

REINVENTING RIFUGIOS:  
REORIENTATION IN THE NEW HAMPSHIRE WILDERNESS

A non-degree-required thesis submitted to  
the Master of Architecture Program  
Department of Architecture

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## Acknowledgments

This thesis project has made it possible for me to continue investigating how architecture and landscape come together at a regional scale over time as well as the potential architecture has to encourage deeper connections to nature, physical and mental health and strong community ties. I look forward to continuing this lifelong pursuit and there are many people to thank for their help and support to this point in the process.

Thank you to Kyle Schumann, my thesis advisor, for supporting my interest in this region during my first semester and helping me discover many of the rifugios and territories of the Italian Alps that I continued to explore over the next two years. For his support and guidance during the Spring 2025 semester directly on this project and encouraging me to trust my intuition as it developed.

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Thank you to Hart Howerton and the Hart Howerton Fellowship Committee for supporting and funding my visit and research into the rifugios of the Italian Alps and kick-starting my analysis of these sites and their capacity to create and reinforce cultural value systems.

The A-school community, my cohort and friends, who I leaned on to commiserate during hard times and who I shared joy with over the course of the last semester and past three years.

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## Abstract

Eco-tourism has surged in the United States and globally, but infrastructure to support it lags behind. In the U.S., people are flocking to nature, and national and state park attendance is rapidly increasing, with many parks now limiting access through tickets and lotteries to prevent overcrowding and environmental damage. While protecting these landscapes is essential for future generations, studies consistently show that time spent in nature has a profoundly positive effect on both physical and mental health, so access for all is more important than ever.

Reinventing Rifugios proposes a new infrastructural framework to support this growing interest, and encourages people to build meaningful connections with nature through context-driven experiences. This proposal re-invents the existing hut typology and distributes fragmented components that produce experiential moments to mediate the experience of the landscape.

Reinventing Rifugios invites visitors to be immersed in nature, rather than just passing through it. The project encourages visitors to slow down; to cultivate a practice of observing, learning and heightened awareness about the space around them. This process of relating to nature through spatial interventions provokes new reflections on nature itself and how we take care of it for the future. As many visitors explore these spaces for the first time, fostering relationships rooted in care, respect, and ecological stewardship is crucial to preserving these environments and ensuring everyone can continue to benefit from them.

This project builds on a series of existing historic huts in the White Mountains in New Hampshire to emphasize the distinction between the existing experience and the new experiences being created.

# Research Framework - Understanding the Existing Rifugio Typology

## A response to a crisis:

In a post-covid world, we are reconsidering what aspects of our society are important to continue perpetuating and which we can leave in the past. This response to the crisis has included examining what it means to have good physical and mental health, connection to nature and strong community ties.

## Context:

In the Italian Alps there is a UNESCO – Intangible Cultural Heritage of Alpinism which places a strong emphasis on these qualities which we want to increase the prevalence of in our communities:

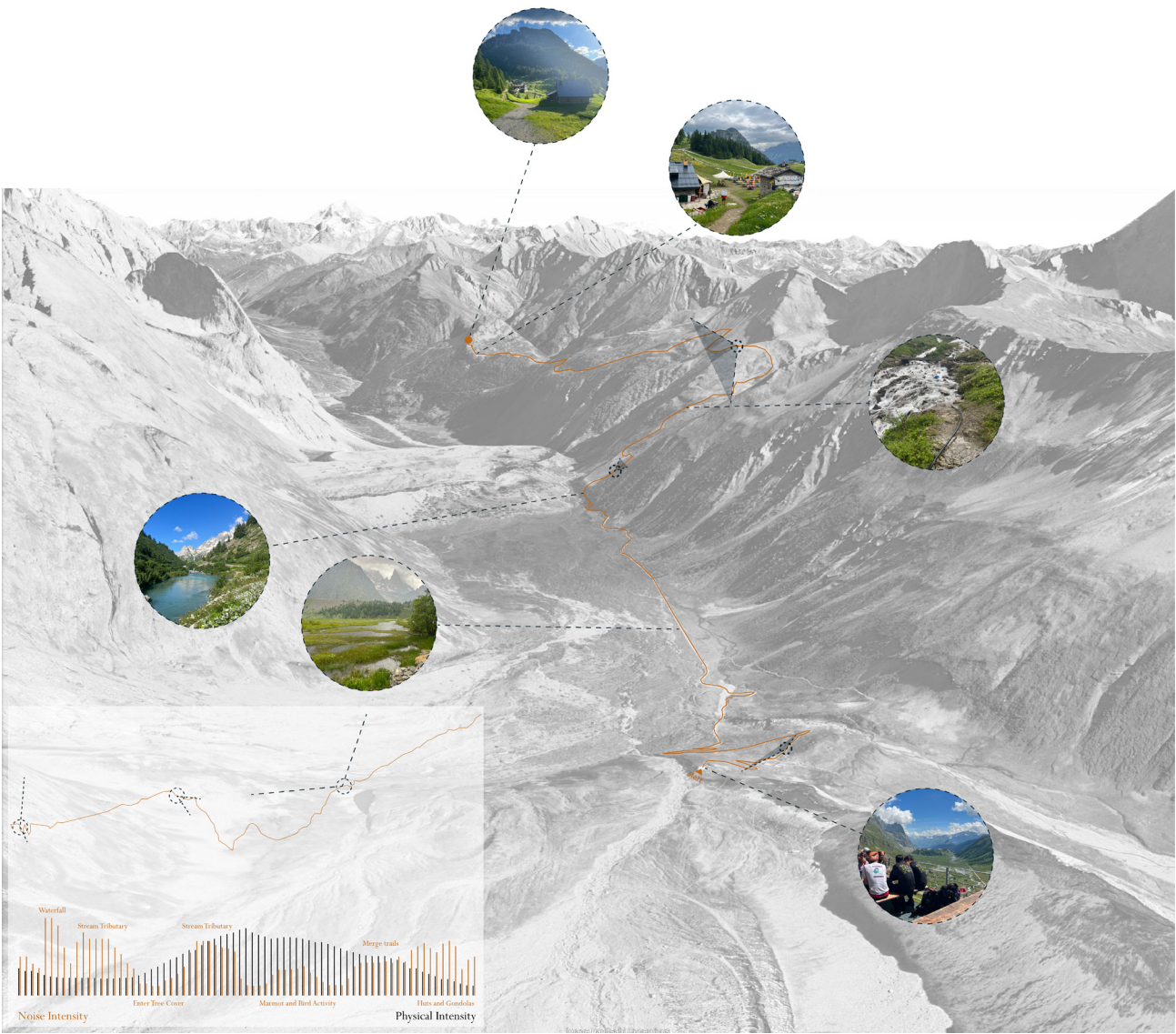
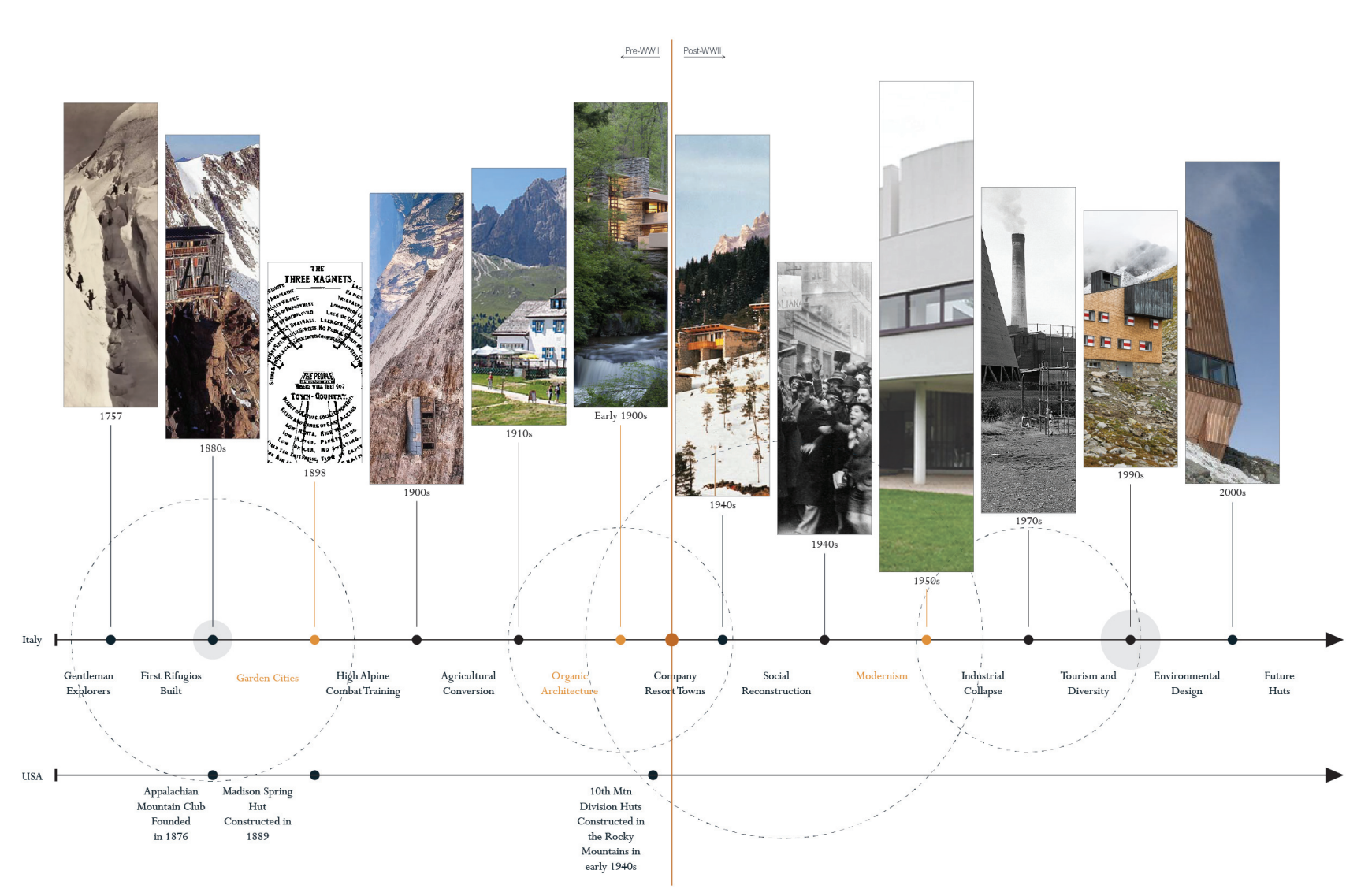
- Connection to Nature
- Physical and Mental Health
- Strong Community Ties

