2016 AIPH INTERNATIONAL GREEN CITY TOURS



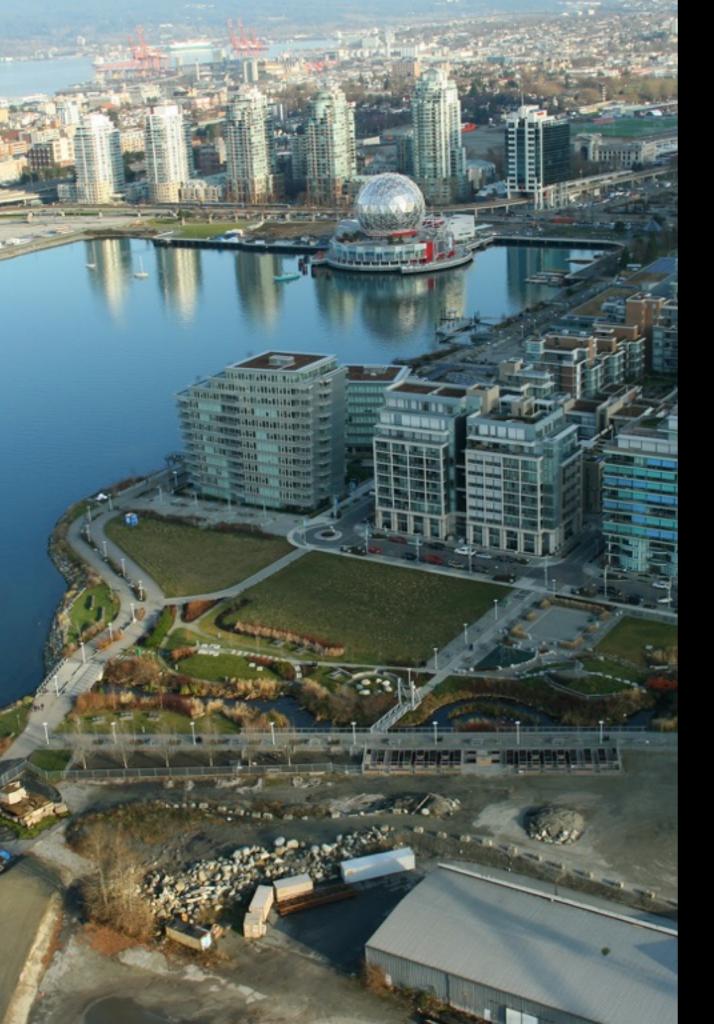
ABOUT THIS PRESENTATION

- Provide a description of each tour stop
- Highlight key points of interest about each tour stop
- Highlight project Awards and Accolades
- Show some before pictures for some projects
- Make it easier to understand what we are looking at during the tours



- Vancouver is one of the most ethnically and linguistically diverse cities in Canada; over half of its residents have a first language other than English
- The City of Vancouver encompasses a land area of about 114 square km
- Vancouver is home to the fourth largest cruise ship port in the world
- The Port of Vancouver is the largest port in Canada
- Vancouver was recently ranked as the third most "livable place in the world" for its high standard of living and quality of life and it is ranked as the 10th cleanest city in the world





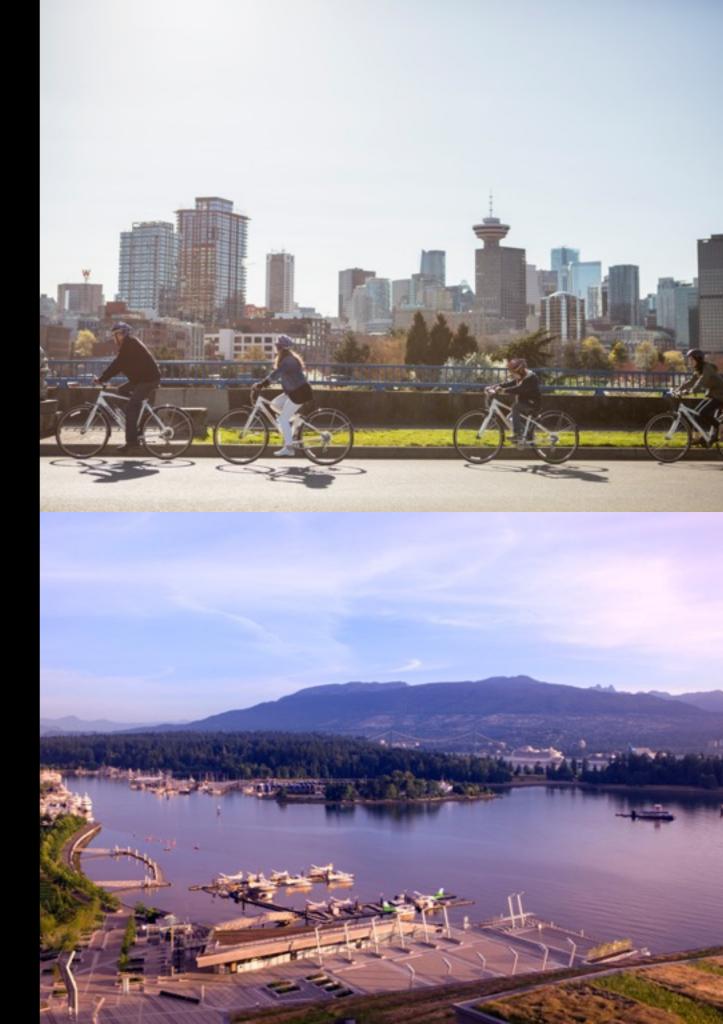
- Vancouver now has the highest real estate prices in the world, now higher than New York City and London
- Vancouver is the largest film production centre in North America after Los Angeles and New York City
- Downtown Vancouver is 65% residential.
- Vancouver attracts over 15-million tourists every year
- Vancouver's Greenest City Action
 Plan is a strategy for staying on the leading edge of urban sustainability



