

The Olympic Rainforest Project

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Project Origins

In fall 2018, we were assigned to create an interpretive center. The site chosen for this project was clearcut acreage about 15 miles north of Forks, WA. For my project the focus of the center was to illustrate the botanical systems within the temperate rainforest. On the main floor, visitors could interact with displays that detailed the different plant groups while showing the mutualistic symbiosis between these groups. On the second floor, visitors would have the opportunity to rest in the cafe and have a bite to eat. From there they could access the rooftop for 360° views of the terrain. Seen from there would be the clearcut area, the Sol Duc River and the forested mountains across the river. Extending from the rooftop is a bridge that provides access to the forest where visitors can exercise their newfound knowledge of the temperate rainforest of the Pacific Northwest.



What makes a forest a temperate rainforest?

- Climate: 12' to 14' of rain per year with temperatures that rarely exceed 80°
- Epiphytes: plants that grow on other plants but are not parasitic. Mosses, ferns and lichens are primary examples
- Large Old Trees: Sitka Spruce and Western Hemlock are the two predominant species
- Nurse Logs: A nurse log is a tree that has fallen providing a nutritive location for plants to grow on. Supported by the nurse log are other trees. Once the log has completely decayed, it leaves behind a tree standing on arial roots that form a cage-like appearance at their base.
- Fungi: fungi and mushrooms are detritivores which means they feed on decaying organisms. These life forms promote the breaking down of a fallen tree while producing more nutrition for the burgeoning trees and plants.
- Deadwood: As mentioned above with nurse logs, deadwood are a provider of nutrients and structures for the epiphytic species to inhabit. You would be hardpressed to look in any direction in this environment and not see this interaction.



A stand of a variety of trees near the hall of mosses in the Hoh Rainforest covered in witch's hair moss.



Salmonberry is a common bramble, related to the rose family found throughout the rainforest



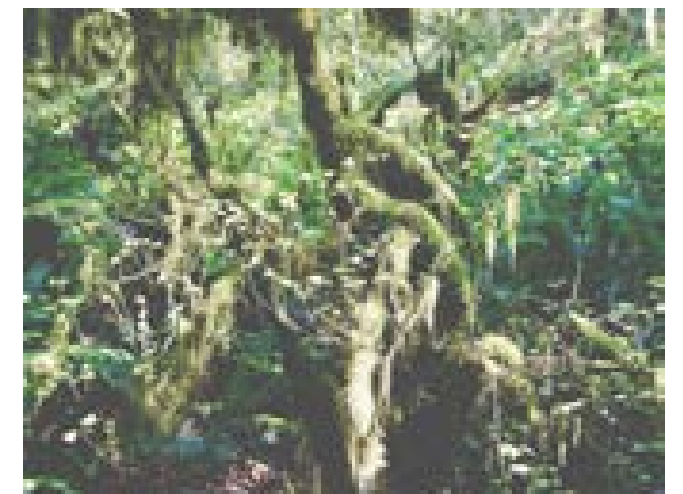
Licorice Fern growing on a tree trunk covered in club moss



An example where a nurse log once laid. The size of the trunk and thickness of the arial roots indicates that this tree is several hundred years old.



A small nurse log whose roots attracted sword fern, a predominant understory plant and epiphyte.



Vine Maple growing off the nutrients of deadwood

Clear Cut Terrain

“About half of Washington is forested. In the Western part of the state, 75% of the trees are less than a century old and about half are less than 40 years old, considered the optimal harvest age. In 2014, more than 3.2 billion board feet of trees were harvested from private, federal and state lands, mostly Douglas-fir and western hemlock, accounting for 13% of total U.S. softwood lumber production and 7% of all plywood production in the United States. Private forest lands in Washington account for two-thirds of the state’s timber harvest.”
- Washington State Department of Commerce report from 2017



Following clearcut, the cleanup process entails creating slash piles for small game animals to inhabit. They also treat the land with herbicide to prevent non indigenous plants from setting up a habitat. Oust Extra® produced by Bayer is a selective herbicide that kills plants such as grasses, wild roses, brambles and some hardwoods.



