 shoreline. As the force of history gathers such a strong presence in this small space, it undermines the sense of permanence embedded in the current built condition, suggesting an inevitably evolving role for both the community and its inhabitants.

At their best, both the public realm and the public buildings reveal the site and its systems in nuanced, provocative ways which engage the much

OPPOSITE TOP A VISUAL PANORAMA OF VANCOUVER, WITH SOUTHEAST FALSE CREEK (SEFC) VISIBLE TO THE LEFT OF THE SCIENCE WORLD SPHERE—AN EARLIER INTERVENTION INTO FALSE CREEK THAT WAS BUILT FOR EXPO 86. **OPPOSITE BOTTOM, LEFT TO RIGHT** A VIEW OF FALSE CREEK FROM THE VANCITY BUILDING; HINGE PARK; A PEDESTRIAN WALKWAY LEADING INTO THE VILLAGE; ANOTHER VIEW OF SITE—THE GREEN ROOF IS THAT OF THE SOUTHEAST FALSE CREEK COMMUNITY CENTRE.

larger issues the development sets out to address. But the residential architecture falls down in this regard.

A number of practical sustainable strategies were applied across all the residential buildings. Exterior sun-shades on the south and west sides of the buildings automatically unfurl to reduce unwanted solar gain. Daylit corridors and wide stairs have views to and from public spaces in order to encourage walking. Corner units and through units are prioritized to provide cross-ventilation wherever possible. The neighbourhood energy utility captures waste heat from sewage and redirects it to a capillary mat system in the ceiling of every unit. Rainwater is collected on each roof to provide water for irrigation and toilet flushing. Fifty percent of the roofs are green. The walls achieve an average R-value of 16. Twenty percent of the units are affordable housing and an additional 110 units are rental housing. All of this is a major improvement on conventional development in Vancouver, and if repeated, could make major inroads on the energy and water fronts.

And yet, even though the buildings are low- to mid-rise, in distinction to their towering counterparts across False Creek, they look and feel remarkably the same. Squinting east from Southeast False Creek to CityGate or

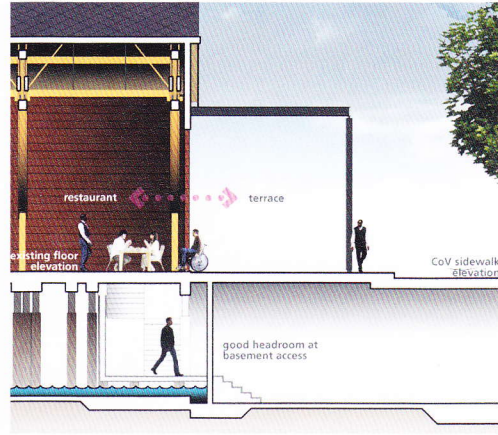
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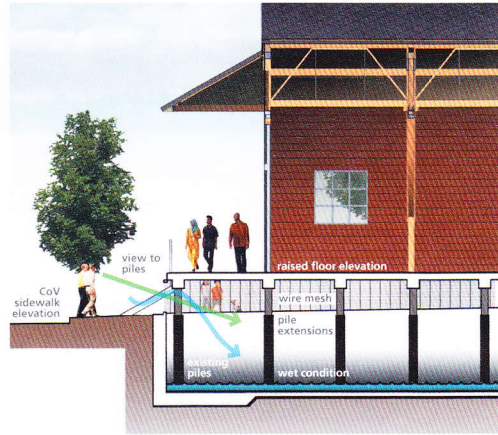
MICHAEL EIKAN



ACTON OSTRY ARCHITECTS INC.