- For a long time, this now residential area was mostly industrial, home to shipyards, a Boeing seaplane plant, a lumber mill
- Railroads ran along the waterfront connecting the industrial sites with the rest of Canada



- With the construction of Canada Place and redevelopment of the surroundings in 1985 the area began to change
- One of the conditions for redevelopment for potential developers was that for every 1,000 people, 2.75 acres of park had to be created





Coal Harbour today is a pleasant residential area where plenty of glass skyscrapers along the waterfront give residents a great view over its marina and the Burrard Inlet Harbour towards the mountains surrounding the city



- The six floating homes in Coal Harbour, along with the twelve in False Creek are the only legal floating homes in the city of Vancouver
- Coal Harbour is home to Vancouver Harbour Water Aerodrome, located a few blocks from Canada Place
- One of the latest additions in the area is the Vancouver Convention Centre West Building
- Walking along Coal Harbour is free and open to the public



- Established 1867, Gastown grew into Canada's third largest city and one of its most cosmopolitan
- Gastown is Vancouver's oldest neighbourhood, officially incorporated as the City of Vancouver in 1886
- As Vancouver's oldest neighbourhood, Gastown is known for its well preserved historic buildings





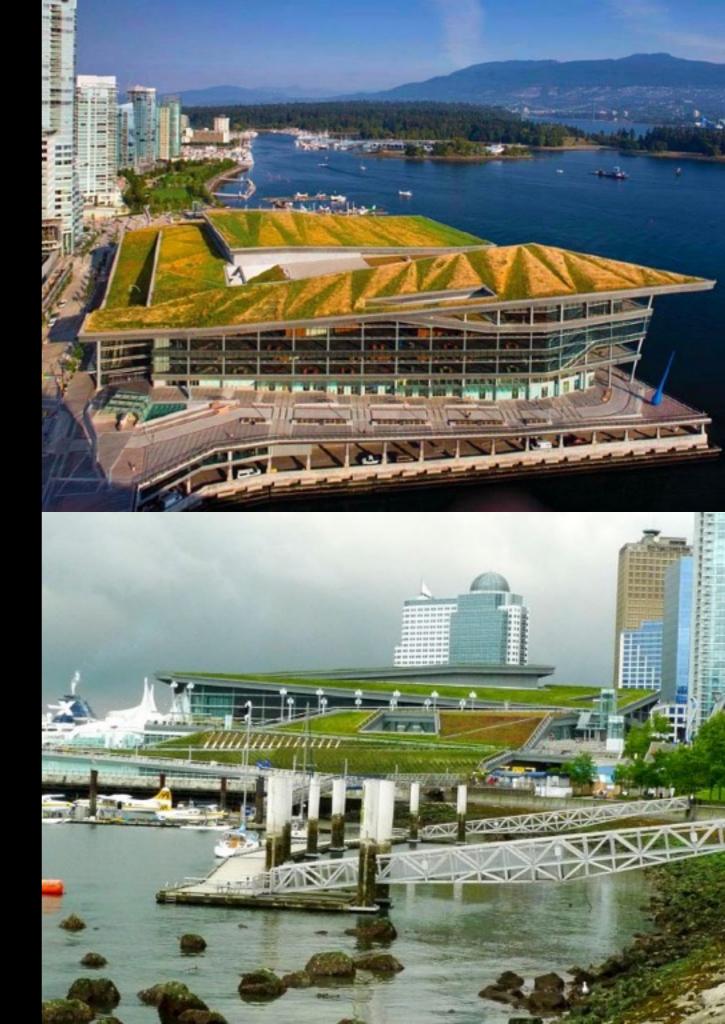
- Almost every building in the Business
 Improvement Area
 (BIA) has heritage designation, and was designated a National Historic Site in 2009
- There's no mistaking
 Gastown for any other
 area of Vancouver, or
 of Canada for that
 matter

