

# Hall's House

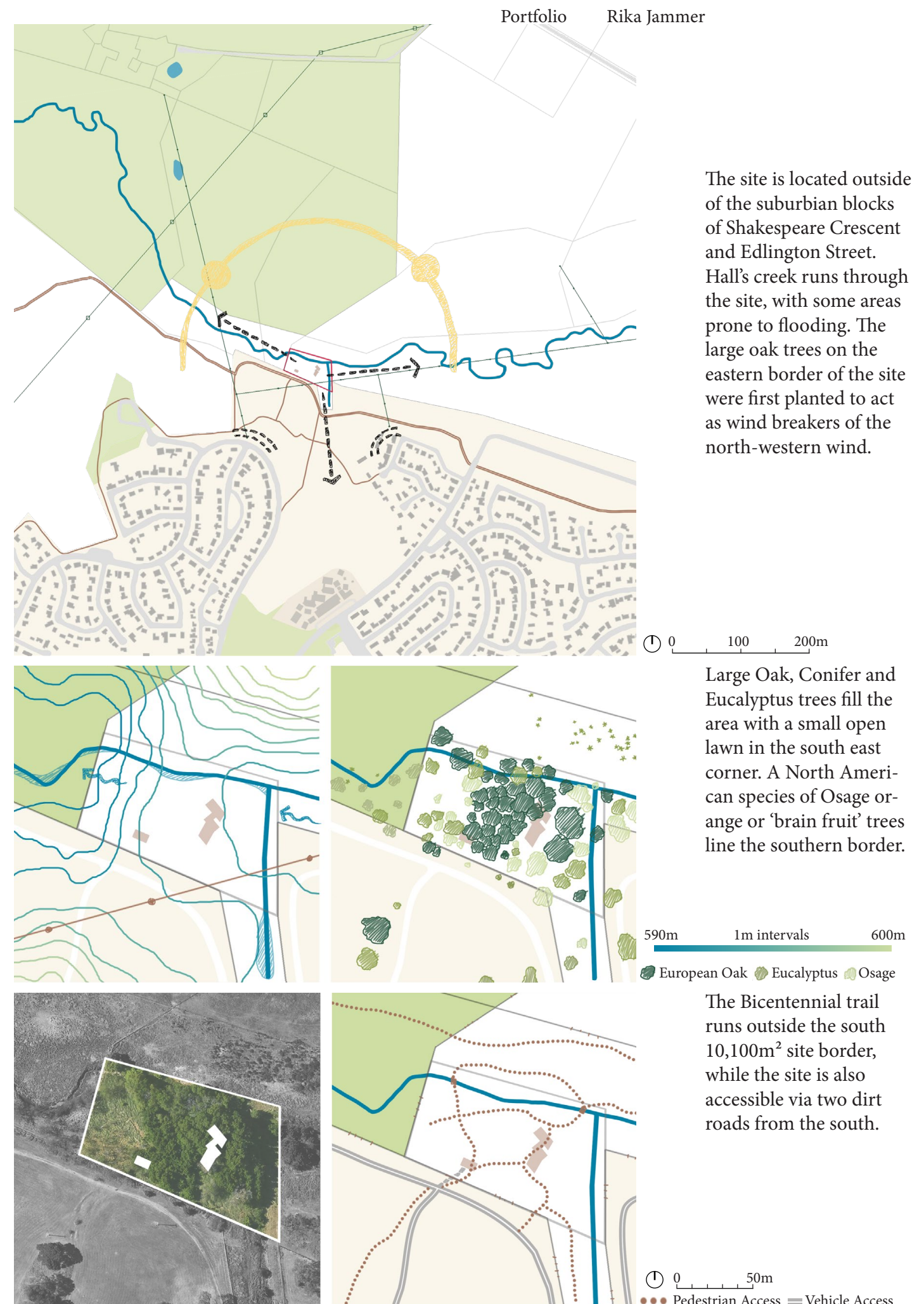
## Original Project

Completed 2022  
Original project pursued independently  
All original architectural graphics and designs

