

GESAMTKUNSTWERK

THE EXHIBITION

From a never-before publicly-shown Arthur Erickson 1955 sketch that set the agenda for Vancouverism, to renderings, models and videos illustrating the most adventurous building here in decades, the Gesamtkunstwerk exhibition explores the thinking behind contemporary city-building. Designed by the Bjarke Ingels Group (BIG) of New York and Copenhagen, this residential tower will rise above the north end of the Granville Bridge, with its adjacent low-rise retail and office buildings defining the new Beach District neighbourhood. The show opens up the design, context and background of Vancouver House to public understanding with powerful visuals and commentary, showing how "Total Design" can transform contemporary high rise residential living through the synthesis of art, architecture, interior design, urbanism and energy with public-mindedness.

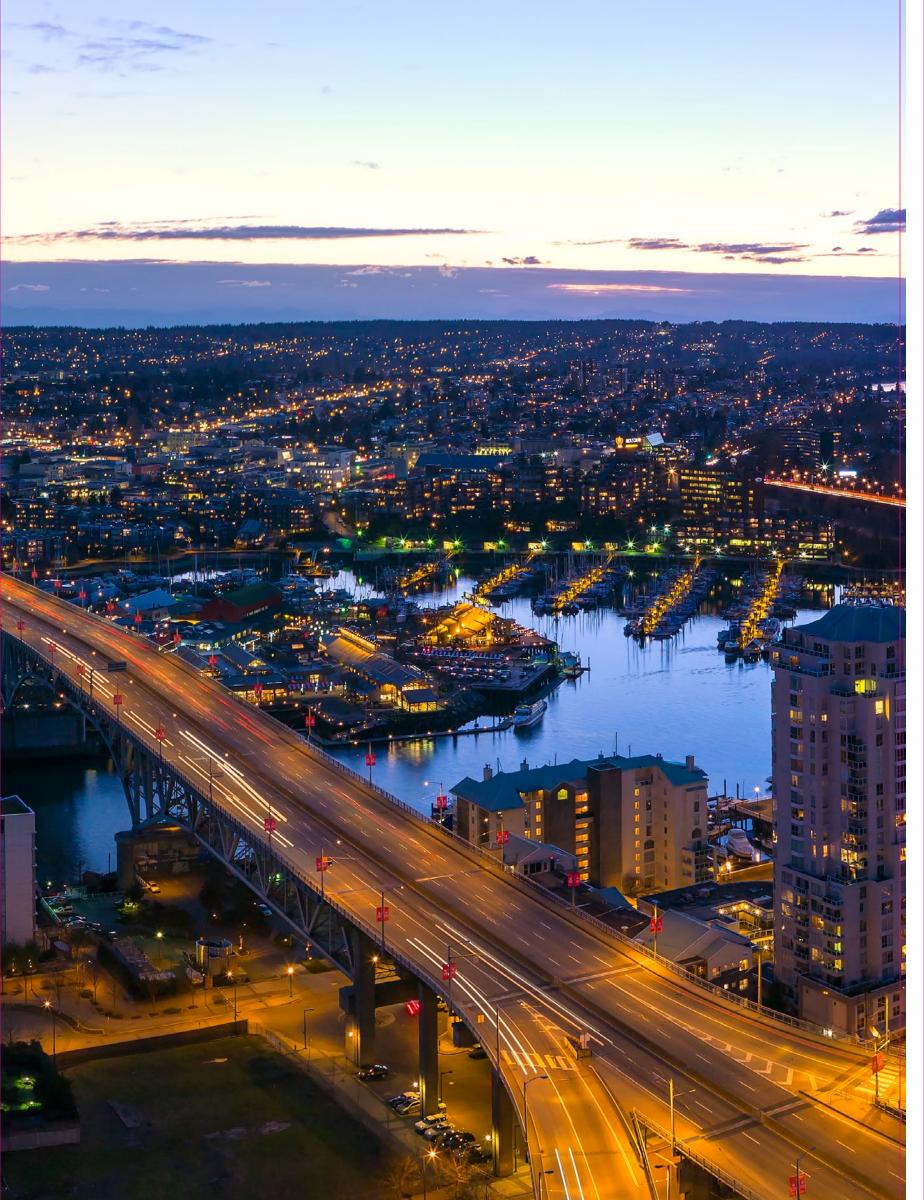
THE IDEA

Gesamtkunstwerk was a new word in German used by composer Richard Wagner in the mid-19th century, then adopted by Le Corbusier and Walter Gropius in the 1920s as re-making the world through "Total Design" – the integration of all of the creative arts and all scales of design, 'from teaspoons to cities' according to the Bauhaus designers. This is the only word that adequately describes the intentions by BIG as architects and Westbank as a developer for their Vancouver House development, with its ground-breaking organic forms in concrete, glass and copper, its thoughtful interiors and apartment appointments, its integration into the skyline, its tapping into Westbank's new "Creative Energy" community energy system, its inspiring public art by Rodney Graham, and its creation of significant new public spaces for the enjoyment of all Vancouverites.

THE PRESENTER

Westbank is one of North America's leading real estate developers, creator of Fairmont Pacific Rim, Woodward's, Toronto and Vancouver Shangri-La Hotels, and TELUS Garden, one of the the world's first LEED Platinum office towers. Westbank projects have led the market both in design innovation and in creating value through ideas. With a long-term commitment both to sustainability through such developments as the planned LEED Platinum Vancouver House and their community energy subsidiary, Creative Energy and also to public art, the firm has commissioned works from such leading artists such as Gwen Boyle, Dale Chihuly, Diana Thater, O Zhang, Ken Lum, Elspeth Pratt, Kota Ezawa, Damian Moppett, Mark Lewis, Stan Douglas, Liam Gillick, Zhang Huan, Ron Terada and (at Vancouver House) Rodney Graham.







GESAMTKUNSTWERK: A MANIFESTO

This exhibition and this catalogue document the evolution of our city-building practice. This evolution has progressed over two decades, beginning with Residences on Georgia, progressing through the Shangri-La Vancouver and Toronto, the Woodward's re-development, the Fairmont Pacific Rim then our recent acquisition of Vancouver's Central Heat. These large, complex mixed-use developments all share an emphasis on the integration of public art, and building them has allowed us to mature into a more well-rounded practice. Long-term commitments to sustainability and the integration of art into innovative architecture, and now the re-imagining of Vancouver's energy infrastructure have compelled us towards thinking about our projects as more than just buildings, but rather, opportunities to shape the entire build-out of the city.

It was in this context that I discovered the word and philosophy behind "gesamtkunstwerk," and came to the belief that it best represents a guiding philosophy for all of our projects, current and future. The key concept here is taking the idea of the total work of art to a whole new scale – applying this philosophy to solve problems and create opportunities for enlightened city-building.

This matters because the future of our community, our country – in fact, all countries – rests on the success of cities. Vancouver, being one of the world's more successful urban experiments, has led this evolution towards enlightened city-building. Cities have become the economy's driving force in the Information Age. Along with that has come an inversion of the hierarchy of power; cities work because ideas come out of them. For Westbank, adopting a building mission around the concept of a total work of art evolves naturally out of the record documented in our book, Building Artistry. It has now become the core philosophy of everything that we do.

If "gesamtkunstwerk" is our philosophy, then Vancouver House is its manifestation. Vancouver House has the potential to become one of the most watched and studied urban development projects under way today. Seven years in the making, we brought everything that we have learned through dozens of complex projects, with the best design and consultant team that could be assembled. We hope that this cumulative intelligence results in Vancouver House taking a giant leap forward – not only from technical and sustainability perspectives – but as for all of our projects, that its artistry remains paramount.

Ian Gillespie

	3	GESAMTKUNSTWERK: A MANIFESTO, IAN GILLESPIE
	6	CURATORIAL ESSAY, TREVOR BODDY
1	14	1. BIRTH OF VANCOUVERISM
1	16	2. TOWER AND PODIUM
2	20	3. EVOLVING BUILDING TYPOLOGIES
3	32	4. VANCOUVERISM 2.0
3	34	5. THE NEW BEACH DISTRICT NEIGHBOURHOOD
3	38	6. PUBLIC ART
4	12	7. DEFINITIVE ARCHITECTURE
4	18	8. OUTSIDE-IN, INSIDE-OUT
Ę	58	9. FOOTPRINT
6	62	10. CITIZENSHIP
6	64	BIG, NEW YORK & COPENHAGEN
7	72	WESTBANK & BIG SELECTED WORKS
7	77	CREDITS

LIFE AS A TOTAL WORK OF ART 22 March 2014



A new word in German coined in the 1820s, composer Richard Wagner popularized gesamtkunstwerk in essays published in 1849. For Wagner, it was the ideal word to promote his notion of creating all aspects of his operas, from scores and librettos, to costumes, sets, even an entire theatre building at Bayreuth.

Gesamtkunstwerk became a core concept and rallying call for architectural Modernists who wished to remake Europe's cities, devastated by World War I. Walter Gropius, architect and director of the omni-arts school the Bauhaus, promoted a version of the concept with a sharper definition, updating it as "Total Design" with designers enriching every scale of contemporary life, from teaspoons to cities.

Architecture & Exhibition Design by BIG Produced by Westbank

CURATORIAL ESSAY

PART ONE: INVENTING THE IDEA OF TOTAL DESIGN

There was a time before design. Furniture, dishes and houses were made by each family, or in local ateliers and guilds. The craft of making was sustained by oral description and by physical demonstration, and the functionality of objects evolved slowly over decades, step by step. This meant that designs for say, a chair, were tested over time, and incrementally improved. Tradition guided design, and some wonderful creations, like Shaker chairs or medieval pewter, resulted from this mode of making.

The invention of printing, especially illustrated books, sped up the process. A drawing with some explanation could send a design far beyond the boundaries of its inception. For example, for its wooden forts in Langley and Nanaimo, the Hudson's Bay Company prepared detailed plans in London for every construction, then sent out mobile squads of specialist builders in canoes to actually build them, armed with printed plans. The importation of paintings of Chinese temples led to recreations in the West of the marvels of the East, as in London's Kew Gardens. Large scale industrialization of the late 18th into early 19th century changed the game again, as manufactured products could be standardized, with broad scales of production cutting costs, but at the cost of finesse. Urban development could proceed at larger and larger scales, and house plans became standardized and then codified by law. Pre-manufactured doors, windows and hardware were integrated into housing, but with them, buildings and streets lost some of their organic, hand-evolved character.

There was a broader price for all this increasingly large scale object-making and urban-building – the pollution and visual chaos of urban landscapes riven by industrialization. Writers and artists were amongst the first to call down the effects of the industrialization on urban environments. British poet William Blake wrote of the "dark satanic mills" that were disfiguring his beloved South London, and cultural critics like John Ruskin and William Morris picked up the cause later in the 19th century, proposing a return to medieval traditions of hand-craft as the solution.

The disfiguration of cities and changing nature of work prompted a somewhat different reaction in Germany. Inspired by the Idealist philosophers, the call there was to instead reform the system of production, rather than return to some ideal from the Middle Ages. In the political realm, Karl Marx demanded control over industrial production

be given to workers. In the realms of design and city-building, arguments evolved differently than they did in the Anglo-sphere. The operative thoughts in the Germanic world were of reform and standardization – if only, if only, the chaotic modern world could be simplified and organized, then the negatives of pollution and ugliness could be eliminated! It is in this context that in 1827 a German philosopher first cobbled together a number of German words – gesamt meaning "total" or "allencompassing" with kunst or "art" with werk, or "work" or in this context, "art-work." Thus from its inception, "gesamtkunstwerk" was a synthetic solution, a call to action, a plan of reform.

Meanwhile, opera composer Richard Wagner was growing frustrated with the conventional division of labour in the creation of musical works. The costumes and stage-sets produced by staff or ateliers attached to existing opera companies to accompany the music and libretto he had crafted always turned out inferior to his personal vision. He was just as frustrated by the division of labour long set into place at commissioning theatres, as these proved devilishly hard to amend. In some senses Richard Wagner is the ultimate Romantic artist, and his deeply-held thought was that art, through the magnetic persona of the artist, could reform society. He started calling his works "music-dramas" rather than operas, and pushed all around him to join in the collective action of producing a singular artistic vision.

Europe churned with political and social change through the year of 1848, a year in many ways similar to the tumultuous unrest of 1968. For Richard Wagner, it was as if the new world that could craft and understand his work was at last coming into being. In two crucial essays written then, and first published in 1849, Wagner used the word "gesamtkunstwerk" in his call to implement his artistic vision in every aspect of the presentation of his operas. For him, the idea was even more ambitious, as gesamtkunstwerk became a model for the reform of society itself. As one of the most popular and prolific composers of the 19th century, Wagner's promotion of the term spread far and wide in the Germanspeaking artistic world, and was known world-wide by opera buffs and Wagner fans – more books were published about the composer than any other living figure in the 19th century, even Charles Dickens.

One institution did more than any other to turn gesamtkunstwerk into a global term. That was the former Grand Ducal Saxon School of Arts and Crafts in Weimar, especially under the direction of the Belgian Art Nouveau architect Henry van de Velde from 1907 to 1915. The program

sought to break down barriers between craft and design traditions, developing new notions of teaching and thinking about design, ideas that shape art and architecture schools worldwide even today. While the English Arts and Crafts movement (inspired by critic John Ruskin and omni-arts polemicist William Morris) had a deep streak of nostalgic Neo-Medievalism about it, the Germans were less inclined to so simplistic a reaction.

In 1919, Berlin architect Walter Gropius assumed the directorship of the school, and soon re-named it the Bauhaus (literally "building-house"), and the curriculum was further tightened, and fine arts were integrated with applied arts programs. The school was socially progressive as well, with students and faculty probing sexual and aesthetic boundaries, even dietary fads (everyone ate mainly garlic for a few weeks!), so much so that the good burghers of conservative Weimar hounded them out of town, forcing the Bauhaus to accept an invitation to move to Dessau, nearer to Berlin. The student and faculty cohorts became increasingly international, and leading-edge ideas in design, architecture and the fine arts circulated, free of the inhibitions of the places that invented them. Gradually, the concept of gesamtkunstwerk morphed in that of "Total Design." Gesamtkunstwerk become Total Design meant that a singular design sensibility could re-make the entire environment, in a catchphrase frequently used by its graduates, 'from teaspoons to cities.' In its last years the Bauhaus moved to Berlin under director Ludwig Mies van der Rohe, but its political and aesthetic progressivism was too much for the Nazis, who shut it down. Gropius moved to Harvard, where his thinking about Total Design influenced a generation of architects, and Mies moved to Chicago, more to practice than teach, but his work became emblematic of the idea.

While the Total Design re-making of teaspoons created few questions, by the 1950s the Bauhaus-inspired remaking of cities was very much being scrutinized. Large organizations – the Italian Fascists, the Russian Soviets, even North American developers – had latched on to the "Total Design" label to justify the fabrication of soul-less, repetitive and monstrously inhumane urban developments. Yes, it was now possible for a single sensibility to transform cities, but what if that sensibility did not respect the diverse needs of people and neighbourhoods? What if it just aggrandized an ideology, or powerful leader, or development bottom line? Total Design without a tempering humanism quickly morphed into "Totalitarian Design."

PART TWO: THE 'TOTAL RE-DESIGN' OF VANCOUVER

Vancouver in the 1950s was an unlikely place for next-stage thinking on the evolution of Total Design to occur, but that is just what happened in a visionary drawing, then a string of unbuilt urban propositions by Arthur Erickson. His talent as a painter had netted the showing of some of his paintings at the Vancouver Art Gallery while still a teenager, and through family friends Erickson had met painter Lawren Harris and the painter-qua-architect B.C. Binning, a kingpin of the local modernist scene, and attended some of the salons in his landmark West Vancouver home (one of these led to a successful lobbying effort for the establishment of a school of architecture at the University of British Columbia.)

After war-time military service with British Intelligence, Erickson was inspired by a Fortune Magazine profile of Frank Lloyd Wright, and within weeks had secured an entry place in McGill's School of Architecture. He returned to his beloved Vancouver in summers, then came home permanently after his post-graduate travels on a Pilkington Scholarship, mainly touring the Mediterranean basin. There followed a few years "getting fired from the best architectural offices in Vancouver," as Erickson once told me, his dreaminess noted by his colleagues, as was his lack of a conventional careerist drive. Friend Douglas Shadbolt talked him into taking up the same one year visiting teaching position he was abandoning at the University of Oregon. In Eugene, Erickson was exposed to the Environmental Design movement, a re-conception of Bauhaus notions of Total Design by former University of California at Berkeley architecture dean William Wurster, whose acolytes had spread up the coast. The movement urged a holistic consideration of the entire built environment, and to design in consort and in respect of nature. Erickson was also inspired by modernist houses in Portland and Seattle, designers such as Paul Hayden Kirk, Paul Thiry and Pietro Belluschi providing models for the kind of architectural practice Vancouver was not yet supporting.

