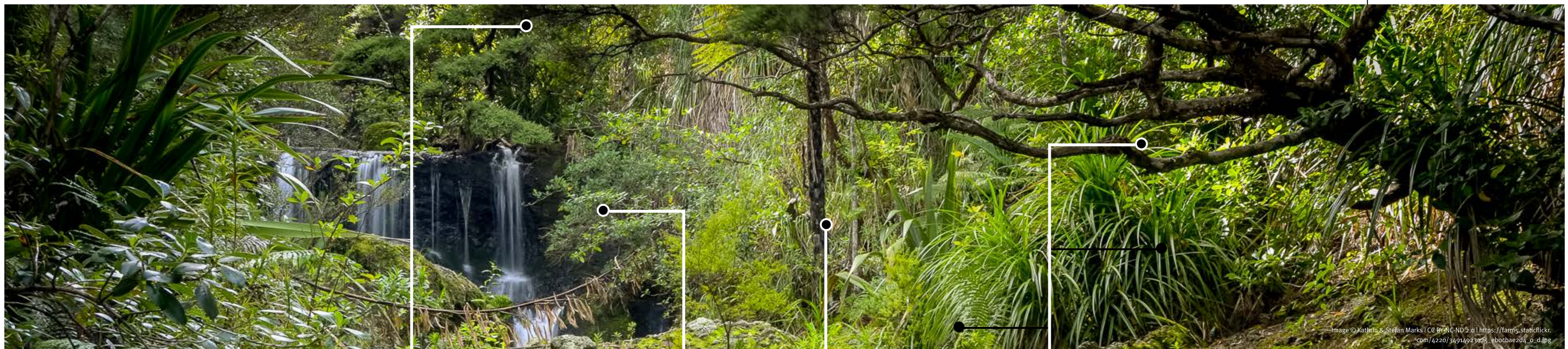


# Te Whenua Hou: Distributed Forest



**A distributed forest of 1.2 million native plants, trees and shrubs running