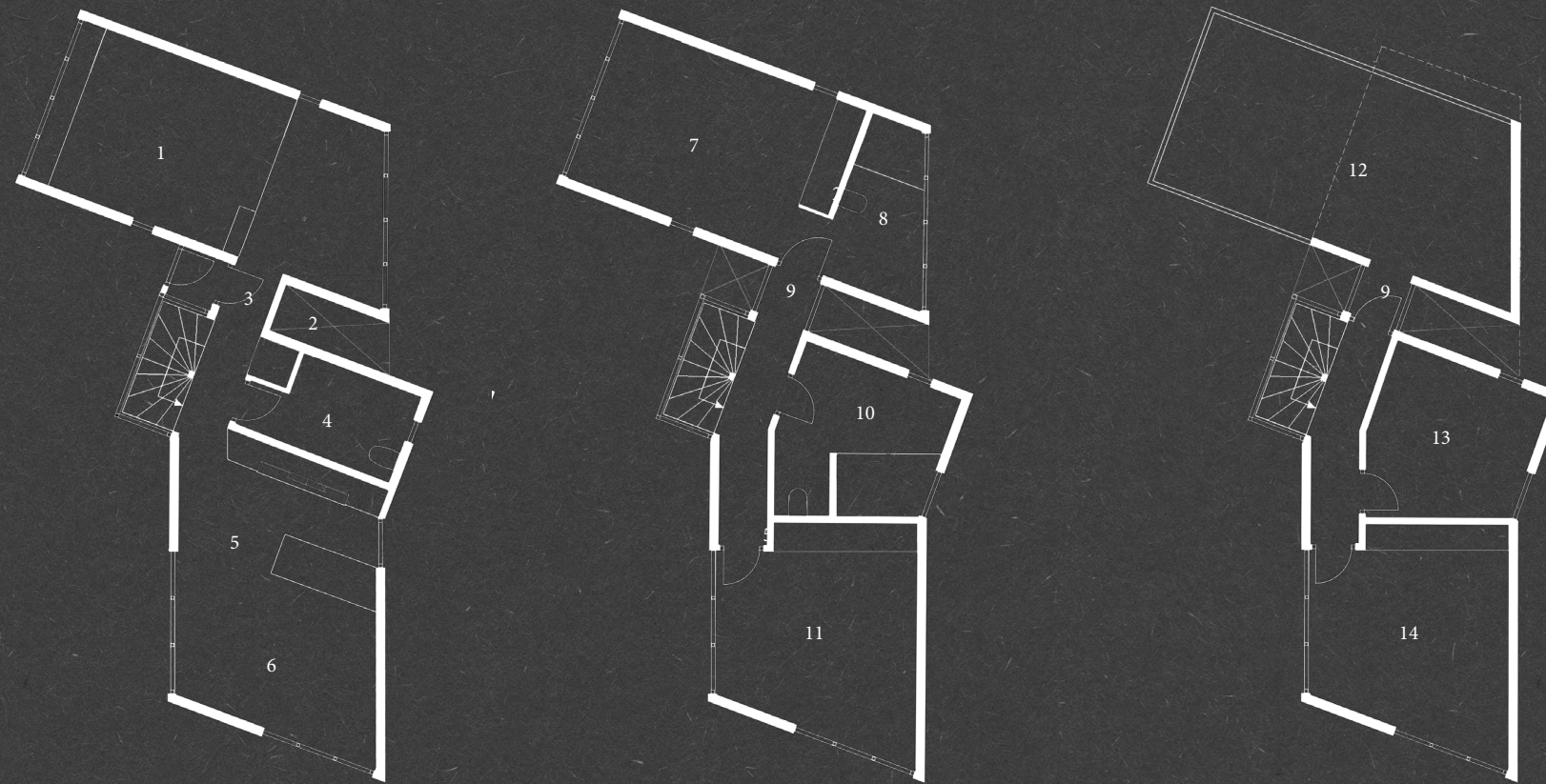


In 1984, British settler Henry Hall was granted 1400 hectares of land on what is now the Canberra suburbs of Charnwood, Dunlop, Fraser and Flynn. The family of 14 had a homestead on the property named 'Charnwood' after their land in Leicestershire, England. They are known to have planted now heritage listed Olive and Osage Orange trees (native to South America) on the site, the buildings were demolished in the 1970s with only the foundations remaining today.

**Project Brief:**  
The new house to be built on the original site of the Hall homestead is to have 3 bedrooms, an office and a kitchen and living area fit for a growing family. The design concept should allow the experience of the house to incorporate its surroundings, aiming to preserve the surrounding trees and incorporate them into the experience of the house.







1:150 on A4

- Sunken living room 1
- Garden strip & green wall 2
- Entry 3
- Bathroom & Laundry 4
- Kitchen 5
- Dining room 6
- Master Bedroom 7
- Ensuite 8
- Bridge over garden below 9
- Bathroom 10
- Bedroom 11
- Rooftop Terrace 12
- Office 13
- Bedroom 14

The living room and master bedroom are flooded with light through the west and east glass facades at sunrise and sunset. The full height glass windows encasing the winding staircase provide a view of the close surrounding oak trees from along the entire hallway.

The building has a steel base frame, with precast concrete walls with Colourbond cladding for the upper two floors. The southern end of the ground floor has double brick walls, using some of the original Canberra bricks used in the Charnwood homestead. All windows are double glazed and the walls, floor and ceiling is fitted with wool insulation.

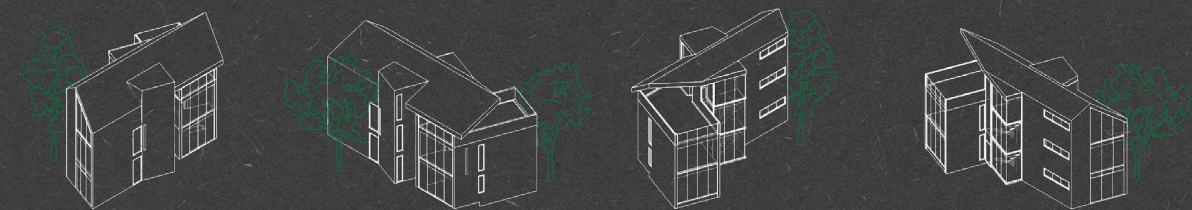
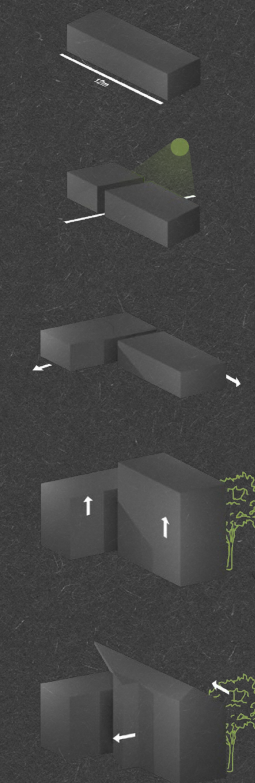
Ground floor kitchen, dining and living areas at 12 x 4m, all have full length glass door access to a lawn and terrace.

A horizontal cut 1m wide is strewn between the public and private living spaces, allowing sunlight to reach private area windows at sunrise and sunset.

The walls are extended to optimise views to far over the creek and treeline.

Two floors are added to compete with the neighboring 20m high trees, fitting three bedrooms, bathroom and office.

As a glass facade winder staircase extends out shielding the genkan entryway. The saltbox roof provides partial sun and rain cover over the rooftop terrace.







