

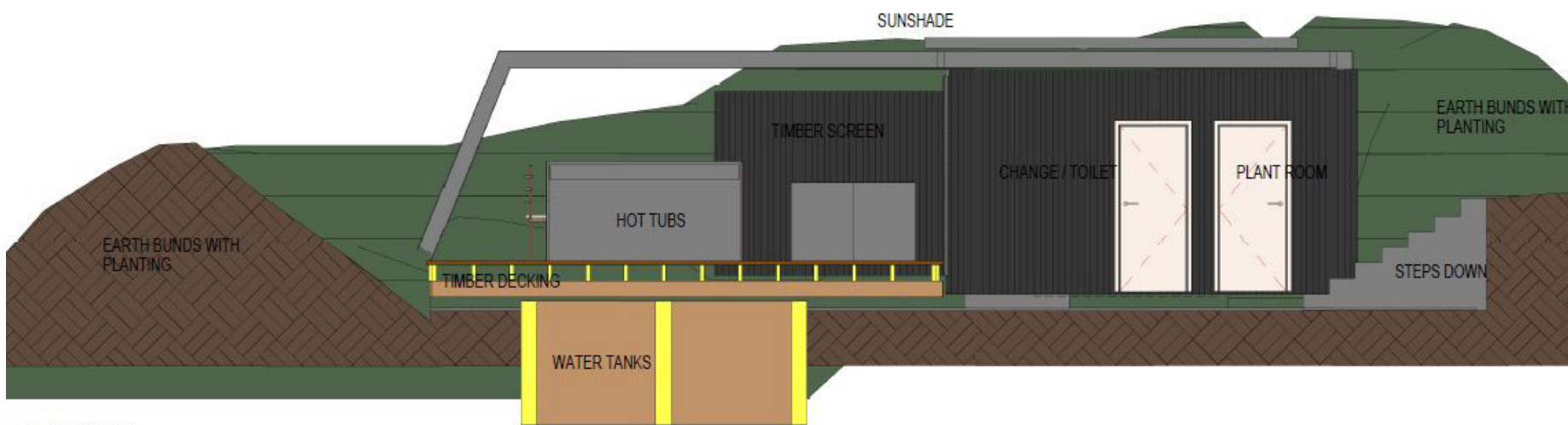
Legend

- 1: Base transfer, storage and car parking
- 2: Hot tubs using biomass energy
- 3: Wood-fired hot tubs
- 4: Sustainable energy and education Centre
- 5: Visitor accommodation and hot tub units
- Grades 1 - 3 cycle trail network within site