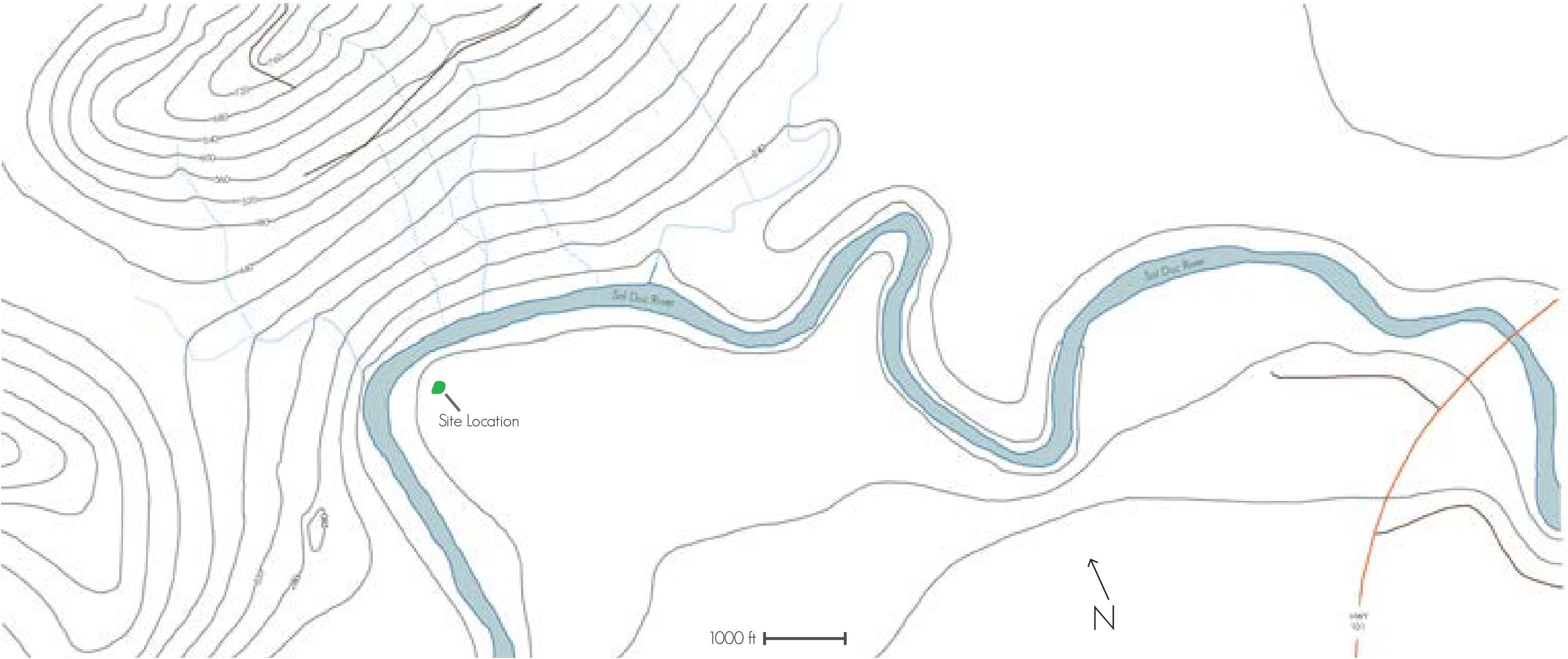
A swath of clear cut terrain on the site’s location.