Back in Vancouver, Erickson started teaching at UBC and formed his own practice in partnership with Geoff Massey. By 1955 Erickson-Massey had only designed a handful of tiny wooden houses, nothing as advanced as the Pacific Northwest work that inspired them. With a fortune originating in Massey-Harris farm machinery, Massey's social and family connections (he was related to Governor General Vincent Massey, Hollywood actor Raymond Massey, and Ottawa modern architect Hart Massey) complemented Erickson's charm and dedication to original

ideas. The two were asked to compile a report on the future of downtown Vancouver for the Community Arts Council of Vancouver. The Community Arts Council was dominated by strong women with connections into the corridors of power, assertive personalities who took on the cultural and architectural transformation of their sleepy and isolated Vancouver as an urgent issue.

"A Report on the Future of Downtown Vancouver" was duly produced for the C.A.C., dealing mainly with transportation, parking and a need to accommodate more housing, with returned soldiers and their new families expanding the city's population. As an addendum to the report Erickson produced a visionary sketch entitled "Plan 56" which was not printed with the report. As far as we know, the Gesamtkunstwerk Exhibition marks the first public showing of the original drawing itself, a soft pencil sketch on Arches paper, a drawing that anticipates many of the themes of the "Vancouverism" of four decades later. Erickson set up the drawing by doing an overall sketch of Vancouver harbour looking north and west from the western sidewalk of the Burrard Street Bridge (Erickson even pencils in piers set with some yachts projecting into English Bay.) The left side of the drawing shows an utterly transformed Kitsilano Point with an apartment tower of nearly 20 storeys (there was a scheme underway then for this site that resulted in the three-winged tower currently standing on Kits Point designed by a team initially led by Wells Coates, who several years later did his own visionary plan for Vancouver, and even proposed a raised rail transit system, forerunner to SkyTrain.) Visible at the centre of the Erickson's drawing is a new bridge that he and Massey were advocating in their C.A.C. report, linking Point Grey and UBC with West Vancouver, a proposal that was, of course, never adopted (the Erickson-Massey urban ideas were never formally presented to City Council, and the City Planning department of the time similarly ignored them.)

The right side of the "Plan 56" shows an utterly transformed West End, with curving residential towers (the stepping curves allow more residents to have open-to-the-sky west and south-facing balconies) that soar forty and fifty storeys high, in a city where the highest residential building was only half that size. While it is difficult to see at this scale, Erickson confirmed to me they intended the towers to be set on continuous three to five storey bases, or podia, with trees and bushes planted on their roofs. This is one of the earliest "green roofs" to be proposed in North America. Erickson went on to indicate that the inclusion of a green roof and waterfalls in Robson Square (with Cornelia Hahn Oberlander collaborating as landscape architect) was a return to this same notion

twenty years later. An early-1970s visit to the similarly landscaped Oakland Museum had proved to architect and landscape architect that public buildings could be built into the ground with landscaped roofs and pools. Similarly, the softened, multi-layered decks facing the harbour of Erickson's 1978 Evergreen Building flanked with a hard 'urban' edge along Pender Street is another carrying forward of these Plan 56 ideals. The tall tower transforming downtown was realized by Arthur Erickson in the cast concrete waffle frame of the MacMillan Bloedel Tower a dozen years after the "Plan 56" drawing. Controversial when it was first opened, it is now evident that the Mac-Blo was the breakthrough project in moving downtown to a higher density, more metropolitan character.

In conceiving the "Plan 56" drawing, Erickson had been inspired by Frank Lloyd Wright's long-term promotion of the notion of a "Mile High Tower," resulting in a proposition for Chicago for such a building (never constructed) that same year. In 1952, Louis Kahn had proposed a very high tower for Centre City in Philadelphia, also un-realized. How is Erickson's design different from these two other visionary towers of the 1950s? The key difference is a word beloved by Vancouver city planners, and many of its citizens: "livability." Erickson's towers were mainly residential, while the American propositions are mainly office. Erickson's alone defers to views, light, and natural features; Erickson's alone could be considered organic in form. Erickson's alone put enlightened living at the centre of his architectonic proposition. There is also the architectural similarity linking both the Kits Point construction and the two massive megastructures proposed for the West End. These are all theme and variation on the same approach, one clear hand and design sensibility proposing the re-shaping of all of downtown Vancouver.

"Plan 56" by Arthur Erickson is thus a complete and mature example of the gesamtkunstwerk philosophy in action, but one humanized, and tempered by its dramatic natural setting. The fundamental curatorial decision was to use this drawing to anchor the exhibition. To do so is sobering, as it shows that fifty years before Westbank and Bjarke Ingels Group (BIG) began working on Vancouver House, a legendary architect was wanting to re-shape downtown with bold curving forms. It is also encouraging, as Erickson's thoughts about how to create liveable high density downtown living are noble grandparents to the thinking and drawings on display in BIG's detailed Vancouver House designs.

The total re-design of downtown Vancouver story continues with Robson Square by Erickson's increasingly confident architectural office, a radical re-thinking of public architecture and public space. As

mentioned, Erickson was able to build his green roofs here, and with waterfalls and reflecting pools, shows his naturalizing aesthetic at work. In arriving at this hybrid concoction of law courts, government offices, a conference centre and art gallery, all wrapped with innovative public spaces, Erickson proposes a building aspiring to the condition of both city, and landscape, notions also evident in the University of Lethbridge and other commissions. In Plan 56 buildings were architecture and they were landscapes too; ditto at Robson Square, the Alberta university megastructure, and countless other Canadian buildings that have followed in their wake.

A young immigrant from Hong Kong, educated at the University of Washington in Seattle, was drawn to work in Vancouver with Erickson on the Robson Square design, serving under project lead and head planner, Bing Thom. James K.M. Cheng regards Robson Square as his "true graduate school," an opportunity to learn city-building and architectural detailing at the highest levels. Cheng left Erickson's employment after several years to complete a Master's of Architecture from Harvard, then returned to Vancouver to open his own firm, notably after winning the open competition for the Chinese Cultural Centre in Chinatown. While that scheme was not completed according to Cheng's vision, he gained a growing reputation as the designer of custom houses, and did his first multiple family developments at Cambridge Gardens, near City Square, and Willow Court in Fairview Slopes, which won Canada's highest award for architecture, the 1983 Governor-General's medal for architecture.

By the mid-1990s Cheng had started the first of his large multi-family projects for Westbank - Palisades, and across Alberni Street along Bute, the Residences on Georgia (R.O.G). The context for these schemes was increasing interest by City of Vancouver planners under the highly respected Larry Beasley in "liveability" downtown, turning marginal zones into vital residential neighbourhoods. Seeking an architectural form appropriate to the planners' intentions, Cheng had invented the particular "Vancouverist" combination of thin high rise residential towers on a continuous base of townhouse apartments in the 888 Beach project, at the foot of Hornby Street just outside the door of the Gesamtkunstwerk Exhibition. At R.O.G. what had come to be called the "tower and podium typology" amongst architects had achieved a voluptuous design resolution - it is a micro to macro masterpiece of design in consort. R.O.G. thus picks up the tradition of the Total Design from the modernists, but with a respectful appreciation of its humanization by Erickson in Plan 56, MacMillan Bloedel Tower, and Robson Square. Its completion with a splendidly-landscaped park, significant installation

of public art, and its urbane and articulate townhouse elevations along Alberni Street is in a class apart from previous downtown Vancouver developments. Total Design with humility; gesamtkunstwerk with grace – these may be the most accurate slogans for recent Vancouver city-building.

So, after this long setting of the stage, it is time to now go through BIG's design for Vancouver House, the main focus of this exhibition. James K.M. Cheng Architects led the early urban design studies on this site, exploring with City of Vancouver planners the range of options available here, making an inventory of options, even before Westbank had secured the complete site. It was evident to Cheng that the conventional tower and podium approach would not work here, as the site was too constricted by the Granville Street Bridge and its approach ramps. In a gesture of grace and humility, Cheng suggested to Ian Gillespie that this might be a good project for the developer to bring in newer and fresher ideas from outside Vancouver for the more 'architectural' portions of the project yet to come, based on the urban design preparatory work by his firm. Cheng and Gillespie had been independently introduced to Bjarke Ingels by Beasley's successor as head planner, Brent Toderian. Prior to this, Ingels had made two visits to Vancouver for lectures to the architectural and academic communities, and through a formerly Seattle-based associate, I was asked to show him Vancouver, including an extended look at the designs of James Cheng and Westbank's development work. So with Cheng's blessings, BIG became the design architects for what would soon become Vancouver House, at Beach and Howe.

One of BIG's breakthrough ideas is effectively to develop a new typology for downtown Vancouver, by pulling apart notions of both "tower" and "podium" and re-constituting them with their own appropriate architectural identities. The tower faced some significant restrictions: there needed to be a required set-back separation between the new building and the Howe Street bridge on-ramp. To get commercially viable floor-plates higher up in the building, the lower sections would need to be quite delimited in their floor plans, then grow out with cantilevered floor plates higher up to fill the available site space, high above their originating site. Ingels and his team were attracted to this idea, and developed the gestural metaphor of the curtain - as if a curtain had just been opened between downtown and English Bay, a mobile, motile curving form caught at the very moment of opening. The wonderful quality of this metaphor is that it works from either side: downtown Vancouver opening itself up to the world (via Vancouver House), or the world welcomed into the streets of downtown Vancouver (via Vancouver

House.) From this BIG then developed a second metaphor of "pixelation" – that every apartment façade act as one "picture element" or pixel, then the whole would adhere together to form the organic picture of the entire Howe at Beach tower. It goes without saying that there could hardly be a more "gesamtkunstwerk" notion than this visual linkage between individual apartment and complete building whole; micro in consort with macro.

At the same time, there was fresh thinking about how to treat the "podium," continuing in BIG's respectful acknowledgement but wish to transcend a simplistic tower and podium formula. The firm had been founded in Copenhagen, where Arne Jacobsen's SAS Royal Hotel (1956-61) was one of the only high rises in the central city, and had been constructed with its rooms in the tower, and public spaces and restaurants in the podium. BIG's Vancouver site was an array of triangular, fractured, seemingly leftover land after accommodating the Granville Bridge in the 1950s. These blocks would accommodate the retail and commercial portions of the project, but architect and developer wanted a clear distinction - they should have very different design qualities, not the consolidation into architectural matching that leads to a lot of bland tower and podia elsewhere downtown. Taken alone, the retail-commercial components of Vancouver House might merit an exhibition and catalogue like this on their own. With their triangular interior courtyards with wood decking, their prismatic angled glass walls, and their upward-cast green roofs, on their own merits these are complex and sophisticated design propositions.

Vancouver House is conceived as being the anchor of an entire new neighbourhood, which Westbank is calling the "Beach District." The portion of lower Granville Street under the north end of the bridge will become the main street of this re-conceived zone, flanked by the BIG-designed new retail-commercial pavilions on either side. As much creative attention is placed on transforming this area as for the high profile tower that flanks it. The best way to understand plans for the Beach District is to think back to the state of Granville Island before CMHC invested public money in its improvement in the mid-1970s. Most Vancouverites rarely visited this prime location then, but with the creation of the public market, the expansion there of what is now Emily Carr University, and a range of other arts uses and innovative retail, Granville Island has become one of the gems of Vancouver.

So from one under-bridge mixed use zone to another, Westbank has applied its Total Design philosophy to improving the entire public

realm here, adding public art and animation to make Beach District the Granville Island of the 21st Century. Flexibility is the by-word in these designs. For instance, the roads here will permit calmed traffic and limited short term parking much of the week. But for weekend markets, urban festivals and music concerts, Lower Granville and flanking streets can be made pedestrian-only. As it does for Granville Island, the bridge deck provides some rain protection. Inspired by ubiquitous bus shelter advertising displays, such key Vancouver photo-conceptualist artists as Jeff Wall and Rodney Graham have long used ranks of bulbs set in a frame to illuminate large colour photographic transparencies from behind - these are called 'light boxes.' To make the under-bridge zone more visually appealing and dynamic, Westbank is proposing a series of light boxes on the soffit of the bridge deck. In partnership with Emily Carr University, students will produce a series of original artworks, to be rotated each year as students pass through one of Canada's most prestigious art schools, located just across False Creek from Vancouver House.

The commissioning of original, demanding works of contemporary art has long been part of Westbank's Total Design ethos. This ethos is applied at a whole new scale at Vancouver House, which seeks to transform the infrastructure of the bridge into a significant cultural space, not just transportation device. In addition to the light boxes, Westbank has commissioned one of the world's most ambitious permanent installations of conceptual art from internationally acclaimed Vancouver artist Rodney Graham, and approved by Vancouver's Public Art Committee on February 11, 2014. Entitled "Spinning Chandelier," Rodney Graham's art-work is a kinetic sculpture that will transform the vast, cathedral-like spaces under the Granville Bridge. Graham's sculpture extends from his 2005 35-film loop installation Torqued Chandelier Release in which a crystal chandelier whirls rapidly as its supporting cable is unwound. Installed under the bridge above the intersection of lower Granville with Beach Avenues, a monumental 14 by 21 foot faux glass recreation of the film's 18th century French chandelier will slowly rotate and rise over the course of twenty-four hours, then once a day release and dynamically spin back to its starting point. "Spinning Chandelier" will quickly become an urban icon, turning a dark under-bridge into the enjoyable focus of public celebration. According to Reid Shier, public art consultant and director of North Vancouver's Presentation House Gallery, "This will be Vancouver's new 'Nine O'Clock Gun," referring to the firing of a canon in Stanley Park that has been a Vancouver urban ritual for more than a century.

Westbank's engagement with Total Design is clearly seen in this exhibition's documentation of the dozens of models and drawings that were created in refining the shape and character of the overall building. BIG's definitive architectural forms are sculptural, without doubt, but the means by which this result was found was the patient solving of dozens of simultaneous equations, the multiple factors that need to be brought into balance in an effective and beautiful form. What is less evident is that the same exhaustive design process was used to refine even what might be – in the hands of most developers – the most banal of interior details.

There is only space to discuss but one of the hundreds of ways BIG's designs improved through iteration and re-iteration – for the lobby mailboxes. For most Vancouver residential towers there is a nook in the lobby or a back room where owners access their mailboxes. For Vancouver House, architect and developer agreed that the daily visit to the mailbox was potentially a welcome social integrator for residents in this large apartment building, an informal stage for them to stop and chat. Total Design means total commitment - this seemingly small item in the larger scheme of Vancouver House went through 11 different design iterations until the right combination of functionality, aesthetics and social purpose was achieved. BIG's final design solution is a sculptural object in steel - looking like a large "+" sign in plan, its sides covered with rows of mailboxes. Its most clever aspect is that this mailbox structure is less than shoulder height at its highest, allowing eye contact and acts of greeting, however modest, to occur between strangers. Nearby, there is an elegant sweeping staircase that leads upstairs to a residents' lounge, all clues that this is a tower that also wishes to be a community.

A similarly comprehensive strategy is used in devising and linking sustainability features in what is anticipated to be one of the world's first LEED Platinum residential towers. One key design decision is to use a new building insulation product from Dow Corning, its first ever application to a residential tower. The new insulation is highly efficient, good for the long term energy budgets of residents, but also thinner. Having to leave significant space for thicker insulation adds up over the entire building in surprisingly more metal, concrete and exterior cladding. Design innovation yields new solutions that save energy and precious materials in unexpected ways.

Because of Westbank and BIG's dedication to state of the art energy conservation, there are literally hundreds of details that make a difference, so this is only a summary of what Total Design means on the sustainability front. There will be Low-E triple glazing throughout,

which reduces heating demand by 34% and cooling by 28%, and drops noise transmission by half. The non-glass portions of the exterior building cladding use vacuum-insulated panels, their reduction of air and heat leakage meaning one third better energy performance. The mechanical systems at Vancouver House are designed for efficiency, with heat recovered from exhaust air, and a low water temperature heating and cooling system reducing energy wasted in air fans by 42%. Both domestic water and air supplies are filtered, improving the quality of life for residents. There are a similar range of conservation features within the retail-commercial buildings that are part of Vancouver House. Even outside the apartments, shops and offices of Vancouver House, the same regimen of sustainable design continues: bicycle storage rooms; highly efficient LED lighting; use of treated wood for outdoor decks; and dozens of other features summarized in the drawings on the exhibition panels.

If Westbank were to stand pat with only this range of energy conservation measures - found in any Vancouver project aspiring for LEED Gold status or higher - it would propose a mere evolution, rather than its actual revolution in thinking about energy use in downtown residential projects. In a classic application of Total Design thinking, Westbank is re-considering the entire idea, the complete system, the full range of conventional thinking about energy use and production downtown. To understand what is intended at Vancouver House, and other developments to follow, one must stand back and think about some broader issues. While much of BC Hydro's electricity is generated from hydro-electric sources, there is currently no major growth in dambuilding approved, with the Peace River's Site C and other large additions a decade or more away, and ever more expensive. The key principle of a new business for Westbank, called Creative Energy, is to find innovative ways of producing and distributing low carbon-generated energy throughout our downtown.

