

Rainmaker Square & Rain Garden

DESIGN CONCEPT

What does it mean to live in Vancouver? The short answer: rain and traffic congestion. How can we turn our city's shortcomings into opportunities? My approach to this design was to give Vancouver a car free, social gathering place that celebrates what makes Vancouver unique: its landscape, mild climate, and the rain.

The design concepts behind Rainmaker Square and Rain Garden explore sense of place, the function of ecological systems, and human urban systems. These three concepts are not separate, but come together as one in my design. I found that the synthesis of these concepts, which we often see as disparate, are the key to creating usable, livable, and lovable public spaces in our city. Rainmaker Square and Rain Garden are two urban spaces that are interconnected. Rain Garden is a place that permits more passive activities (e.g. reading, lounging, quiet contemplation, savouring a morning coffee etc.), while Rainmaker Square promotes more active uses (music concerts, demonstrations, exhibitions, theatre etc.). The two sites form a complete public place where a range of activities can take place simultaneously in the heart of the city.

LOCATION

The proposed location of Rainmaker Square is in Mount Pleasant on the 2200 block Main Street between East 7th and 6th Avenues, where Kingsway meets Main Street. The Rain Garden is located on Main Street stretching between the north side of East 12th Avenue to Rainmaker Square to East 6th Avenue. The Rain Garden is a linear park and pedestrian promenade leading to the square from the south. The location of the site is adjacent to a portion of the original Brewery Creek streambed that ran from 18th toward False Creek meandering and crossing what is now Main Street and Kingsway. Although this area is increasing in density, green space is minimal and public spaces are even scarcer.

SIZE & DIMENSION

The not including the staging area Rainmaker Square is approximately 888 m². Rainmaker Square can accommodate up to 6300 people (0.14m² per person) comfortably. The staging area is approximately 216 m².

UTILITY

The staging area can be accessed by pedestrians at both the east and west sides of 6th Avenue. The staging area will have vehicular access at the west entrance at 6th Avenue. Additionally, the square can be accessed at the west and east entrances of 7th Avenue by both pedestrians and vehicles. Storage for the square is located at the rear of the staging area. Servicing and vehicular access for Rain Garden is permitted in the laneways.

ACCESSIBILITY

Proper allowances and universal design considerations were made for people with a wide range of abilities. Ground plane materials including permeable surfaces and pathway width allowances were checked and double-checked for compliance to accessibility and universal design standards. The site was designed to be inclusionary; Rainmaker Square and Rain Garden permit residents to gather both programmed and informally no matter their age, class, background, ethnicity or ability.

SEASONALITY

The use of umbrellas as overhead screens offer both shelter from the elements and aesthetic value with a hit of bright colour for grey Vancouver days. The umbrellas come in three colours: red, yellow and transparent. The umbrellas also illuminate in the evenings to light the square and environs. The umbrellas are made of tensile fabric that gives them both strength and allows them to open and closed depending on the weather and use. The umbrellas are suspended over the square and the entrances to the gardens using guide wires attached to a support pole system and appropriate structures.

FEATURES & PROGRAMMING

1. Interaction between users and water is facilitated through effluent outflow from the constructed wetland and interactive puddle water feature, which functions as a water park for all ages.
2. Accessible public washrooms are obligatory for comfort and health of users.
3. Native plant species in the constructed wetland and throughout the site celebrate the area's former landscape and require less maintenance than non-native vegetation.
4. Permeable surfaces are used throughout the area to allow water infiltration, but also remain accessible to those with mobility challenges.
5. Land contour concrete seating creates an amphitheatre in the square.
6. Lounge seating allows for both social seating and individual seating. The serpentine shape derived from the shape of meandering streams enables users to sit face to face with companions or sit individually. The lounge seating takes advice from Christopher Alexander's and pays homage to the Abalos and Herros' Xurret system as it allows users to sit, recline and even sleep.
7. Seating is configured to create outdoor lounge areas on the site.
8. Wood observation bridges criss-cross the constructed wetland connecting both sides of the streets in the Rain Garden.
9. Colourful, iconic and functional oversized umbrellas used as overhead screens and lighting fixtures allow the square to be used for day and nighttime activities.

The features and the programming of the site are intertwined. Many of the features are multipurpose and allow for flexibility and diversity of use. Other than the addition of concrete contour seating the ground plane of the square is free of obstacles to allow for a diverse set of uses including a plaza, stage, market, public art showcase and many other programmed and informal gatherings.

Rainmaker Square and Rain Garden reintegrate naturalistic elements of the original creek and native plant species through the reintroduction of a functioning ecosystem. Moreover, the proposed design acknowledges that Vancouver is located in a temperate rainforest and celebrates this fact rather than working against it with concrete and glass as how much of the city has developed.

Sense of place is addressed through the reintegration of the area's natural heritage and design elements that embrace Vancouver's unique climate. The reintegration of nature into the area creates an aesthetically pleasing atmosphere, but also serves a functional purpose. The Rain Garden's focal point is the constructed wetland, which provides ecological services as a method of stormwater management. Stormwater is collected in the forebay and left to settle in the detention pond. Wetland plant species are used to remove contaminants such as heavy metals and phosphorus from stormwater. After the natural filtration process, the water is then piped into shallow splash pools and the interactive water puddle feature that allow users to interact with the water. There is also an indirect relationship between the vegetation and the atmosphere. The wetland plants and surrounding vegetation contribute to cloud formation through evapotranspiration. Consequently, this makes the site a rainmaker because of its contribution to the hydrological cycle (the earth's water recycling system).

The design elements in Rainmaker Square juxtapose the ecological systems and the human made built environment. In the square, the juxtaposition is apparent in the contrast between the native vegetation and contour seating with the vividness of the umbrellas. In a sense, the umbrellas symbolize what it is to live in Vancouver. The umbrella provides protection from the elements, but in bright colours it also celebrates the rain. The overarching design concept of Rainmaker Square and Rain Garden is to create a public space that embraces the rain, our unique climate, our landscape and its ecological systems in the heart of the city.