across a series of 20 farms...**



**Canopy shelter**



**Shrubshelter**

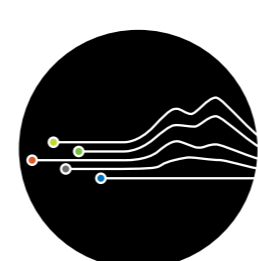
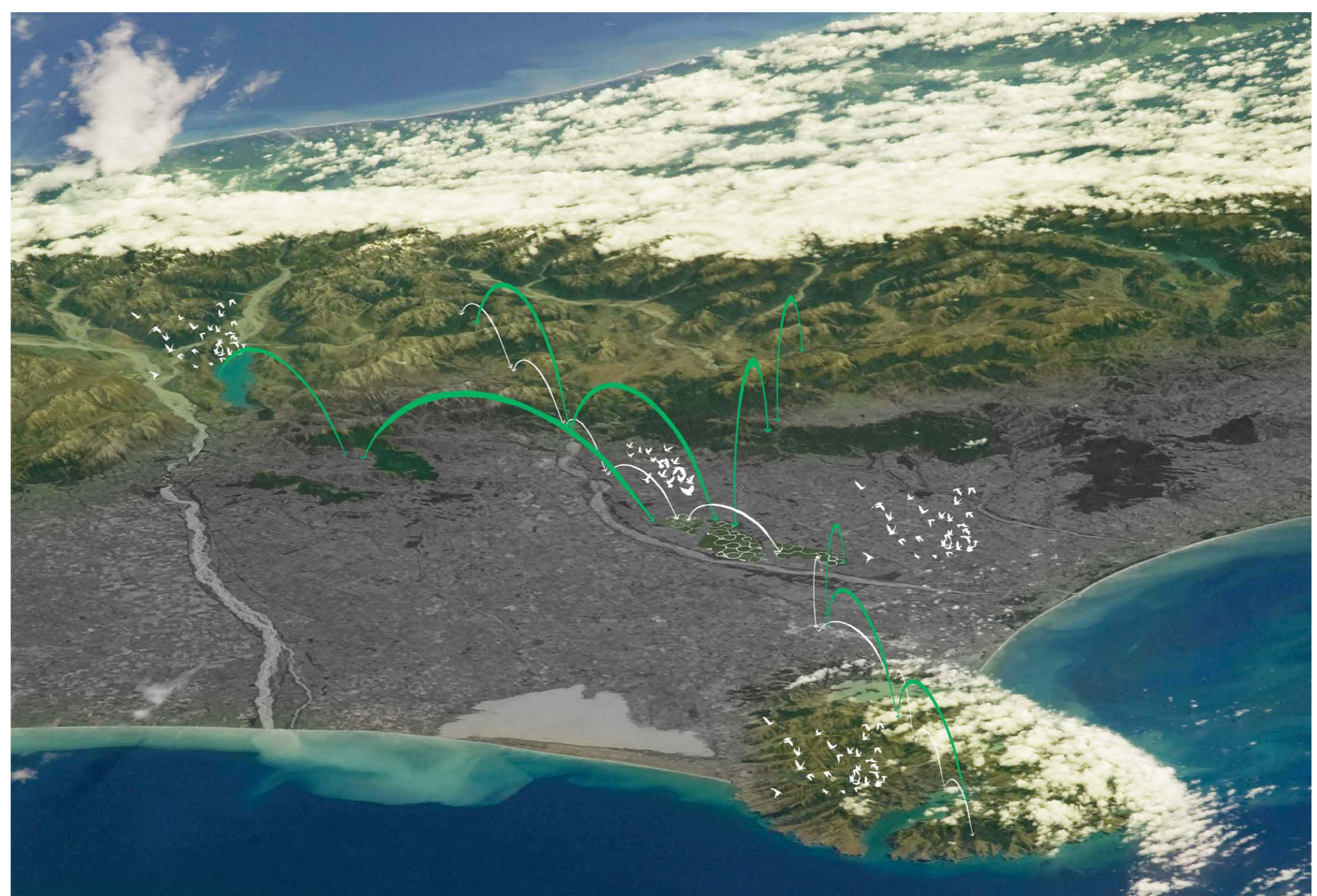


