

## **The Mound**

Perhaps there are very few major cities in the world whose civic symbol is related to water. It would be safe to assume that there are even less, or perhaps none, that celebrate a water tower like Mannheim does. The story of Mannheim and its battle for clean and pure water spans centuries; a community intent on surviving in a land with little access to clean ground water has taught us a lesson on what it means to fight for clean water with ingenuity and innovation, and finally emerge victorious, having a water tower in the centre of town to show for it.

In the presence of this town's relentless spirit for innovation and its appreciation of technology we saw it necessary to show our due respect and pay tribute to the city by focusing our project on a new public space that —just like its predecessor, the water tower— creates a space for the people to enjoy and appreciate the life-giving presence of water, while using the newest technologies of its time.

### **The Experience**

The Mystic Mound is a self sustaining Land Art Generator structure. It serves as an elevated landmark, in an otherwise flat metropolitan area, for people to gather and enjoy the presence of water and nature in a very distinct and transcendental architectural space.

The experiential dimension of the mound aims to create a space that is a sudden shift, from the more or less urban landscape outside, into a magical and mystical space detached from reality. The round staircase are reminiscent of ancient gardens, winding around the column of the mound, lush with beautiful plants and flowers.

This is the story of water and the beauty it can create when technological innovation, architectural design and nature come together. It is a learning playground to witness the natural process of water from precipitation and travel through the aquifer, all the way to purification and usage. All of the segments of process have been made available for viewing and interaction within the structure of the mound.

It's a sight to witness, enjoy and learn about the intricate and beautiful cycle of water. It is also a paying its due respects to a city that continues to appreciate and cherish water.

### **The innovative and environmental aspects:**

The mound holds within itself all of the technological features that allow it to be a self-sufficient unit. All of the electrical energy needed to operate this structure is captured through photovoltaic panels situated on the mound, and stored in the storage units within the body of the mound. The water is also retained all year round from precipitation as well as from groundwater and purified within the structure's purification unit.

This pure water in turn flows through the designed space, giving life to the lush garden spiralling around the outer surface of the mound, while cycling back around through the central pond and back to the top.

**Technologies utilized:**

- 1 - Submersible Ground Water Pumping
- 2 - Sand Filtration
- 3 - Ultra Filtration ( Reverse Osmosis)
- 4 - Ultraviolet disinfection
- 5 - Ozonization
- 6 - Pressurized Water Reservoirs (spherical stainless steel tanks with 10 meter diameter) with a total capacity of 250,000 cubic meters or 250 million litres of pure drinking water
- 7 - Solar Power Generation network producing 20,000 MWh/year
- 8 - 300,000 m<sup>2</sup> garden space with the potential to yield 300 tons of agricultural products per year