### Lodgers!

**Reinvigorate Traditional Construction Methods**

Our design proposal emphasizes three main areas to achieve sustainability, efficiency and net-zero: material sources, construction methods, and prefabricated products.

Firstly, we source renewable and reclaimed wood, including typical dimensional timber for 95% of the structure and dried grass for 100% of the facade, for our design. The other 5% of the materials used in the design are the small metal components such as plates and bolts. The intention is to collect the wood on-site and from nearby demolition sites to reduce the carbon footprint in material transportation.

Furthermore, we adopt indigenous shelter and light timber framing techniques that are already supported and accepted in the contemporary design-build process. We adapt indigenous practice, and we believe that further dialogue and engagement with the Native American communities involved will ensure the success of the design.

**Formworks Based on Various Site Conditions**

With computational tools and parametric design strategies, we can synthesize historical ingenuity and adapt it to the contemporary design-build process. We developed a script that can identify the structure's formal expression freely, based on the touch points on the ground and simultaneously, run structural calculations to understand its build-ability.

### Land Stewardship

Honoring the independent people’s harmonious relationship with the land, Fly Ranch has over 10,000 years of stewardship by the Indigenous People. The Numu (Northern Paiute) and the Newe (Western Shoshone) have established their own way to live with the land in Nevada. The tradition below shows only a segment of their likely, crafts, and shelter. We don’t claim expertise in the indigenous practices, and no balance has been forged through dialog and engagement with the Native and the Norse are critical for Fly Ranch to continue land stewardship.

**Indigenous Shelter and Craft of Thatching**

Learning from the past practices — low-tech, low-energy, high community participation.

### Timber Industry and Recycling in Nevada

The timber and logging industry in the U.S. has grown substantially to fulfill the market demand. However, the practices have caused a large portion of native forests and reduced ecological resilience. The large-scale and rapid human intervention shortening the cycle from forest to building to waste, has led to a startling increase in the carbon footprint in material transportation.

**Construction Details**

[Diagram showing typical wood framing detail, axonometric views, and facades connection axon.]