

Ruamahanga River Centre

Wairarapa, New Zealand

Design: 2022
Program: River Theatre, library & workshop
Client: Ruamahanga Restoration Trust
Team: CMA+U
Structure: Dunning Thornton
Services: 355 Building Services

The River Centre is part of a strategy to heal the Ruamahanga River catchment from its source to the ocean. A process of community building with the younger generation to learn through doing, through direct effort and empirical learning (water test kits), Through doing we learn to understand the nature of the river, how it behaves, and what it needs to be healthy.

The River Theatre is intended as a seed for learning how to build in a low impact way with local material. Additional facilities can be realised over time (research library, exhibition space, workshop). Each like a vessel floating amongst reflecting pools shaped by the weaving line of river rocks that line the path towards the ancient trees and the Ruamahanga River beyond.

This first seed is a proof of concept to see how close we can get to being one with the site, in the sense that a sailing yacht is tuned to wind and water.

The spirit of the building is embodied in the natural material elements of water, rock and wood harvested directly from the site. Water from the roof; river rock directly from the ground with sand, clay and limestone to make floor and walls. Wood cut and milled on site, dried and charred to protect against mould and insects for roof and wall cladding. Additional materials are sourced locally

including LVL and recycled bottles from the local town. Similarly local joiners teach students and local community how make furniture, door and window joinery.

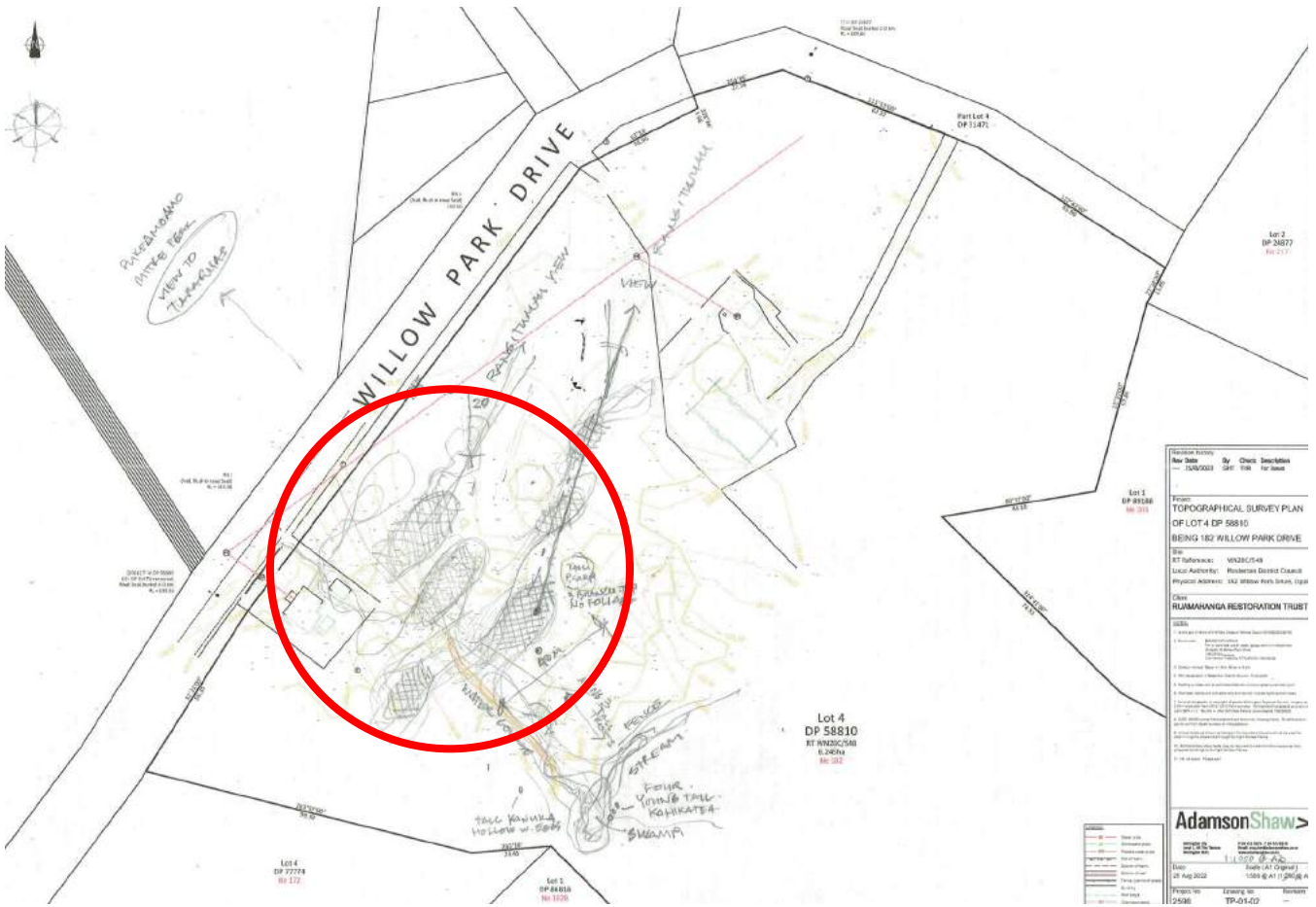
The building is located between well established native trees and orientated north towards Mt Rangitumau, aligned with the Tararua Mountains while keeping its eaves low to shelter against the cold winter winds off the mountains and the intense summer sun. A simple open plan shaped by its curved vessel-like form helps to shape gatherings for talks. Seats can be arranged in different configurations such as formal talks or informal gatherings. To the south the roof extends to form a covered porch off the arrival terrace and leads to the entrance lobby with storage room and small office either side and mezzanine above.

