alpinenexus - about

The initial approach was to take a potential single cabin and design it as a modular unit. This allows a single cabin to exist independently on a single site, or to be built in a sequence to create a community of cabins on the same stretch of land. This allows the density of units to potentially surpass a system of separate cabins but also allows a single structural system to accommodate all the units as well.

The structure of the nexus follows a repeated grid pattern underneath each modular unit so as the sequence is repeated, a forest of structural columns form, leading to a community that is floating on a forest. This structural system follows inspiration of the nature of birch tree forests and *Constant's New Babylon: The Hyper-Architecture of Desire*. By avoiding building pads altogether, a system of footings have been implemented to avoid extensive damage to the landscape and only requiring footings where necessary.

The cabin units themselves were based off of the envelope dimensions from the PDF of site 3, which is also the site chosen for this prototype community. The individual cabins sought to effectively direct views down the sites incline and accommodate human needs in an efficient and comfortable manner. This leads to a three-bedroom unit that is fully equipped and arranged spatially so the plumbing and electrical lines could be situated in one corner, and as such, stackable on top of or below subsequent units. By arranging energy and plumbing lines in larger corner columns, the underside of the cabin would remain untouched and clean with no visible pipelines, lending to the aesthetic of floating on a forest of columns.

As the nexus expands, staircases link each unit to the whole community, creating a sense of meandering and exploration while living in a community with other individuals that are also floating up in the mountain sky. This is where the project comes to a close, a community that is also a network of individual modules floats on a forest of columns, closer to the sky. The modular sequence was designed to efficiently accommodate views and human comfort, and a series of footings as opposed to building pads bring the project to the table. As a prototype, the aim was to explore methods to reduce building footprints, but also expressively design a modular system with an emphasis on density, community and exploration.

I hope you enjoyed the prototype work designed for Summit,

Peter Mueller – Designer (Graduate Student at North Dakota State University)