

Fire

In the form of heat, represented through solar radance and the light that illuminates the earth

Wind

In the form air, can surround an object or be contained within a space. It will be the driving force in the project, creating a void within the earth through the inflation of the veil

Water

Water can be found in a variety of locations throughout the ranch: within the surrounding springs, local well, and the precipitation

Earth

A mixture of mud, clay, sand, soil and organic aggregate – creates the ground for which the project is built from both the macro understanding of the land and a micro understanding of material

Veil leverages the five fundamental elements of the Japanese Buddhist belief – wind, water, earth, fire, and void – to create shelter. Veil is a pneumatic armature containing void. By challenging impermanence, a temporary formwork becomes permanent as a three-dimensional, flexible cement-impregnated fabric, laminated against a UV treated polyvinyl carbonate membrane, hardens through hydration. Wind – in the form of air – inflates the form. Water hydrates the cloth and catalyzes the structure. Earth – a mixture of mud, clay, sand, and invasive/organic plant/aggregate – clads the armature. Fire – in the form of solar heat – hardens the earth – a subtle nod to early wattle and daub construction techniques. The resulting product is a void, framed by a veil, contained within the landscape. A pavilion which becomes individually unique with each added layer of clay – shaped through the collaboration of the community. Through their hands, they leave behind their identity, the residue of their fingerprints imprinted on the sculpted adobe structure.

The structure's form becomes derived from its function. At the scale of the site, the pavilion craters the ground, creating a protected courtyard within the surrounding ring, deflecting wind while framing horizons, connecting the heavens to the earth. With its expansive surface area, the courtyard aids in the collection of precipitation, creating a large catchment basin with the potential to accumulate 225,000 liters of water annually. Within the interior of the structure lies a sunken greenhouse – a walpini – with a southern-facing orientation ideal for soaking up light throughout the day. This sunlight becomes trapped within the vinyl membrane of the veil, creating a passive-solar heat source for the plants/people within. As nothing is wasted within the construction process, the temporary formwork of the veil finds its use integrated into the final product of the design, a membrane regulating internal heat through solar radance.

Through this system, plants can be grown, harvested, consumed, and composted, becoming the foundation for the next harvest to be grown again – depicted as an ouroboros or the infinite cycle of re-use. Through these understandings, I believe the overall form of the design begins to take on the abstraction of a snake eating its tail, a grand allegory to a continuous cycle of life. What can be abstracted as a snake's skeletal spine and ribs, is actually a series of staggered archways skinned along an inflated pneumatic formwork.