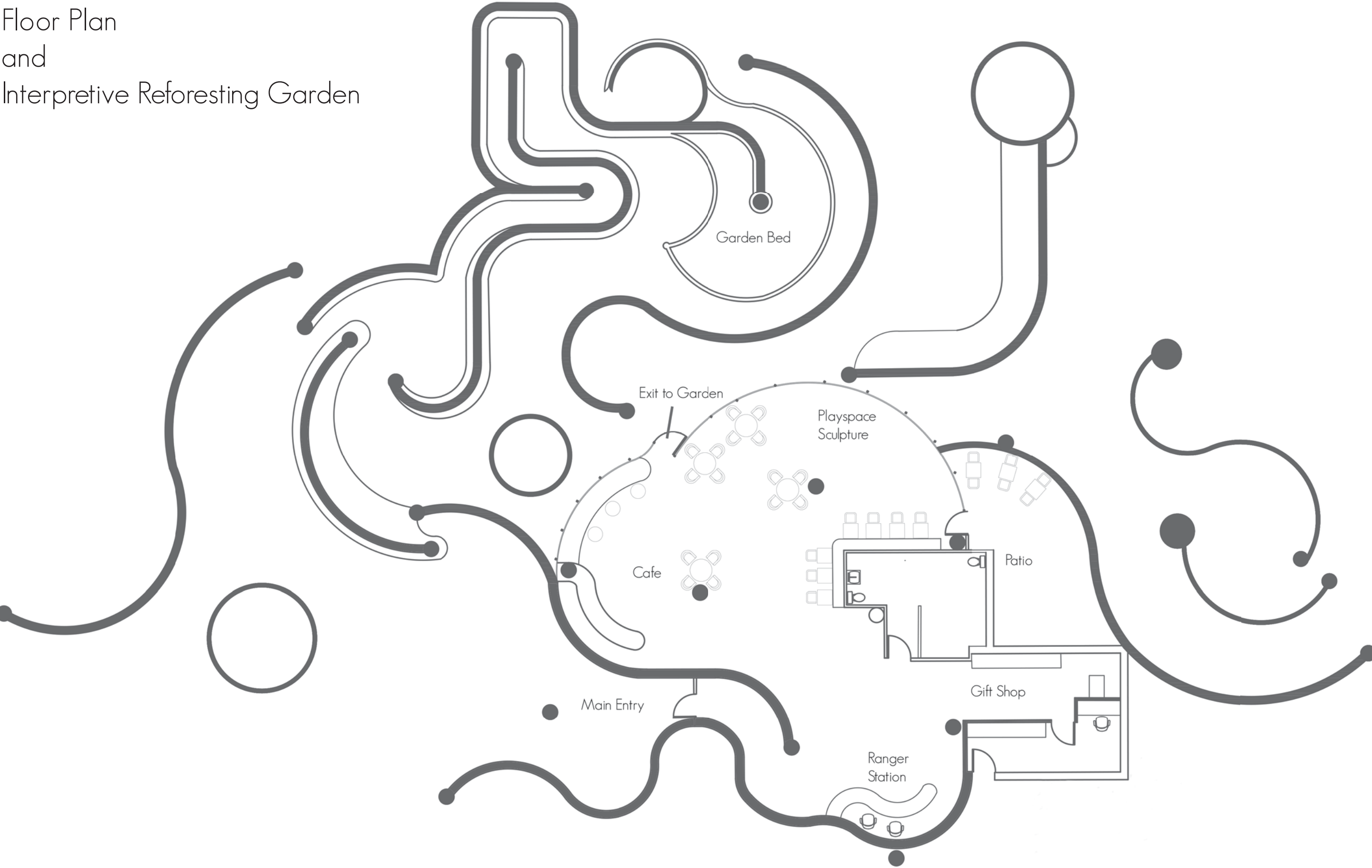
Here is an example of what the reforested areas look like up close. The trees are tightly packed, preventing the ability for a lush vegetative environment to exist.