SW



SE



NE



NW

0 1 3 5 10m

Rendered view of entryway, staircase and open 1m wide cut between the public and private living spaces on the ground floor, allowing sunlight to reach deep into the house.



Rendered interior view of kitchen and dining area, with genkan-style entry area behind the glass encased winder staircase.





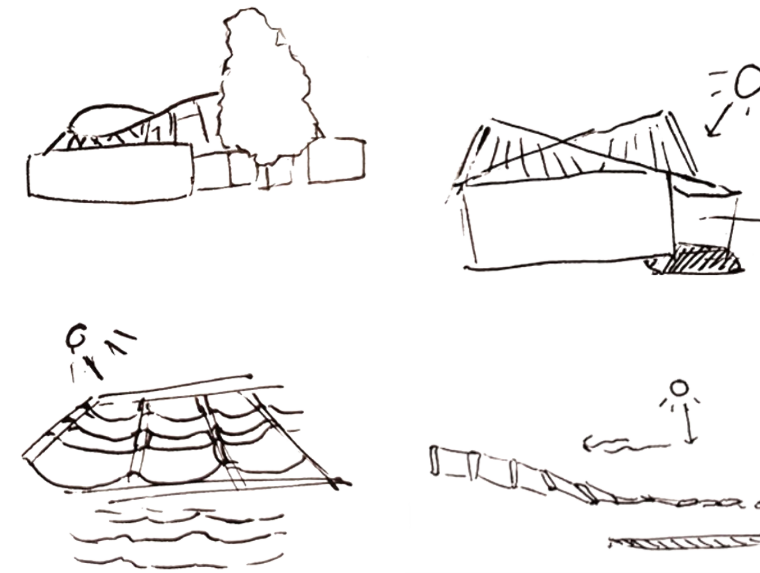
# Childrens House

## Competition Entry

Completed as entry to Kaira Looro Humanitarian Architecture Competition in 2022.

In Sub-Saharan Africa, child malnutrition affects on average every 1 in 5 children, in Senegal the poor economic and health infrastructure makes it hard for families to access food and healthcare. In the village of Baghere on the banks of the Tanaff valley in the Seidhou region of Senegal, 1 in 3 children is suffering from malnutrition, bringing the mortality rate higher than the national average. The 'Children's house' is to be built on a local site that aims to provide this community with nutritional supplements, paediatric appointments, urgent care, hospitality, and a program to train community nurses.

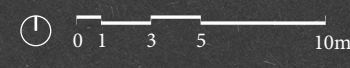
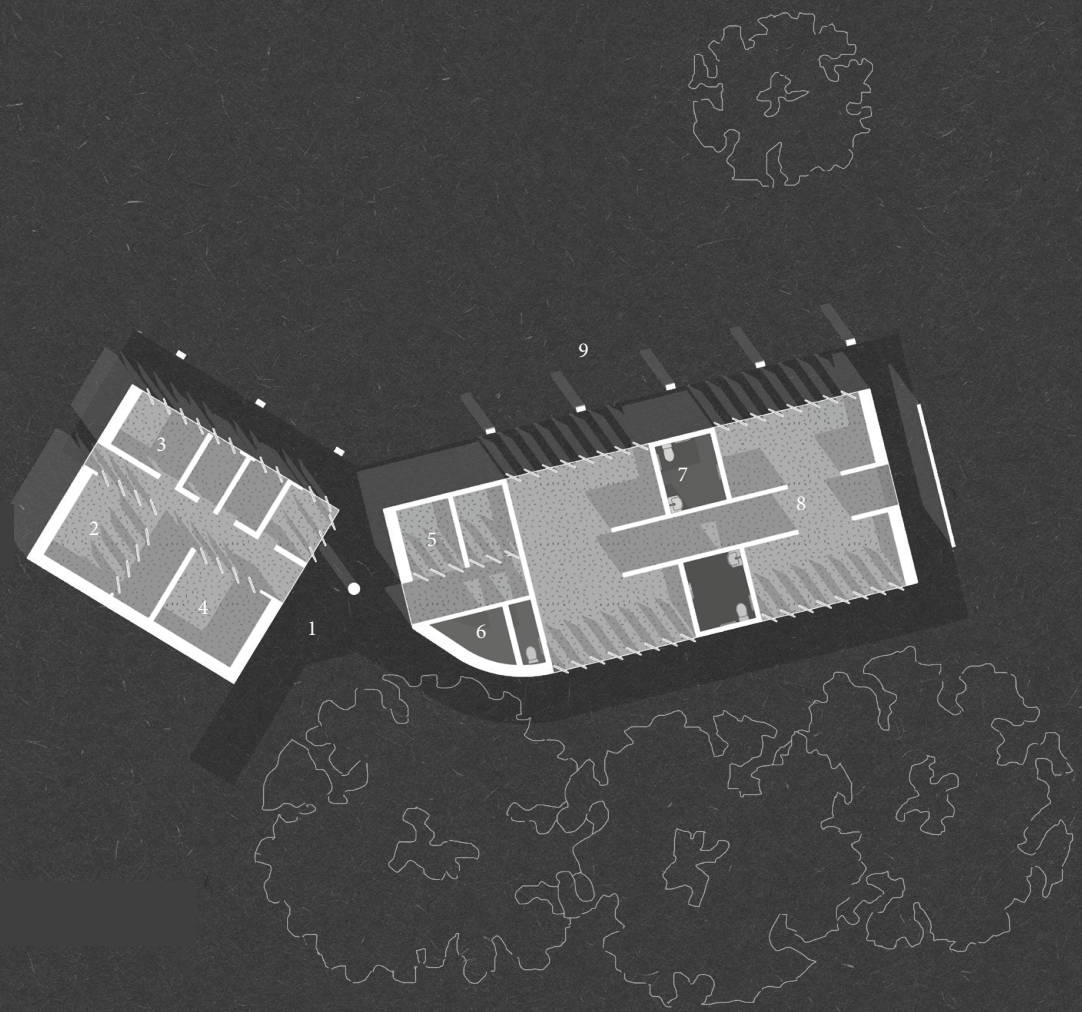
With a construction budget of €30,000, this design should use locally sourced and sustainable materials to provide a rural community with pediatric healthcare services in a humanitarian context.