The main theatre is an open five metre high space with glazed wall to the north. A skylight above provides additional natural light and warmth. The bones and rhythm of its lightweight diagonal timber structure are exposed for all to enjoy. It spans the full width of the theatre, east to west, supported on ground beams and topped with a built in curved timber bench next to a low window. This allows dappled light to the interior via reflecting pools.

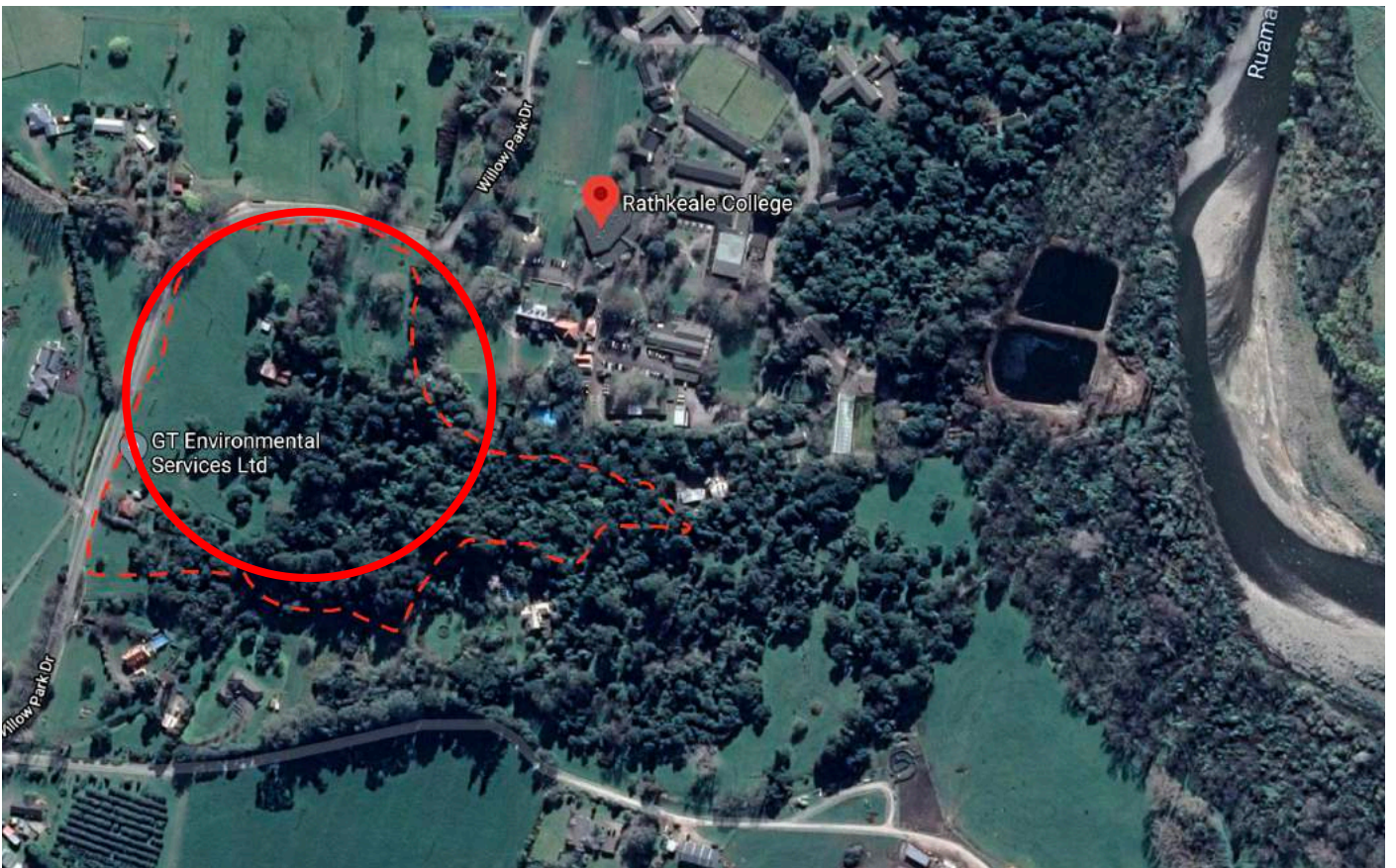
Ventilation flaps for cooling are integrated into the design for the hot dry summers. Landscape is an integral part of the architecture with reflecting pools defined by weaving river rocks as if part of the river itself, the building extends outward onto large terraces provided to the south (arrival terrace) and north (sun terrace) for outside gatherings and talks.

The process of construction is an important part of the educational process to enable local community and the coming generations of school students to learn the skills and material processes of building as a natural extension of their lives. This way people can work towards common goals and together build community facilities through collective effort and skill development. The hope is that this will catalyse community ownership and further phases of development in future.