Site Topography, Characteristics and Features

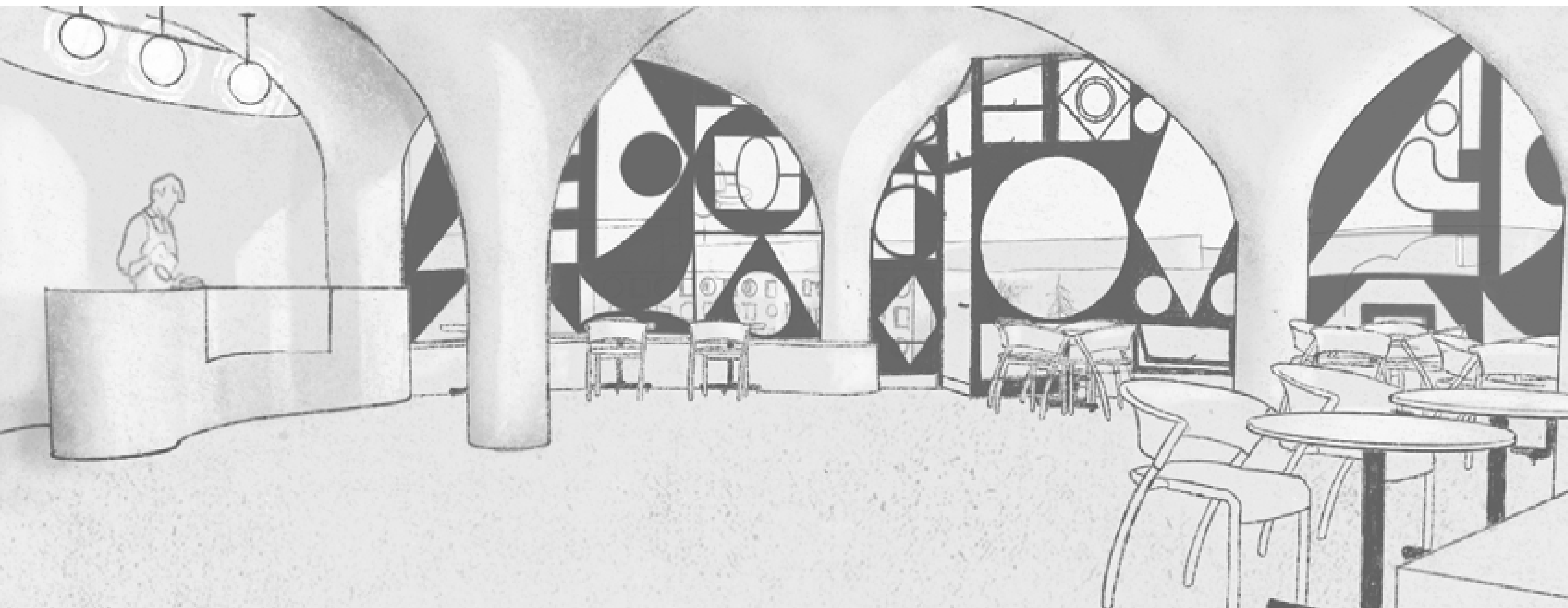
The building and Interpretive Reforesting Garden is located 1.5 miles away from highway 101. The purpose of placing the building this far back on the land is to utilize the steepest portion of the mountain range to protect the plants from the wind and light. Visitors will cross the clear cut areas and arrive at the visitor center with a dramatic, forested back drop.



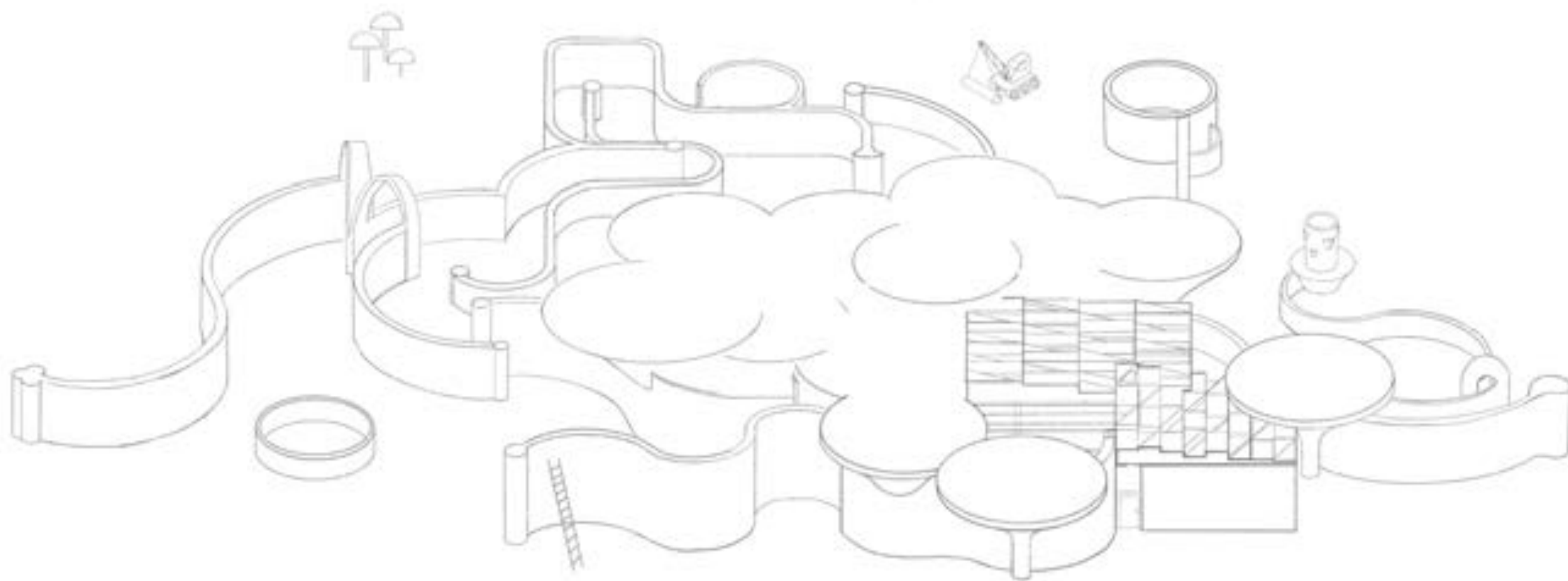
Floor Plan
and
Interpretive Reforesting Garden