The initial inspiration was Toshiko Mori's Cultral centre in Northern Senegal, the organic form of the roof inspired the wood shade structure to run through and connect two seperate buildings, in this way it shields the interiors from harsh sunlight from two different angles. The buildings positioning along the southern site boarder utilises the treeline to provides shade and wind protection from the harsh sun shining from the south.







- Entry 1
- Administration 2
- Doctors Offices 3
- Classroom 4
- Examination room 5
- Storage 6
- Bathroom 7
- 8-Bed Medical Ward 8
- Vegetable Garden 9

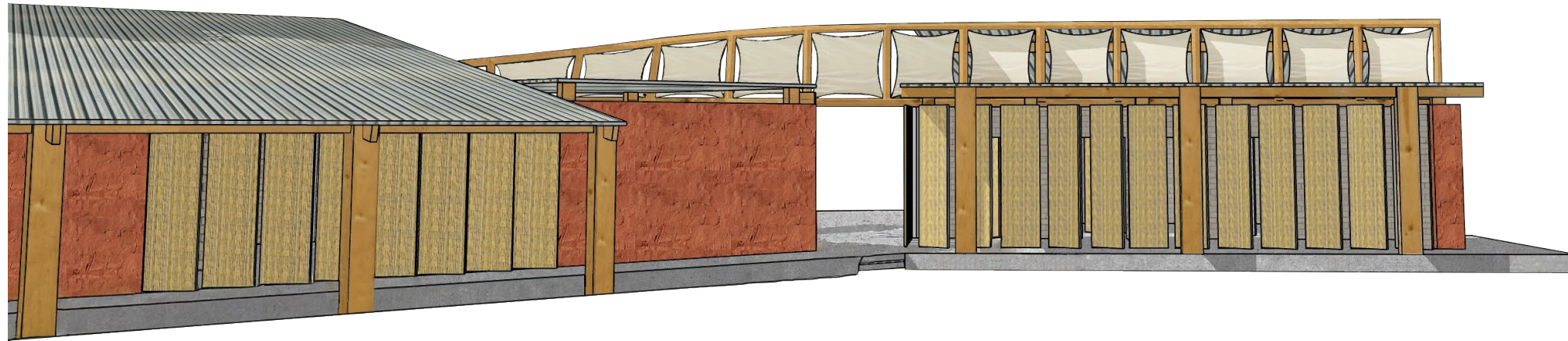
The building housing offices and a classroom for the training of nurses sits across from a larger skillion-roofed building with an 8-bed medical ward, treatment rooms and bathrooms.

Accessed by a busy gravel road, the site sits far up into the village, bordering the nearby Balmadou forest to the northeast and the Casamance river to the south. The minimum average temperature in winter is cool at 16°C, while maximum temperatures of 45°C and humidity rise to up to 95% in summer. Periodic winds blow warm and dry from east to west in winter and trade winds blowing from west to east in summer, while monsoons affect Southern Senegal in late summer and spring.



Baghere Village  
Sedhiou Region in Southern Senegal



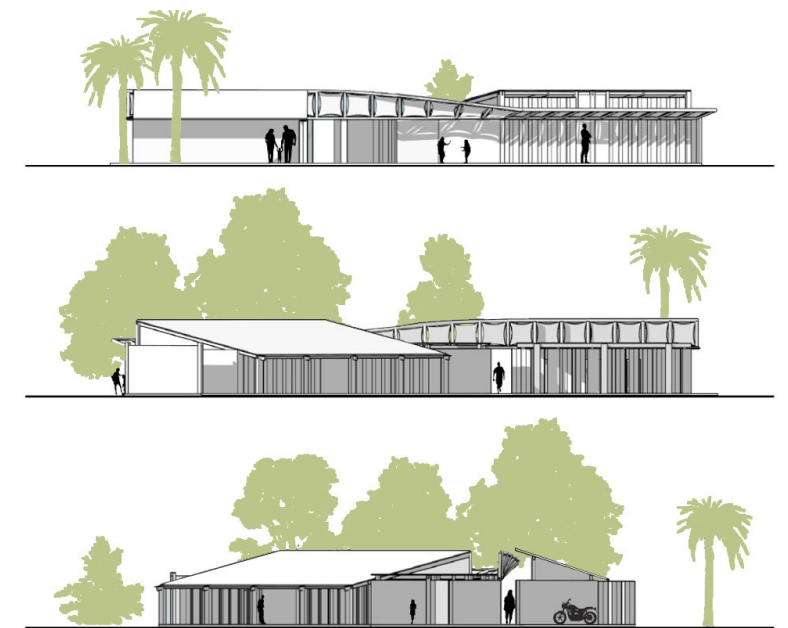


The Sehdiou region in Senegal has experienced significant desertification and coastal erosion, by avoiding the use of mangrove wood and palm materials we can limit the environmental impacts that a demand for such material might have. By instead opting for recycled materials like using old tires to build playground equipment and broken pottery as reclaimed flooring, we can engage the community in the idea of a new health centre from the start.

The large sloped corrugated iron roof on the east building serves as both rainwater catchment and then also as a biophilic source of calm and comfort. When it rains, inpatients can hear the rain on the roof through the high rosewood insulated roof, and also see as it pours down like a wall of water into the concrete-lined irrigation canals, supplying the vegetable garden outside. In the west building, as the sun hits the wood-framed sunshade wall, the special polypropylene plastic (the same used to make sandbags) allows the harsh sun to beam through the adjacent bamboo shutter doors, illuminating the classroom with a warm but filtered afternoon light.