The rifugios are the physical anchors in a network that allows for this UNESCO Cultural Heritage to not only exist, but flourish. Without the rifugios in the region, these outdoor areas would be pass through spaces. The outdoors as pass-through spaces would severely limit the potential for human connection and reduce the impact of the interconnected benefits the huts create.



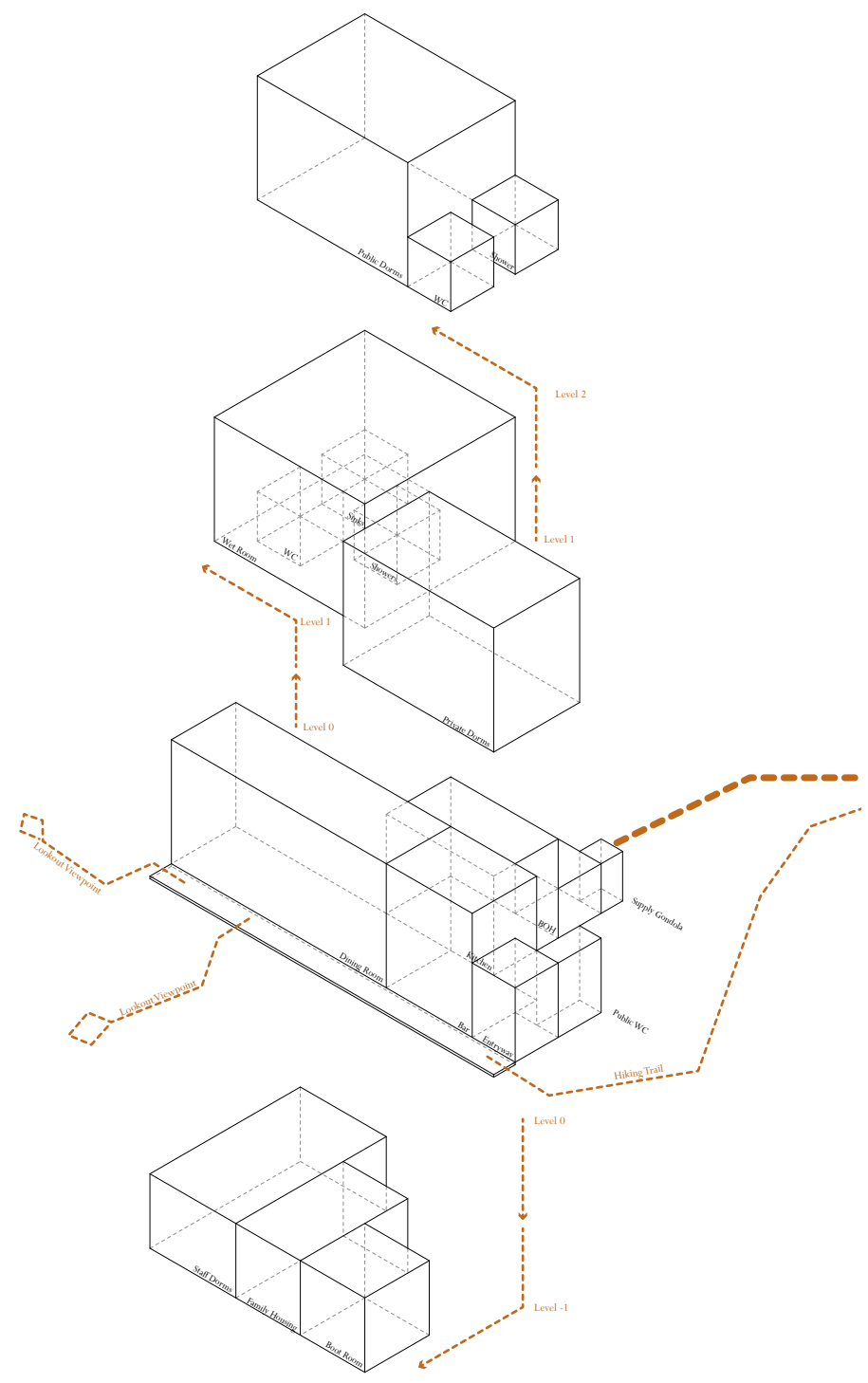
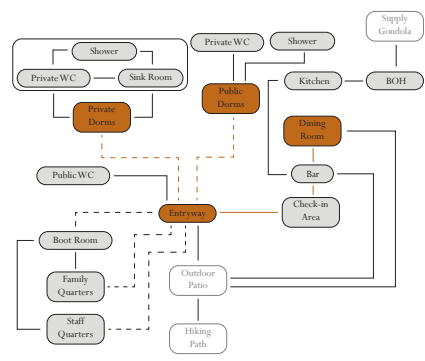
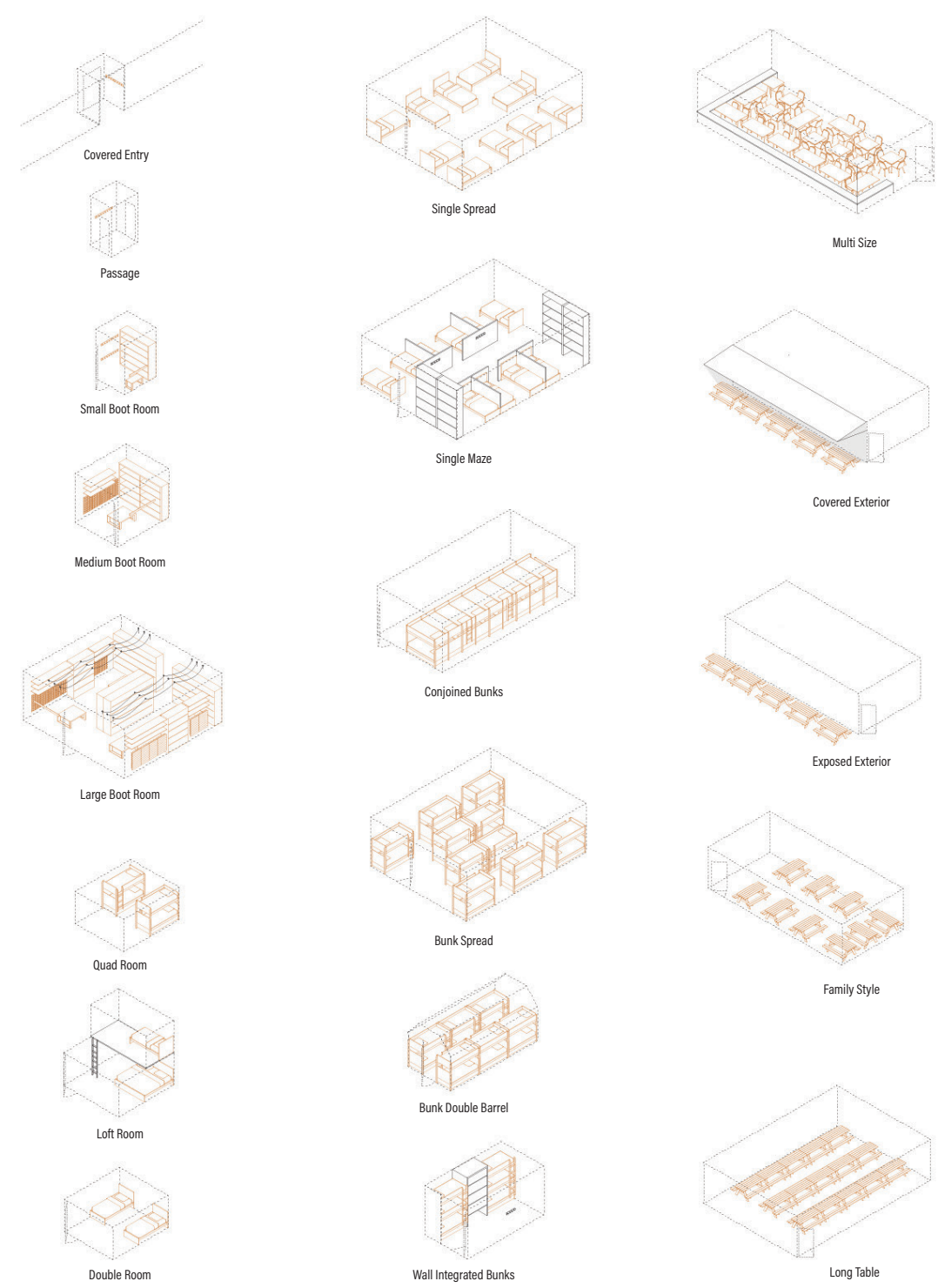


# Research Framework - History and Mapping



The experience of the rifugio is not just the building itself, but its ties to the history it emerges from and the landscape that surrounds it. It also blurs the boundary between where nature ends and the rifugio begins and vice versa. The path to the rifugio, its physical intensity, sounds, milestones, and landmarks all influence the experience of the rifugio.