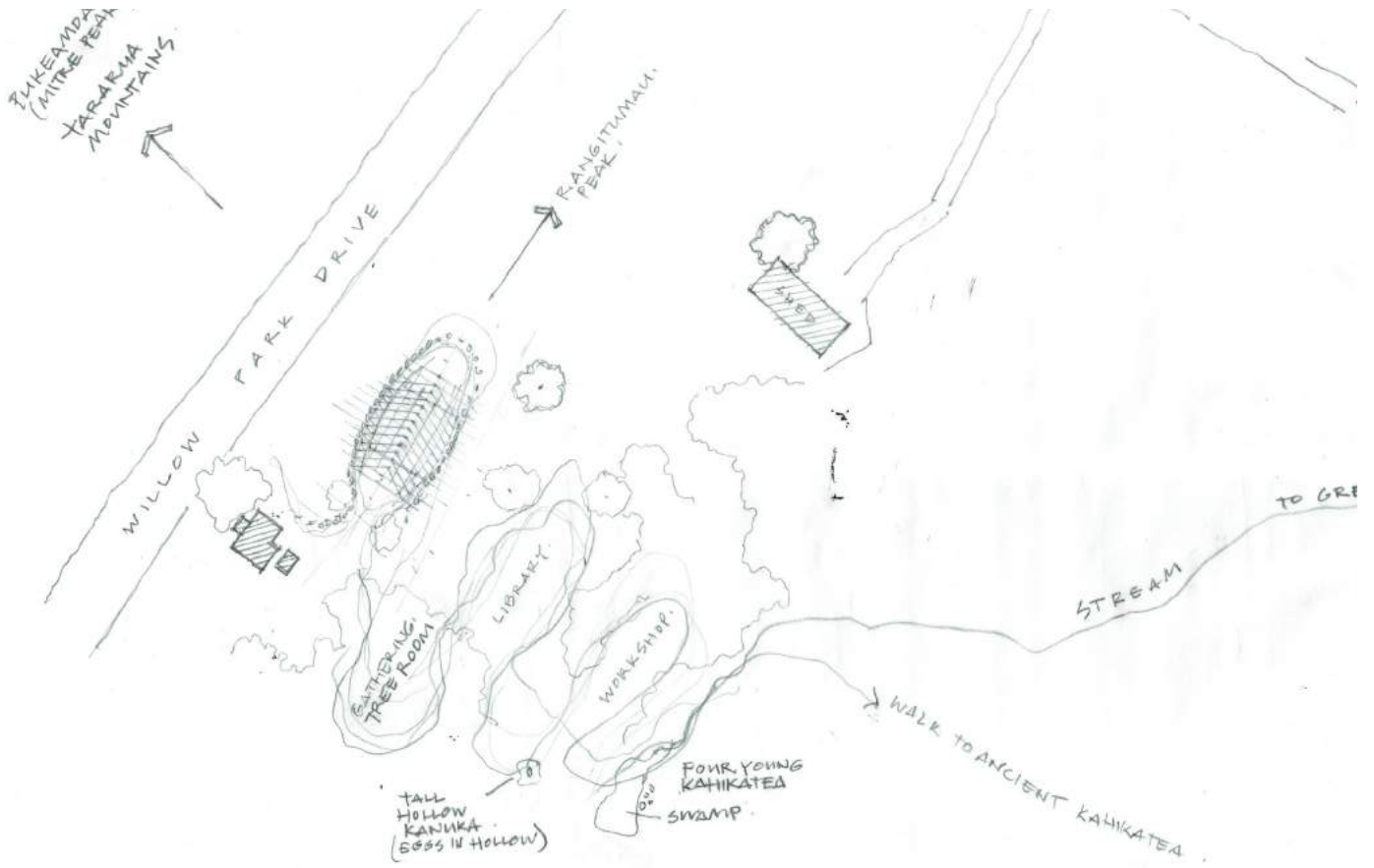




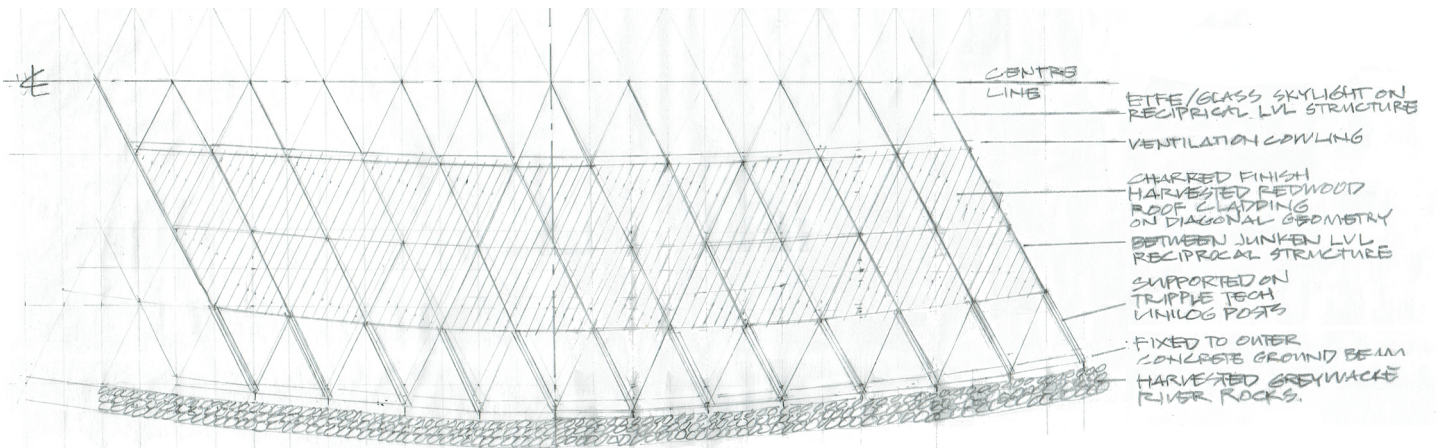
Context: Site Plan



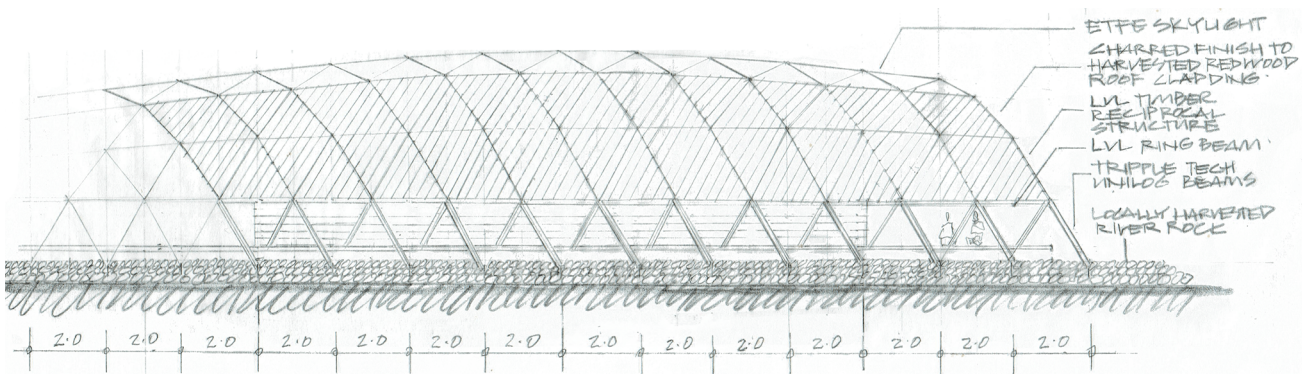
Site Context (aerial photo)