- The Gastown Business
 Improvement Society installs and maintains over 200 hanging flower baskets in Gastown each summer
- Based on an 1875 design, the Gastown Steam Clock was the first steam-powered clock in the world
- The provincial government declared Gastown an historic area in 1971, protecting its heritage buildings
- Gastown is enriched with 100 commercial buildings and approximately 550 businesses
- Gastown is listed in Best of Vancouver Readers' Choice Awards

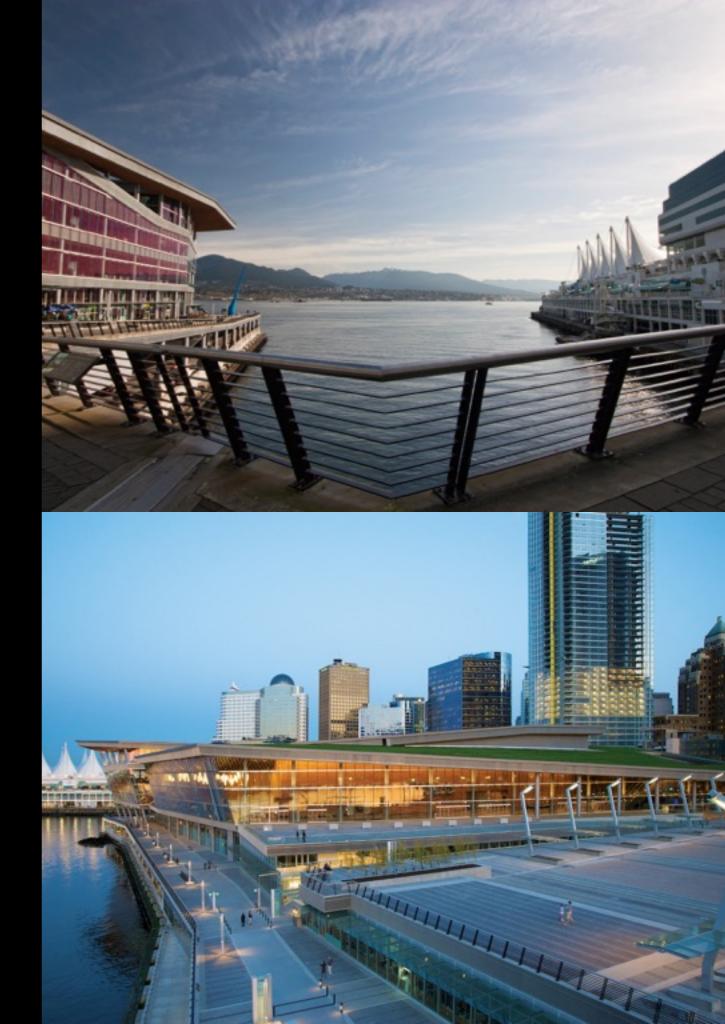




- A LEED Platinum certified building, the Vancouver Convention Centre is home to Canada's largest green roof, at six acres
- The roof consists of over 400,000 indigenous plants and grasses, along with four beehives
- A restored marine habitat is built into the foundation of the West building. Water quality in the area has improved dramatically, with the growth of a large variety of sea life



- A sophisticated black water treatment plant recycles grey and black water that goes back into our washrooms for toilet flushing and is used rooftop irrigation during warmer weather
- A seawater heating and cooling system takes advantage of the adjacent seawater to produce cooling for the building during warmer months and heating in cooler months





- Local BC wood products from sustainably-managed forests are used throughout the facility
- A 'scratch' kitchen using primarily fresh, local and seasonal ingredients
- Promoting and using locallygrown products means less energy consumption for transporting products to our door
- Green SealTM and EcoLogoTM approved cleaning products are used facility-wide, including in the kitchen and food service areas