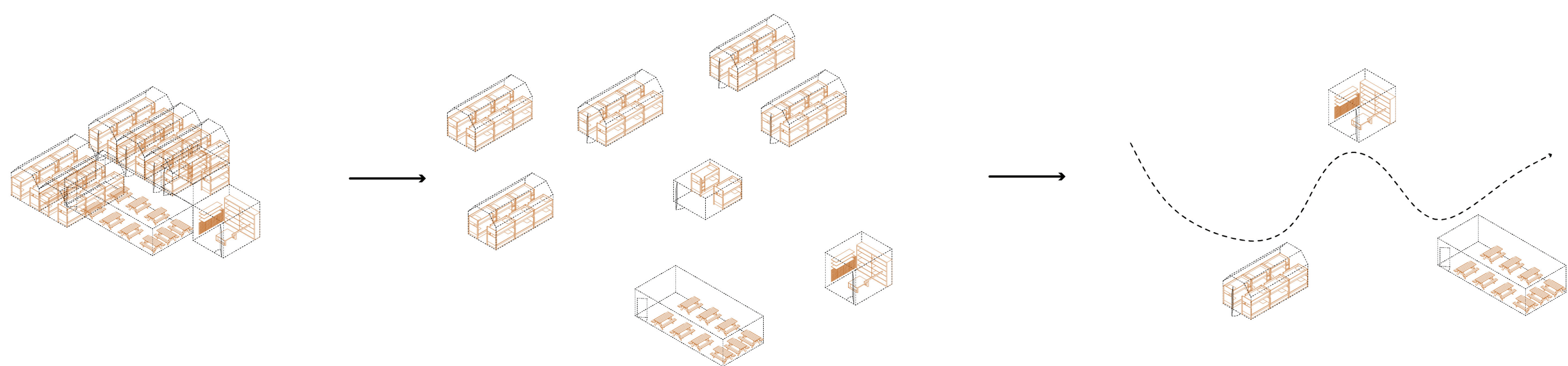
# Research Framework - Kit of Parts and Adjacency Analysis



The elements the make up the rifugios and their adjacencies are also critical in encouraging or inhibiting strong community ties and connection to nature.



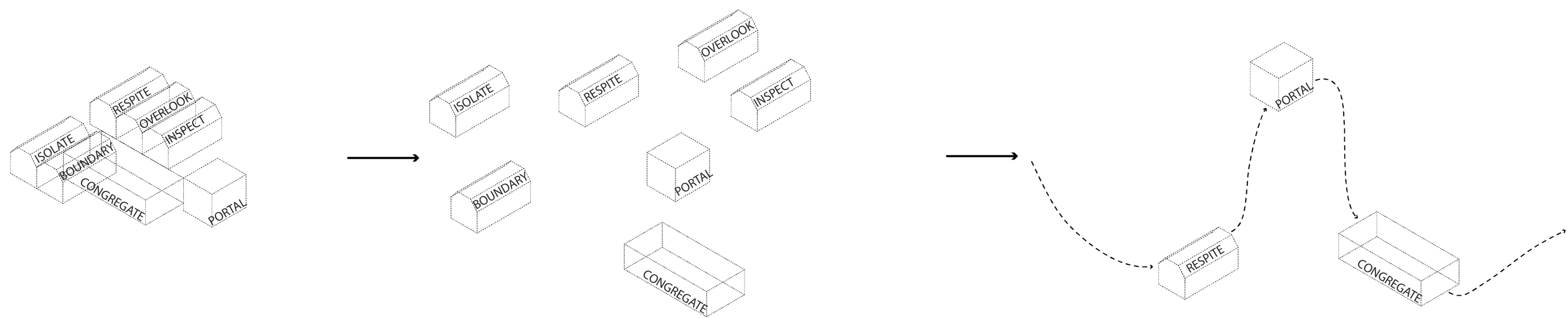
# Guiding Principals and Context - Hut Fragmentation



Composite Hut Components

Exploded Components

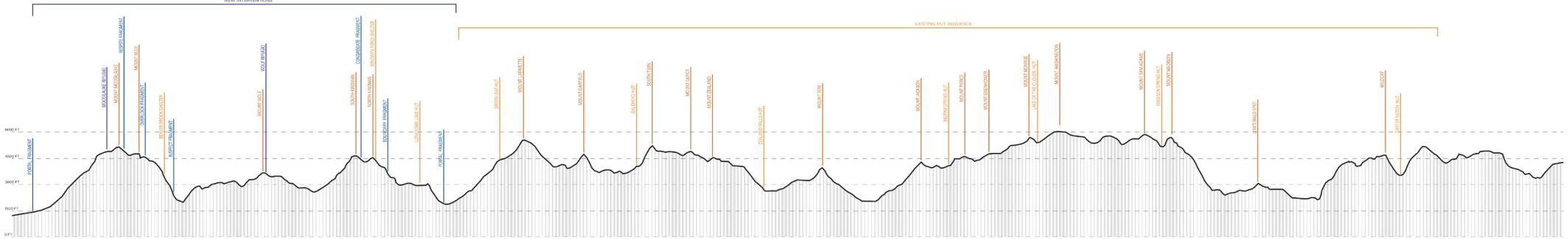
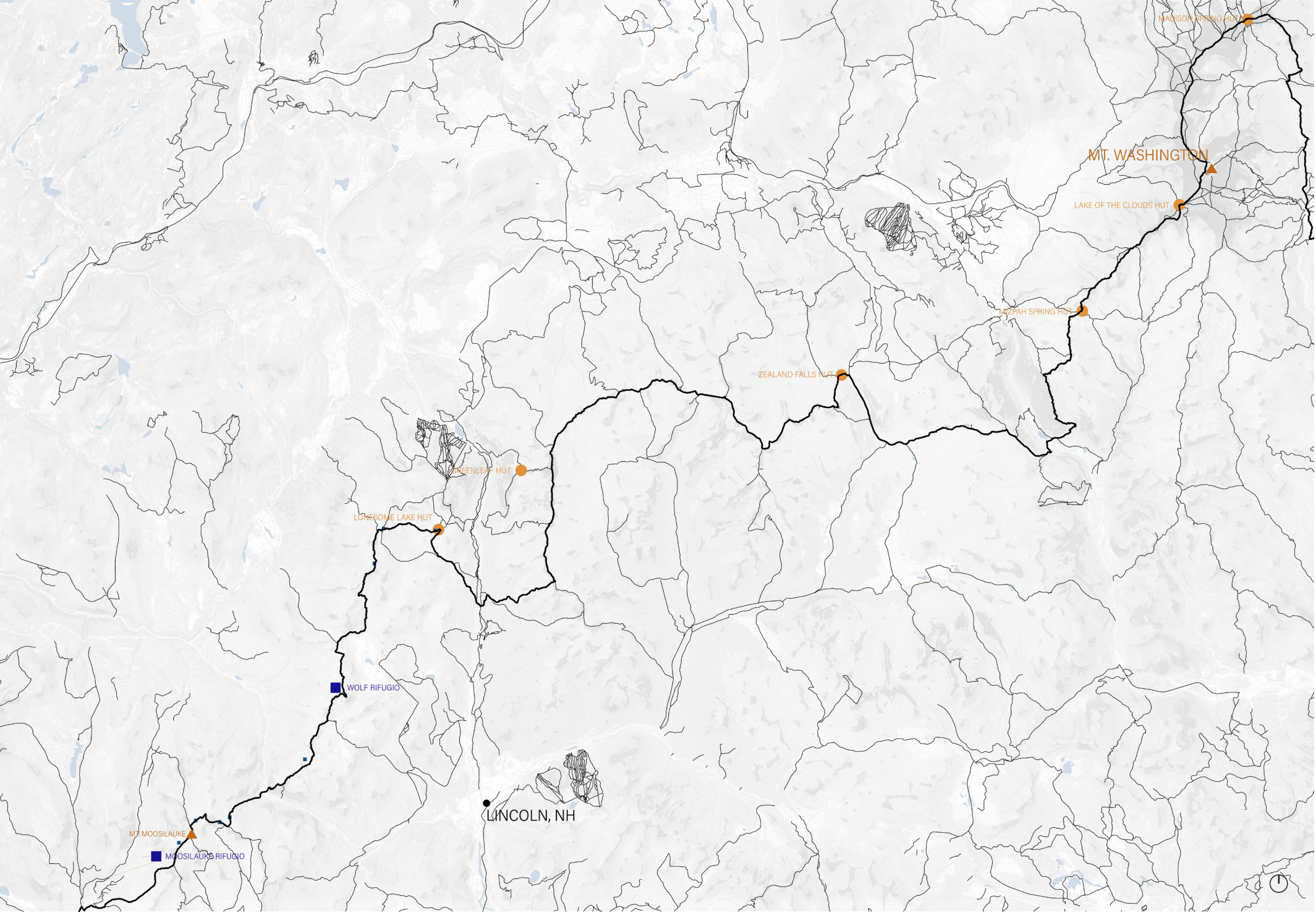
Experience in the Landscape