While it may not be known to the general public, downtown Vancouver has long had a community heating system. It has long been known that community heating connection is one of the most effective energy conservation and low carbon strategies possible for large urban buildings, especially when density creates economies of supply and delivery. Founded in 1968, and called "Central Heat" until recently, the Vancouver system currently supplies heat in the form of steam to over 200 buildings in the downtown core from its central plant on Georgia at Beatty Streets. Westbank recently bought this company, has re-branded it as "Creative Energy" and plans to not just expand, but entirely update the community heat system, beginning with Vancouver House and

subsequent buildings from other builders in the Beach District, then right across the entire urban core. The key advantage here is what is called an "energy switch" – devising a system which can be rapidly weaned from carbon-burning generation (like coal, oil or natural gas) to geothermal, bioenergy, and low carbon generation options, not in decades, but in mere years. The key to this is Creative Energy's recognition of the latent possibilities in existing urban infrastructure – in thinking of energy, the solution becomes cities, unity discovered in diversity, development creating value in niches that others ignore.

Precisely because there is installed pipe and a consumer base of some of the city's largest buildings (including Westbank's Shaw and Pacific Rim projects, the Convention Centre, and so on), whenever and wherever less-greenhouse-gas generating sources come on line, they can be brought to end users more easily. Other creative options are also being investigated in parallel such as utilizing existing infrastructure such as Vancouver's Dedicated Fire Protection System, a large water loop that can tap seawater originally installed as a backup for regular water mains in the case of a major seismic event. By tapping this loop, it may be possible for Creative Energy to capture more cost-effectively waste or low grade heat from office cooling, sewers, seawater or the earth in order to heat buildings in the Beach District and beyond.

Creative Energy is also actively investigating a variety of low carbon solutions at unlocking the stored energy in clean wood waste from local parks, buildings, sawmills, and industry. To enable the use of new forms of energy, Creative Energy will also develop new hot water networks for the Beach District and other growing neighbourhoods beyond the existing steam lines. These networks are more efficient, last longer and can use other forms of energy such as waste heat in sewage and ground source energy.

Westbank's investment in Creative Energy shows that an interest in Total Design – in the complete architectural, aesthetic, social and environmental re-conception of city-building – is even transforming the company itself. Gesamtkunstwerk in application has pushed the company out of narrow conceptions of a core business being solely conventional real estate development – Westbank is now better described as a city-building company.

Notions of citizenship – dwelling together in the *civitas*, or the commonality of urban living – apply every bit as much to large companies as they do to individuals. There are two innovative mechanisms that

Westbank uses to assert its commitment to corporate citizenship here. The first is working with City of Vancouver engineering and planning staff on connections to a possible greening of the Granville Bridge – the rededication of the central two traffic lanes to a greenway and Manhattan "High Line" style linear urban park that would link downtown with South Granville and make a stronger Beach District better linked by pedestrians and cyclists into the rest of the city. With this initiative, as in its design and art innovations, and holistic approach to sustainability, Westbank is continuing a pattern of being slightly ahead of its markets. This was as true of the first Westbank projects shown in this exhibition as Residences on Georgia as it is for the developments of four years ago like the Fairmont Pacific Rim.

The notion of citizenship operating here even extends past Canada's borders. The developer is working with established non-profit organization World Housing on a "Home for Home" program where the developer will pay for the construction of a modest dwelling for some of the Developing World's most impoverished families for every condominium sold at Vancouver House. While Westbank will advertise the link and hopes it leads at least a few purchasers to buy here, this is ultimately not a business decision, but one of citizenship. Recognizing one's membership in multiple communities, both local and global, is the ultimate act of connection. Through design, art, sustainability and citizenship, Vancouver House engages with big picture issues as few other singular developments, taking a systemic, synoptic and ultimately synthesizing approach to city-building.

PART THREE: DESIGNING AND APPLYING GESAMTKUNSTWERK

This exhibition is itself an exemplar of the Gesamtkunstwerk philosophy in action. As the proposal for Vancouver House proceeded through various levels of civic approval, Ian Gillespie had conversations with Bjarke Ingels and his staff at BIG about pulling together an exhibition of the visual material produced in their multi-year design efforts. Around the time of final City of Vancouver approval of the project, in October of 2013, it was proposed that the main floor of the Westbank-owned "Mini Storage" building on Howe between Pacific and Beach Avenues be renovated into a first class gallery space, before it enters into service later in 2014 as the main sales centre for Vancouver House. The BIG notion was that the exhibition be inspired by their own New York studios over-looking the Hudson River, and that much of the visual material

would be pinned on the wall, as if it were just put up for a casual review by colleagues and clients. BIG interior design staff under Francesca Portesine designed the renovation of the spaces and Edward Yung served as project manager, the team pulling the visual material and its installation design into form.

By late October of 2013 I had been asked to join this team as external exhibition curator and catalogue editor. Knowing my background as urbanist and historian and critic of contemporary architecture, lan Gillespie asked me to draw on my background and knowledge of Vancouver material to demonstrate how Vancouver House links with the historical idea of gesamtkunstwerk, and evolves out of city-building in Vancouver, including Westbank's own early projects. I quickly arranged for a lending of the Arthur Erickson sketch for "Plan 56" – an original drawing that had never before been displayed to the general public – as a means of both explaining the idea of gesamtkunstwerk, and to show how the subsequent line of designs by him and James K.M. Cheng are excellent exemplars of its principles.

It was quickly apparent that if this exhibition were to investigate how Vancouver House demonstrates the Total Design philosophy in action, that design would need to be visually presented and verbally described in its totality – all aspects, inside and out, technical and environmental, micro and macro. With this decision, the Gesamtkunstwerk Exhibition is in a class by itself as an architecture show. I know of no other exhibition, here or abroad, that so thoroughly presents the complete range of thinking and designing that went into a building that has not even commenced construction. In choosing to highlight to the public the full range of thinking behind contemporary development and architecture, the boundaries of transparency are pushed to the limits with the collection of scale models, drawings, videos, wall texts, recorded narrations and mock-ups on view here.

Our intention is to put the entirety of Vancouver House on display, so that the public can understand the thought, the skills, the passion that goes into contemporary city-building. Form your own opinions, please, but spend some time to linger with what is on show here, perhaps return for a second viewing, or to enjoy some of the public salons we have planned. I think you will enjoy the same surprising sense of pleasure that I did, in coming to understand how part relates to whole, how portions lead to entire plans, how ideas inform ideas, then crystallize into definitive form. The Gesamtkunstwerk exhibition has been created not for those who commissioned it, nor those who designed it, or even for those of

us who have curated it, but for you. If the complex but necessary act of contemporary city-building becomes a little clearer for you after touring this exhibition, we will have succeeded.

Welcome to Vancouver House.

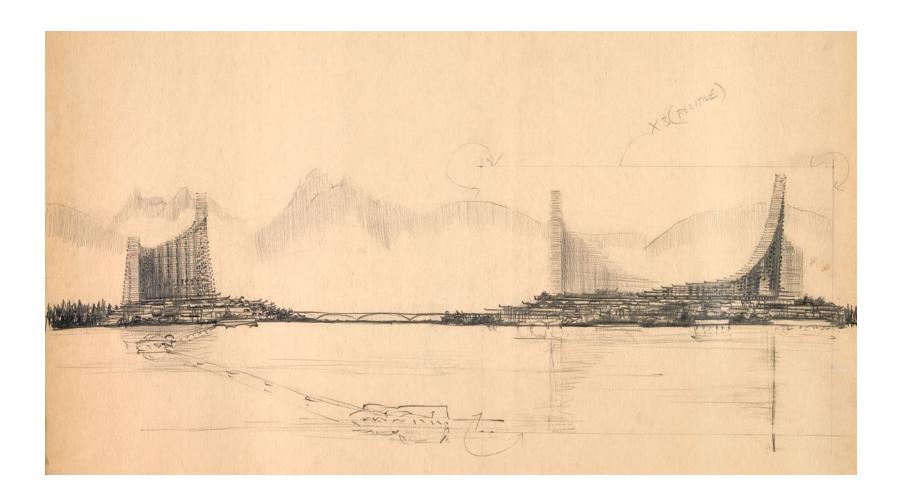
Trevor Boddy Gesamtkunstwerk Curator and Catalogue Editor March 22, 2014

Vancouver-based Trevor Boddy is a curator and critic of contemporary architecture and urbanism, and consulting urban designer. His writing on buildings and cities has been awarded the "Alberta Book of the Year" and "Jack Webster Journalism" prizes, Western Magazine Award, the Architecture Canada/ Royal Architectural Institute of Canada's 2010 Advocacy Award, and an Honorary Membership in the American Institute of Architects. As curator Boddy produced the 2008 exhibition "Vancouverism: Architecture Builds the City" and related Trafalgar Square site-specific construction, which was named a marquee event for the 2008 London Festival of Architecture, then was re-mounted in Paris in 2009, and returned home to Vancouver at Woodward's for the 2010 Winter Olympic Games. Boddy was appointed Adjunct Professor in UBC's School of Architecture and Landscape Architecture in 2012, and has held prior professorial appointments at Manitoba, Oregon, Toronto and Carleton.

1. BIRTH OF VANCOUVERISM A VISIONARY 1955 SKETCH, THEN TWO BOLDLY INVENTIVE BUILDINGS BY ARTHUR ERICKSON SET OUR DOWNTOWN CITY-BUILDING AGENDA FOR THE NEXT HALF CENTURY – SIGNS OF THINGS TO COME.

It is time that Vancouver started thinking about its inevitable fate: a great city of ten million people.

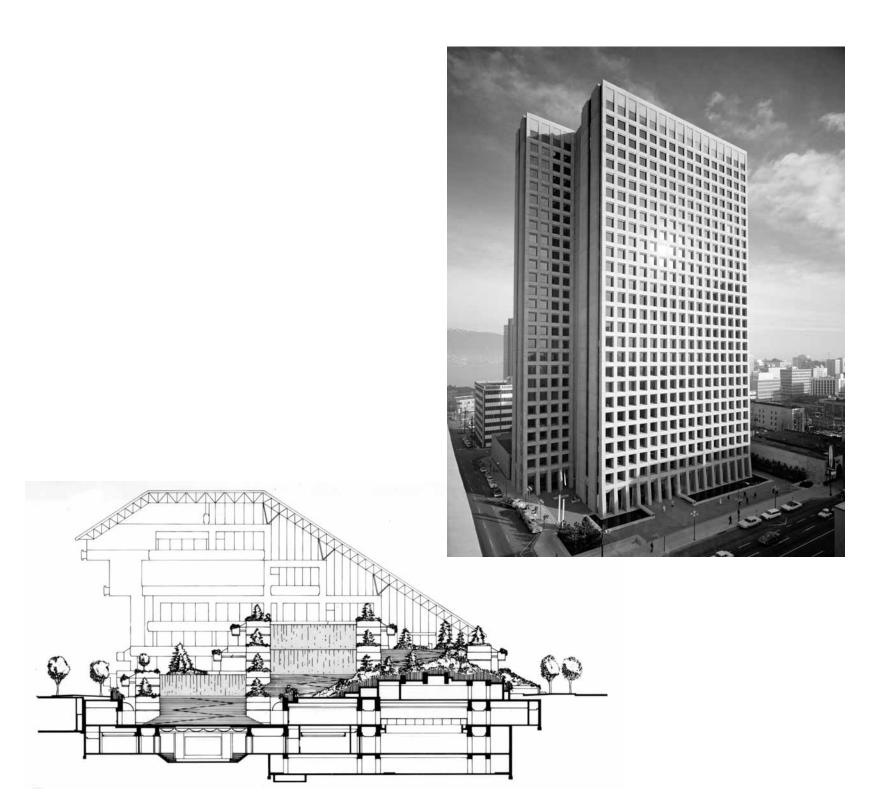
- Arthur Erickson, 1992 (Greater Vancouver population then, 1.5 million)



ARTHUR ERICKSON PLAN 56

Arthur Erickson's Plan 56 pencil sketch imagining of a future Vancouver, showing the West End re-made with soaring and twisting residential towers on the right, and vastly increased housing density on Kitsilano Point on the left, with an unrealized proposition of a new bridge to be built further west connecting UBC with the North Shore, its mountain backdrop can be seen faintly behind. Erickson's drawing was inspired in part by Frank Lloyd Wright's "Mile High City" and a similar unbuilt visionary scheme by Louis Kahn, but predates the more famous futurist urban propositions of the Japanese Metabolist or British Archigram groups. Amazingly, when Erickson pencilled this sketch, he had only completed two tiny wooden houses on his own.

Plan 56 Rendering by Arthur Erickson from "A Report on the Future of Downtown Vancouver" produced by him and Geoff Massey for the Community Arts Council of Vancouver, 1955. Original pencil on arches paper drawing from the Canadian Architectural Archive, shown courtesy of the University of Calgary Library Special Collections.



View of the MacMillan-Bloedel Tower on West Georgia Street, by Arthur Erickson Architects (in association with Adamson Associates) showing the cast concrete 'waffle' elevation which slightly diminishes with each floor as it rises, increasing its perceived elegance. Not just the 'Brutalist' treatment of concrete, but also this building's height and strong definition of Georgia Street challenged timid local design conventions, and it was controversial when it opened.

A sectional drawing from Arthur Erickson Architects of Robson Square, showing a "Media Centre" conference facility below (now UBC Robson Square), the roof gardens, waterfalls and elevation of the Law Courts. Erickson's radical move was to bring nature into the heart of the city in a non-suburban manner, and to layer building uses into a complex but balanced hybrid of functions, a public building unlike any other in the world.

2. TOWER AND PODIUM FIRST AT THE FOOT OF HOWE AT BEACH STREET, THEN WITH SUBSEQUENT DEVELOPMENTS IN YALETOWN AND COAL HARBOUR, JAMES K.M. CHENG INVENTS THE COMBINATION OF THIN RESIDENTIAL HIGH RISE WITH CONTINUOUS TOWNHOUSE BASE, THE "TOWER AND PODIUM TYPOLOGY" NOW RECOGNIZED BY ARCHITECTS AND DEVELOPERS AROUND THE WORLD.



View of the SAS Royal Hotel in downtown Copenhagen, designed by Arne Jacobsen in 1956 and completed in 1961. Even today a rare high rise in the downtown of the Danish capital, hotel rooms are in the tower, with restaurants, shops and banquet facilities in the podium. Previously, Skidmore Owings and Merrill had completed New York's Lever House in 1952, another elegant exploration of tower with podium. The Vancouverist innovations were to adapt tower and podium to solely housing uses, and in particular, to create porous and engaged street-scapes by lining the podium base with townhouses.

SAS Royal Hotel, Copenhagen, image courtesy of Jørgen Strüwing.



888 BEACH BY JAMES K.M. CHENG ARCHITECTS

Long building section from False Creek through 888 Beach up to Beach Avenue showing how the multi-tower project relates to views, water and streetscape, with parking cleverly tucked under a block-centre garden for residents. Both landscape and buildings were designed by James K.M. Cheng. Former Vancouver Co-Director of Planning Larry Beasley was instrumental in encouraging local developers to experiment with this configuration, altering our downtown forever. Thus, 888 Beach is the 'Ur-Project' for Vancouverist tower-on-podium, a pattern now being built from Dubai to San Diego, with architects worldwide now listing it as a valuable "typology" for use in contemporary downtown development.

Photograph by James Cheng, courtesy of James K.M. Cheng Architects.





View of south-west corner of 888 Beach, showing the near-continuous ring of townhouses that surround the entire super-block development. James K.M. Cheng studied at Harvard under Richard Meier at the peak of the Post Modern era in design. Many of the details here are inspired by Brownstone walk-ups and other 19th century housing types found in Boston's Back Bay and Brooklyn: the gentle bow window based on historic models; location of the primary living level a few steps up from the street; protective canopy over the door, and so on. The layered elevation on lower Howe Street rivals the formalist work of Peter Eisenman, while the building massing at the Pacific corners are object lessons in how a large building can elegantly 'turn the corner.'

Drawing courtesy of James K.M. Cheng Architects, Vancouver. Photograph by James Cheng, courtesy of James K.M. Cheng Architects.

2. TOWER AND PODIUM







RESIDENCES ON GEORGIA BY JAMES K.M. CHENG ARCHITECTS

Though this is an unusual block for downtown Vancouver without a lane, Residences on Georgia has nonetheless emerged as the definitive icon of Vancouverist 'tower-on-podium typology' approach to high density living that had gone from an architectural invention by Cheng to informal civic policy under head planner Larry Beasley. Most of the smaller apartments are concentrated in slender towers at either end of the block, between them being a continuous row of townhouses on Alberni that also have rear doors opening onto a large formal garden for residents on the Georgia side; the park as urban room. This is the second collaboration of James Cheng with Westbank, with the first being the Palisades across Alberni up Bute Street, with a continuous public art installation flanking both it and Residences on Georgia. The art by Gwen Boyle and Dale Chihuly is the product of a developer-run public art competition, one of the first for Vancouver.

Photographs by James Cheng, courtesy of James K.M. Cheng Architects, Vancouver.



Between the slender towers are continuous townhouses, with their main entrances boldly expressed in an entirely Modernist idiom all along Alberni Street, their back elevations looking directly onto the Georgia Street (private) garden. Architect James Cheng's skill in abstracting the principles and specific architectural features of traditional vernacular housing forms without replicating them (as the Post Modernists did) makes for one of the most humane and elegant new streetscapes in downtown Vancouver, enforced by their contrast with the Cheng-designed Palisades project across the street.