Brick walls sealed with red clay shield from sun and the strong easterly winds, bamboo hinge doors can be closed to act as a wall or opened for airflow and easy access around the building.

- Sun path over building 1.
- Wind flow from east to west 2.
- Pedestrian access 3.
- Tree wall providing shade from the south 4.
- Roof rainfall and irrigation system 5.



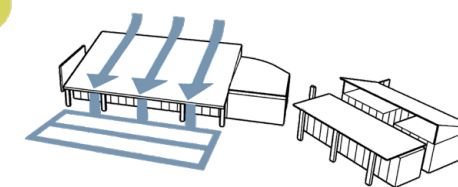
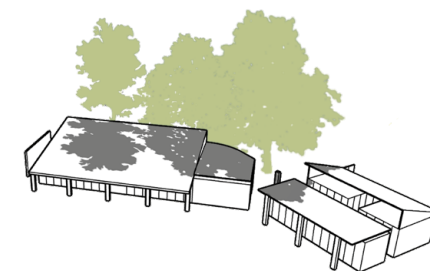
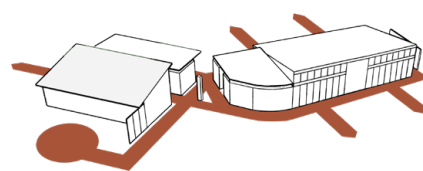
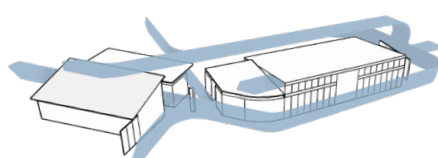
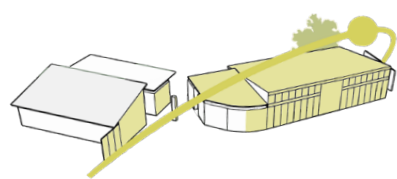
1.

2.

3.

4.

5.





# Cloister House (Enclosed House I)

## Case Study

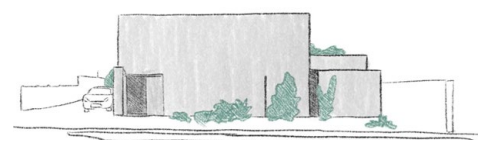
Architectural case study on Cloister House (Enclosed House I), completed 2019 by Italian-Australian Perth based firm MORQ

Case study done as part of Curtin University in Architecture Methods 1B - Digital Literacy course, completed May 2024.

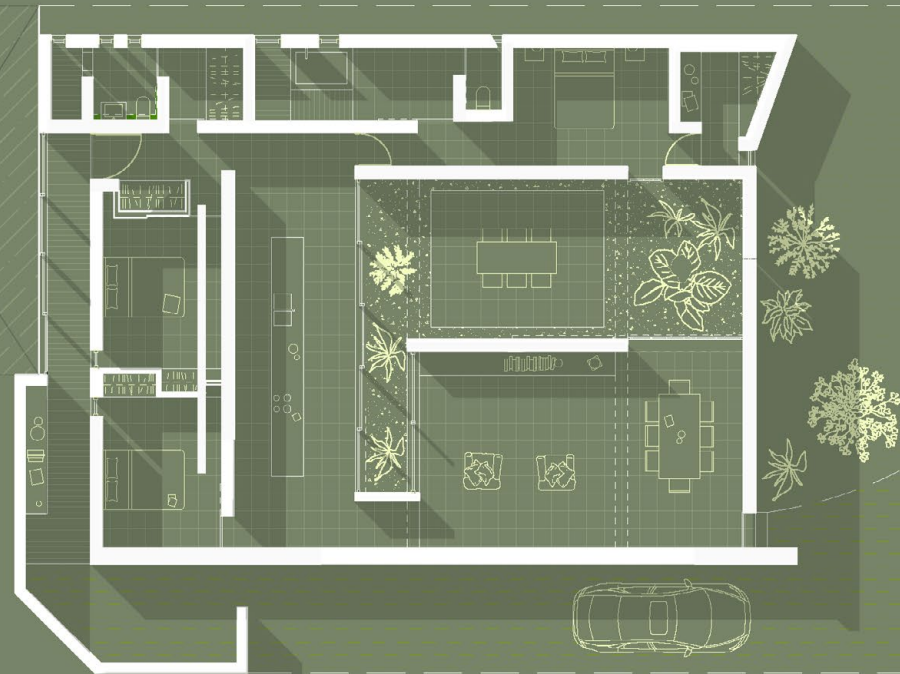


Cloister House (Enclosed house I) is a house in the quiet, coastal suburb of Floreat, in Perth, WA. Designed and built in 2019 by the Italian-Australian firm MORQ, the house stands tall in stark contrast from the typical suburban home. The young professional client couple wanted a three bedroom house “softly lit, relaxing, with a distinct presence”.