On the regional scale, a kit of parts becomes a kit of experiences that can be fragmented across the landscape, responding to its direct context and landscape type to mediate the experience of the landscape.



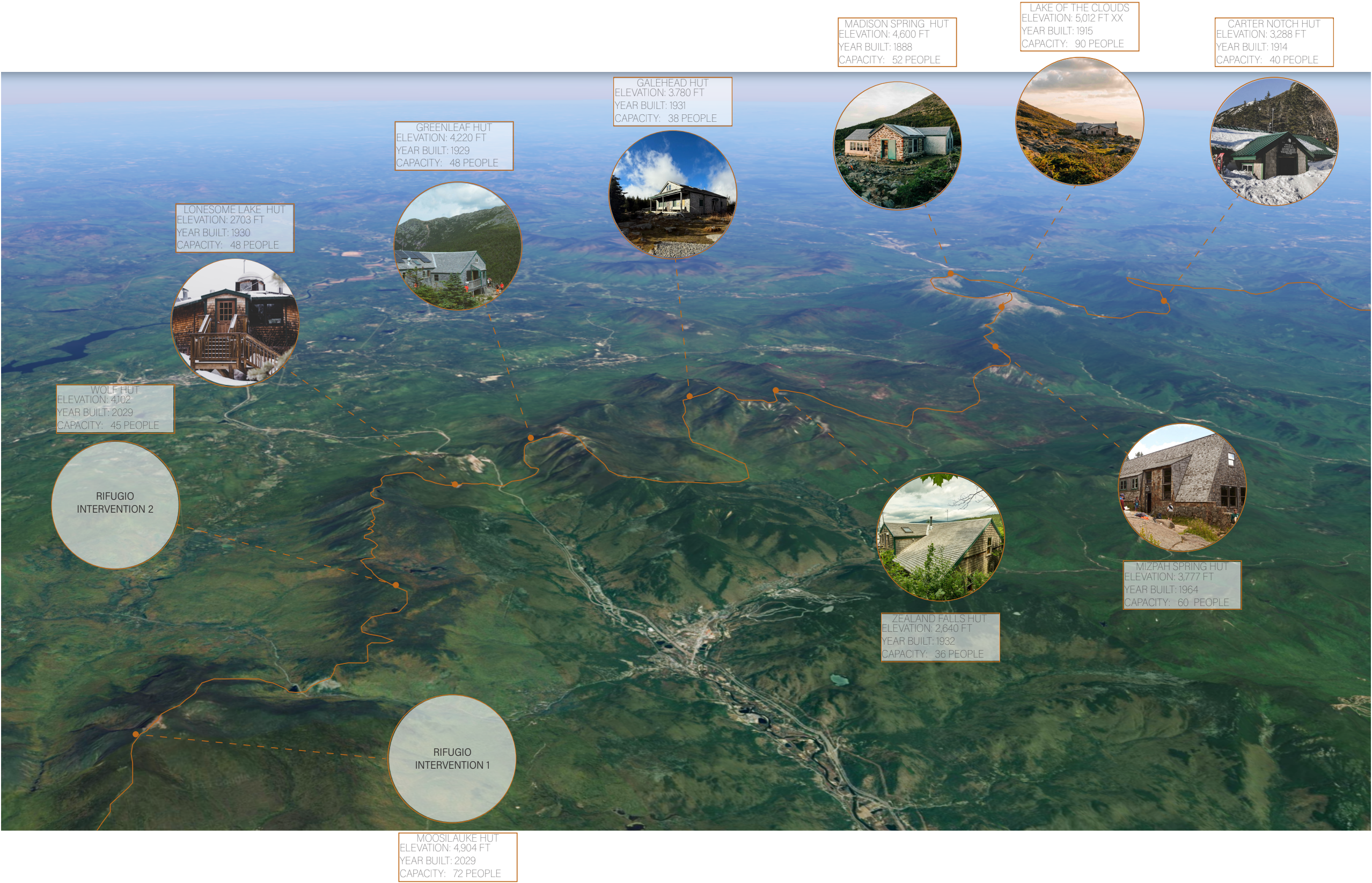
Guiding Principals and Context - Regional Scale



The project is located in the White Mountains in New Hampshire along a 50-mile stretch of the Appalachian Trail. The proposed reinvented refugios and fragments in the landscape build off an existing network of AMC huts in the region to highlight the contrast between the existing experience and the new proposed one.