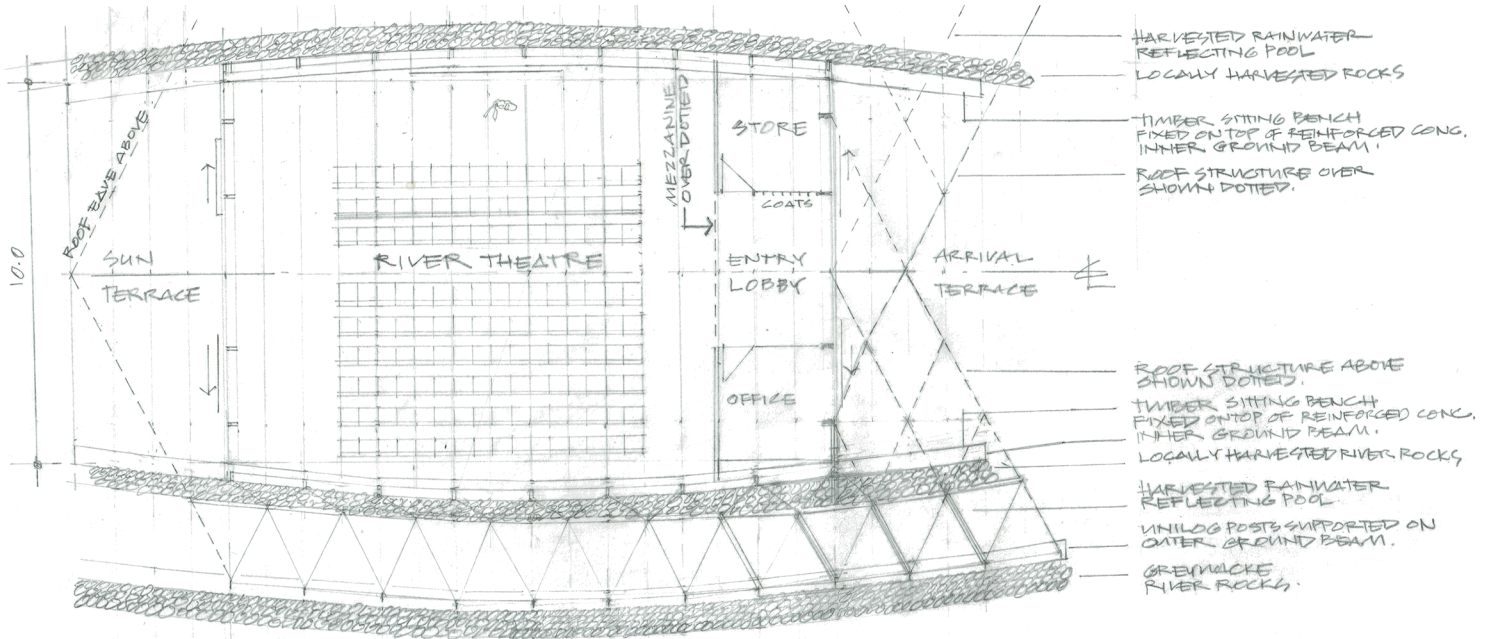
site plan



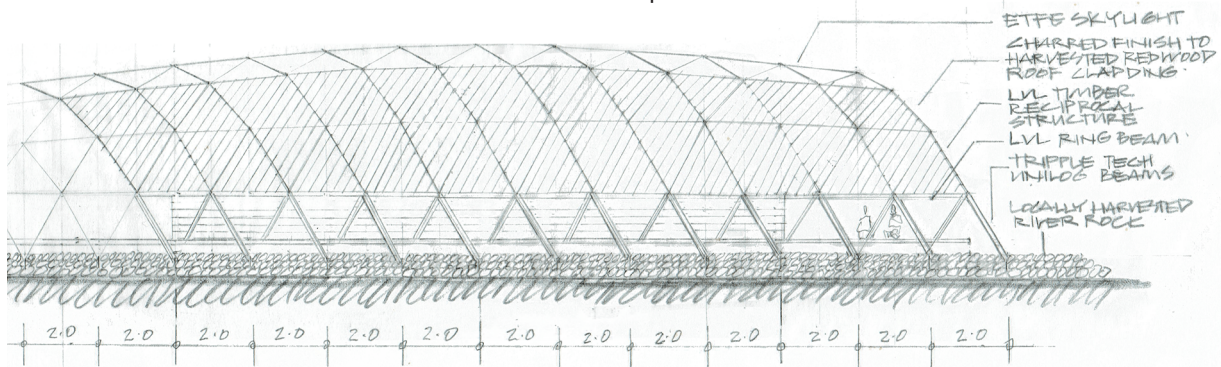