“The strikingly bare environment of this house creates an obvious divide in appreciation. Quite unashamedly, the house turns its back on the remarkable suburban context, shielding its inhabitants from the busy street and creating an inner world”. MORQ studios



Cloister House Rika Jammer



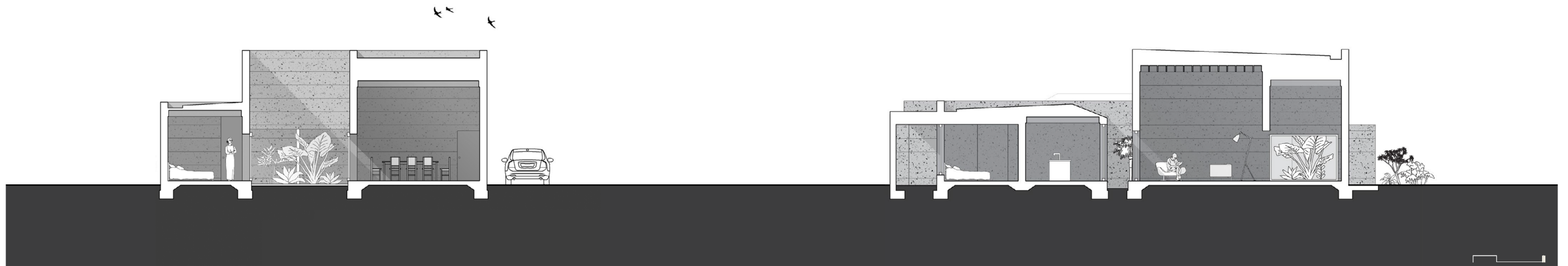
All original plans and architectural graphics, photography by Givlio Aristide, 2019.



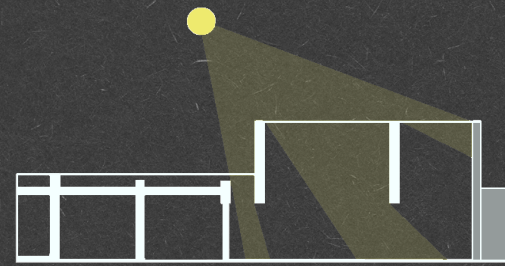


The house is divided by the courtyard into three spaces. A double height entry, dining and living area are closed off by the more private bedrooms, bathroom and kitchen area towards the back of the site. The structural proportions of the thick concrete walls are designed to guide natural light into the enclosed courtyard at the center of the house. This open air outdoor space is adorned with native Australian ferns, grasses and vines, creating a lush and inviting heart to the house.

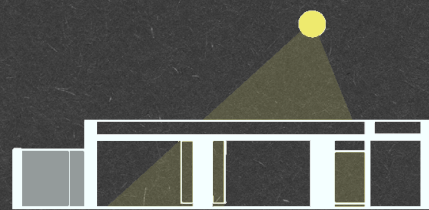
With a very limited material palette, concrete tiles and raw redwood beams fill the interior space. Exposed rammed concrete made using ancient technique Pisé (uses lime and cement as a binding agent), this raw finish kept consistent throughout with thick 300mm walls.





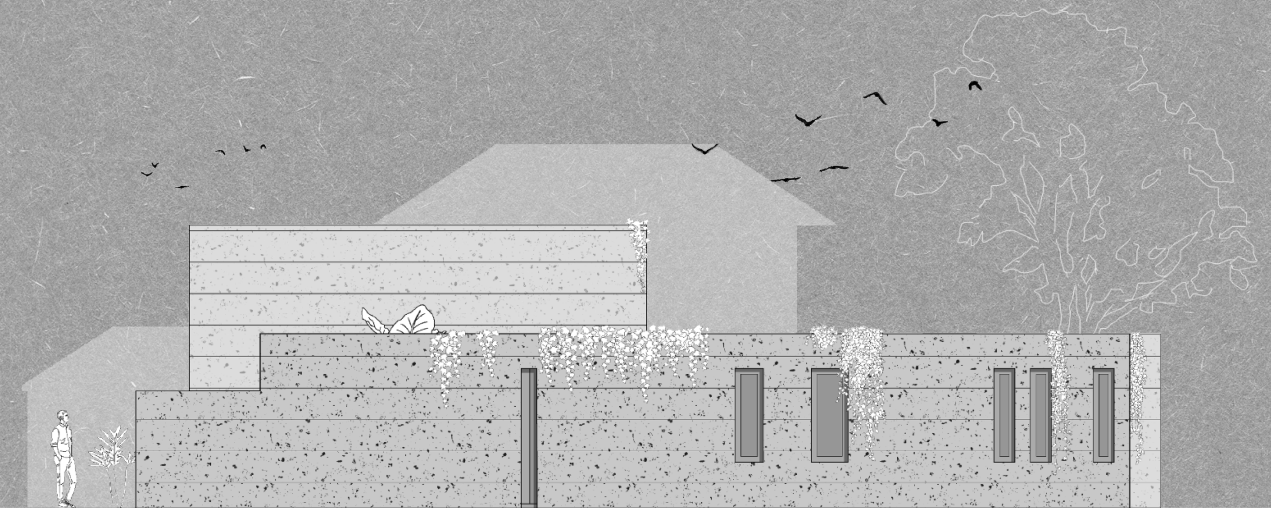


Sun position on summer solstice  
21 Dec 12:00  
Azimuth: 22.18 °  
Altitude: 80.88 °

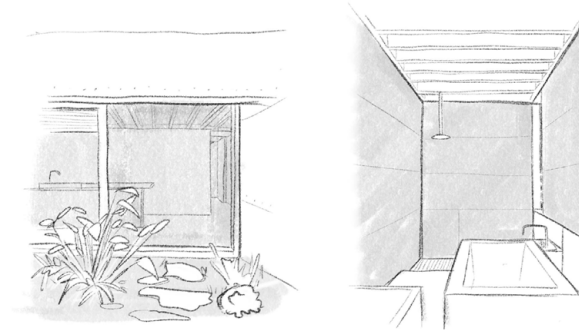
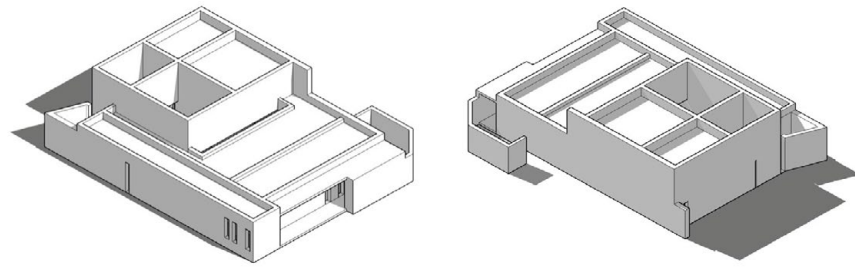


Sun position on winter solstice  
21 Jun 12:00  
Azimuth: 5.19 °  
Altitude: 34.45 °

The design uses the architectural principle of subtraction. Shapes are extracted or cut away from the main mass of the house to make terraces, interior gardens and light filled courtyards. Here spaces are arranged around an L-shaped central courtyard that brings natural light and ventilation to the internal spaces not otherwise open to the road or open site borders.