**Buffershelter**



**Dairy sheds**

**That supports different dairy farming functions and irrigation regimes and creates a 350 hectare ecological stepping stone for native birds to cross the Canterbury Plains...**



Lincoln University  
Design Lab  
www.designlab.ac.nz  
contact: mick.abbott@lincoln.ac.nz

**NGĀI TAHU Farming**

# Context



# Outcome



Includes opportunities to extend a distributed native planting system across the Canterbury Plains...

## Shelterbelt and reserve network

Constructed to form a distributed and deconstructed native forest, plants - valued for their capacity to support native biodiversity - are organised according to their capacity to support distinctive components of dairying. The story of Canterbury's braided rivers travelling across the plains is reinforced through development-scale patterning, which in time might operate as the project's visual gateway for people flying into Christchurch.

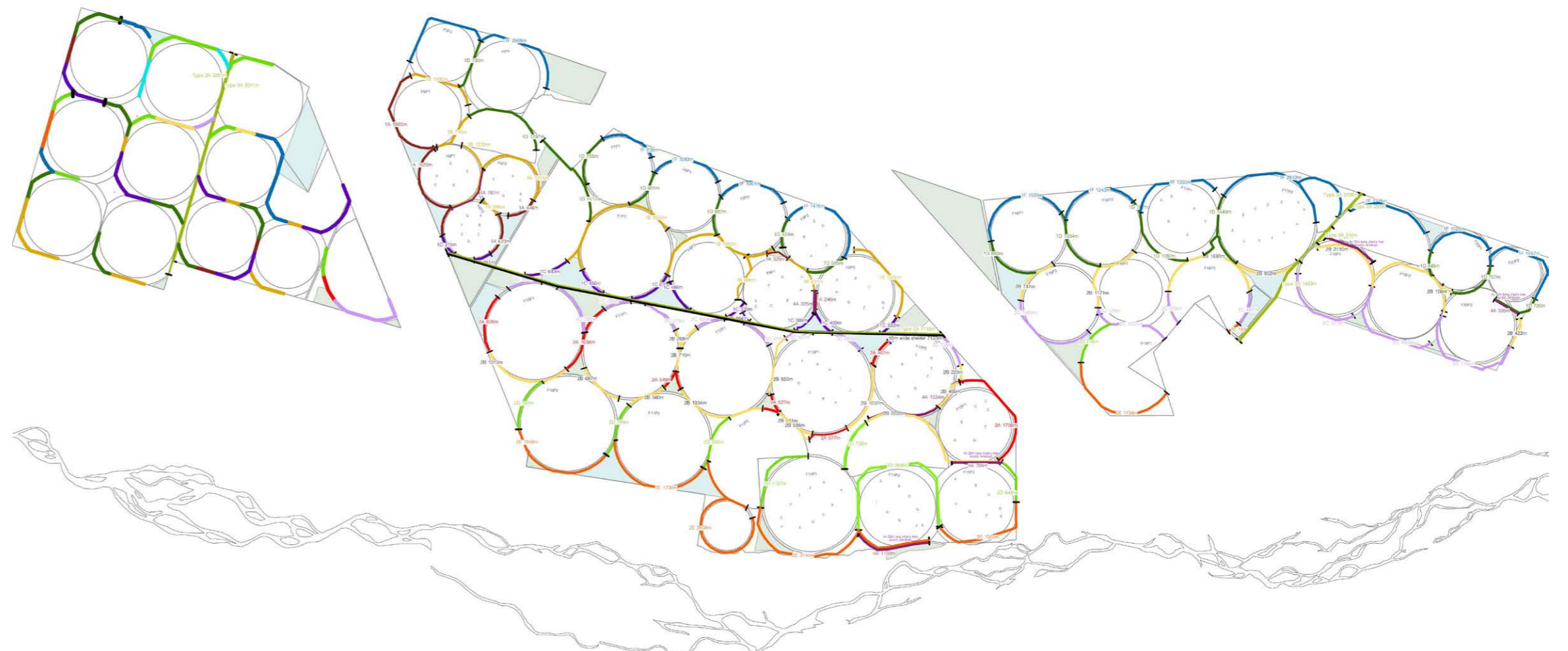
Twin colonnades of totara dominate the primary shelterbelt network, supported by kowhai, tarata, houhere, kohuhu and kapuka. The proposed network provides a corridor for native birds to travel from the South Island's back country over the sparsely vegetated plains to Banks Peninsula, shelter for stock, and a native timber resource for future generations.

### Patterning strategy

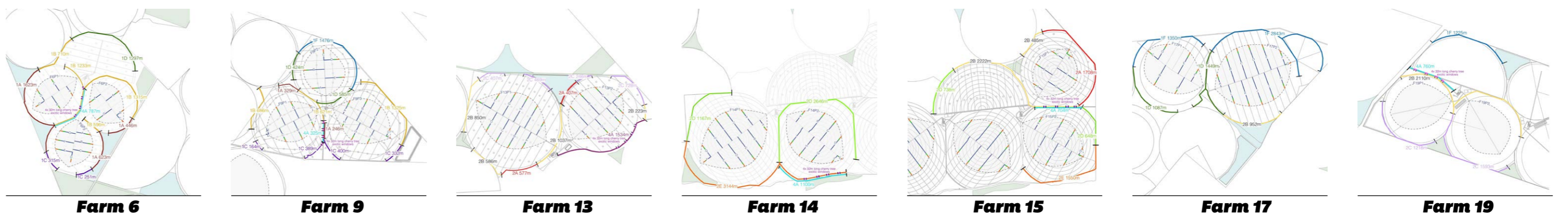
Systematic and modular planting patterns are proposed at a number of scales. At the plant scale, species are arranged in a rhythmic sequence. In this way meaning is created allowing monitoring of successful or struggling species by farmers in their everyday stewardship. At the farm pivot scale patterning responds to the dominant north easterly and southerly winds and sun direction, while at the development scale patterning focuses on aerial impression.