AWARDS

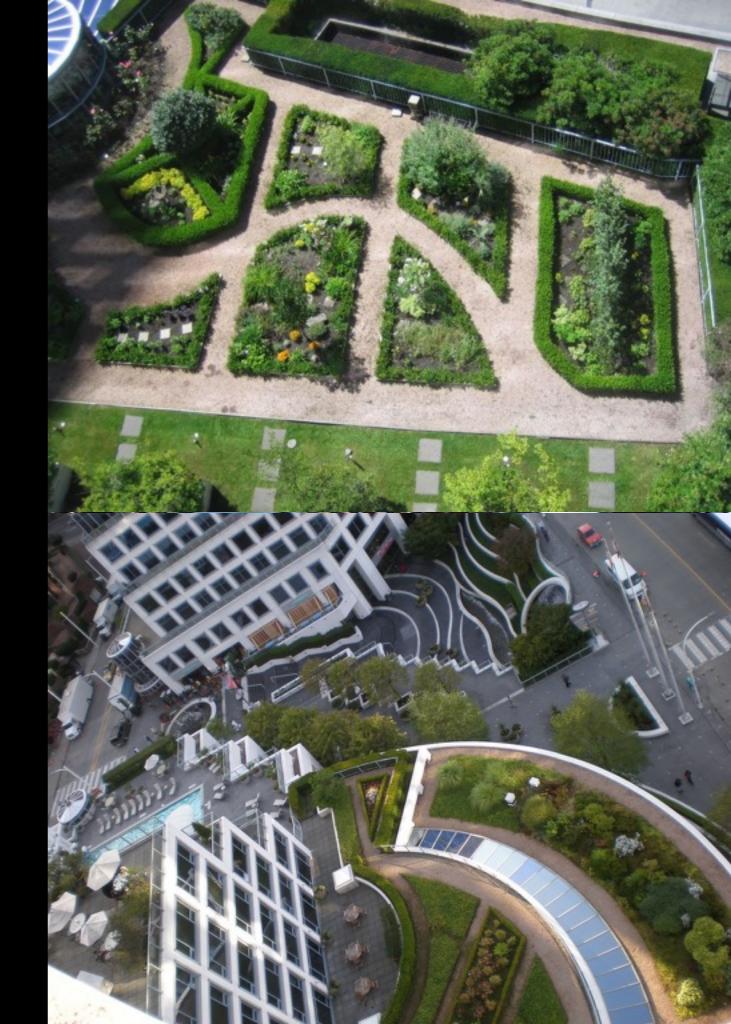
- Top Ten Green Projects awarded by the American Institute of Architects' Committee on the Environment (COTE) (2011)
- APEX (Convention Industry Council's Accepted Practices Exchange) and American Society for Testing and Materials (ASTM) certification – Venue and Food and Beverage Standards, level one (2014)
- Leadership in Energy and Environmental Design (LEED®) Platinum (2010) for West building
- World Architecture News (WAN) Sustainable Building of the Year Award (2013)
- Top North American City For International Meetings
- Plus 29 others in varying categories





- The rooftop garden contains a pollinator hotel which provides habitat for hundreds of species of solitary bees (super pollinators) native to BC. 2014 has brought mason bees to the hotel's garden in an exciting partnership with Hives for Humanity as part of the Pollinator Corridor Project
- The 2,100 sq. foot garden produces over twenty varieties of herbs, vegetables, fruits and edible blossoms, which guests can enjoy in Chef Hauser's culinary masterpieces

- The Fairmont Waterfront boasts a 5 Green Key Hotel rating, making it one of the most environmentally friendly hotels in Canada
- Highlights include a rooftop garden and apiary, local organic menus, and a commitment to zero waste
- Third floor terrace has four beehives and over 250,000 honeybees