roof plan



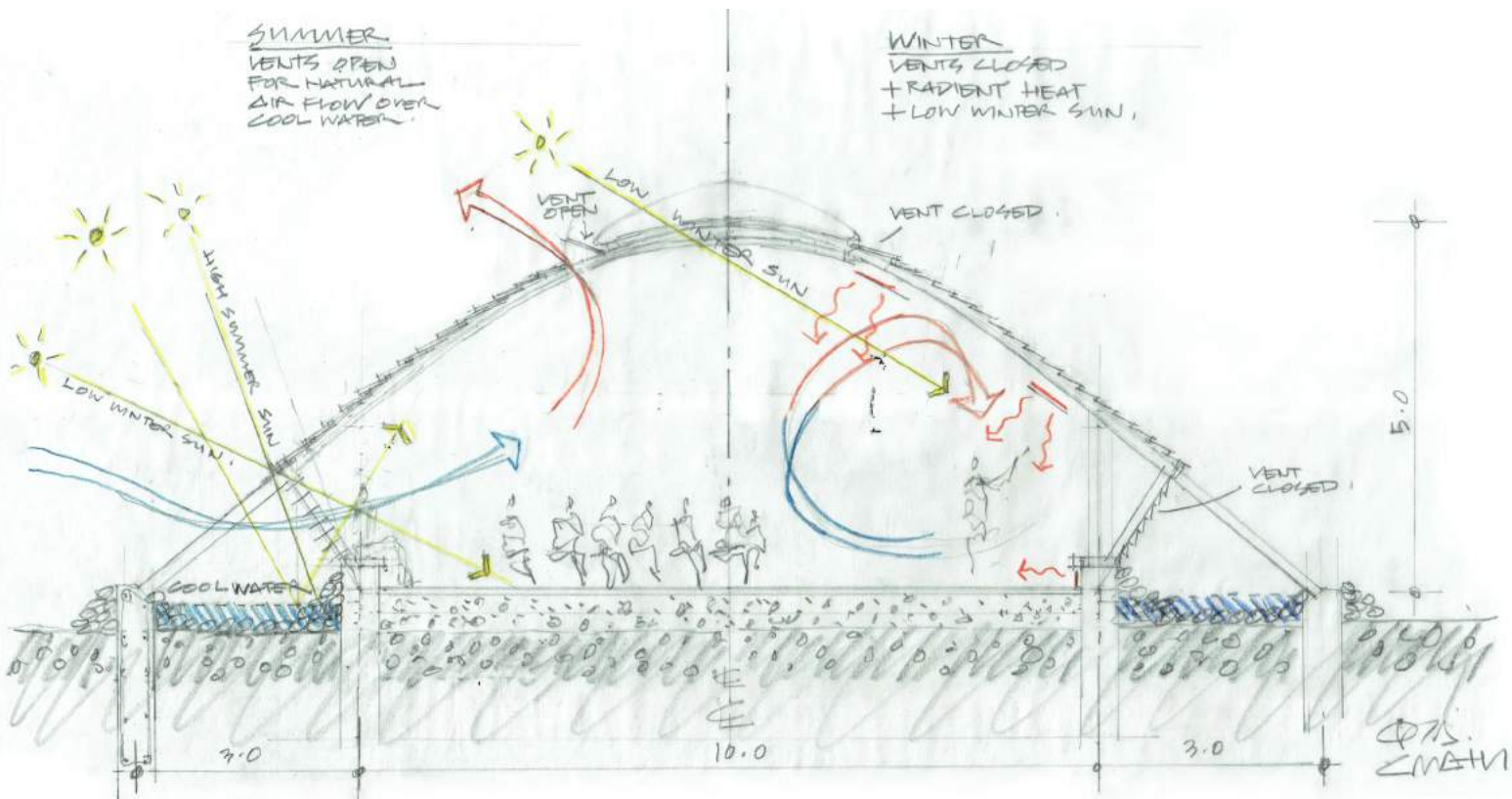
west elevation