Original collage-style renders created using Sketchup and Photoshop.

‘The clients wanted a house that feels 1000 years old.’ MORQ  
The raw and unrelenting concrete interior eliminates any ability to decorate or furnish beyond a minimalist degree. The clients preferred a house that informs a quiet and otherwise isolated lifestyle.

Notice the absence of any fixed lighting inside, aside from the lamps in the bedrooms, the open courtyard facilitates the need to rely on natural direct and indirect sunlight for daily living.



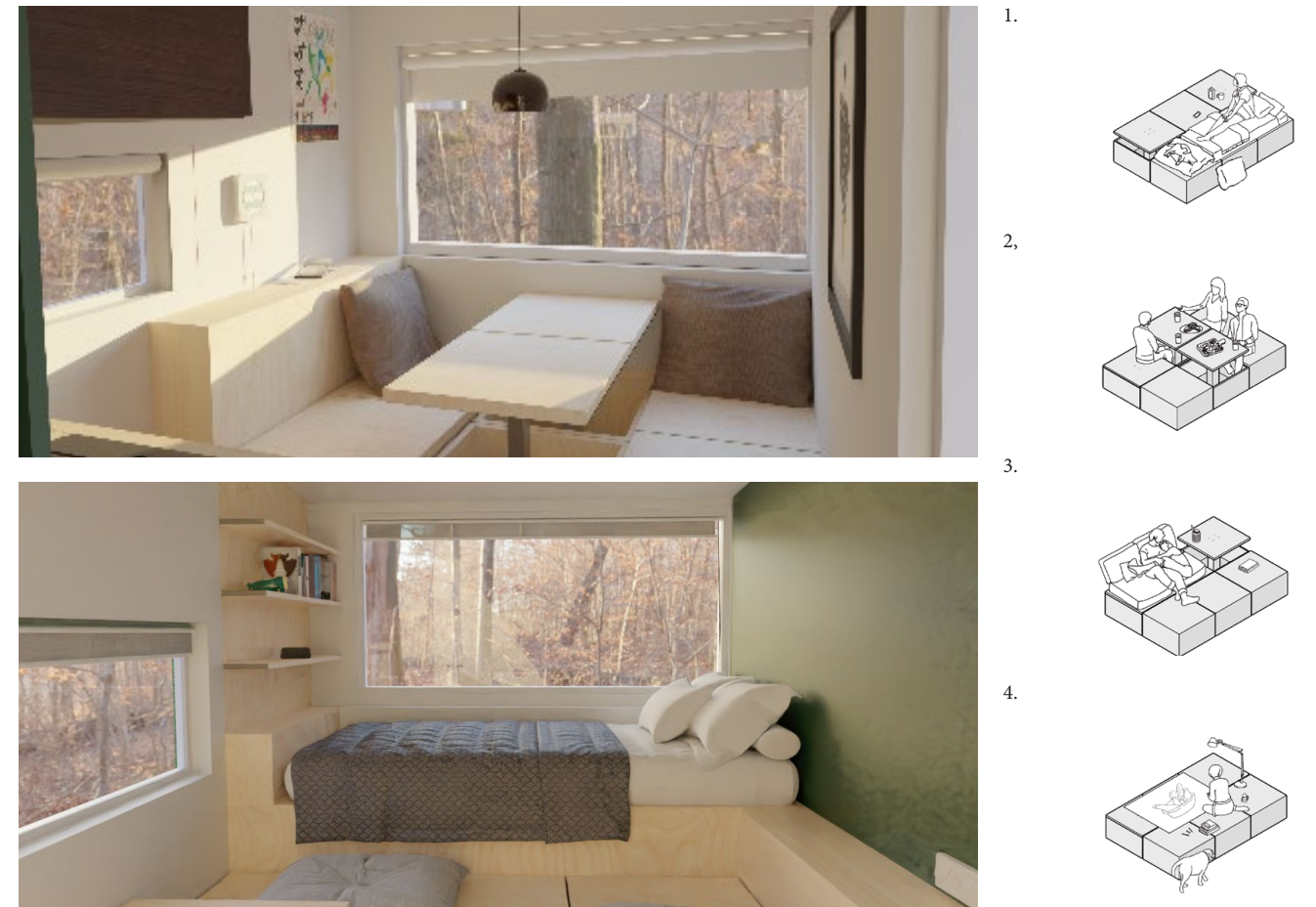
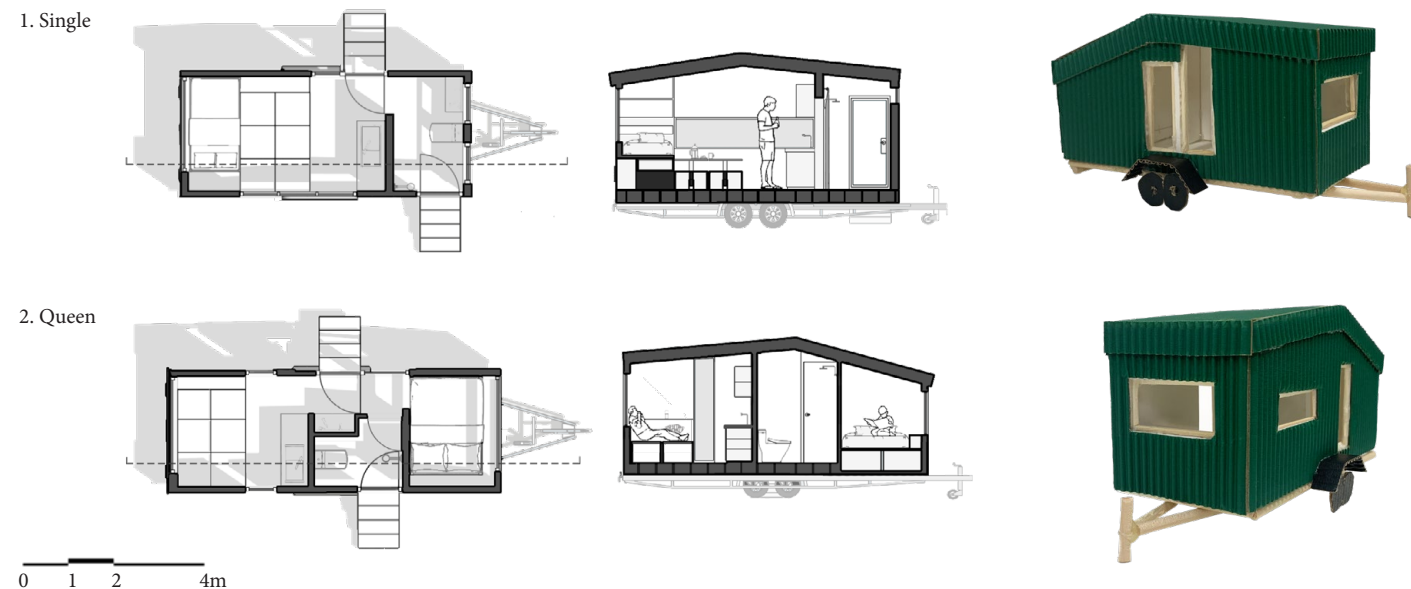
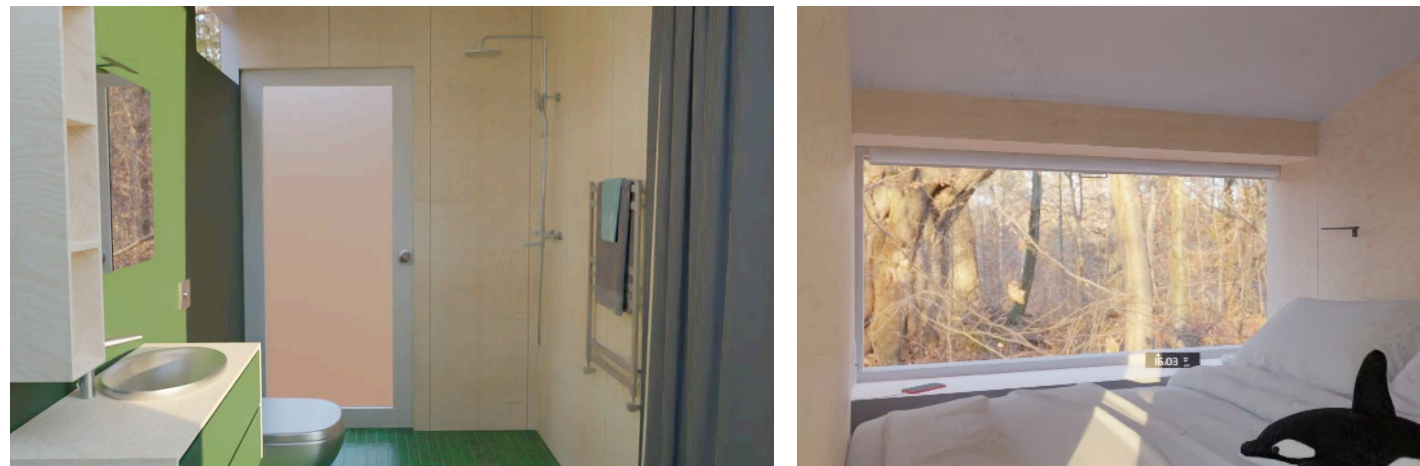
# Medway Tiny House

