

Thank you Whatcom Housing Authority for the opportunity to present this structure and design for this competition. While the initial design may be basic, the structure is well thought out and there is already a completed build on the big island in Hawaii. Every detail of this structure has been meticulously crafted and thought out to maximize efficiency, sustainability, cost, and clients wishes. This modern and unique accessory dwelling unit (ADU) is designed with the Whatcom Housing Authority's community goals in mind.

The layout encompasses the universal design and aging in place as the guiding principles for this structure. This ADU supports the ADA requirements to allow for easy access throughout the structure and provides an open concept floorplan for easy maneuvering. This allows for the evolving needs of an individual or family to accommodate disability and aging. This dwelling is ADA accessible in all areas.

In regards to the affordability and cost effectiveness for this dwelling the entire gambrel can be cut and assembled in warehouse cutting down on waste and maximizing use of sustainable materials. All plumbing is centralized for cost and streamlined for the build. The ductless mini split provides top of line heat/air conditioner which is highly efficient. The structure is virtually earthquake/fire proof. Highest standard on energy efficiency.

Sustainability and resilience

After slab on grade and ICF install entire framing and window package can be installed in 1 week. Cutting jobsite labor drastically. Closed cell foam insulation in combination with ICF walls will create a bomber structure with virtually zero air leaks. The insulated concrete finish floor cuts down further on excess building materials. The metal roof with pre-installed grooves allows for ease of solar panel installation. Entire home can be built from foundation to watertight in less than a month.

Innovation, Creativity and Aesthetics

House can be sized to fit anywhere depending on location and site restrictions.

Tall ceilings with big window and skylights will provide a huge open feel in a small space. 4' skylight for outside inside feel. It is also easily modified off site in prebuild phases to meet needs of the individual or family. There is a lot of storage above Kitchen/bathroom and bedroom. This space can also be converted into nooks for guests or kids. Bedroom/office is modular and designable for customer. All modular with unlimited possibilities to fit each customer's needs. House can be sized to fit anywhere depending on location and site restrictions. This design is easily modified on or off site in prebuild.

Details of design/build of structure:

Insulated slab on grade

5' tall 16" ICF block wall. R-21.

4x10 Modular Gambrel framing. 2' O.C. R-39.

All windows and skylights modular and able to be placed anywhere desired.

French doors Sensitivity: General Business Use. This document contains proprietary information and is intended for business use only.

Insulation to meet or exceed all city requirements

Full kitchen with island, 36" sink

Full bathroom with walk in shower or shower tub combo. Huge skylight for inside outside feel