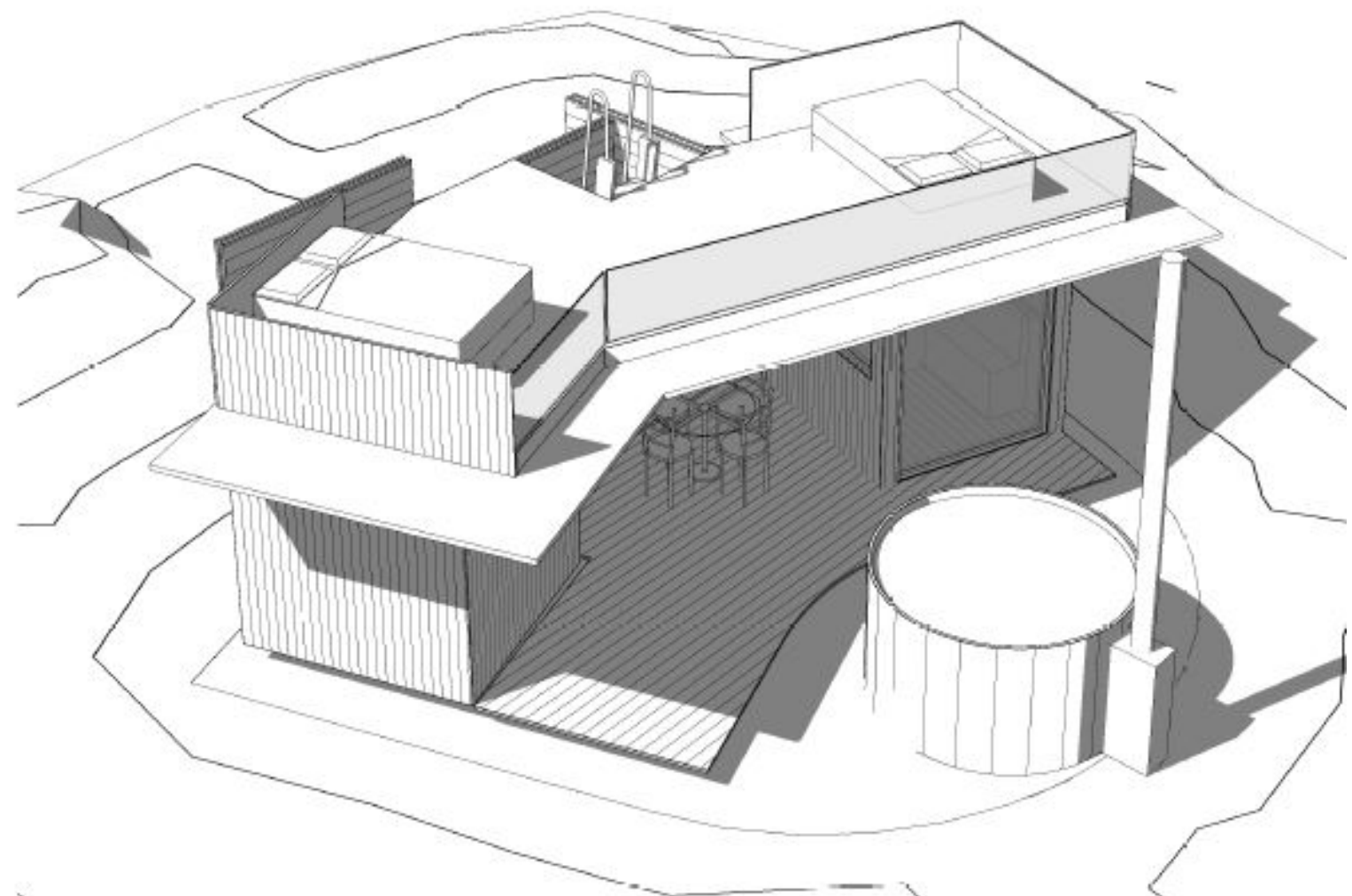
Energy Efficient Buildings



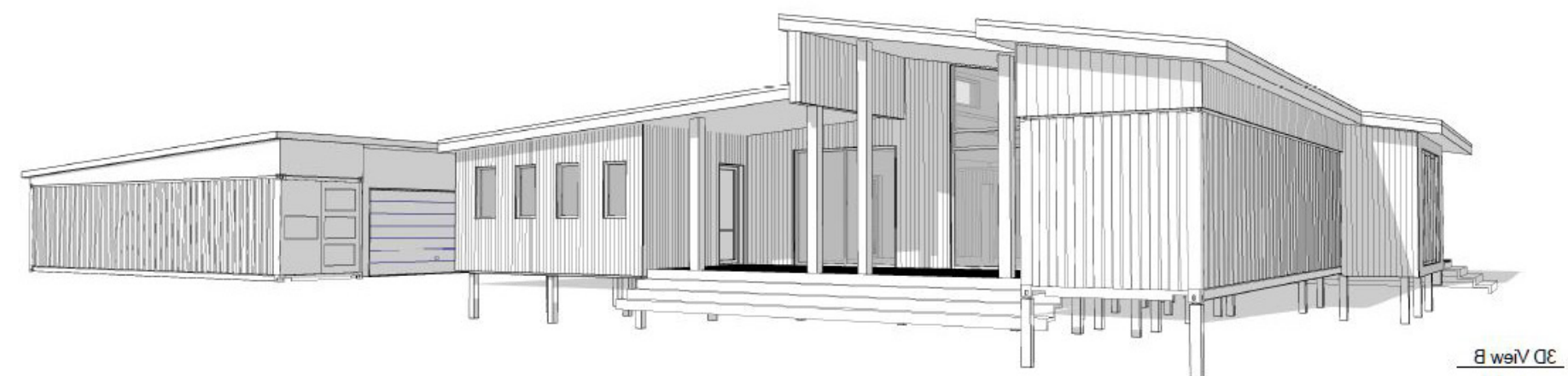
1: Base transfer, storage and car parking