 $\label{prop:convex} \mbox{Photograph by James Cheng, courtesy of James K.M. Cheng Architects, Vancouver.}$

JAMES KM CHENG | ARCHITECTS

January 23, 2012

City of Vancouver 453 West 12th Avenue Vancouver, BC V5Y 1V4 Attention: Mr. Brent Toderian, Director of Planning

Dear Mr. Toderian

Re: 1400 Howe Street Rezoning Application

I write in support of this rezoning application. It is not often that we have a project in Vancouver that is truly special and unique both in terms of urban design and architecture. Vancouver has been known all over the world for its urban realm, often hailed as one of the most livable cities in the world, but often criticized for the uniformity of our towers. This proposed rezoning by Bjarke Ingels of B.I.G. is an extremely imaginative and thoughtful response to a unique site that is both next to and sandwiched in between the Granville Bridge and its ramps. It is an important gateway location into our city that deserves special consideration. The key reasons for my strongest support are as follow:

Public Realm Treatment

The proposed project provides a unique take on Vancouver's well-known tower/podium typology. It provides a form-specific tower combined with an equally form-specific urban village. The currently desolate voids under the Granville Bridge will be transformed into a vibrant mixeduse pedestrian environment of retail, offices, and both market and rental housing.

The existing predominantly residential neighbourhood will gain much need amenities such as a food store, convenient services and a gym to transform it into a truly complete and balanced community.

Skyline Treatment

The design of the tower and the commercial blocks between the on/off ramps will provide a new and unique critique to Vancouver's typical towers. It is also a fitting response to the City's "General Policy for Higher Buildings" and request for new benchmark for architectural creativity and excellence while making a contribution to the beauty and visual power of the city's skyline.

Sustainable Design

The articulations of the exterior facades are responses to the various solar exposures. These passive considerations are integral to the overall sustainability concept. In addition to environmental sustainability, it also scores high both in terms of social and economic sustainability.

Architectural Innovation

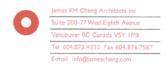
There is no question that the architectural language developed for this project will set a new paradigm for the Vancouver tower/podium typology. Not to be undervalued is the structural innovation needed to execute this "inverted" massing concept. The project will certainly raise the bar for architectural discourse in Vancouver and no doubt will be the most unique punctuation in our skyline when completed.

As urban design consultants to this most exciting project we are privileged to witness the evolution of this project from early concept to a finely honed package that excels in all levels and equally privileged to offer our support.

Yours truly,

JAMES K.M. CHENG ARCHITECTS INC.

James K.M. Cheng, MAIBC, FRAIC Principal



3. EVOLVING BUILDING TYPOLOGIES THE CHALLENGES AND POTENTIALS OF THE BEACH AND HOWE SITE REQUIRED FRESH THINKING, A RADICAL DESIGN EVOLUTION FOR THE SHAPE AND STRUCTURAL FORM OF VANCOUVER RESIDENTIAL TOWERS.

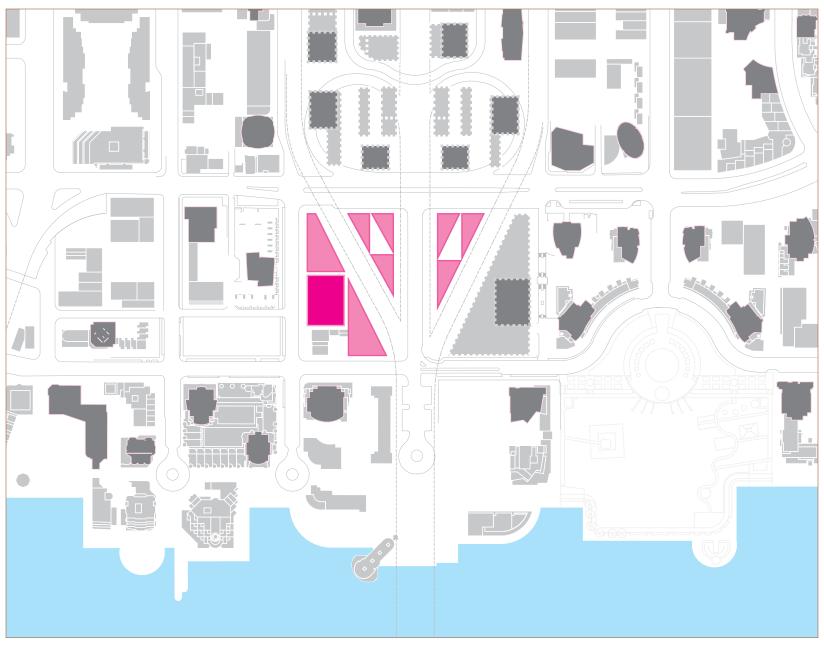


Image courtesy of BIG.

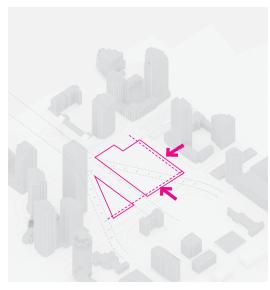




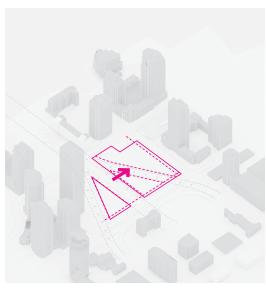
A NEW TYPOLOGY FOR VANCOUVER HOUSE

One of New York City's architectural gems – the 1903 Flatiron Building on Lower Broadway and 23rd in Manhattan designed by Chicagoan Daniel Burnham – is shown as it stands today on the left, and on the right, transformed into a torqued, cantilevered cousin of Vancouver House. Both buildings are set in triangular sites that had been previously passed up as un-buildable for tall buildings. The new technology of steel frame construction and Otis elevators made the New York building possible, while developments in computer technology, engineering and materials science make Vancouver House possible.

Original, left, and transformation, right, of Manhattan's Flatiron Building by BIG.

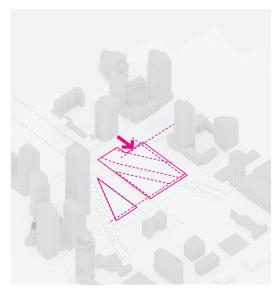


1. Street setbacks to allow future widening of Howe Street and Pacific Street

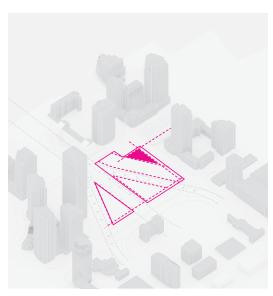


2. 3 metre setbacks from Granville Bridge edge, trisecting 3. Safety setback of 30 metres from Granville Bridge the site

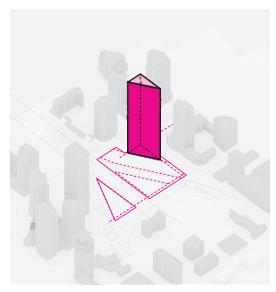




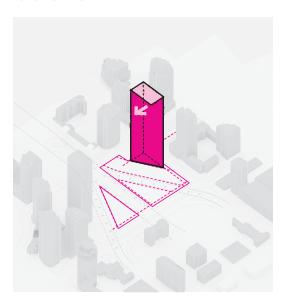
4. Limited distance to minimize shadows over May and **Lorne Brown Park**



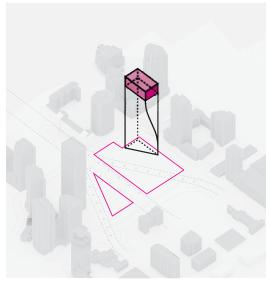
5. Resulting triangular footprint of approximately 6,000 sf



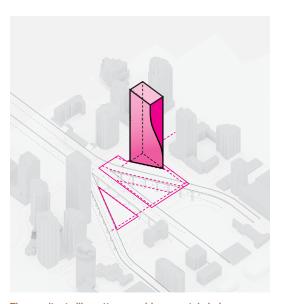
6. Extrusion of resulting footprint.



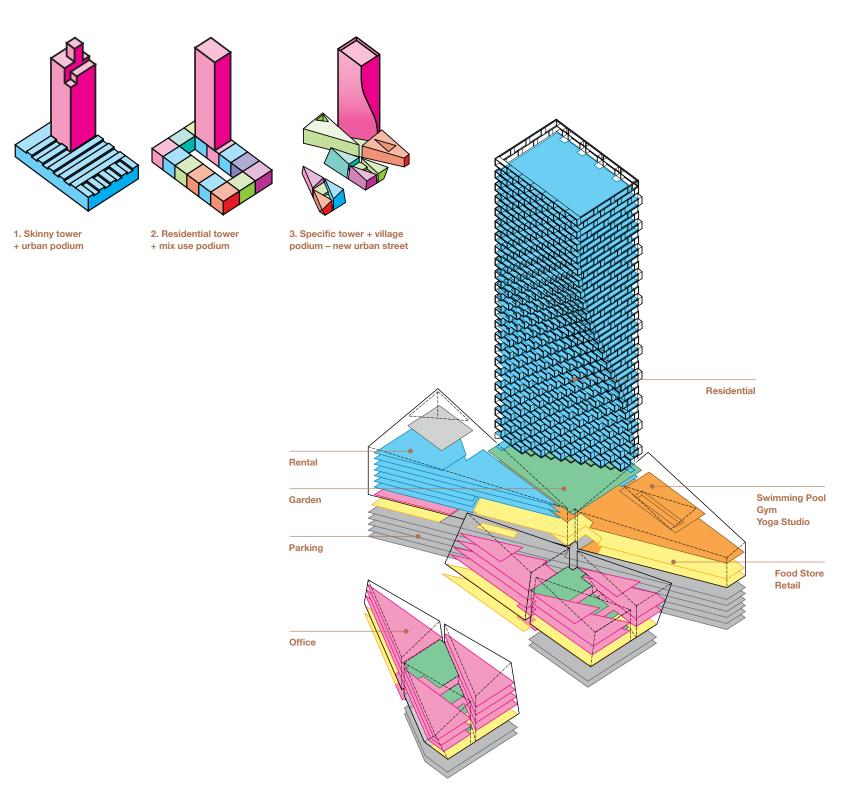
7. Three dimensional opportunity – away from the bridge, the tower can reclaim its logical footprint at the top



8. Extra volume at the top to create a new landmark



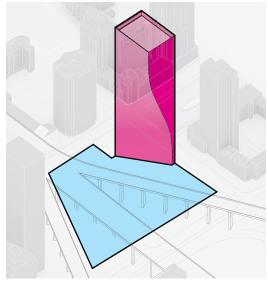
The resultant silhouette resembles a curtain being drawn aside, welcoming people as they travel across the Granville Bridge, optimizing the urban conditions and livability for its future inhabitants – in the air as well as on the street



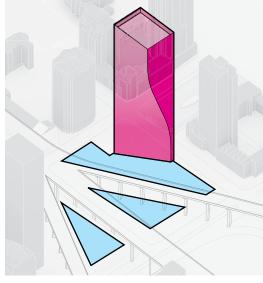
VANCOUVER HOUSE MASSING

Massing and building typology early design studies by BIG. These cartoon-like drawings explain the thinking behind the ultimate shape for the Vancouver House tower. Beginning with a simple tower alone, and proceeding through tower and podium, the ultimate form is the tower twisting from a triangular base to a much larger rectangular top. Setbacks from Granville Bridge ramps, shadowing and overlook relationships with neighbouring buildings, and the opportunity of light and views to the south and west also shape the tower.

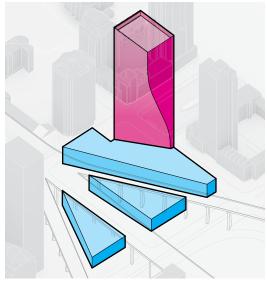
Pages 27 and 46 of Dec 17, 2012 Rezoning Submission by Westbank/BIG to the City of Vancouver Planning Department.



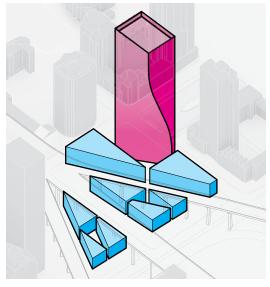
1. Limits of the site



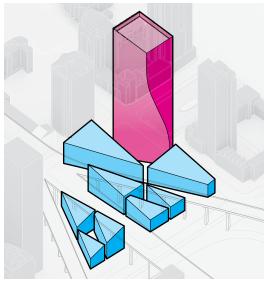
2. Site sliced by Granville Bridge required setbacks (3m)



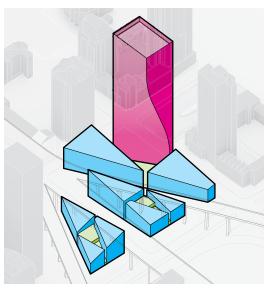
3. Extrusion of the site



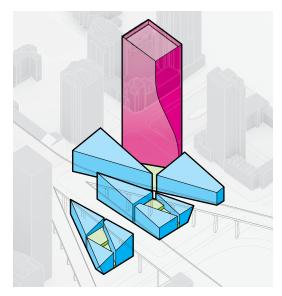
4. Creation of inner intimate spaces away from the bridge



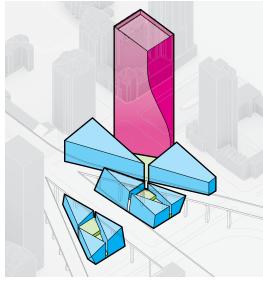
5. Raising three new peaks to emphasize flows along Granville Bridge



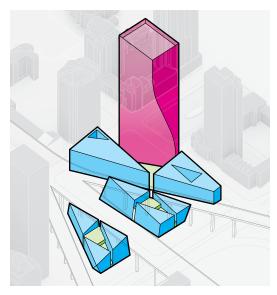
6. Insertion of green spaces into the podium buildings



7. Sliced corners to align with the future development of the loops site



8. Tilting facades facing Granville Bridge to add extra light under the bridge



The podium resembles the urban fabric found in historical neighborhoods, rather than the big box podiums in modern (sub)urban developments



BIG DESIGN PROCESS

The design of Vancouver House was a process that took seriously Vancouver's short but successful history of urban policy. The criteria that informed BIG's design – the legacy of Vancouverism, the unique and difficult site at the gateway to the city, the zoning conditions, the ambitious mixed-use programming, the relationship and proximity to Granville Bridge – are all things expanded on in this exhibition.

BIG is a design office that works with a wide variety of available means, media, and scale. On any given project, the team engage in design techniques ranging from the traditional – hand and computer drawings, physical models of all scales – to the technological – parametric-driven computer modelling, laser-cut and 3D-printed physical models, sketch and high-quality computer renderings. Each design tool allows the team to consider the project through a different lens, thereby expanding on the possibilities of architectural solutions.

Above: Photograph courtesy of BIG. Right page: Photographs and renderings courtesy of BIG.























