

## ESSENCE S-N-S (SHELTER NODE SYSTEM)

**S-N-S**, (pronounced “Essence”), is a pre-fabricated ‘Shelter Node System’ that contains the essence of service elements required for a basic ‘autonomous’ residential shelter. It provides those aspects of accommodation that usually require specialist expertise and skilled labour to construct or integrate into a house. A modified shipping container is proposed for a prototype **S-N-S**.

Easily transportable in size, the **S-N-S** includes a bathroom at one end and a kitchen at the other. During transport the central space is used as storage for standardised components that are assembled into additional enclosure - such as pre-finished, insulated panels for floor, walls and roof, windows, screw pile footings as required and solar cells. Following deployment, a water bladder fills the central space as a water tank of about 17,000 litres. Additional water tanks can be added to the ends to suit the storage needs of the location.

The base of the unit contains mechanical systems for grey water treatment, water pump, a composting toilet and solar power batteries. Wall light points, general power outlets and data points surround the **S-N-S** for servicing of attached spaces, avoiding the need for further reticulation of any services.

It is proposed that a recipient of **S-N-S** should assist with the less skilled construction of the enclosure, from systems and materials offered or materials of their own choice. Expert tuition and supervision could be provided.

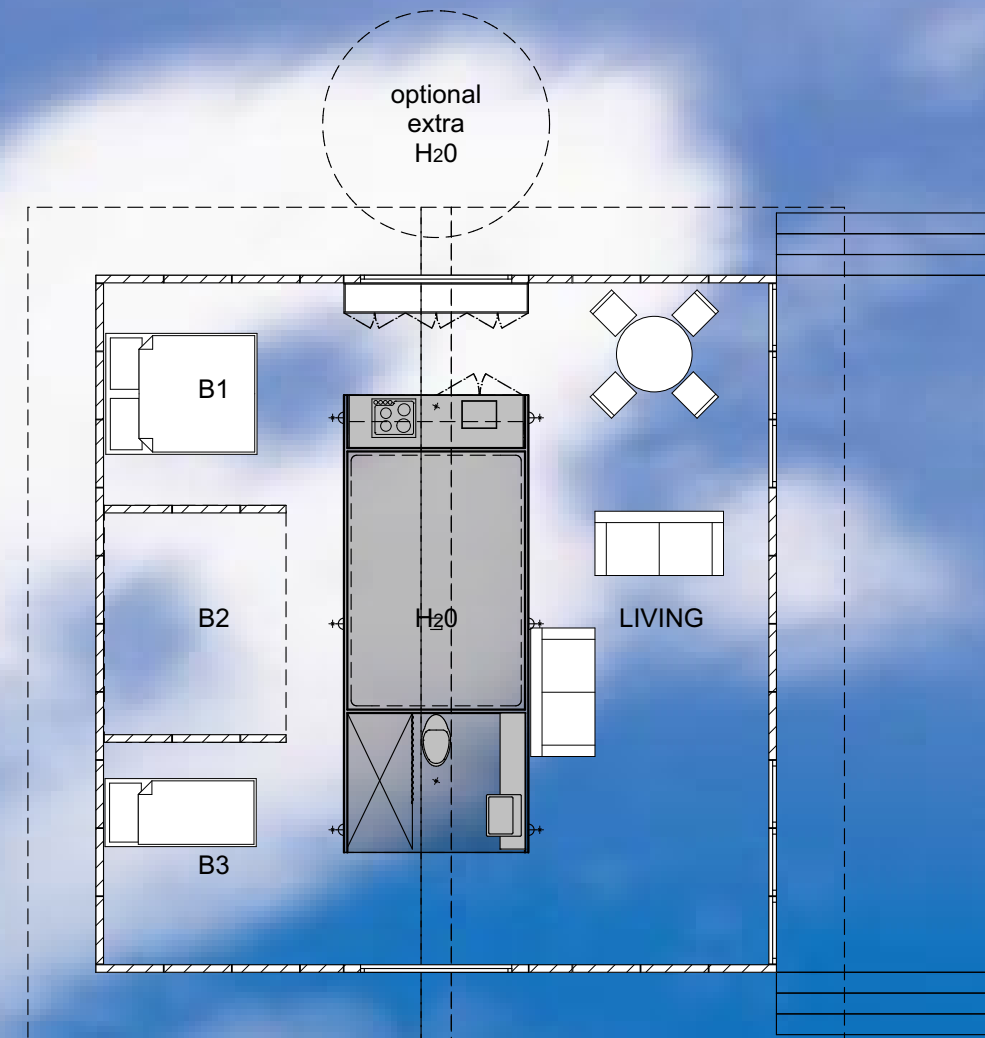
Social harmony is fostered by involving the inhabitants in the construction of their own house, “a housing program should not be carried out for people, but by people.” (Jan Gudmand-Hoyer). Inhabitants will develop a sense of ownership and pride in their place of residence.