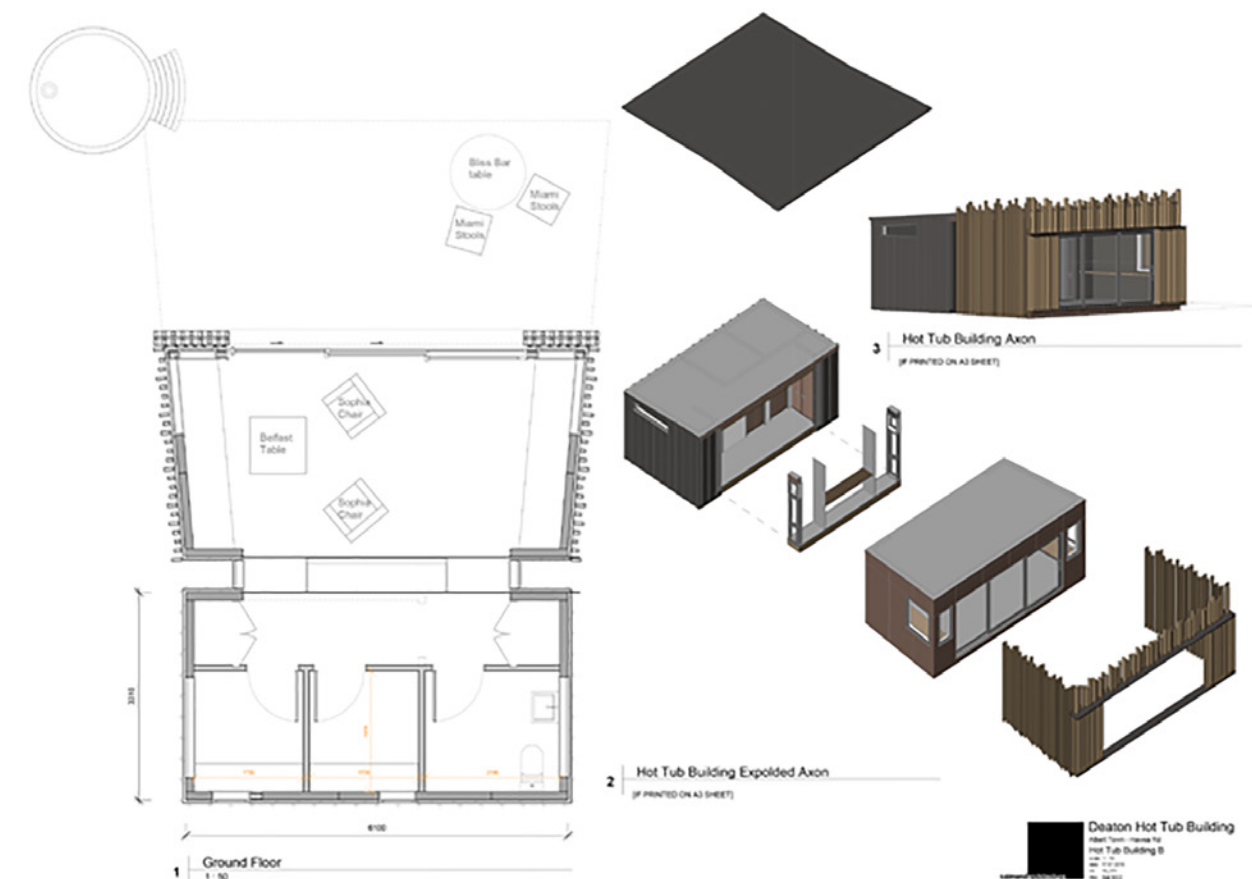
2: Ten headland hot tubs



3: Eight ridgeline accommodation/hot tub units



4: Sustainable Energy and Education Centre



5: Seven modular accommodation/hot tub units

LandEscape Masterplan
CAMPHILL ROAD



vivian+espie
resource management and landscape planning

SOUTHERN LAND
URBANYING | PLANNING | LAND DEVELOPMENT

AW