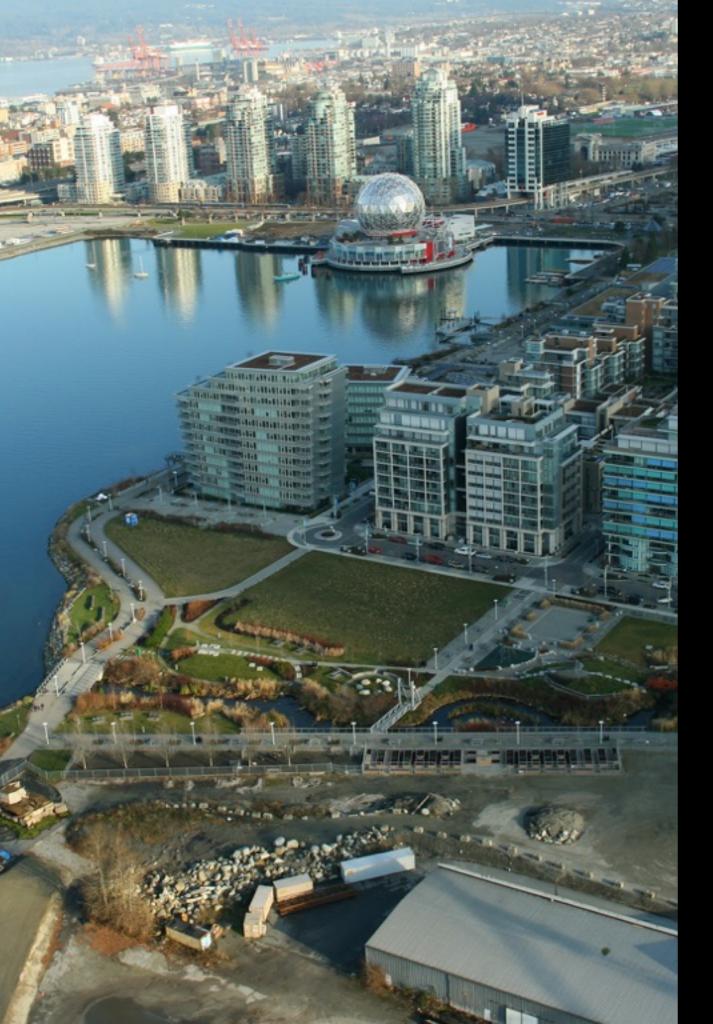




- AWARDS
- The Fairmont Waterfront is currently ranked as a '5 Green Key' Hotel and a '4 Green Key Meetings' Hotel by Green Key Global
- TripAdvisor Traveler Rating 4.5/5
- #3 Top City Hotel in Canada by readers of Travel + Leisure for 2015
- 2016 US News and World Report's - #10 Best Hotels in Vancouver List

VANCOUVER OLYMPIC VILLAGE

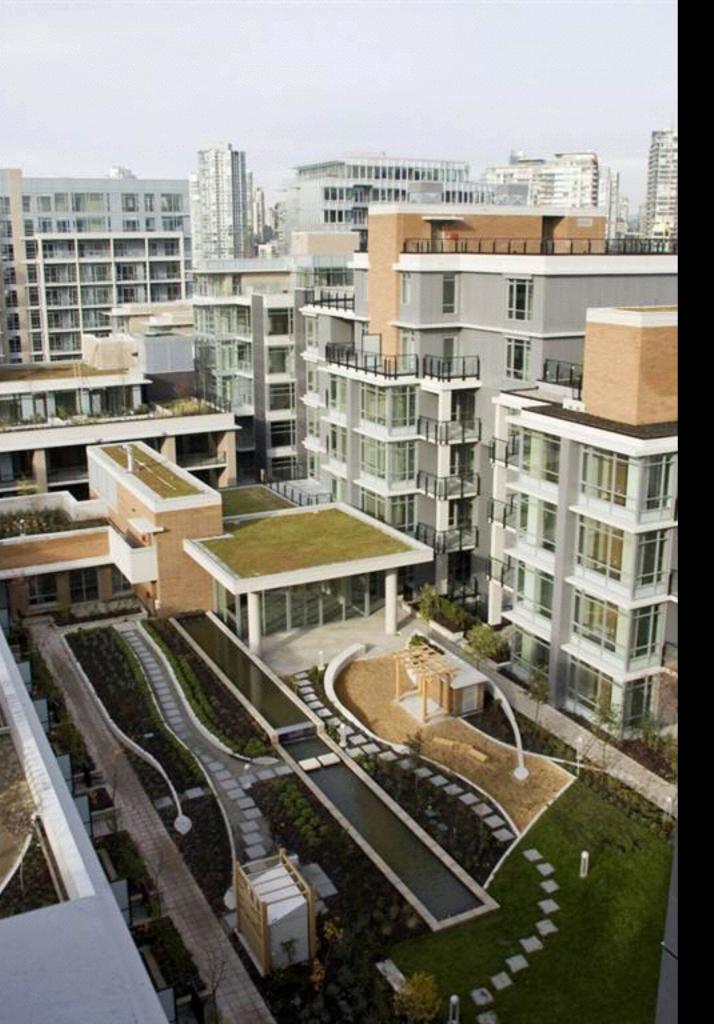




- The Olympic Village is one of the greenest communities in the world
- The Olympic Village uses innovative energy efficiency and sustainability systems like solar heating and green roofs
- The Olympic Village's heat and hot water needs are met by a neighbourhood Energy Utility system, which uses heat captured from the sanitary sewer's main line

- The Olympic Village is 1,000,000 sq. ft (93,000 m2) village with over 1000 units, which was able to accommodate over 2,800 athletes, coaches, and officials
- The City of Vancouver projects that Southeast False Creek will eventually become home to up to 16,000 people by 2020