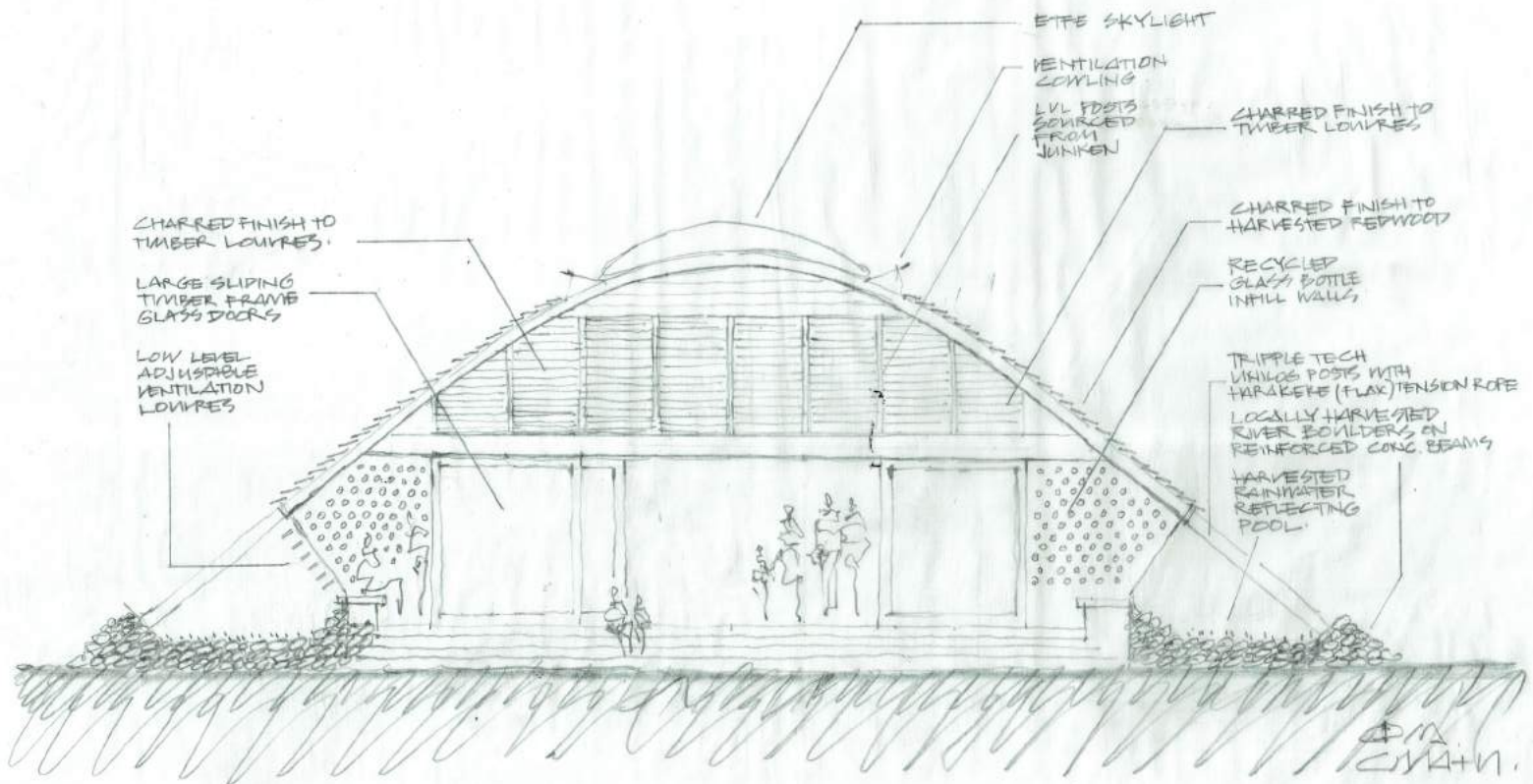
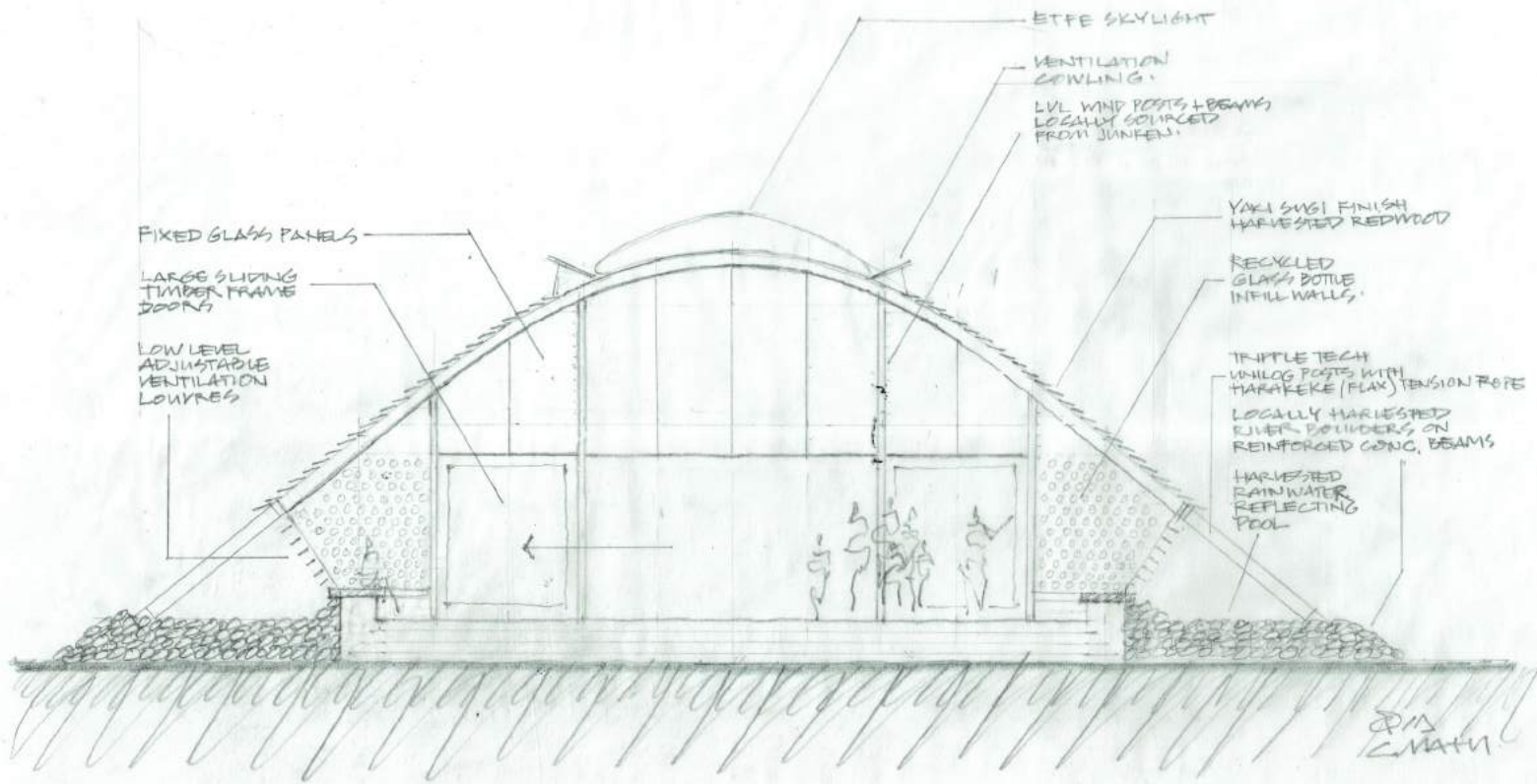
floor plan