Architectural Works

salmond architecture

Transportation



YouMo electric bike rentals



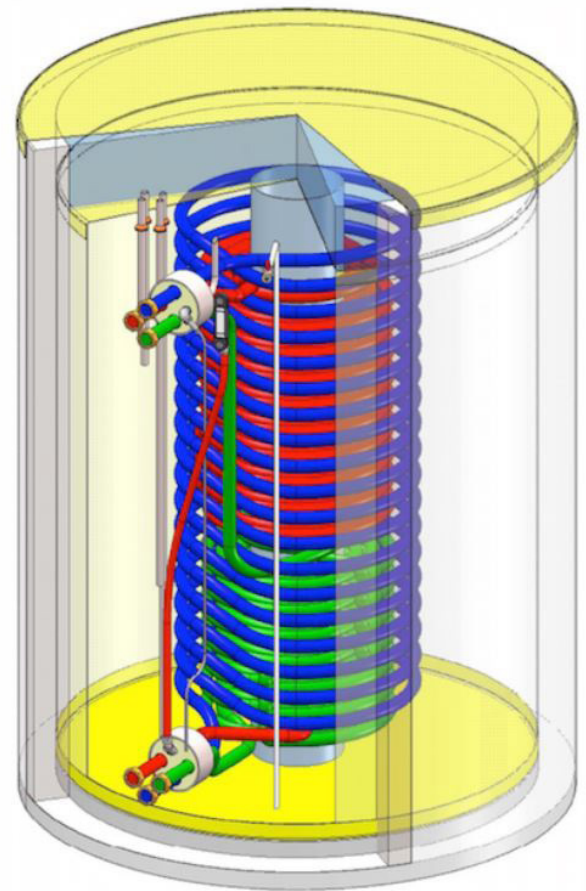
Jeepney Electric Vehicles
for on-site transfers



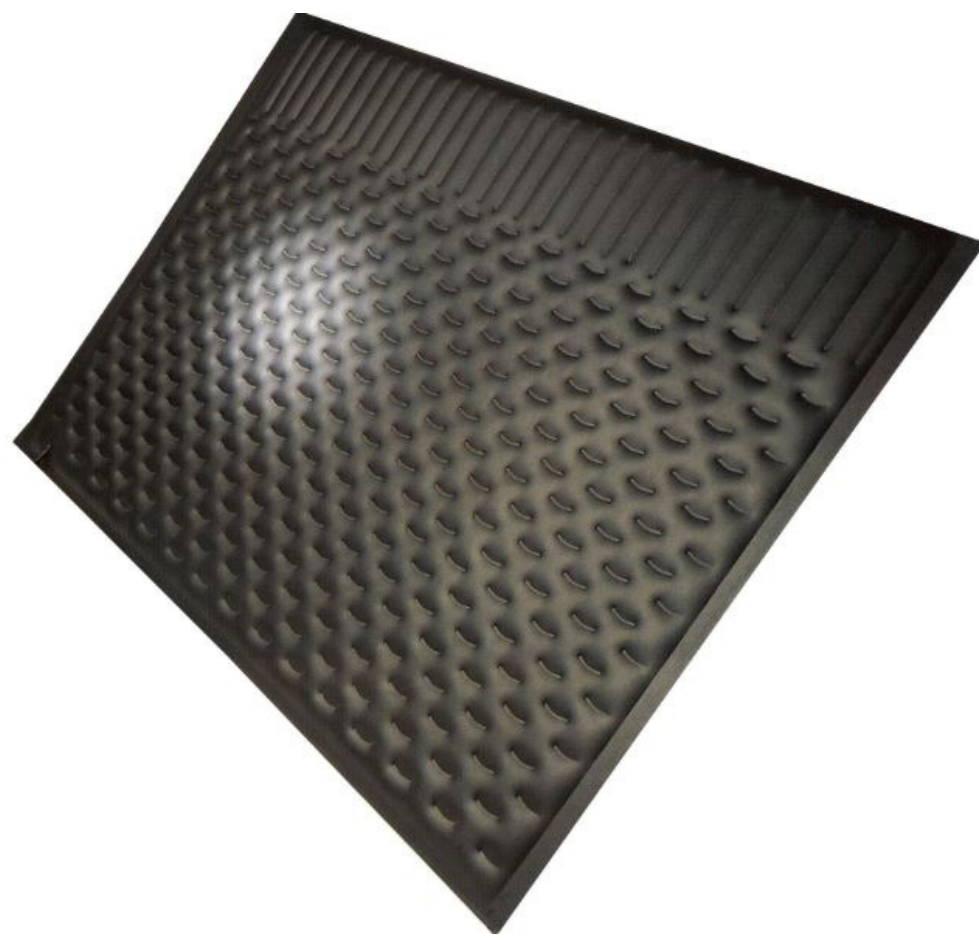
Mini-bus shuttles to and from Wanaka
and surrounds



Renewable Energy Systems



1: Hasse Tank: Thermally Stratified Buffer Tank
(Made in Germany)