WALTER FRANCL ARCHITECTURE



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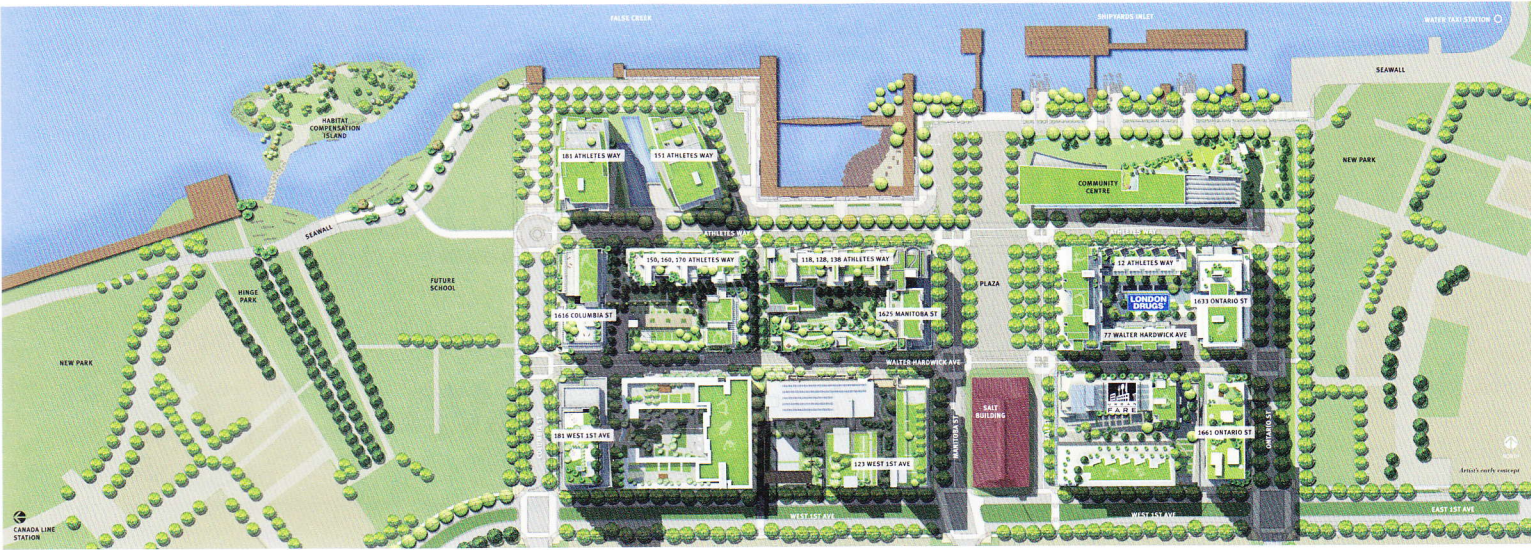
utility plant feasible, a window to solid wall ratio of 70 to 30 was applied across the site. In the market-rate buildings, this ratio was distributed uniformly through window wall systems, such that the walls are still made of glass, but with a slight spandrel panel creep to make up that 30 percent. In order to convey that this development is qualitatively different, the 70/30 might have been deployed more inventively across all four façades, both responding to solar orientation and reimagining the irrefutable primacy of “the view” in market housing, working from the understanding that the views might be just as valuable when carefully framed.

Given its prominent waterfront site, and its soon to be prominent place on the world stage, the architecture operates at more scales than most buildings. It operates at a large urban scale, given its high degree of legibility from across False Creek or up on the Cambie Bridge. It has an impact at an intermediate urban scale from within the site, and at a more intimate scale from within the units. An additional scale is made meaningful through the massing of the roof gardens, situated a storey or two below the ultimate roof line such that these semi-private green spaces rest within the field of view of a significant portion of the occupants on an everyday basis. These spaces become an easily accessible part of life, a place for casual use and encounters, rather than a questionable amenity requiring a special trip or the exclusive domain of penthouse dwellers. And this is where an evolution of form can be felt, a byproduct of the mid-rise massing perhaps, but more than the introduction of mid-rise in and of itself. Four or five storeys above the street, with perhaps one storey enclosing them on one side and several on another, these spaces become a lifted ground plane with an indeterminate relationship to the city. The surrounding units frame offset, fragmented views, affording a surprising connection to the bridges and viaducts inhabiting the same strata.

Where these tangible differences emerge, they really do reinforce the City’s aspirations to create a more sustainable community. Where the sustainable strategies are shaped in service of a “marketable” package, becoming either attractive amenities or invisible features, they do much less than

ABOVE, TOP TO BOTTOM WALTER FRANCL ARCHITECTURE AND NICK MILKOVICH ARCHITECTS ARE WORKING HARD TOWARDS COMPLETING THEIR SOUTHEAST FALSE CREEK COMMUNITY CENTRE; A VIEW OUT TOWARD FALSE CREEK WITH THE NEW COMMUNITY CENTRE STILL UNDER CONSTRUCTION; ACTON OSTRY’S SALT BUILDING IS THE ONLY REMAINING HISTORICAL STRUCTURE ON THE SITE.

north and west toward the downtown core, the buildings blur together with their window-walled neighbours. The mandate to achieve an R-value of 16 could have given rise to a distinctly different envelope, revealing the sustainable ambitions of the development, or at least provoking questions as to what drove the difference. To make heating with a single neighbourhood



SITE PLAN

they could foster the qualitatively different relationship to the urban environment that a sustainable community would entail. **CA**

Hannah Teicher currently works for SHAPE Architecture in Vancouver.

- CLIENT** MILLENNIUM SOUTHEAST FALSE CREEK PROPERTIES LTD.
- STRUCTURAL** GLOTMAN SIMPSON GROUP OF COMPANIES
- MECHANICAL** COBALT ENGINEERING & ASSOCIATES LTD.
- ELECTRICAL** NEMETZ (S/A) & ASSOCIATES LTD., ACUMEN CONSULTING ENGINEERS
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- COMMISSIONING** KD ENGINEERING (TBC) CO.
- COST CONSULTANT** BTY GROUP
- SCHEDULING** GUOJIN PROJECT AND COST MANAGEMENT LTD.
- AREA** 1,500,000 FT²
- BUDGET** \$1 BILLION
- COMPLETION** NOVEMBER 2009