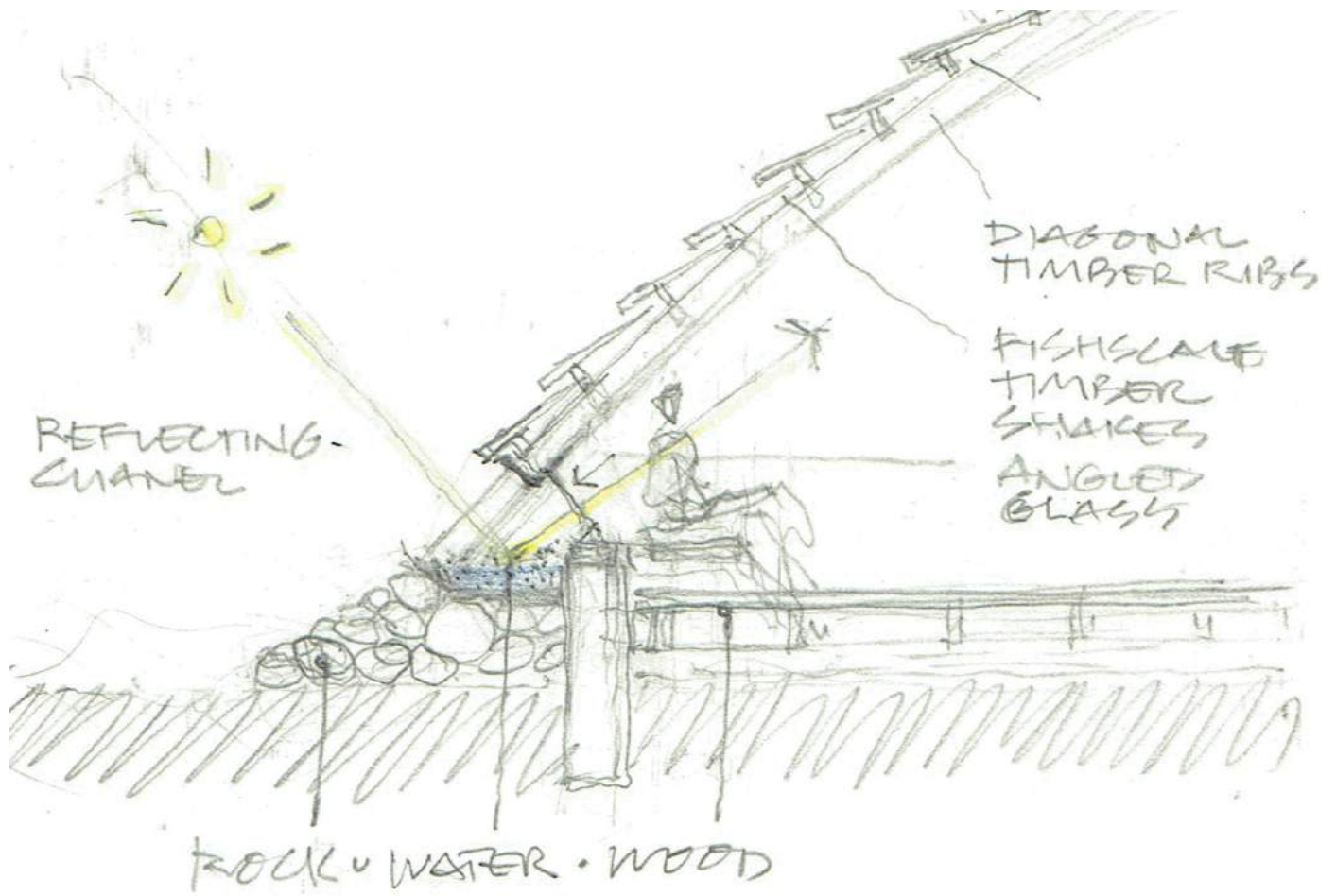


long-section



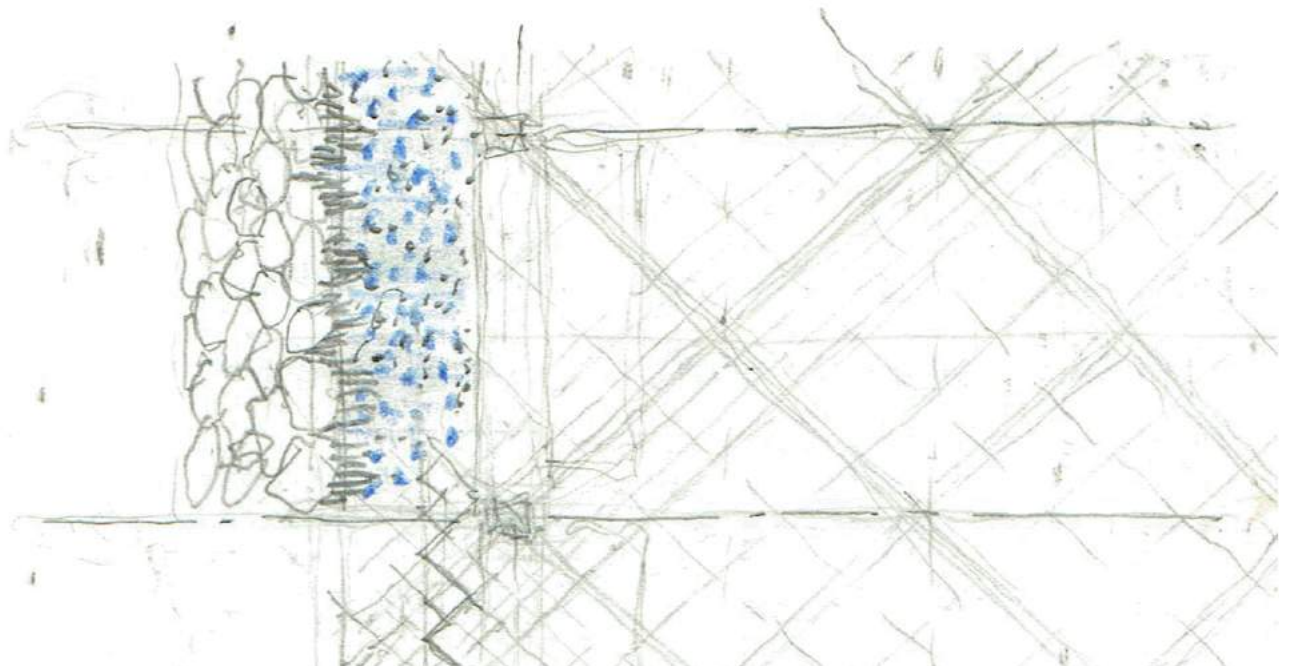
cross-section





Detail Section: river rock foundation, reflecting pond, wood roof structure & integrated seat