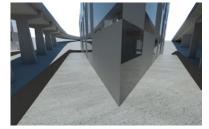
































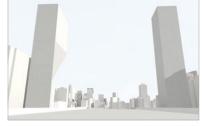


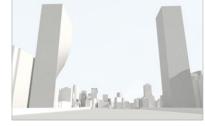


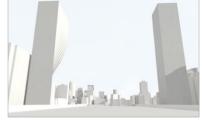












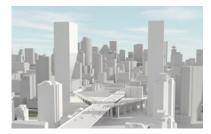




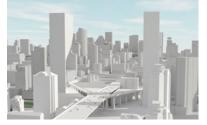


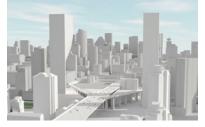




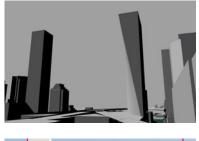




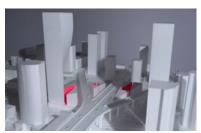


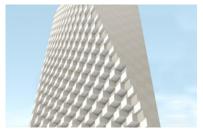




















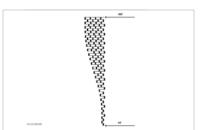




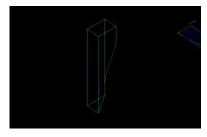


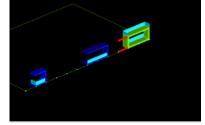


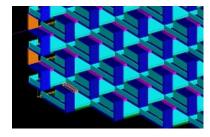


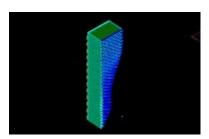


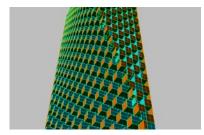


























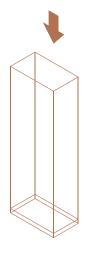




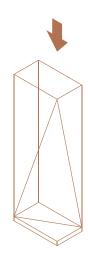




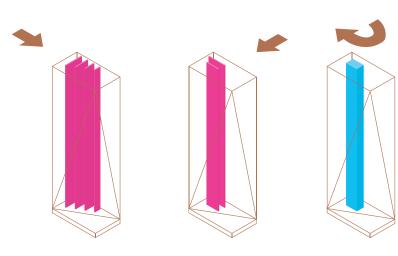
1. Representation of a typical high-rise tower



2. Vancouver House unique design challenge

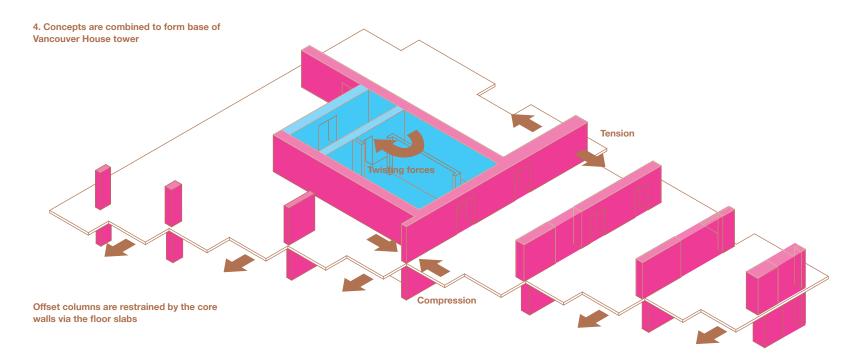


3. Structural concepts used to resist the internal and external forces of the tower



Long walls resist bending forces

Closed boxes resist twisting forces

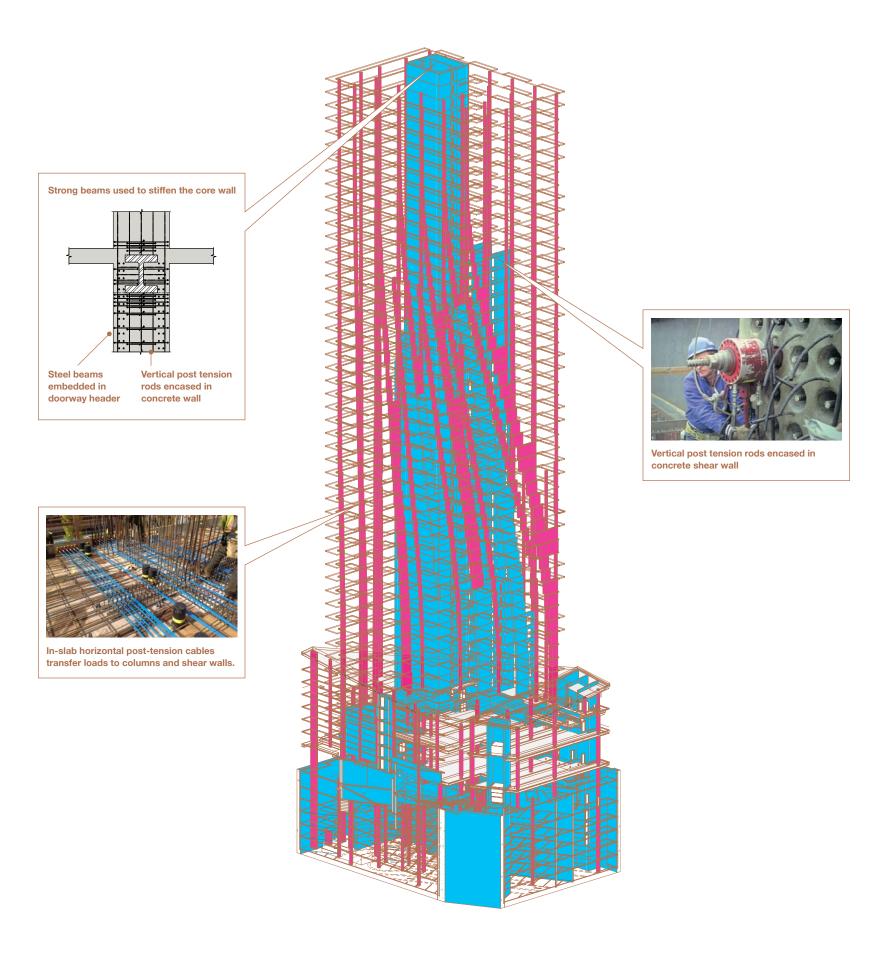


VANCOUVER HOUSE BUILDING STRUCTURE

The drawings above illustrate the design process by engineers Glotman-Simpson of Vancouver (in association with Buro Happold of New York) for Vancouver House. The challenge of the structural design is to take the loads from the wider, higher floors then transfer them back to columns and the building core, while at the same time dealing with seismic and wind load factors for a non-symmetrical building.

Glotman-Simpson illustrates the key structural forces acting on Vancouver House and how they are dealt with in the innovative design of the structure. The complexity of the high strength cast-in-place concrete structure involve loads cantilevered back as the floors diminish on lower levels, balanced by vertical post-tension rods running up the flat side.

Illustrations courtesy of Glotman-Simpson Consulting Engineers.



See through perspective rendering of the complete structural framing for Vancouver House. As floors extend further and further out over the eastern triangular half of their rectangular site, their loads are transferred back to a branching system of columns and shear walls by the use of horizontal post-tension cables, and vertical post-tension rods.

 $See-through\ perspective\ drawing\ of\ all\ key\ structural\ elements\ in\ Vancouver\ House.\ Courtesy\ of\ Glotman-Simpson.$

4. VANCOUVERISM 2.0 SITE CONTINGENCIES AND A SPIRIT OF INNOVATION HAVE DRIVEN WESTBANK AND BIG TO PUSH THINKING ABOUT URBAN ARCHITECTURE AND PUBLIC SPACE INTO NEW REALMS.

Think of our building as a giant curtain, at the moment of being pulled back to reveal the world to Vancouver and Vancouver to the world. – Bjarke Ingels, Big Architects



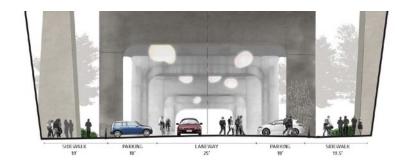
VANCOUVERISM 2.0

Two views of the Vancouver House show how both residential high-rise and lower commercial buildings together form the new community. The first view shows a view looking south with the new construction notched up against the on-ramps of the north side of Granville Bridge, a combination of offices, galleries, showrooms and retail that invent a new neighbourhood in what was until now, leftover land. The dramatic second view of the entire Tower shows how it torques up from its tightly delimited triangular base, then branches out into fuller floor plates at higher levels. While there is evolution evident here from Vancouverism's standard tower-on-podia, these boldly sculptural forms declare a new era for Vancouver residential towers. The net effect is as if an enormous curtain had just been opened, welcoming the world to a well-conceived downtown Vancouver.

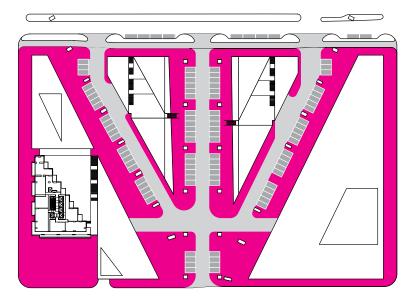
BIG Architects in association with Dialog.

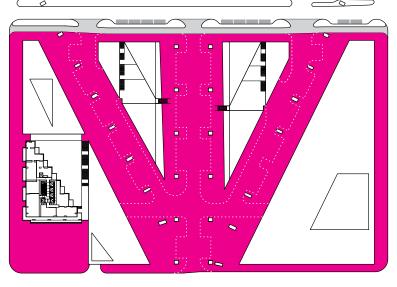


5. THE NEW BEACH DISTRICT NEIGHBOURHOOD VANCOUVER HOUSE IS DESIGNED TO BE CATALYTIC IN FORMING A NEW NEIGHBOURHOOD NESTLED UNDER THE BIG BRIDGE'S ARCHING FRAME – AN UPDATED SIBLING TO BELOVED SISTER PLACE GRANVILLE ISLAND, ACROSS FALSE CREEK.









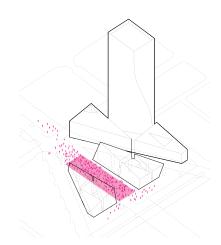
Standard public realm

Special event public realm

FALSE CREEK PUBLIC SPACE

The keyword to Vancouver House's public spaces is 'flexibility.' The plan at left shows how everyday parking can be accommodated, with continuous ground plane improvements from building to building, improving on the close mix of cars and people found at Granville Island. The plan at right shows the same spaces cleared of automobiles, its 30,500 square feet of public space accommodating between 700 and 2,800 people, depending on whether it is used for markets, festivals or concerts. The design sets the line of new construction back, defining generous sidewalks for cafes and public life. To become a complete neighbourhood and a destination itself, a wide range of retailers from grocery stores, drug stores, a range of restaurants and local services will spark a new street life in the Beach District.

BIG in association with Dialog, schematic ground floor plan of entire development and surrounding edges showing parking and non-parking configurations.



700 - 2,800 people

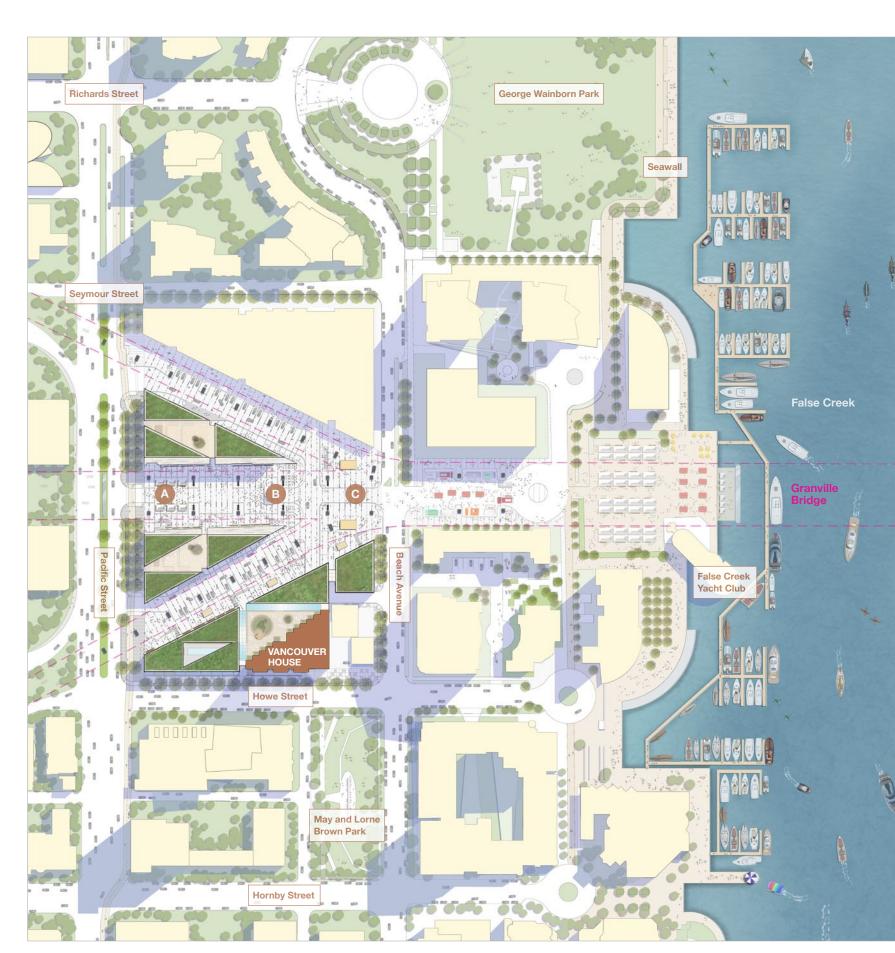


This perspective view shows the transformed public space underneath the bridge as a vital zone for living, working and playing. This is an 'urban room' defined by new retail-commercial blocks on either side, with the north end of the Granville Street Bridge sheltering the space from above. This rendering shows the street life anticipated in this urban re-conception, while in the background is one side of the rental housing block, a component adding to the Beach District's social and demographic diversity.

BIG in association with Dialog, perspective view of under-bridge public spaces.

5. THE NEW BEACH DISTRICT NEIGHBOURHOOD

Our firm has worked on Westbank projects for 20 years. These are some of the most original and important urban landscapes we have designed. – Chris Phillips, Phillips Farevaag Smallenberg Landscape Architects



This large rendered plan by Vancouver House landscape architects Phillips Farevaag Smallenberg shows Beach District public spaces in full use, with the companion zones of Granville Island also illustrated for comparison. This compelling drawing portrays the hive of activity that will soon demark both sides of False Creek; look closely, you'll see a rich range of activity on the streets. The green roofs have been shown at the top of the Vancouver House buildings, and linkages from the new development to False Creek and its ferries are evident. New retail and public space opportunities will give the north under-bridge zone the same liveliness found in the south zone on Granville Island, where the market building, Emily Carr University and other arts uses have transformed this into one of Vancouver's most-loved spaces. The 'call-out' drawings are zoom-ins highlighting some of the key spaces. Enlightened city-building is more about people than it is concrete or copper, and this drawing shows how Beach District sets stages for every aspect of urban life.





A. Farmer's Market



B. Outdoor Concert



C. Restaurants and Food Kiosks



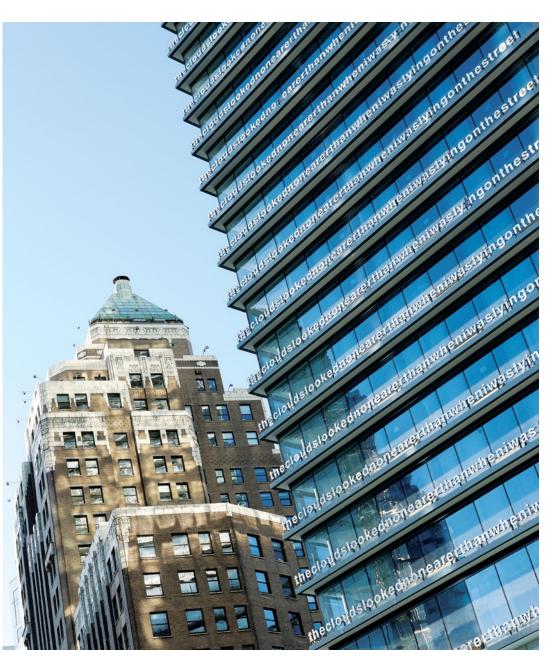
D. Granville Island Public Market

6. PUBLIC ART IN A CLASS OF ITS OWN AS A DEVELOPMENT INDUSTRY PATRON OF CREATIVITY, WESTBANK HAS EMBRACED DEMANDING, AVANT-GARDE WORK BY THE WORLD'S FINEST ARTISTS, USING ITS PROJECTS AS VAST CANVASES.





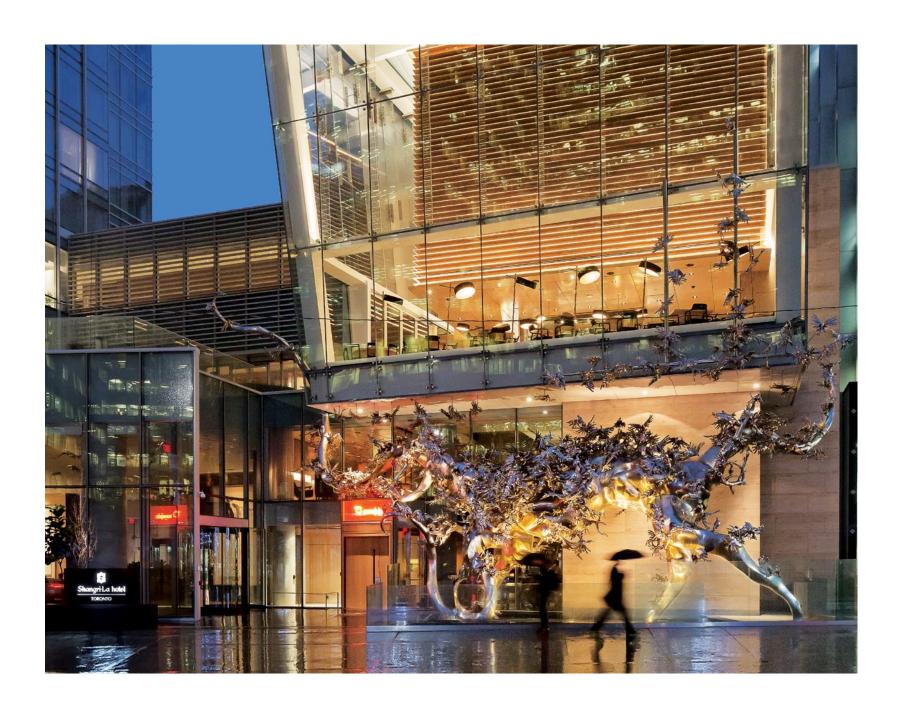




PREVIOUS WESTBANK PUBLIC ART COMMISSIONS

At left, three examples of Westbank-commissioned new public art integrated into its Vancouver developments. Top is "Abbott & Cordova, 7 August 1971" by Stan Douglas, a critical examination of the history of streets near Woodward's. Middle is the transformation of the edge of Bute Street near Alberni showing how public art from Dale Chihuly and others has transformed the streetscape. At bottom, Diana Thater's installation of LED lights creates a harbour-scale beacon, visible from Second Narrows and Lion's Gate Bridges. At right is Liam Gillick's text-based work *lyingontopofabuildingthecloudslookednonearerthanwheniwaslyingonthestreet* running around the hotel room floors of the Fairmont Pacific Rim, the heritage Marine Building across Cordova Street lit up in its reflections.