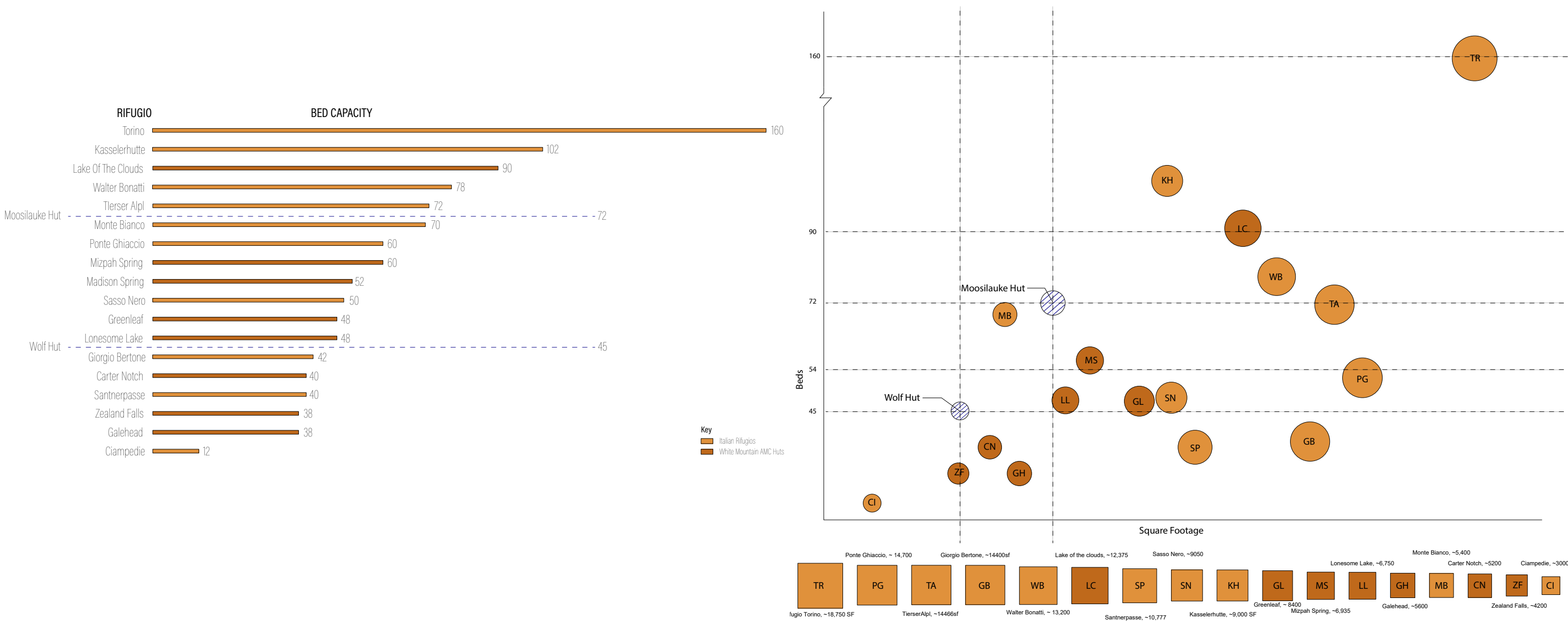


Guiding Principals and Context - Hut Connection





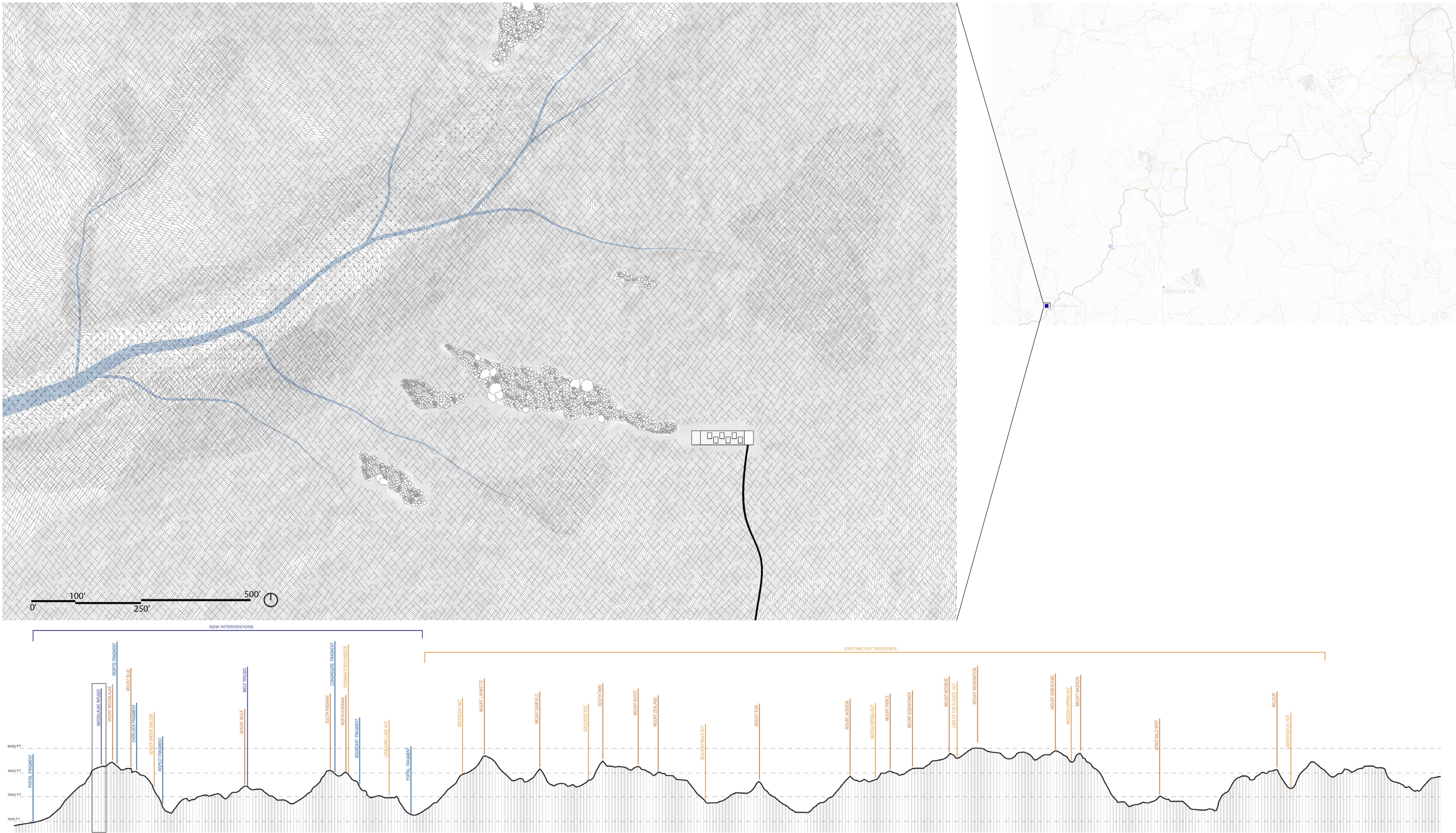
# Guiding Principals and Context - Physical Scale



The larger proposed interventions of the reinvented rifugio typology are both within scale and more space-efficient than the existing rifugios in Italy and huts in New Hampshire.



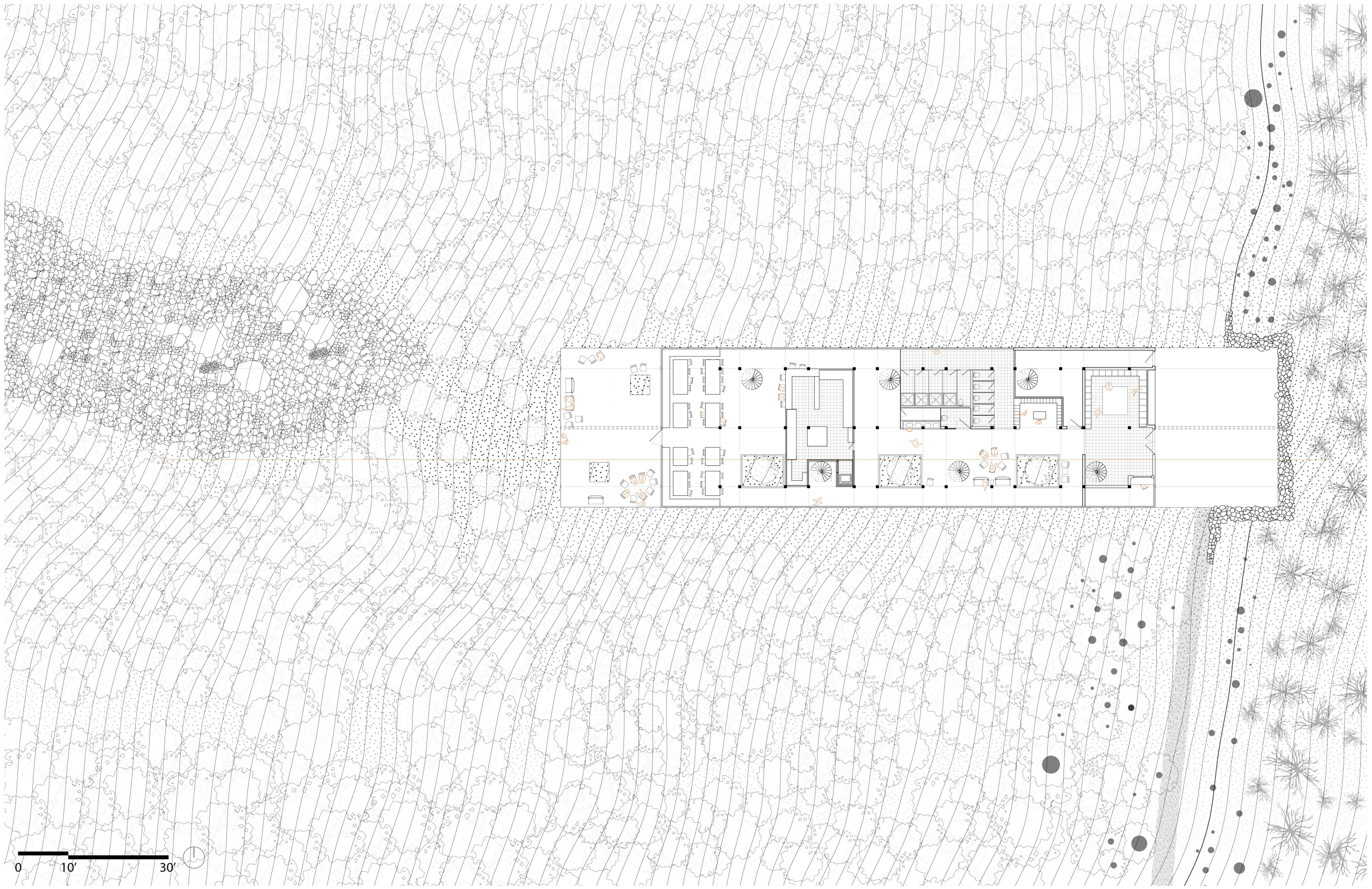
## Rifugio Intervention - Site



The Moosilauke rifugio is positioned above a former landslide zone on a steep 35 degree slope so the change in time and the landscape can be read through the emergence and growth of fauna in that zone.