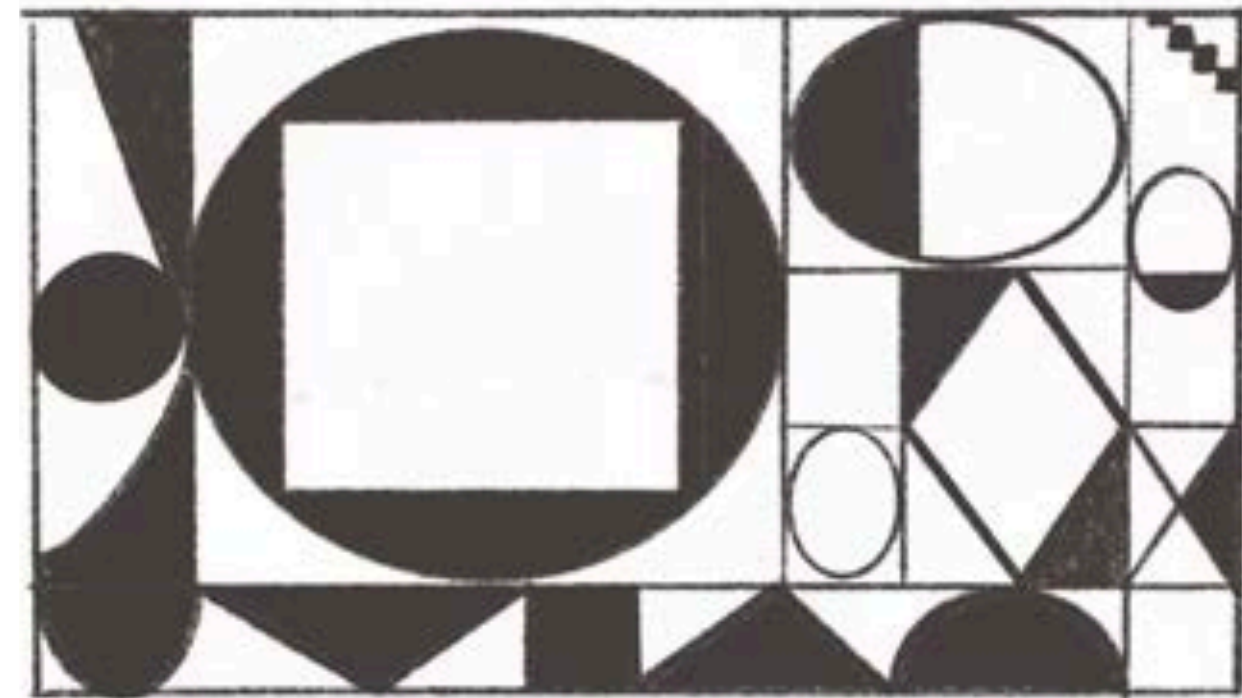
Cafe Interior Space



Exterior View



Artwork



Influences and Inspiration