Top left and bottom left: Photograph courtesy of Paul Warchol. Middle left: Photography courtesy of James K.M. Cheng.



For the Shangri-La Hotel in Toronto, *Rising* by Shanghai artist Zhang Huan is both intimately integrated with the James Cheng-designed hotel building, and a defiant and public gesture of creative independence on its main public façade. The bold biomorphic forms here were scaled up from scans of roots and branches, cast in stainless steel in China, then assembled here along Toronto's University Avenue just below Queen Street. The commission by Zhang Huan for Westbank is one of the most highly regarded public art installations ever completed in Canada's largest city.

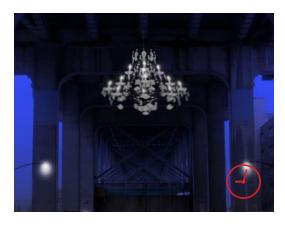
Photograph courtesy of Paul Warchol.

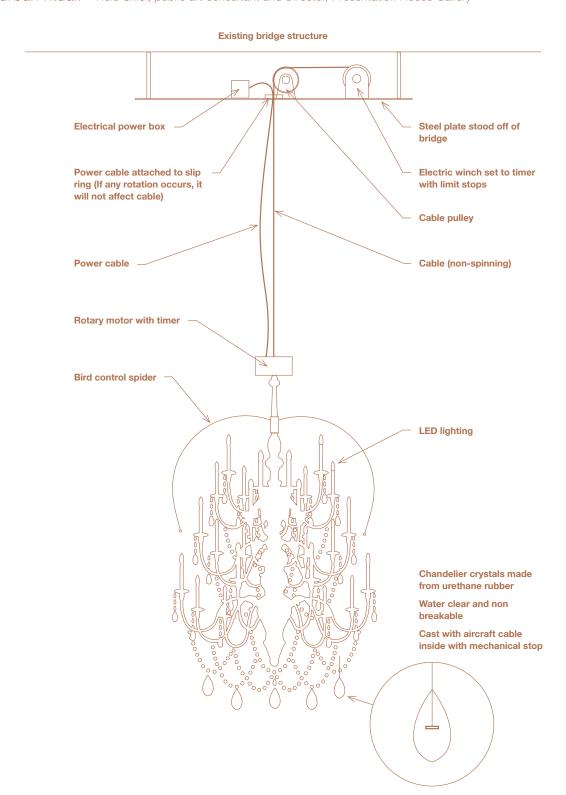
6. PUBLIC ART AT THE EDGE

A transformative artwork "Spinning Chandelier" reimagines an under-appreciated civic space, setting a new international precedent for conceptual art at city scale. For Vancouverites, this will become the new 'Nine O'clock Gun' – the gift of an extraordinary new urban ritual. – Reid Shier, public art consultant and Director, Presentation House Gallery





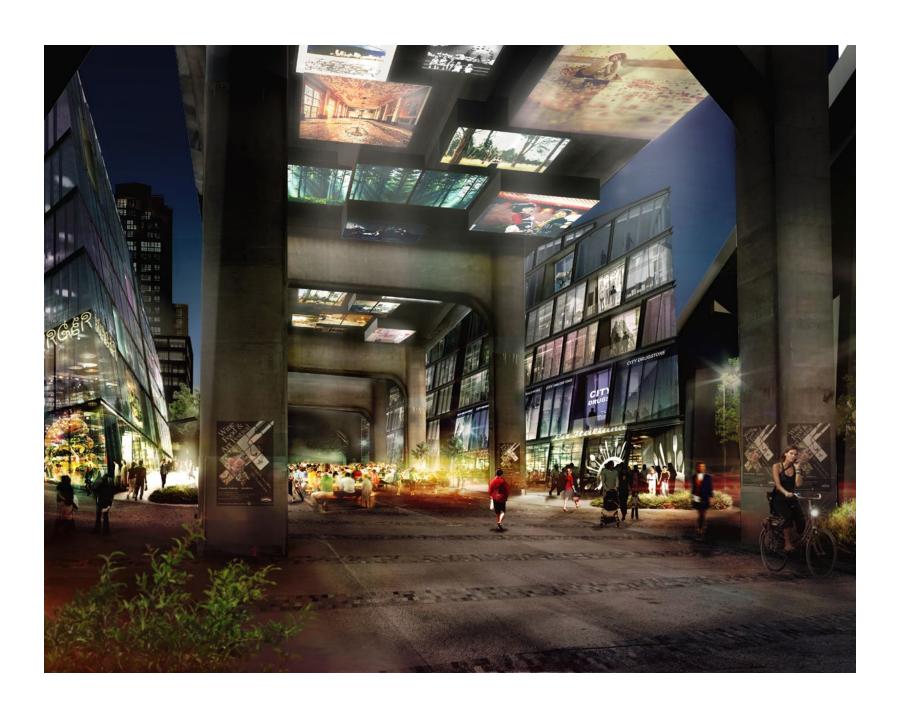




VANCOUVER HOUSE PUBLIC ART BY RODNEY GRAHAM

"Spinning Chandelier," by Vancouver artist Rodney Graham is a kinetic sculpture that will transform the vast, cathedral-like spaces under the Granville Bridge. Graham's sculpture extends from his 2005 35-film loop installation *Torqued Chandelier Release* in which crystal chandelier whirls rapidly as its supporting cable is unwound. Installed under the bridge above the intersection of lower Granville with Beach Avenues, a monumental 14 by 21 foot faux glass recreation of a French chandelier of 200 years ago will rapidly drop at a fixed time every day, spinning as it descends. Then it will rotate majestically as it is slowly raised back into its original rest position. "Spinning Chandelier" will quickly become an urban icon, turning a dark under-bridge into the enjoyable focus of public celebration.

Visualizations and technical study drawings of "Spinning Chandelier," courtesy of Rodney Graham studio.



21ST CENTURY SISTINE CHAPEL

A second installation of public art will also reside on the underside of the bridge, helping to enliven the nighttime streetscape of lower Granville Street. Inspired by ubiquitous bus shelter advertising displays, such key Vancouver photo-conceptualist artists as Jeff Wall and Rodney Graham have long used ranks of bulbs set in a frame to illuminate large colour photographic transparencies from behind – these are called 'light boxes.' These light boxes will display changing photographic rotating content produced in consort with students from Emily Carr University, a creative partnership with our near neighbour. Think of it as a 21st century Sistine Chapel, showing creative visual thinking in process from the next generation.

BIG rendering showing the lower Granville Street night-time streetscape, with the light boxes installed underneath the bridge.



7. DEFINITIVE ARCHITECTURE THE FINAL FORMS FOR VANCOUVER HOUSE ARE THE PRODUCT NOT OF ARTISTIC WHIMSY, BUT RATHER CREATIVE PROBLEM-SOLVING WITHIN THE PARTICULAR CONSTRAINTS OF THIS UNIQUE SITE BY BIG'S DESIGN TEAM.

Our breakthrough was to integrate the pixels – the individual apartments – with the picture, forging a continuity at all scales, a sense of movement. – Bjarke Ingels, Big Architecture

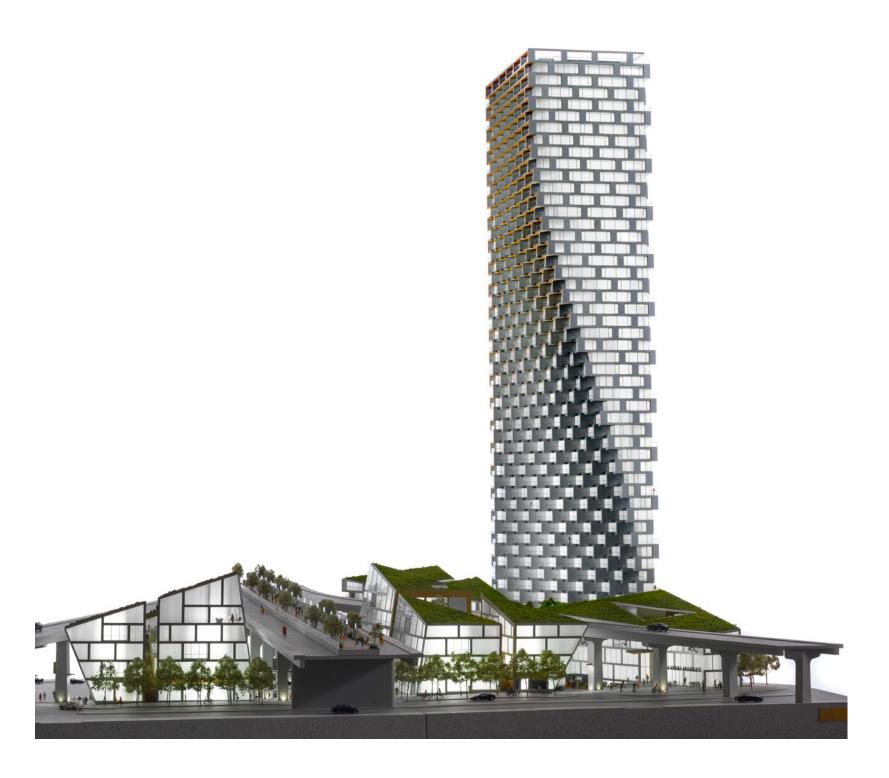


VANCOUVER HOUSE ARCHITECTURAL SYNTHESIS

Winter twilight shows the Vancouver House tower a beacon framing the Granville Bridge looking south, the angled roof of one of the office-retail buildings visible at its base, and the peaks of two others visible on the other side of the Howe Street on-ramp. The entire development contains 710,000 square feet of space, with the 52 storey tower containing 400 units, the 10 storey rental block containing 95 units, plus the three triangular retail-commercial blocks.

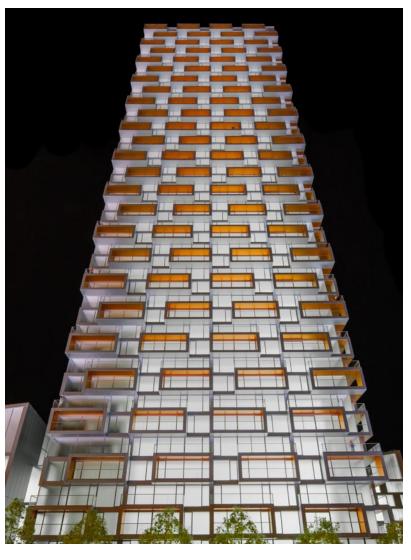
Left: BIG rendering showing the development from Pacific Street looking west. Above: BIG rendering showing the development from lower Howe Street looking south.

7. DEFINITIVE ARCHITECTURE



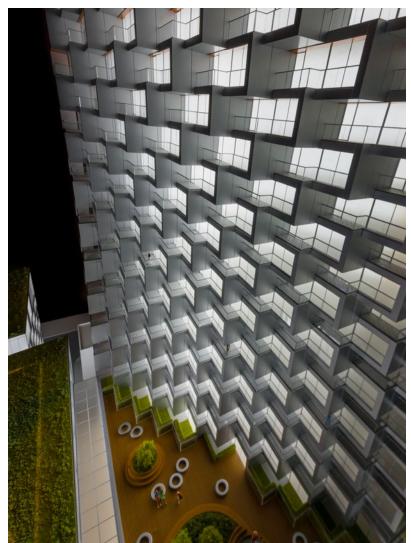
EXHIBITION PRESENTATION MODEL

The large presentation model prepared for this exhibition is the product of four months of dialogue between architect, developer and professional model builder. This model is the product of nearly five thousand manhours of work, and is a tremendously important component of the design process. This model is the last of nearly one hundred design and presentation models produced in the past five years for internal design team review. This three-dimensional study model of Vancouver House shows the palette of façade materials and the character of the apartments. A combination of old-fashioned model-maker's hand-craft with digital milling technologies plus state-of-the-art plastics, a model like this helps explain architectural features to clients, city planners and approval authorities, construction partners, and to the design team itself. Because of the investment of time, money and design attention in the model, Westbank felt that a model of this importance merited the best photography available.



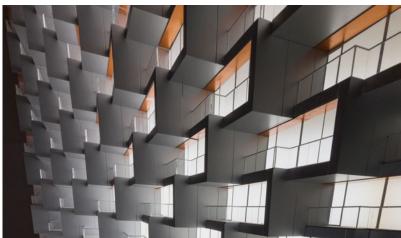


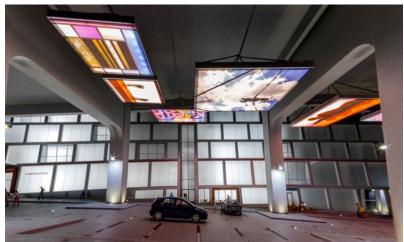




7. DEFINITIVE ARCHITECTURE













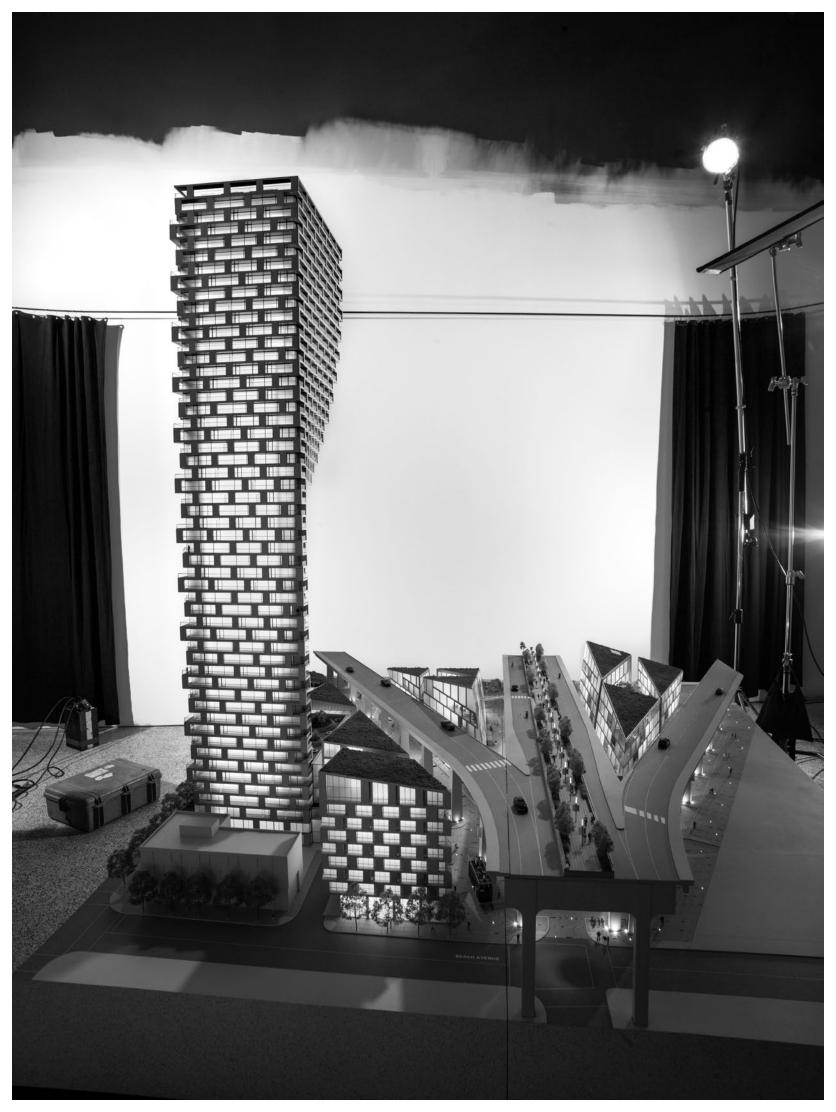




MODEL PHOTOGRAPHY SESSION WITH JAMES CHENG

Because of the investment of time, money and design attention in the model, Westbank felt that a model of this importance merited the best photography available. It was agreed that no-one has as good a compositional eye, plus technical skill with photography as Vancouver House's urban designer and original design architect, James K.M. Cheng. Appointed to the Order of Canada in 2013 for his outstanding career as an architect, James Cheng is not only one of Canada's most lauded architects, but also a much-praised architectural photographer. He doubles as both architect and photographer of many of the Westbank projects in this exhibition. To photo-document this model, we built a photography studio in conjunction with frequent Westbank photographer Colin Goldie.

Model by B+B Scale Models for BIG and Westbank. Photograph by James Cheng.



8. OUTSIDE-IN, INSIDE-OUT THE ARCHITECTURE, INTERIORS AND URBAN DESIGN ARE ALL EXPRESSIONS OF THE SAME DESIGN PRINCIPLES, AND LINK ONE TO THE OTHER: *GESAMTKUNSTWERK* IN APPLICATION.