2: Thermocell: Solar Thermal Collector Array
(Made in New Zealand)



3: Hargassner Wood Gasification Boiler
Fuelled by wilding conifer sourced woodchips
(Made in Austria)



4: District Heating Scheme: Underground Pipes
(Made in Germany)



5: Hot Rot In-Vessel Thermophilic Composter
(Made in New Zealand)



6: Solar Photo Voltaic Power Generation



7: Bambooloo Waterless Composting Toilet
(Made in New Zealand)



8: Solar Lighting

Passivehaus Design Principles

- 1. **Thermal Insulation:** All opaque building components of the exterior envelope of the house must be very well-insulated.
- 2. **Passive House Windows:** The window frames must be well insulated and fitted with low-e glazings filled with argon or krypton to prevent heat transfer.
- 3. **Ventilation Heat Recovery:** Efficient heat recovery ventilation is key, allowing for a good indoor air quality and saving energy.
- 4. **Airtightness of the Building:** Uncontrolled leakage through gaps must be smaller than 0.6 of the total house volume per hour during a pressure test at 50 Pascal (both pressurised and depressurised).
- 5. **Absence of Thermal Bridges:** All edges, corners, connections and penetrations must be planned and executed with great care, so that thermal bridges can be avoided.

Meet the Deatons - the Local Family behind LandEscape

Juliet, Rik, Spencer, Stirling and Bayne have had the joy of living in the wonderful town of Wanaka since 2008, but our connection to and love of the area began many years before. My mother Jean Bayne lived and worked at the Hermitage at Mount Cook for a period and liked to tell of how she used to go tramping and climbing with her friend Ed Hillary. Then my brother Paul became an Alpine Guide at Mt. Cook and, later, head guide for Harris Mountains Heli-Skiing here in Wanaka. In 1991 we discovered and purchased the stunningly beautiful farming property we now call LandeScape.

Rik and I had a very strong and long held interest in renewable energy systems and technologies. Rik in particular is deeply knowledgeable on these systems, on energy efficiency in the built environment and the philosophies underpinning them and will talk to anyone about these topics on the slightest provocation for as long as they will stand still and listen ... so be careful if he corners you and gets started! He describes himself as an energy evangelist, although not, he hastens to add, an energy martyr. During a wonderful family touring holiday in Europe in 2013/14 we discovered many exciting new renewable energy innovations and initiatives taking place across the European continent as we visited demonstration centres such as The Centre for Alternative Technology in Wales and The Nordic Folk Centre in Denmark and at vast trade fairs such as InterSolar in Munich, EcoBuild in London and World Sustainable Energy Days in Wels, Austria.

We returned home to our stunning property with an arsenal of knowledge on these energy systems and an unshakable drive to provide both our local community and the visitors who are drawn to this unique place from around the globe, with a fun, relaxing and informative travel experience set within an infrastructure so based and with a strong educational dimension as its background philosophy and ethos. A chance for people to immerse themselves in our stunning natural surroundings and perhaps also learn a little about the renewable energy based systems powering their experience. LandeScape Wanaka, our 300 acre farming property, is without doubt the perfect setting to create this place where visitors can truly 'lose their mind and come to their senses'.

A bold vision in the making, we begin with our first stage e-bike offering which will be quickly followed by wood-fired hot tubs set in spectacular locations about the property. In short order these will convert from on-board fire boxes to a sophisticated underground integrated district heat and power micro-grid energised by solar photovoltaics, solar thermal, heat recovery from an in-vessel thermophilic composter, a wood gasification boiler and the efficient storage, use and re-use of energy and heat. All buildings will be constructed to, or close to, Passiv Haus energy efficiency standards that will render them as PlusEnergy buildings. Flushing toilets will be eliminated and water will be utilised mindfully and reused in irrigation. Agricultural production will continue on the farm following organic and Permaculture farming principles and with a strong emphasis on Local-for-Local food production.

We will then work towards LandeScape becoming a full scale tourism development operating as a true sustainability demonstration centre along the lines of those we visited in Europe. No eco-babble or greenwashing here, just real world solutions to very real world extant civilisation level problems.

We are very excited to invite you to visit LandeScape Wanaka, find out more about our vision and follow our journey from passionate beginnings to the renewable energy tourism heart of New Zealand.

Juliet Deaton ... Wanaka, New Zealand



Future Aspirations



Tiny house village



Vertical produce garden



Fruit and nut orchard



Garden market