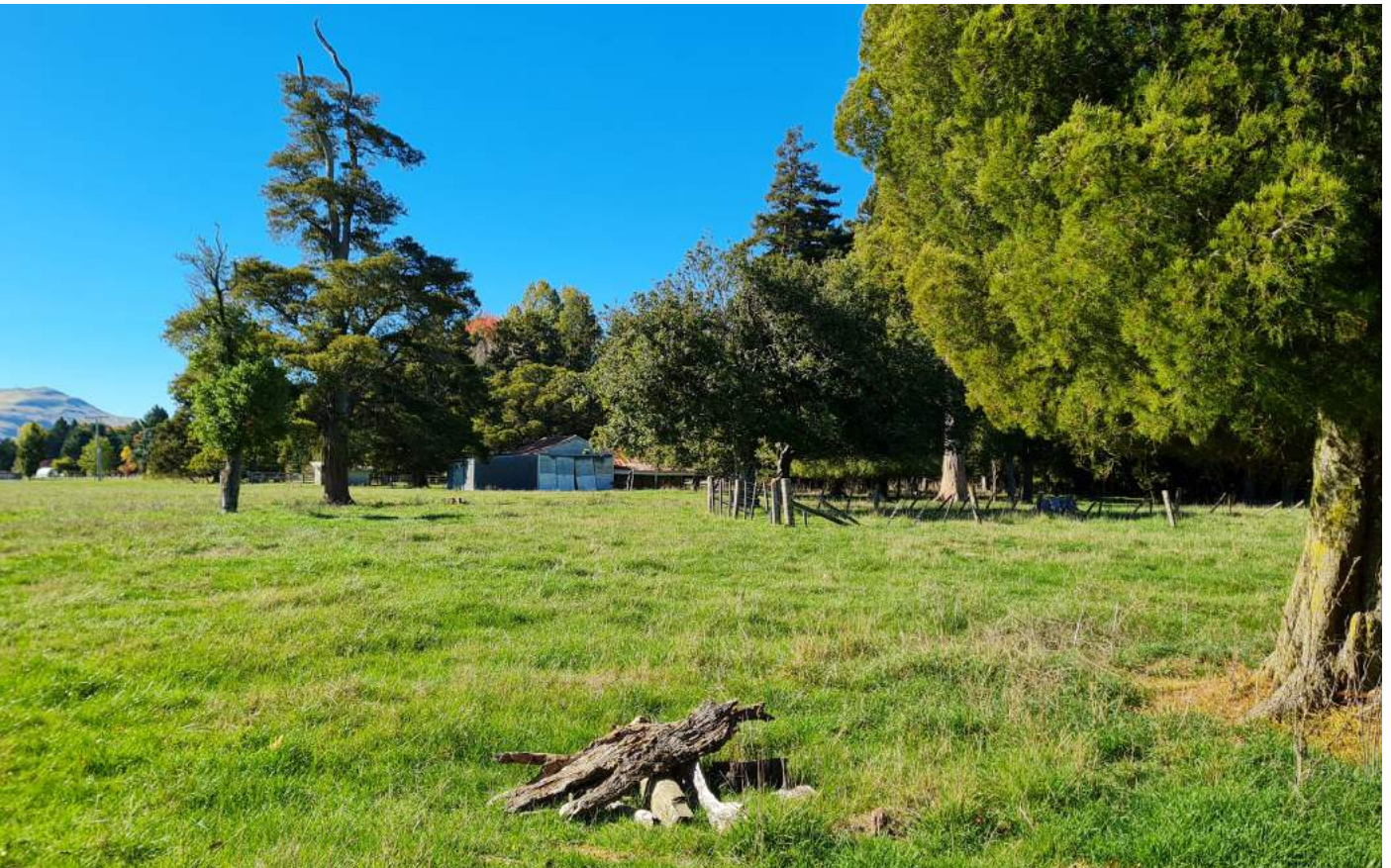
WEAVING PRIMAL MATERIALS TOGETHER



Detail Plan: river rock foundation, reflecting pond, wood roof structure & integrated seat



Ancient Kahikatea lowland giant



Site looking north to Rangitumau in the distance