Varying designs for the envelope around the **S-N-S** give flexibility to users and cater for individual expression. Envelopes as simple as tent attachments similar to modern camper trailers, to single sided bed-sits, three bed space dwellings and larger extruded forms and stacked options could all be built.

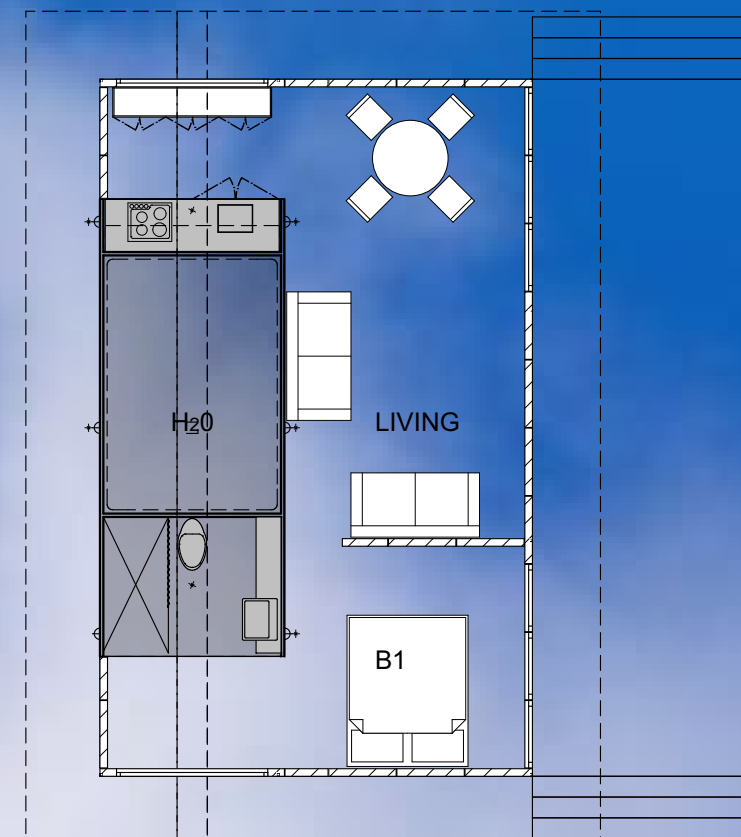
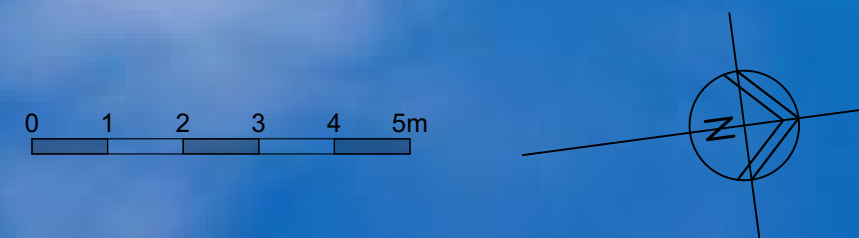
The cost of an **S-N-S** module could be in the range of \$40,000 to \$50,000 and attachment enclosure options could be in the range of \$10,000 for a tent-like attachment to \$70,000 plus for a three bed space attachment. Mass production of the **S-N-S** modules would reduce costs, as would mass production of panel systems for attached enclosure elements. Use of re-cycled components for attached enclosures could also reduce costs.

Current planning rules which may be challenged include energy rating requirements – (not required when **S-N-S** dwellings only use their own solar power), approvals for grey water recycling and composting toilets, pre-certification of engineered services inherent in the **S-N-S**, and training and certification requirements for non-skilled owners to be involved in the construction of attachment shelter.

S-N-S 'Shelter Node System'



S-N-S with attached 3 bed space enclosure option



S-N-S with attached single bed space option



S-N-S / 3 BEDROOM ENCLOSURE



S-N-S / SINGLE BED ENCLOSURE



S-N-S / TENT ENCLOSURE