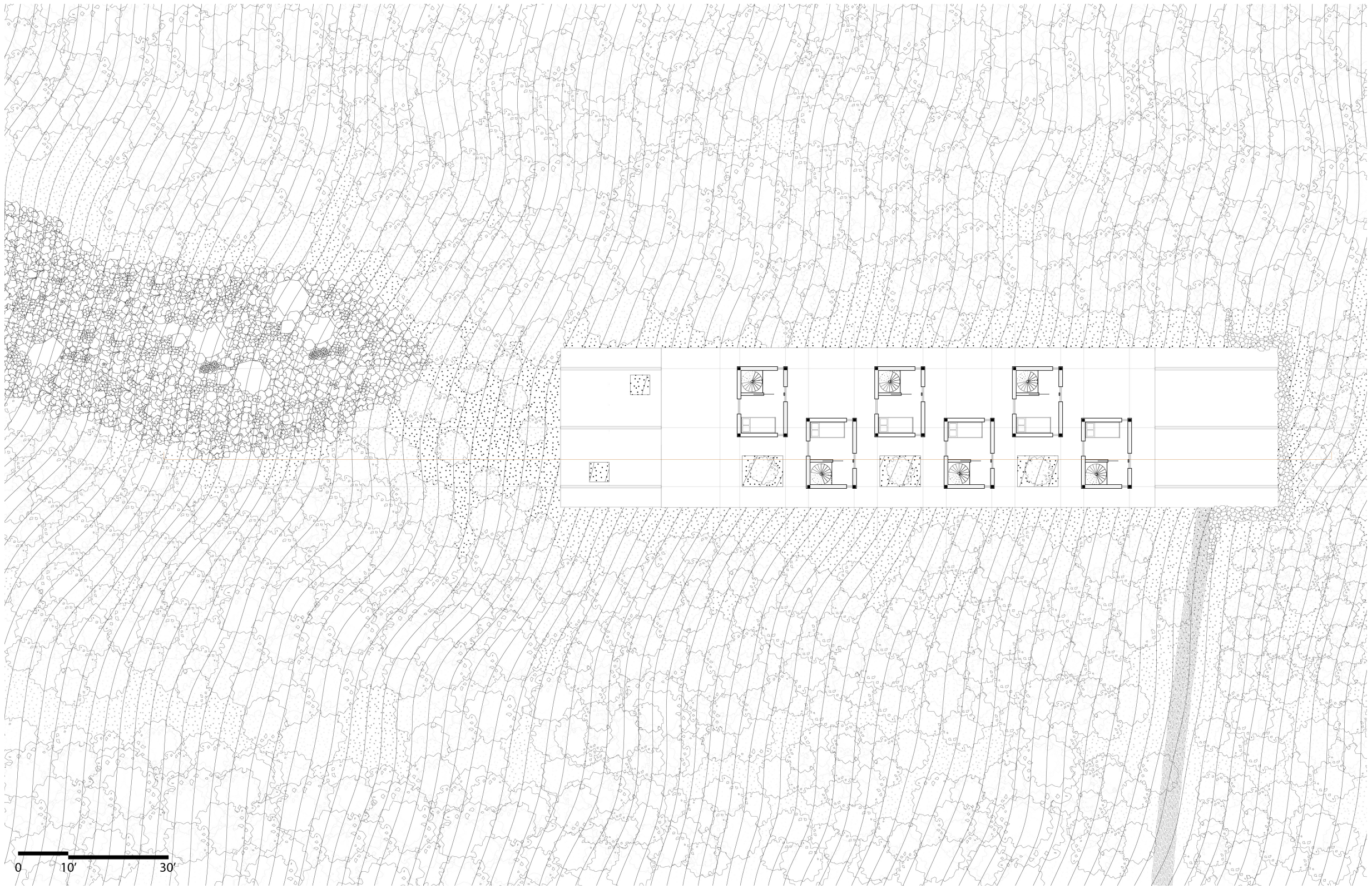
# Rifugio Intervention - Plinth Floor Plan



The Rifugio's horizontal plinth allows you to read the steep change in the landscape and register your position against it, while the programmatic arrangement supports mingling the continuation of experiencescapes in the region. Communal activity is all located here, while storage and services below the plinth contrast with the vertical sleeping towers above.



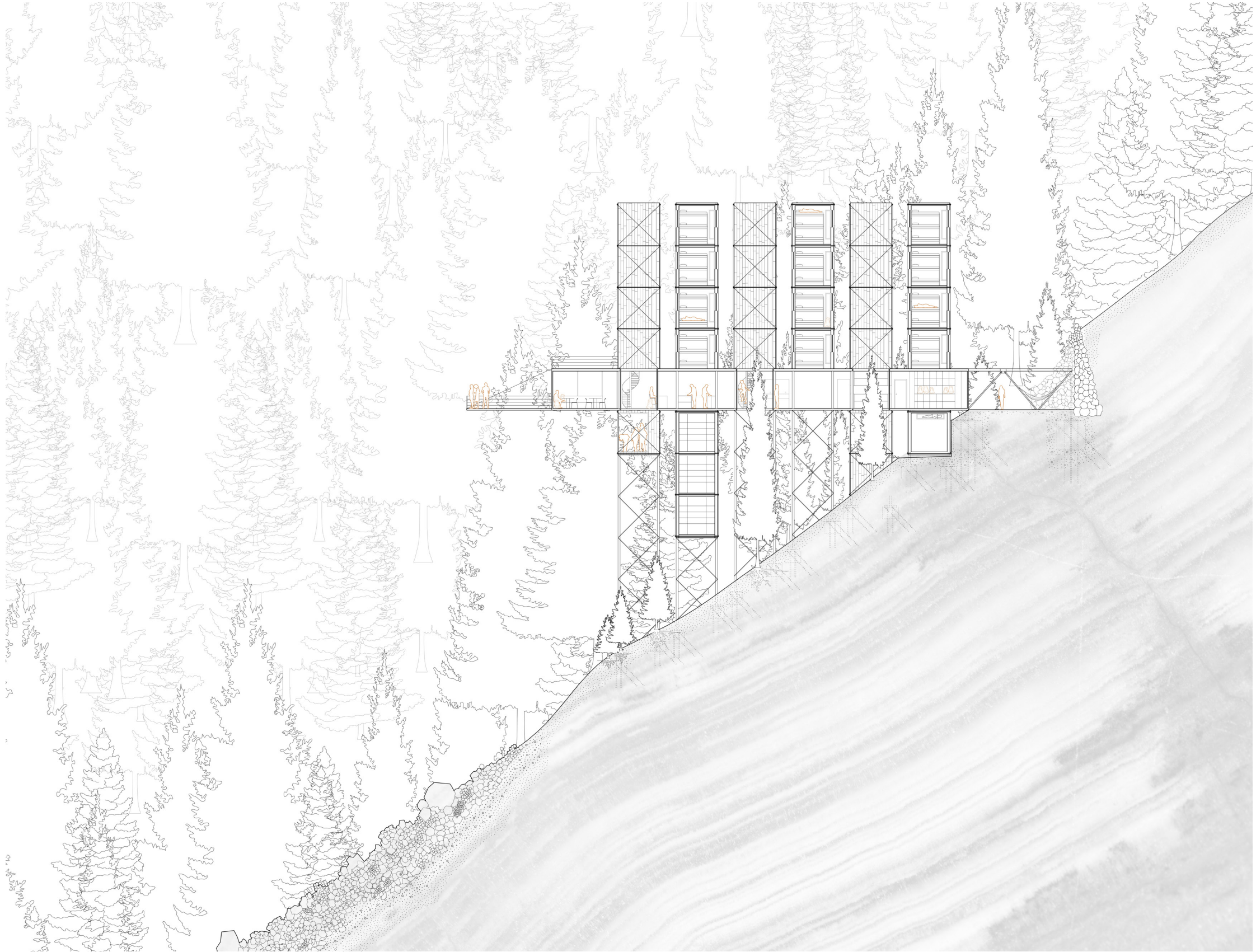
# Rifugio Intervention - Tower Floor Plan



The purposefully small sleeping units encourage visitors to spend their waking hours in the communal plinth below, while also providing a new perspective up in the midst of the trees.