- The site now boasts a 45,000 square foot community centre, the Creekside Community Recreation Centre
- The Creekside Community
 Centre is a LEED platinum
 standard building. The
 building harvests rainwater
 for irrigation and toilet
 flushing, uses solar power
 for radiant cooling, has
 green roof technology and
 consumes 50% less energy
 than a standard building

- Stormwater management initiatives include green roofs, bioswales, permeable pavers, infiltration galleries, rainwater collection/reuse and surface drainage elements (minimal pipes)
- Green roofs are a minimum of 50 per cent of the total building footprint, providing natural insulation, stormwater management, habitat and opportunities for rooftop gardening
- The waterfront redevelopment comprises the newest section of the Seaside Greenway/Bikeway, part of Vancouver's 22 km Seawall



- Habitat Island is a man-made island off the west shore of the Village
- City staff used 60,000 cubic metres of rock, cobble, gravel, sand, and boulders from the Olympic Village construction
- Boulders and logs commonly found along the coastlines in this region of British Columbia provide a home for plants, small animals, insects, crabs, starfish, barnacles, and other creatures. Surrounded by water at high tide, the island is a sanctuary for birds. More than 200 native trees, shrubs, flowers, and grasses that grow naturally in the region have been planted on the island and along the waterfront path
- AWARD Urban Land Institute's 2013 Urban Open Space Award





- The name of this living wall project is "Mountains & Trees, Waves & Pebbles"
- Built on an overpass, this 10,150 square-foot doublesided green wall consists of 120 unique plant species with more than 50,000 plants, most of which are native to the province of British Columbia
- It is fully hydroponic and is created with 100 percent recycled materials



- The carbon sink of the wall is equivalent to 47 mediumsized trees
- Maintenance and pruning are performed on a custom engineered rolling platform that does not require road closure
- The living wall is hooked up to an automatic drip irrigation system
- One of the most biologically diverse living walls in North America

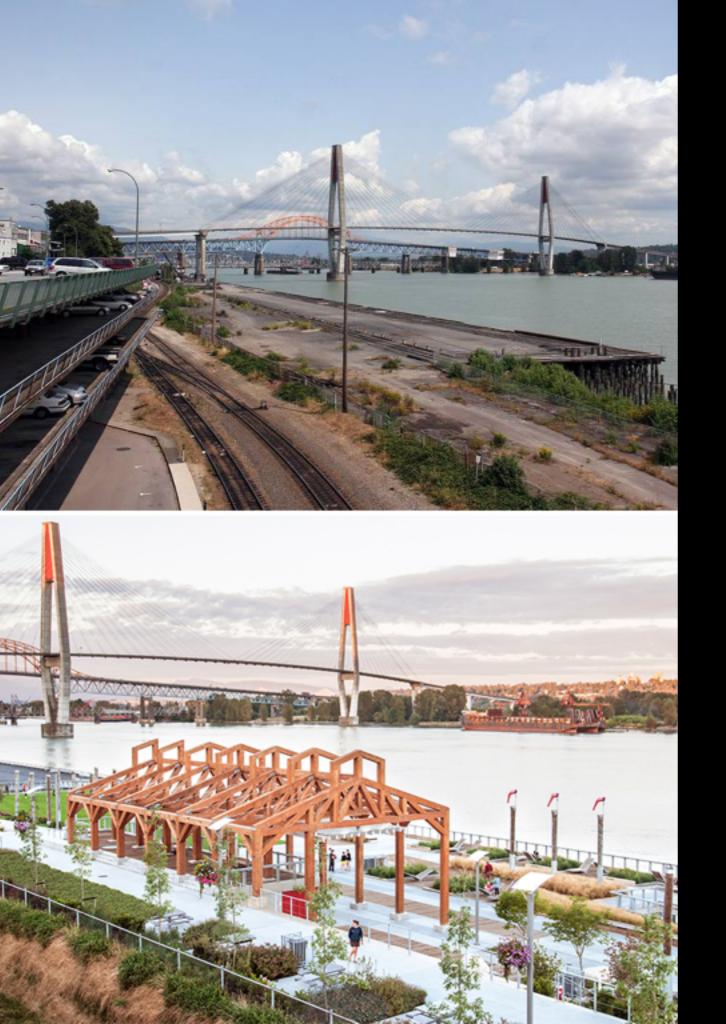








- This 2.5 kilometre
 waterfront (3.84 hectare)
 park is built equally on
 land and water. It is
 rejuvenated brown field
 site
- The park is home to 19 tree species, 39 shrub and ground-cover species and three species of ornamental grasses