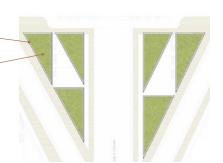


EXTERIOR DESIGN PROCESS

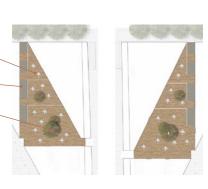
Night View north under Granville Bridge. Traffic and some parking will be permitted on the street, except for special events such as street festivals, craft fairs, farmer's markets, and music concerts. Because of the extremely wide sidewalks on either side, animation is not limited to the ground plane, with angled walls, 'Sistine Chapel' digital displays on the 'roof' and a rich treatment of street and sidewalk surface making this a completely re-conceived and furnished 'urban room.'

BIG in association with Dialog, perspective view of under-bridge public spaces, framed by new Westbank retail-commercial development.

Planted Green Roofs
600mm Ornamental Stone White River Rock
Extensive Sedum Carpet Minimum of ten species mix



Courtyards
Radiata Pine decking
Herringbone Pattern
Stone Steps
White Birch
Betula papyrifera

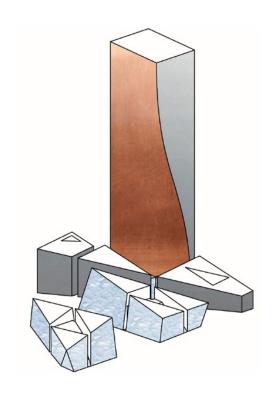




Two plans of the blocks lining Granville Street, show planting schemes devised by project landscape architects Phillips Farevaag Smallenberg Landscape Architects. At left are the planted green roofs of the three triangular retail-commercial blocks, which define a public space at ground level. At right is a zoomed-in detail of the surface treatment of these two squares, with treated Radiata Pine decking, stone steps, and an artful grove of White Birches.

This is an a view of interior courtyard, showing a new public square flanked by office suites, a stair down to parking from the wooden deck. All of the public and semi-public spaces are integrated, with a system of ramps, bridges and stairwells linking the landscaped spaces, which have both visual amenity and serve as informal gathering places.

8. OUTSIDE-IN, INSIDE-OUT THE INTERIORS ARE CONCEIVED AS INEXTRICABLY LINKED TO THE OVERALL ARCHITECTURE AND MATERIALITY OF VANCOUVER HOUSE. AT SEVERAL POINTS, THE EXTERIOR MATERIALS CONTINUE INSIDE THE BUILDING, INTERACTING IN DIFFERENT WAYS WITH A RANGE OF UNIQUE SPACES, TRANSFORMING AND BEING TRANSFORMED BY THE CHANGING CONDITIONS.





Copper in facade soffits



Materials

INTERIOR DESIGN PROCESS

The material selection for the Interior spaces starts from a very wide and wild process of researching local Canadian cultural references and material production, then re-interpreting those sensibilities through the lens of "Scandinavian" design.

The cool, gray tones of the facade panels are coupled with warm copper dotting the balconies on the south and east facades. This juxtaposition between cool and warm imbues the tower with a depth of personality that is reminiscent of the Scandinavian Impressionist "Skagen School."



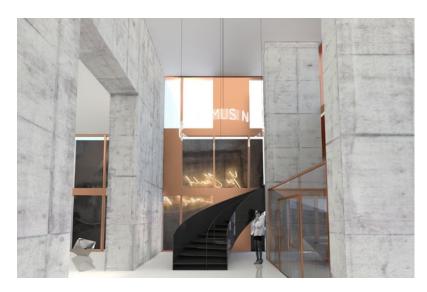






Lobby This final look is the result of hundreds of iterations on materials and furniture combination in order to find the perfect balance between the spaces and the objects.

Explorations



would invite people to discover the "floating Lobby" at the second level.

Main Stair









Explorations The several options respond to the desire of having an embracing and elegant stair which

The application of cool materials to the outside surfaces, and warm to the inside, suggests a relationship similar to the lining of a jacket. The entry lobby and other public spaces have direct visual connections to the exterior, and are subsequently considered the outer layer of our 'jacket'. They receive cool interior finishes, such as concrete or stone: these materials are the interior translation of the cool metal panels on the façade and create a clean, simple and refined environment like an art gallery space. The interior of the lounge is clad in copper, identical in treatment to all the 'linings' of the West balconies. The tenant experience is a sequence of spaces each one different from the previous one. Each zone's personality is distinct just as it is unique in size, proportion and purpose. From the 'Art gallery' lobby with its "floating elements" like the sculptural main stair, reception desk and mail boxes, we move towards the elevator Lobby.



Mailbox BIG studied a variety of ways to interpret the mailbox, elevating an ordinary and functional requirement and giving it sculptural importance. The final design, a 'X' shaped element sitting atop a mirrored base, gives the appearance of heavy object suspended in mid-air.



















Explorations

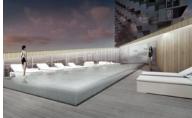






Residential Pool









Explorations

8. OUTSIDE-IN, INSIDE-OUT







Elevator Lobby Elevator Cabins











Residential Corridor Explorations

Using a variety of materials and objects we experiment with a monochromatic space in which the black and white give rhythm to the residents' waiting time. The elevator lobby and corridors on the upper floors have similar but unexpected treatments interrupted by the intermediate experience of colored elevator cabins.

8. OUTSIDE-IN, INSIDE-OUT









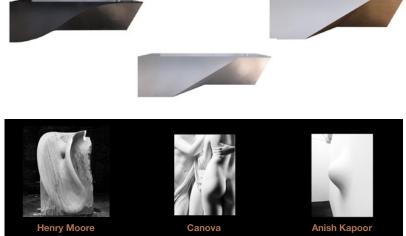
Suite Entry Door

Explorations





We have conceived a unique island design that recalls the formal language of the building. The sculptural qualities of the island naturally make it a centrepiece of the living space; nevertheless the functional qualities of a conventional kitchen island have been maintained.



Above: Material explorations, Black Corian, Stainless Steel, Corian & Copper Below: Island = Sculpture, 'Carved' from the same material to exalt its plasticity through the simple reflection of the light. White Corian is used to express the 'monolithic' qualities of this object.

The suite entry door is conceived of as a luxurious separation between the public and private spaces. The door reminds residents of a metallic vault door, there to shutter away the outside world. Once inside, immersed in the experience of a luxurious and comfortable apartment with high end kitchen design and elegant bathrooms, visitors can turn their attention to the spectacular view from each apartment's window.



Floors 41 – 52 Kitchen Linear and elegant since the beginning, the refined kitchen design evokes a heavy object suspended in mid-air referencing the philosophy of elevating ordinary and functional requirements to a sculptural importance.





Explorations







Floors 41 - 52 Ensuite The various options explored the relationship of the functional pieces rendered in a sinuous form with the placement, materiality and texture of wall and finish treatment.

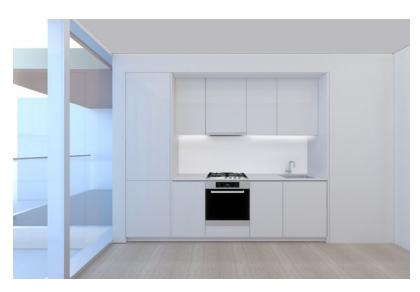




Explorations







Floors 2 – 40 Kitchen
A refined kitchen design that through subtle changes in design serves as a quiet partner to the neutral palette.









Explorations



Floors 2 – 40 Ensuite













Murphy Bed
The intention was to have an object (comfortable and cozy when in use and visible) that would completely disappear when not exposed. All the options are based on this "mimetic' thought.





Explorations







Office Lobby
The materials of the lobby clearly reference the exteriors with the exterior wood decking material being echoed in the wood wall cladding while the pixilation of the façade is playfully represented by the lighting treatment and its reflection in the ceiling.





Explorations







Office Bathroom Bike Parking



Rental Lobby
The aesthetic of the lobby is minimalist and neutral to relate to the cool metal panels of the exterior. Mailboxes are treated as a suspended sculpture, a distinct treatment for a functional requirement.



Rental Lobby

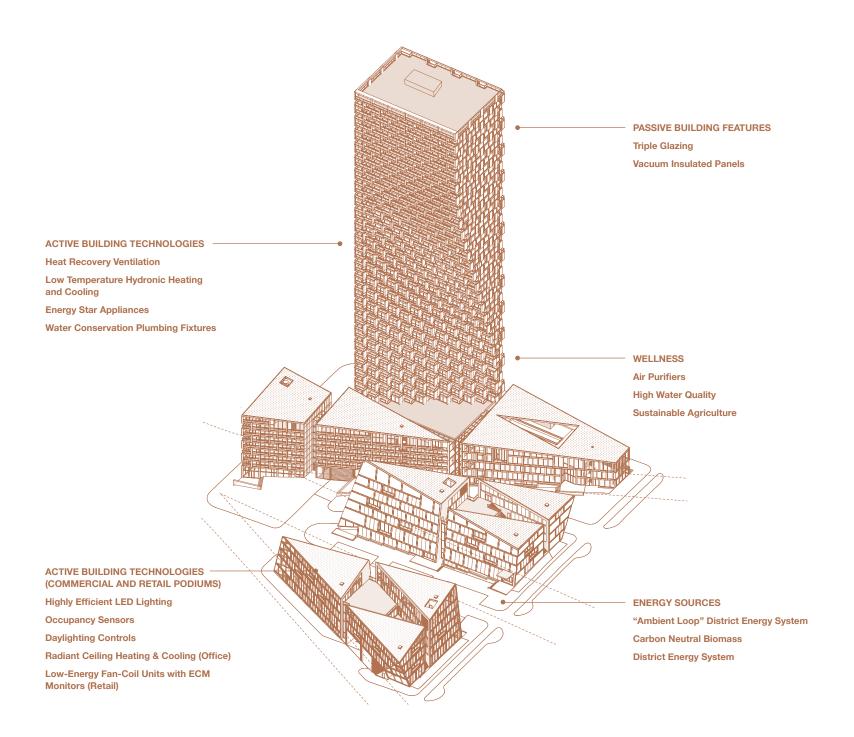


Rental



Rental Corridor
The black and white color palette selection used for the rental corridors relates to the residential corridor treatment and the black and white carpet lends visual movement to the public areas.

9. FOOTPRINT THE BIG PICTURE IS COMPLETE AS VANCOUVER HOUSE FINDS ITS HOME IN THE SKYLINE, ITS GREEN FEATURES AND CONNECTION TO A LEADING-EDGE DISTRICT ENERGY SYSTEM ALL AHEAD OF THE CURVE. VANCOUVER HOUSE WILL ACHIEVE THE HIGHEST LEVEL OF SUSTAINABILITY COMPARED TO ANY HIGH RISE IN THE WORLD INCLUDING A CONNECTION TO A LEADING EDGE COMMUNITY ENERGY SYSTEM.



VANCOUVER HOUSE SUSTAINABILITY FEATURES

Continuing its status as one of the largest LEED Platinum real estate developers in the world, Vancouver House will be a showcase for leading edge sustainability features. The plan to achieve LEED Platinum here, the first for a residential high rise this large, includes a linkage to Creative Energy's district heating system, triple pane windows, new-technology highly efficient building insulation, and many other features. None of this compromised the architecture, shown in this view of the elevation, but rather, inspired it.

BIG from the Re-zoning submission, page 56.

Infrastructure defines cities. Shared communication, transportation, water, sewer and energy networks are their lifeblood, the hidden engine of innovation and sustainability. Robust and efficient infrastructure is the foundation of the world's most productive, resilient, livable cities. – Trent Berry, Reshape Infrastructure Strategies Ltd.



CREATIVE ENERGY EXTENDS SUSTAINABILITY DOWNTOWN-WIDE

Because of its emerging Gesamtkunstwerk philosophy, Westbank is growing the boundaries of its business, integrating community energy systems into its own developments like Vancouver House, and extending connections to others.

Central Heat was founded in 1968 and currently provides steam heat to over 200 buildings in the downtown core from its current plant on Georgia at Beatty Street. The company is being rebranded by new owner Westbank as "Creative Energy" which will reimagine the company as a low-carbon generated heating system in downtown Vancouver, and expanding the system to new areas of the downtown core. Creative Energy is investigating the creation of new cost-effective, low carbon energy sources, including the recovery of heat from water stored in downtown's Emergency Fire Suppression system under downtown streets, all in conjunction with an expansion into the Beach District, South Downtown and North East False Creek.

9. FOOTPRINT

9. GATEWAY



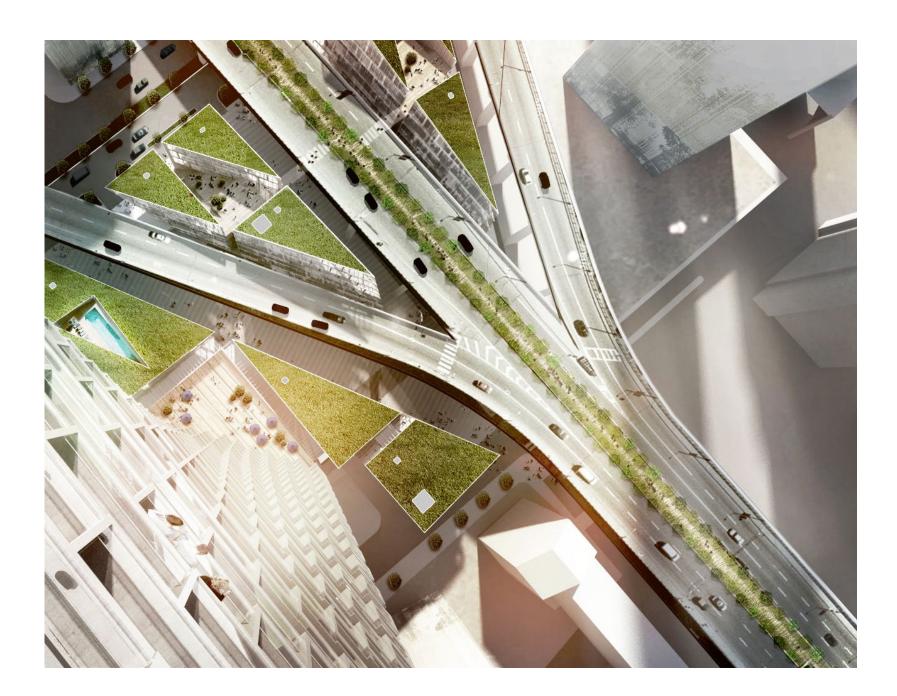
VANCOUVER HOUSE PLACE IN THE SKYLINE - GATEWAY TO DOWNTOWN

Panoramic rendering of Vancouver House inserted in Vancouver skyline context. One of BIG's key architectural design principles at Vancouver House was its pixelation, the creation of hundreds of apartment-scale modelled surfaces that subtly transform, catching the light in different ways. This results in a visual dynamism that will set it apart from the conventions of most Vancouver towers, galvanizing the downtown as no other building.

Rendering by BIG in association with Dialog.



10. CITIZENSHIP VANCOUVER HOUSE FITS INTO ITS SOCIAL AND ENVIRONMENTAL CONTEXT, BUT ALSO GIVES BACK TO ITS BROADER SCOPES OF COMMUNITY.



GRANVILLE BRIDGE GATEWAY AND BIG PICTURE URBAN DESIGN

This view down from the top of the tower looking down at the green roofs and courtyards of the retail-office sections of Vancouver House. The proposed new Greenway is shown at centre of the Granville Bridge, and the developer intends to build a direct stair connection to the bridge, further integrating the Beach District into the life of the city.