## Original Project

Original design done as part of Year 12 Tertiary Design Technology class  
Completed June 2023

Renders made using Blender, floorplans and design graphics made using Sketchup, AutoCad and Photoshop.

**Brief:**  
Design and develop a 'tiny house on wheels' fit for a couple who travel for work but often have guests. Must include bathroom, kitchen and sleeping area, maximum trailer length of 12m, height from floor of 4.3m.



**Boxplot:** Custom furniture piece to suit small, multi-use spaces.

Metal framed plywood boxes arranged together, each with an extendable tabletop. The top of each box can be lifted with height adjustable with a coil spring and locking pin, the tabletops can serve as a dining area, breakfast bar, lounge area with coffee table or kept flat to extend multi-use floor space. Space in the boxes under the tabletops allows for comfortable seating or can be used as extra storage space.



A towable trailer-based tiny house can offer individuals financial flexibility and mobility while reducing environmental impact. Living in a small space can impose a minimalist lifestyle, by prioritising storage and flexible use spaces, the tiny house can offer comfort and adaptability in most living situations. Boxplot (see above) is a furniture design concept in both tiny house designs, with the ability to serve as a dining, living and sleeping area.

Height adjustable tabletops and the subsequent empty box spaces provide seating, facilitating guest sleepovers (1), dinner with friends (2), movie nights (3) or large art projects (4). Designed to adhere to NHVR standards for trailers, both have a bathroom with chemical toilet and open shower, single kitchen sink, fridge space and countertop for portable stove.