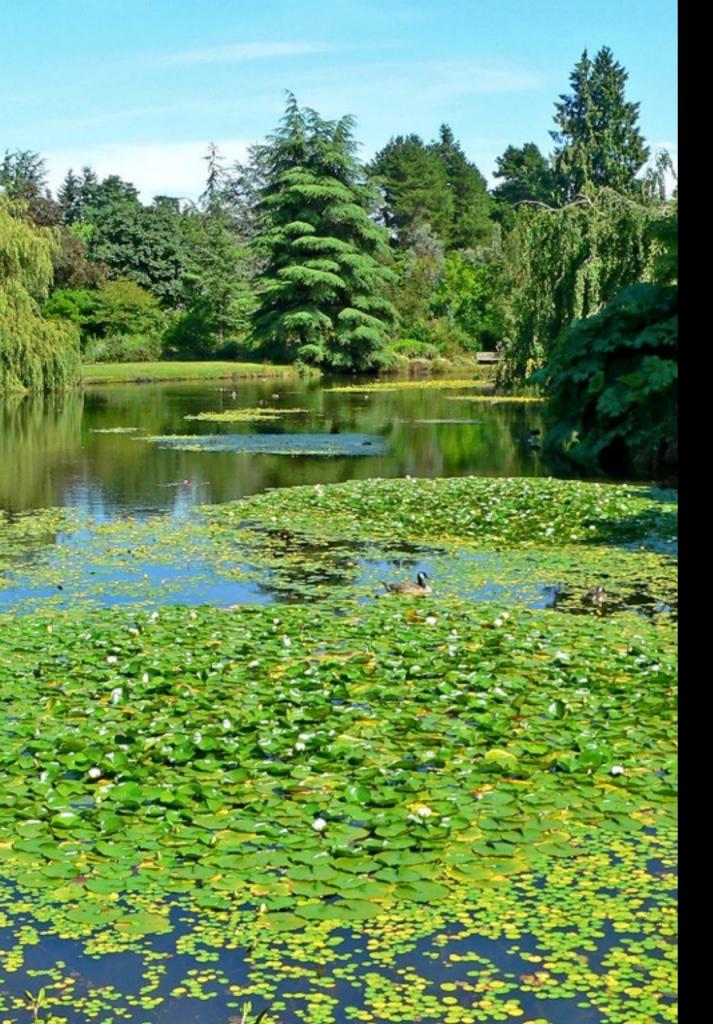


- 3,980 square metres is built on new marine deck, supported by 3600 pilings, 8,220 square metres is existing timber wharf, 10,000 square metres is on land and 16,240 square metres is water. 55% of the park is built over the water
- The seat wall contains 122 total photos, 87 historical photos and 35 children's photos
- 21 hanging baskets are featured in the park

- Inside Vancouver nominated New Westminster Pier Park #1 boardwalk around Vancouver.
- BCLNA Landscape Awards of Excellence
- CNLA National Award of Excellence Caterpillar Award for Commercial Construction
- Royal City Builders 2015 Award for Landscaping
- Royal Architectural Institute of Canada 2014 National Urban Design Award
- BC Recreation and Parks Association
 2014 Parks & Open Spaces Award
- Canadian Society of Landscape
 Architects 2013 Regional Design Award







- In 1910, site was an isolated acreage of stumps and bush owned by the Canadian Pacific Railway
- This award winning 'Living Building' is shaped like an orchid and a true pioneer in green design
- It is a LEED Platinum certified building, 100 percent water independent, and all the energy is supplied onsite by renewable sources

- hectare (55-acre) garden in the heart of Vancouver has matured into a botanical garden of international stature since opening to the public in 1975
- VanDusen's collection includes 11,500 accessions representing more than 7,300 taxa (plant families) and 255,000 individual plants from around the world