A view to Vancouver House from a re-imagined Greenway on top of the Granville Bridge, where two lanes for cars have been removed to provide space for a landscaped pedestrian and bikeway crossing. Inspired in part by the huge success of New York's High Line raised pedestrian park on the west side of Manhattan, this proposal will be a crucial high-level link for the city's bikeway and pedestrian pathway system. It will also allow easy connections between the Beach District and Granville Island, pulling these two special neighbours ever closer together.























































































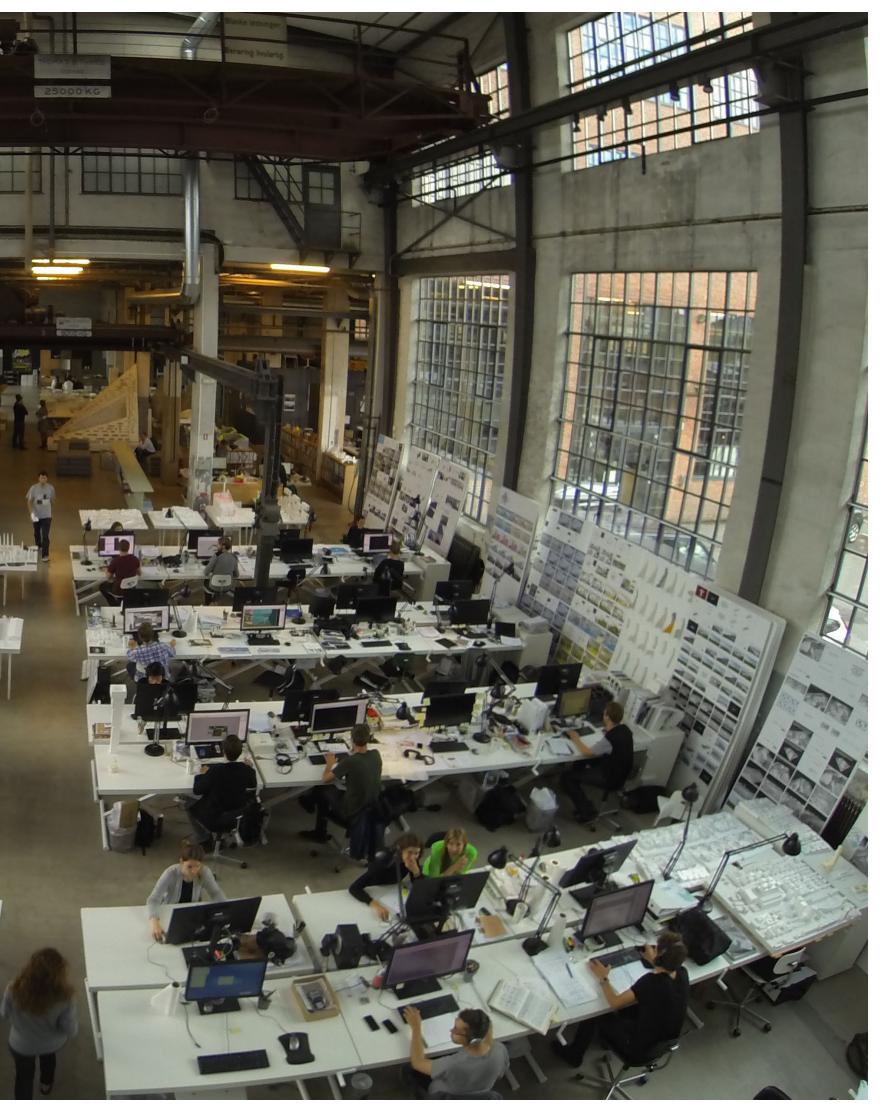
















SHAW TOWER VANCOUVER, CANADA, 2005



VANCOUVER, CANADA, 2009





WOODWARD'S VANCOUVER, CANADA, 2010

SHANGRI-LA TORONTO

TORONTO, CANADA, 2012



6 & FIR

VANCOUVER, CANADA, 2013



TELUS SKY

Established in 1992, with over \$12 billion of projects completed or under development, Westbank is active across Canada and expanding into the United States with luxury residential, rental apartments, affordable housing, office, retail, and hotels. The main focus of the practice is on large mixed-use projects with a strong emphasis on sustainability.

The goal of the firm is to create a body of work that is improving the cities we practice in while incorporating a high degree of artistry.

Left: Photograph by Paul Warchol.
Above (clockwise): Images by Paul Warchol, Colin Goldie, Paul Warchol, Luxigon, Ed White, and Peter Aaron.





THE MOUNTAINCOPENHAGEN, DENMARK, 2007



SHANGHAI EXPO DANISH PAVILION





DANISH NATIONAL MARITIME MUSEUM

HELSINGER, DENMARK, 2013

CITÉ DU CORPS HUMAN





SHENZHEN ENERGY MANSION

SHENZHEN, CHINA, IN PROGRESS



AMAGER NATIONAL RESOURCE CENTRE

COPENHAGEN, DENMARK, IN PROGRESS



BIG is a Copenhagen and New York based group of architects, designers, builders and thinkers operating within the fields of architecture, urbanism, research and development. The office is currently involved in a large number of projects throughout Europe, North America, Asia and the Middle East. BIG's architecture emerges out of a careful analysis of how contemporary life constantly evolves and changes. Not least due to the influence from multicultural exchange, global economical flows and communication technologies that all together require new ways of architectural and urban organization. We believe that in order to deal with today's challenges, architecture can profitably move into a field that has been largely unexplored. A pragmatic utopian architecture that steers clear of the petrifying pragmatism of boring boxes and the naïve utopian ideas of digital formalism.

Images courtesy of BIG.

DESIGN PANEL REVIEW APRIL 11, 2012















DEVELOPER

WESTBANK Michael Braun **Damon Chan Stanley Chan Christina Flanigan** Ian Gillespie **Vincent Hoy** David Ju Michael Kershaw Michelle Kuo **Lily Law** Yuet Chi Lee **Dave Leung** Judy Leung Renata Li **Hweely Lim** Xinna Liu Masa Matsubara Theo Ong **Christina Sun** Lynn Wang Maggie Wang Ting Wang

DESIGN ARCHITECT

Kimberley Wong

BIG NYC Arash Adel Melissa Bauld Karol Borkowski Elena Bresciani **David Brown Terrence Chew Thomas Christoffersen Birk Daugaard David Dottelonde Brian Foster** Sean Franklin **Hector Garcia** Julianne Gola Alexandra Gustafson Spencer Havden **Tobias Hjortdal Ivv Hume** Biarke Ingels **Christopher Junkin** Jan Leenknegt **Chris Malcom** Marcella Martinez **Rvan Massev**

Armen Menendian
Agustin Perez-Torres
Francesca Portesine
Brian Rome
Carolien Schippers
Blake Smith
Barbora Srpkova
Doug Stechschulte
Alina Tamosiunaite
Michael Taylor
Lauren Turner
Martin Voelkle
Edward Yung
Ben Zunkeler

ARCHITECT OF RECORD

DIALOG
Aida Aguilar
Doris Fischer
Bruce Haden
Vance Harris
Janay Koldingnes
Marion LaRue
Bruce McCallum
Hernando Mogollon
Martin Neault
Irene Neven
Sara Remocker
Trevor Thimm
Wayne Yarjau

CONSULTING ARCHITECT

JAMES K.M. CHENG ARCHITECTS James Cheng Dawn Guspie

CITY OF VANCOUVER

Rodel Arroyo
Michelle Au
Brad Badelt
Alexandra Baxter
Kevin Cavell
Alina Cheng
Dwayne Drobot
Jerry Dobrovolny
Dane Doleman
Jacquie Gijssen
Michael Gordon
Mark Hartmann
Karen Hoese
Matthew Holm

Brian Jackson Sadhu Johnston Peter Judd Lon LaClaire Alipasha Larijani Al Luongo Benny Mah Karyn Magnusson **Tibor Mate** Kevin McNanev Anita Molaro **Bryan Newson David Parkin** Mark Schwark **Douglas Scott Paul Storer** Ryan The Natali Tkgoz **Rob Waite** Marian Williams **Donny Wong** Alan Zacharias

BROOK POONI & ASSOCIATES Gary Pooni Kathryn Sharp

POTTINGER & ASSOCIATES LTD. Virginia Bird Emily Howard Duncan Wlodarczak

STRUCTURE OF RECORD

GLOTMAN SIMPSON
CONSULTING ENGINEERS
Ehsan Dezhdar
Anthony El Araj
Wayne Field
Nicole Franco
Geoff Glotman
Celso Mendoza
Geoff Poh
Rob Simpson

STRUCTURE

BURO HAPPOLD CONSULTING ENGINEERS Pamela Buckeye Erleen Hatfield Matthew Heran Cliff Horton Michael McGough Derrick Roorda Craig Schwitter

MECHANICAL

INTEGRAL GROUP Edmund Aye Jubin Jalili Goran Ostojic

SUSTAINABILITY

INTEGRAL GROUP Christina Lyons Kim McClymont Vladimir Mikler

ENERGY MODELLING

INTEGRAL GROUP

AMBIENT LOOP (COMMUNITY ENERGY)

INTEGRAL GROUP Chris Doel Vladimir Mikler

ELECTRICAL

INTEGRAL GROUP Geoff McDonell Gary Rhode

NEMETZ & ASSOCIATES Daisy Chan Ron Dejesus Steven Nemetz

CIVIL

HUNTER LAIRD ENGINEERING LTD. Jennifer Nam Declan Rooney

UTILITY

CREATIVE ENERGY Diane Rapatz Amy So RESHAPE INFRASTRUCTURE STRATEGIES LTD. Trent Berry Will Cleveland Gerald MacDonald

ENVIRONMENTAL

EBA ENGINEERING CONSULTANTS Bob Reid Heather Valsangkav

PHH ARC ENVIRONMENTAL LTD. John Holland Bryan Zecchel

LANDSCAPE

PFS STUDIO Alia Johnson Kelty McKinnon Chris Phillips

PUBLIC REALM – EVENT PROGRAMMING

DONNELLY EVENTS
John Donnelly

CODE

LMDG Frank Mattia Shawn Talarico Eric Teevens Mike van Blokland

TRANSPORTATION

BUNT & ASSOCIATES Christephen Cheng Peter Joyce John Turecki Thea Wilson

GEOTECH

GEOPACIFIC CONSULTANTS LTD. Matt Kokan Laura Schultz Kaz Szczepanski

ENVELOPE

MORRISON HERSHFIELD Jameson Vong

SURVEY

BENNETT LAND SURVEYING LTD. Neil Bennett Patrick Korabek David S. Meredith

BUTLER SUNDVICK & ASSOCIATES
Jesse Morin

CURTAINWALL

BVDA FAÇADE ENGINEERING Mark Brook

ELEVATORS

GUNN CONSULTANTS INC Jerry Chang Eric Peterson Ian Wilton

WIND

GRADIENT
MICROCLIMATE
ENGINEERING INC
Vincent Ferraro
Justin Ferraro
Bob Guenette
Un Yong Jeong
Beth Johns

ACOUSTICS

BROWN STRACHAN Andrew Fawcett Brown Strachan

LAWYERS

KORNFELD MACKOFF SILBER LLP Cecilia Aveani Chris Boyko Glenis Bryson Wesley Chan Dianne Chow Deidra Hall Neil Kornfeld Celine Lo Jamie McRae Angelita Monroy Elsbeth Piir Samir Prinja Barb Stephen

FINANCE

HSBC Ellen Au Yeung Gordon Chan Wendy Clarke Bill De Haan Rich DeZego Ralph Hilton Daniel Jay Keen Lau Annie Li Alfred Li Derek Li Paulo Maia Alexi Manolis Elviro Marsella Paul Mathieson Karla McCarthy Linda Seymour Garth Stoll **Dale Telfer** Kristy Todd Millar Paul Vassallo

FULCRUM Rowena Chan Graham Flater Neil Johansen Johan Lemmer Paul Rowe Benjamin Salopek Sharon Wong

Wayne Vickers

Wilfred Wong

CONTRACTOR

ICON WEST CONSTRUCTION CORP Tim Chan Vincent Cheu John Dutt Teresa Fok Robert Freimanis
Toru Hirano
Linda Huot
Wendy Jiang
Jackson Jue
Philip Kwok
Bruce McCulloch
Bryan Tucker
Steven Wang
Frank Wang
Jacqueline Woo

MILLWORK

CN ARCHITECTURAL
MILLWORK AND
CONSTRUCTION INC.
Hon Chong
Daniel de Caimen
Lokesh Nair
Chandra Nair

SWINGSTAGE

TRACTEL Craig Schoch

DOW CORNING Chris Combs Stanley Yee

APPLIANCES

EDMONDS APPLIANCES
Glenn Anderson
Jan Heck
Dr. Markus Miele
Angela Neale
Jilly Robinson
Gernott Trettenbrein
John Tsianakos
Dr. Reinhard Zinkann

PLUMBING FIXTURES

DURAVIT Jason King

KOHLER John Hart Adam Horwitz Herbert V. Kohler David Kohler Craig Kohn Bill McKeone Christopher Neumann Jennifer Raden Micki Reinardy Coralee Sandee

PUBLIC ART

Jan Ballard Bryan Newson Reid Shier

MARKETING

S&P REAL ESTATE CORPORATION Jason Dolker Lena Lin Pete Dupuis Sid Landolt Bruce MacDonald Roxanne Reid

PUBLIC RELATIONS

Jill Killeen Nick Rabuchin Brittany Wong

COMMUNICATION

TINCAN
COMMUNICATIONS
Rob Mathison

GRAPHIC DESIGN

ZACHARKO DESIGN Anna Bohn Robin Oshiro Terrance Zacharko Theresa Zacharko

WEBSITE

RE:PURPOSE CO Amanda McDougall

SIGNALS DESIGN GROUP Michael Barrow John Belisle Janelle Chung Rob MacDougall Alanna Munro Myke Preuss **Shan Roberston Peter Szymcazk**

PHOTOGRAPHY

Colin Goldie Cameron Goldie Ken Nash

ARCHITECTURAL MODEL

B&B SCALE MODEL
Augustine Chen
Jenny Fan
Terry Henderson
Simon Kim
Roger Li
Michelle Lucca
Garry Lundgren
Aleks Szczygielski
Henry Zhang
Sharon Zhang
Helen Zhi
Bernd Zwick
Ryan Zwick

PRINT PRODUCTION

METROPOLITAN FINE PRINTERS Brian Beharrell Vijay Chand Bob Faulkner Matt Karpes Claus Larsen Barry Quinn Kris Ratchford Spiros Serves Craig Storey Peter Tom Steve Tucker Anita Turner Mike Winteringham

MULTIGRAPHICS
Paul Batts
Matthew Clark
Anoop Pittalwala
Sudhir Sharma

EXHIBIT SPACE

CURATOR
Trevor Boddy

CONSTRUCTION

CITY WIDE BUILDING Adam Henney Ross Learman Matt Madden

FRAMING & DRYWALL

LOUIS & SONS
Dan Berube
Larry Dutcyvich
Mike Horacsek
Rob Martin
Dwayne Sutherland
Dennis Walters

ELECTRICAL

PANORAMA INTEGRATED SYSTEMS Dean Dounis Ben Essery Jerry Sipsas

BUILDING SUPPLIES

NORTHERN BUILDING SUPPLY LTD. Paul Thomas John Thomas Neil Thomas Gord Thomas Al Thomas Sudesh Verma

BRUNNER'S CONCRETE CUTTING Mike Acutt Rob Kushner

Rob Kushner Nathan Page Bryan Sayler

SHEET METAL

IMPACT SHEET METAL John Homenuke Derek Lacelle Omar Eylene Brent Jones **PAINTING**

BERRY BROTHER'S PAINTING Darryl Berry Mike Berry Hildon Blackwell

CONCRETE FLOORING

SIGNATURE CONCRETE LTD. & JARED HENRICKSON & ASSOC. Jared Henrickson Tyler Macey Ryan McMillan Anton Ossipchuk Jeff Wardlaw

MECHANICAL AND PLUMBING

INNOVATIVE MECHANICAL Carl Coupal Stephen Jaeckel

GLAZING AND PANELLING

SUPERIOR GLASS Brian Dyck George Kitagawa

TILES

ADANAC FLOORING Paul Chan Kin Shum Alan Tsang Wilson Wong Leslie Wong

DOORS AND HARDWARE

MCGREGOR DOORS
Russ Menagh

ADRIATIC DEMOLITION & DISPOSAL LTD.
Zoran Bjelica
Dalibor Bogavac
Radoslav Korac
Milan Kovacevic
Guilbert Leonard
Ken Madigan
Kelly Swayze

GESAMTKUNSTWERK EXHIBITION

1460 Howe Street Vancouver, Canada V6Z 1R8 604 893 8958 gwerk.ca

EXHIBITION CREDITS

VANCOUVER HOUSE DESIGNERS BIG in Association With Dialog

CURATOR + CATALOGUE EDITOR
Trevor Boddy

INSTALLATION DESIGNERS
BIG

Edward Yung Francesca Portesine Agustin Perez-Torres Barbara Sprkova Spencer Hayden

PARTNER IN CHARGE, BIG Thomas Christofferson

GRAPHIC DESIGNERS Zacharko Design Terrance Zacharko Robin Oshiro

AUDIO GUIDE Acoustiguide

AUDIO/VISUAL Maximum Project

PROJECT 56 DRAWING
Professor Linda Fraser
Special Collections
Canadian Architectural Archive
University of Calgary

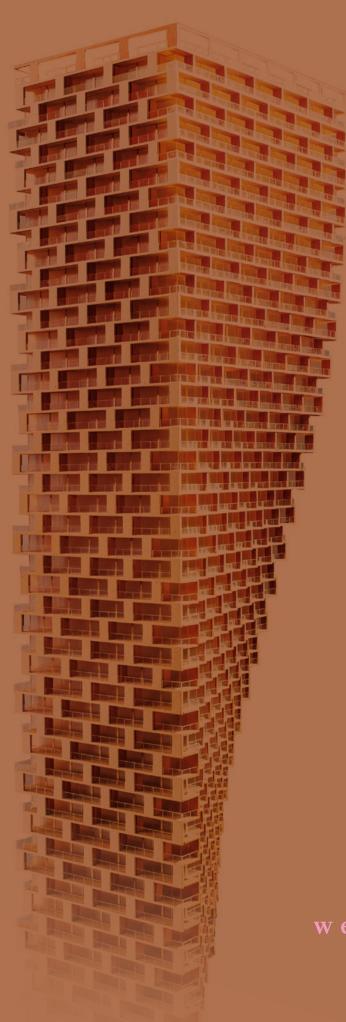
PUBLIC ART Rodney Graham Reid Shier

MODEL PHOTOGRAPHY James K.M. Cheng Colin Goldie

VIDEOGRAPHY
Dave Hamilton Photography
Dave Hamilton
Francois Latremoille
Thierry Latremoille
Gregor Phillips
Louvens Remy
Guy Roland

PRINT PRODUCTION Metropolitan Fine Printers Multigraphics

CONTRACTOR
City Wide Building



westbank BIG