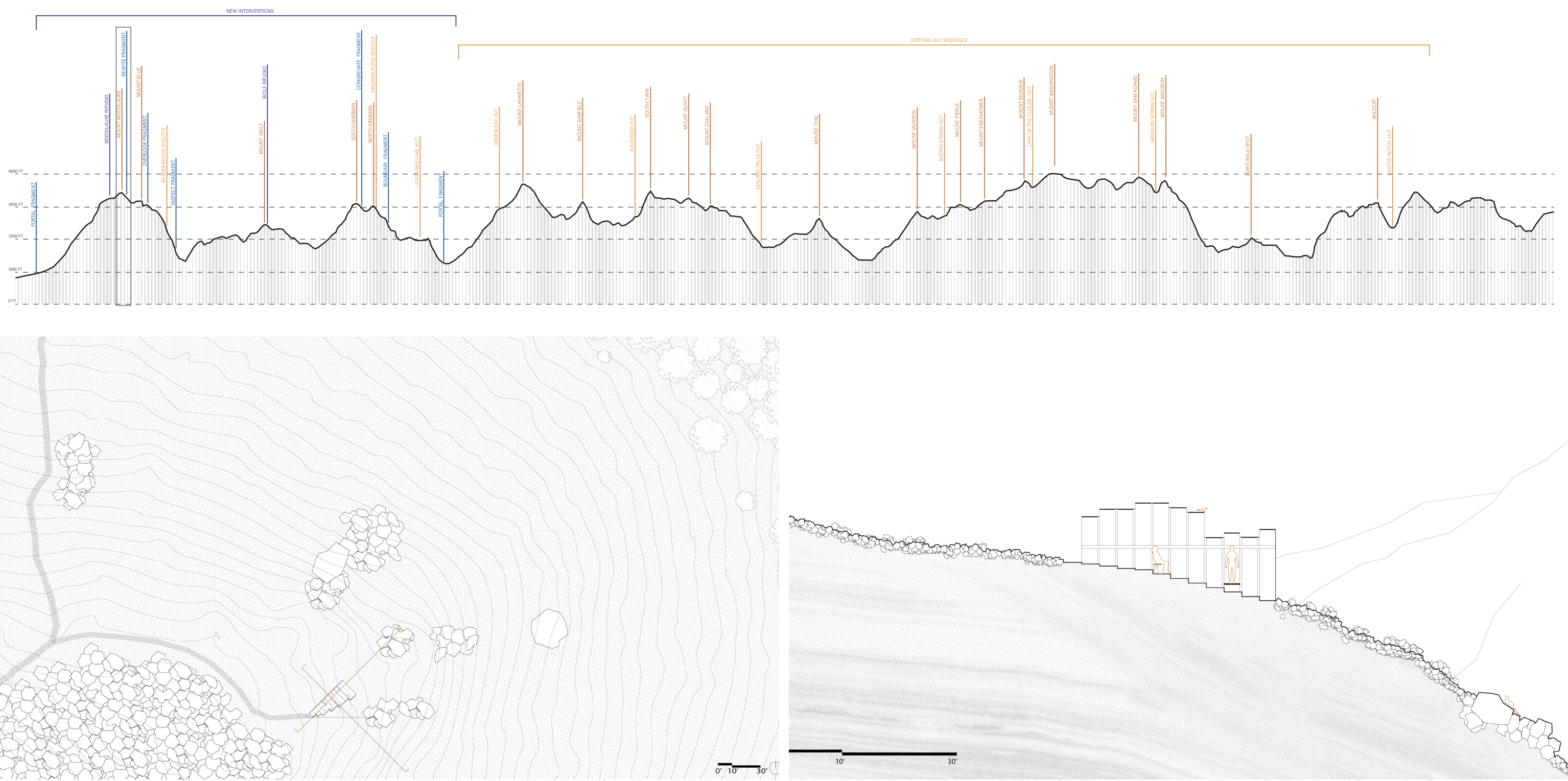
Rifugio Intervention - Section



Voids along the plinth allow the surrounding context to move through the space and a modular construction method creates adaptability for it to grow to meet increasing demand over time.



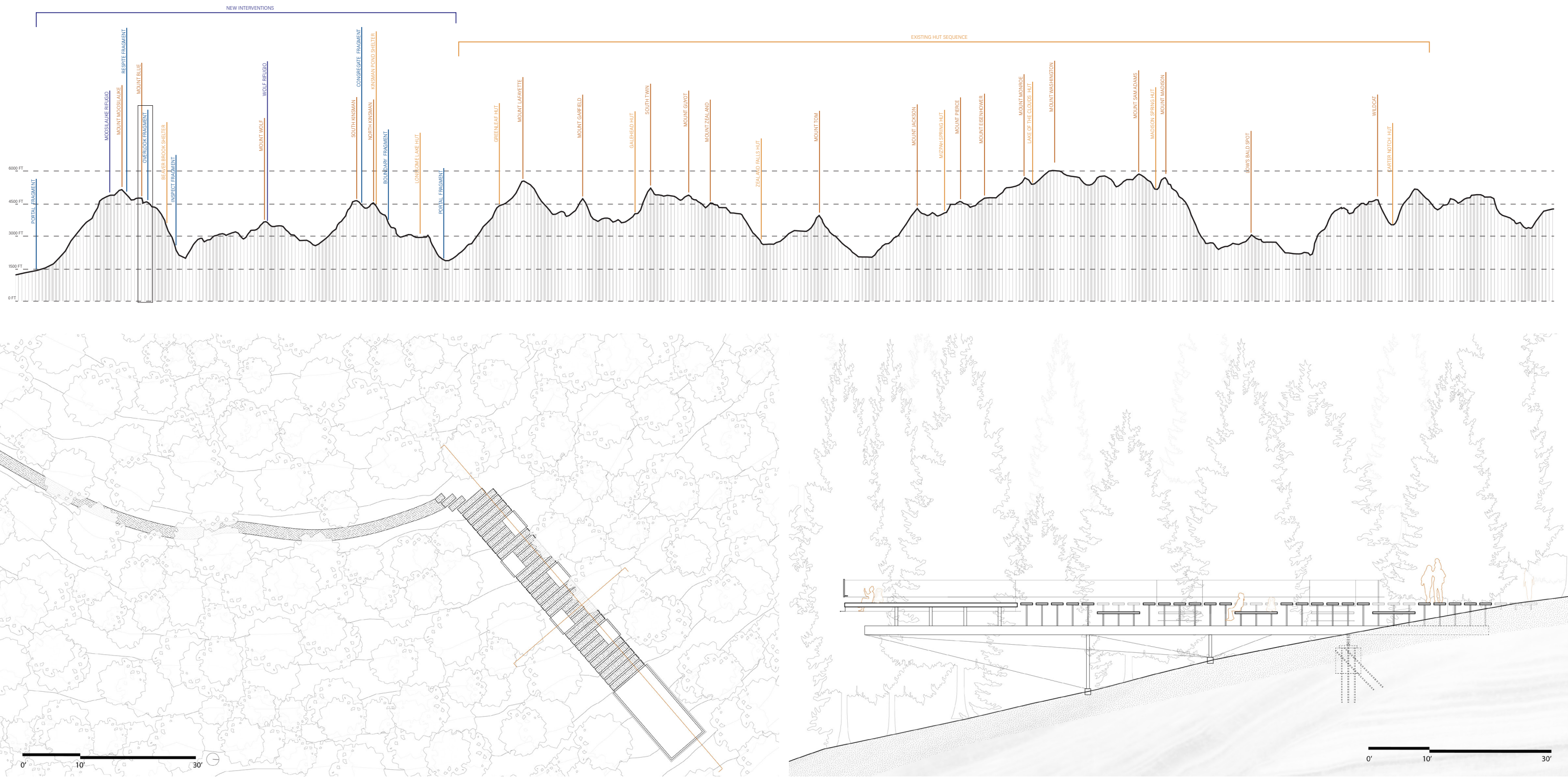
# Fragment Intervention - Respite



The respite fragment is located on the eastern edge of Mount Moosilauke, where it faces the most extreme weather shearing off Mount Washington and where conditions change the most quickly. This site provides respite and shelter as well as framed views of the landscape out of a horizontal cut in the shelter that allows you to read the changing slope you're within from inside the hut and creates interactivity at multiple scales.