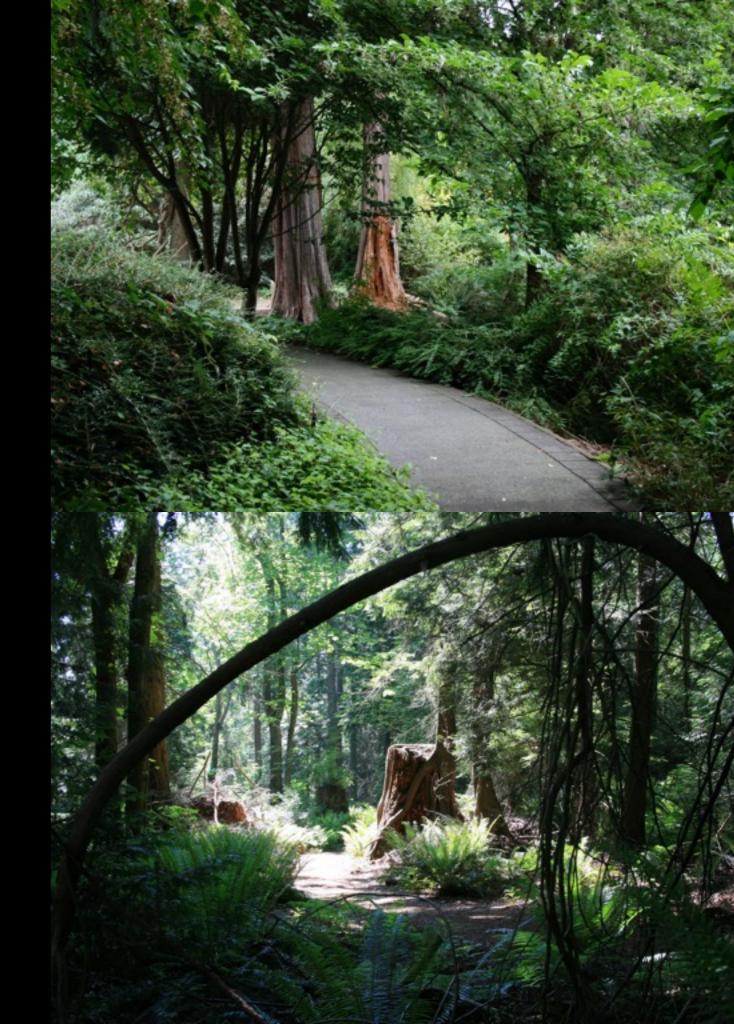




- Lieutenant Governor's Award for Engineering Excellence by the Association of Consulting Engineering Companies, BC
- Five Vancouver Regional Construction Association awards
- Lieutenant Governor of British Columbia award in architecture, merit level by the Architectural Institute of BC
- 1st place in the inaugural World Architecture News Engineering Awards (UK)



- UBC Botanical Garden is located within the grounds of the University of British Columbia on the peninsula, which is situated to the south west of Downtown Vancouver
- The UBC Botanical Garden was established in 1916
- Garden is also used as a research facility centre for plant research





- There are seven main gardens

 Alpine, Asian, Carolinian,
 Food, Native, Physic, Nitobe,
 Arbour, and Contemporary
- The UBC Botanical Garden covers an area of about 110 acres (44 hectares)
- Contains over 8,000 different plants.
- AWARD Greenheart Canopy Walk winner of the Canadian Garden Tourism 2015 New Garden Experience of the Year Award



- Granville Island is manmade, created through dredged fill from False Creek that turned 2 sandbars into a 36 acre island
- The peninsula was once an industrial manufacturing area, but today it is now a hotspot for Vancouver tourism and entertainment
- In the early 1900s, Granville Island was home to factories, plants and sawmills









- Stanley Park is a 1,001-acre public park that borders the downtown of Vancouver in British Columbia, Canada and is almost entirely surrounded by waters of Vancouver Harbour and English Bay
- Turned into Vancouver's first park when the city incorporated in 1886, named after Lord Stanley, a British politician who had recently been appointed governor general
- Much of the park remains as densely forested as it was in the late 1800s, with about a half million trees, some of which stand as tall as 76 metres (249 ft) and are up to hundreds of years old





- In December 2006, a
 devastating windstorm struck
 Stanley Park. The storm
 levelled 41 hectares of forest
 (over 1,800 hundred trees), and
 causing extensive damage to
 the Seawall
- The park also features forest trails, beaches, lakes, children's play areas, and the Vancouver Aquarium, among many other attractions
- Stanley Park, an urban oasis, is 10% larger than New York City's Central Park. It is a staggering 1001 acres

- The Stanley Park Seawall begun in 1917 and completed by 1980, the seawall is part of the world's largest uninterrupted waterfront path. The portion around Stanley Park is nine kilometres long and a popular spot for runners and cyclists. It takes 2 to 3 hours to walk, or one hour to cycle
- The 28 km Seaside Greenway is an uninterrupted pathway, including the Stanley Park Seawall, which extends from the Vancouver Convention Centre to Spanish Banks Park.
- Most popular recreational spot in the city







- The Seawall is divided in to two clearly marked sections - one for walkers and joggers (closest to the water), and one for cyclists and inline skaters (inside path)
- On September 21, 1980, the entire Seawall loop around Stanley Park was declared officially completed with the final paving between Third Beach and Second Beach
- Stanley Park Ecology Society promotes awareness of and respect for the natural world and plays a leadership role in the stewardship of Stanley Park

VANCOUVER AQUARIUM

- Established in 1956, the Vancouver Aquarium was Canada's first public aquarium
- It has a global reputation as a leading marine science centre
- Situated in the middle of Stanley Park, it is a LEED Gold certified building (the first of its kind for a zoo or aquarium)