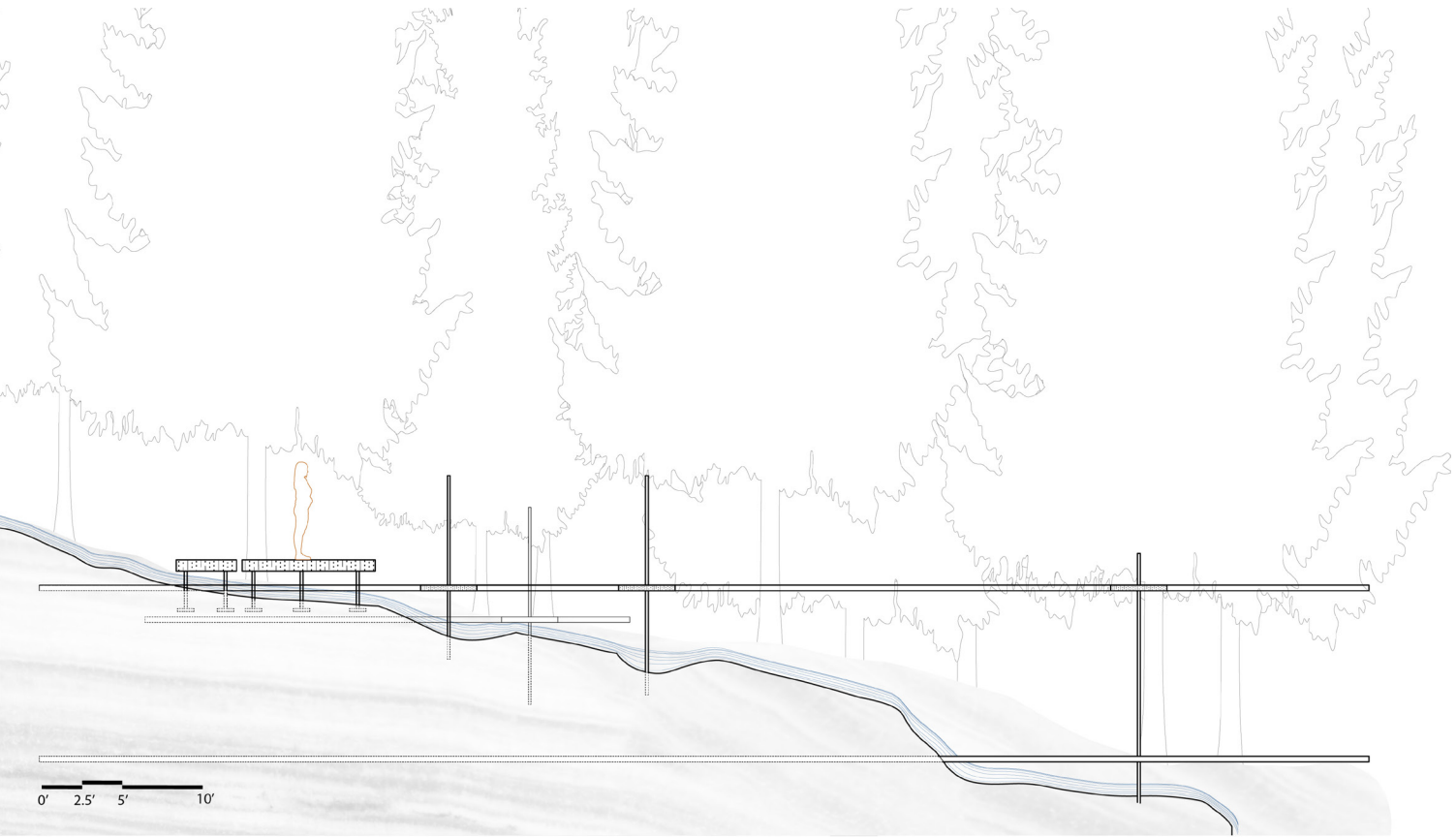
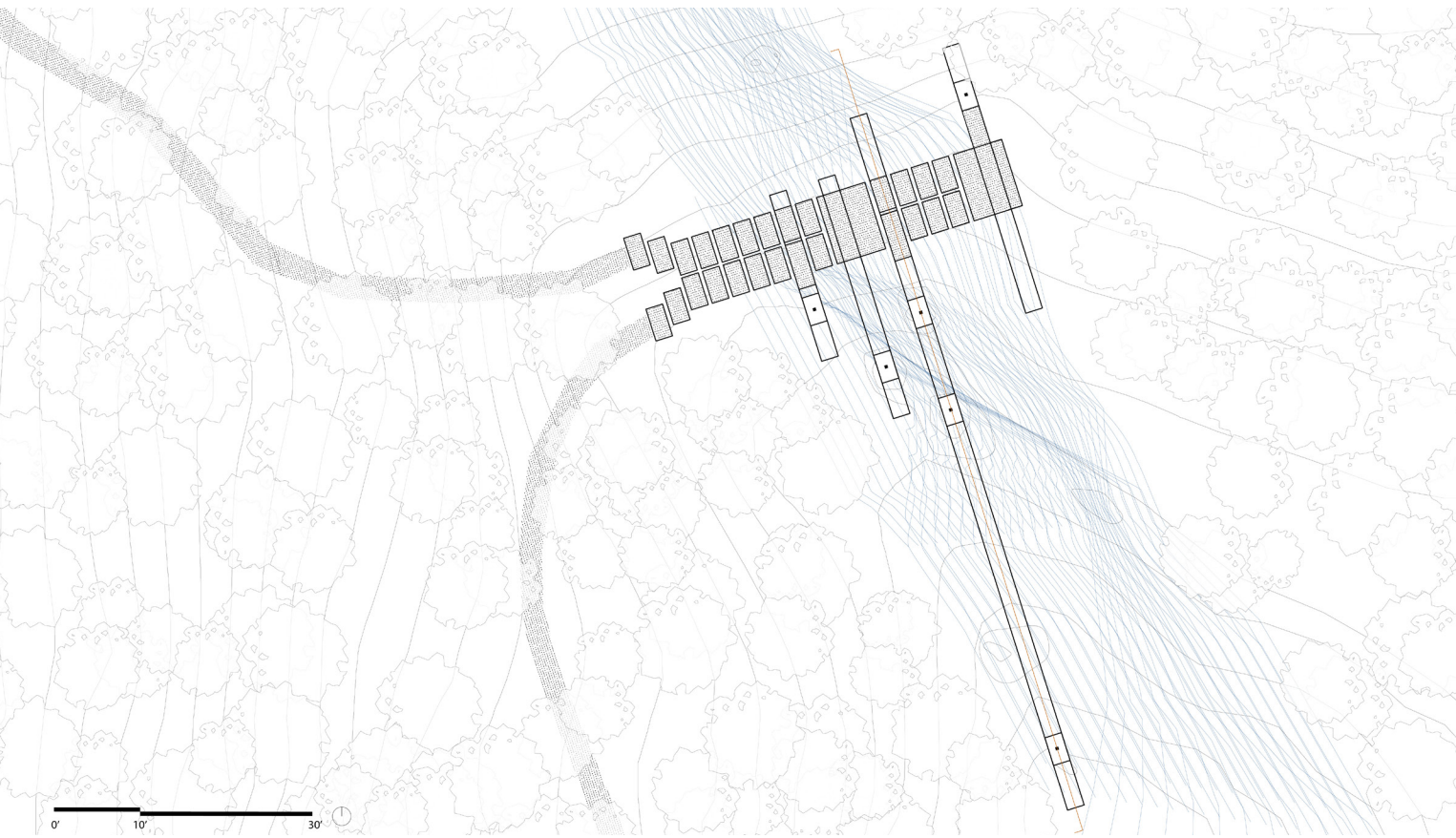
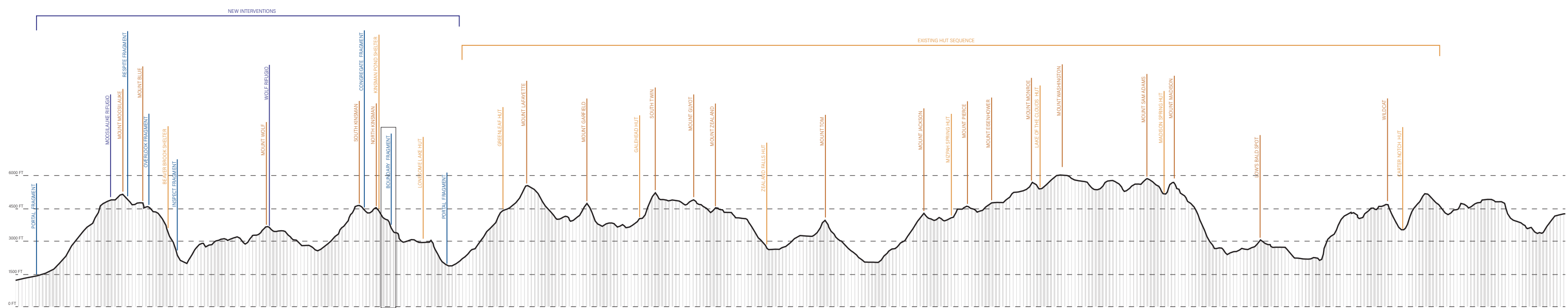
# Fragment Intervention - Overview



The overlook fragment emphasizes the shifting landscape falling away beneath it and becomes a space for observing and sitting with that changing landscape as opposed to passing through it.



# Fragment Intervention - Boundary



The boundary fragment highlights the condition of spaces humans can and cannot enter, or should and should not enter, while at the same time creating a datum for reading the changing water levels and conditions. Furthermore, after a flood, pools are filled to produce reflective surfaces, creating a condition where you can reorient to your surroundings through the reflection, seeing them as they are, not as your imaginary of them. In winter the snow buildup can be read along the vertical datum and icicles build up on the horizontal datum showing the more minute changes in the winter.



Model Photos



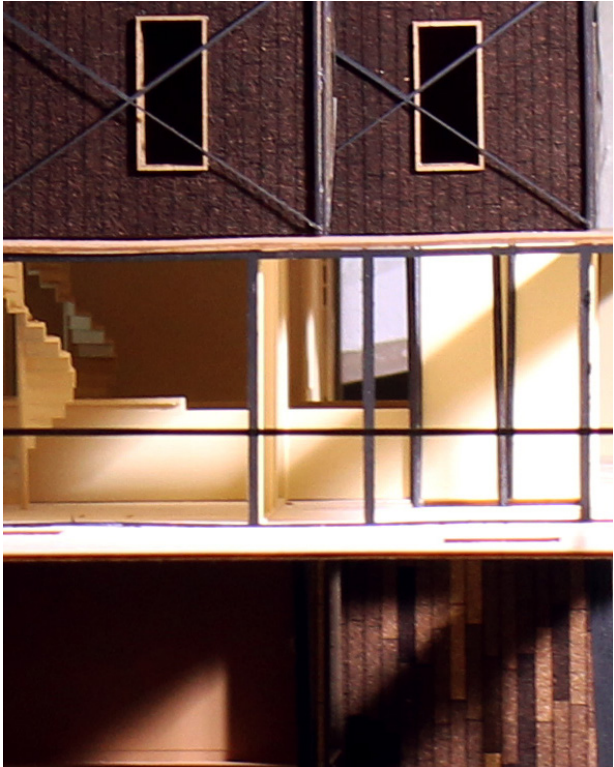
Full Model 3/4 View



Full Model Front View



Facade Ties Detail



Shadow Detail



## Looking Ahead

The thesis project “Reinventing Rifugios” continues the investigation into how architecture and landscape interventions can foster relationships with nature and others in the wilderness that is centered around an ethic of care and stewardship. Through a series of interventions using horizontal and vertical datum to reorient our understanding of place in the landscape, this approach combines a consistent spatial language with a programmatic emphasis on gathering spaces to impart this impact. This is not a conclusive exploration, but rather an initial foray into thinking about how we get people to slow down, observe and learn from their surroundings which I look forward to continue building upon.

**Thank you!**