### Selected Key Shelter Species

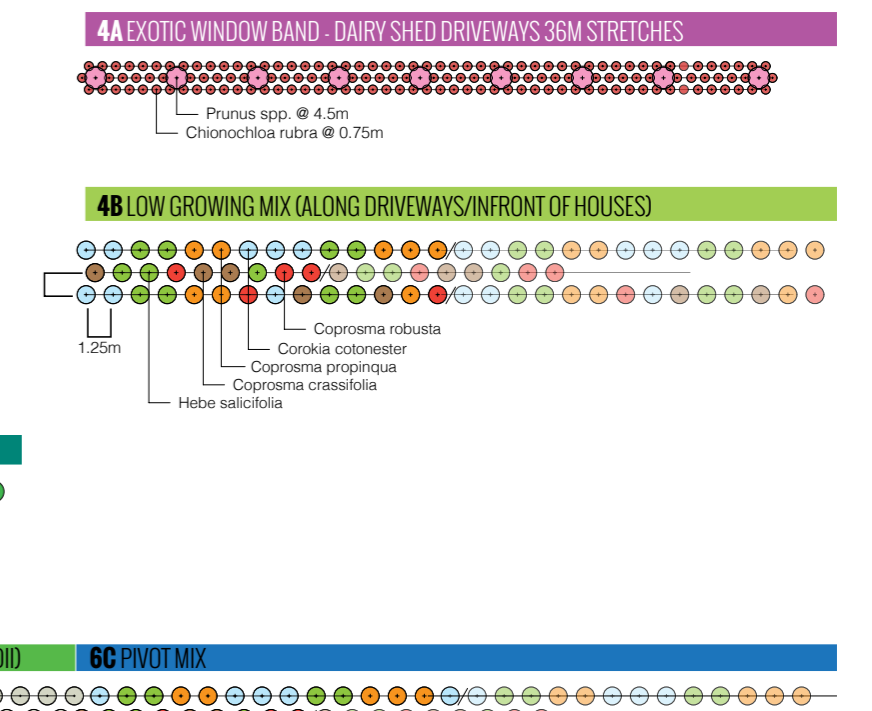
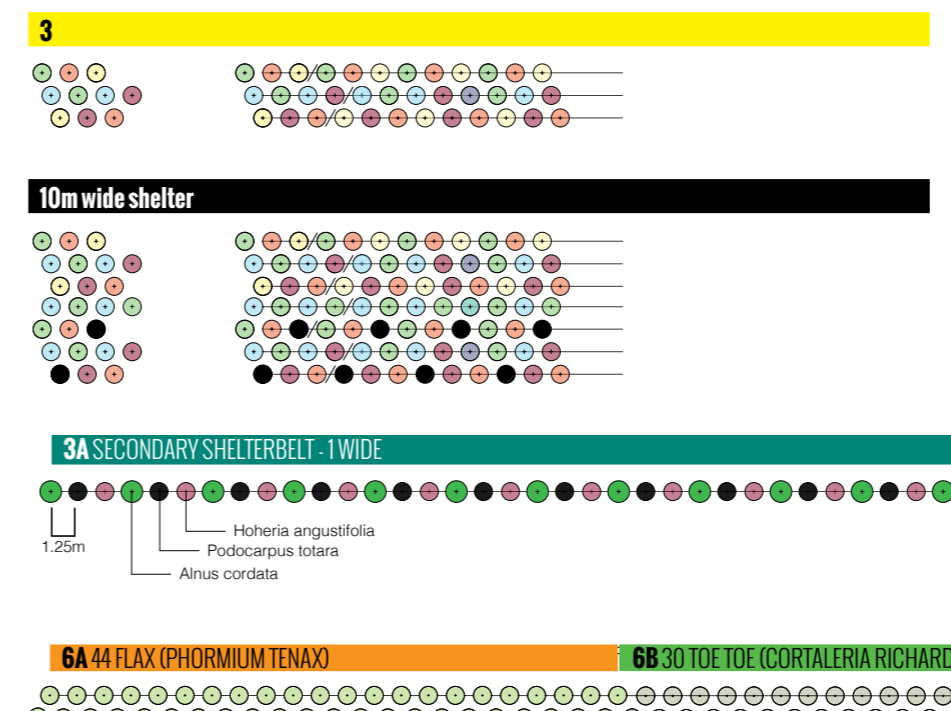
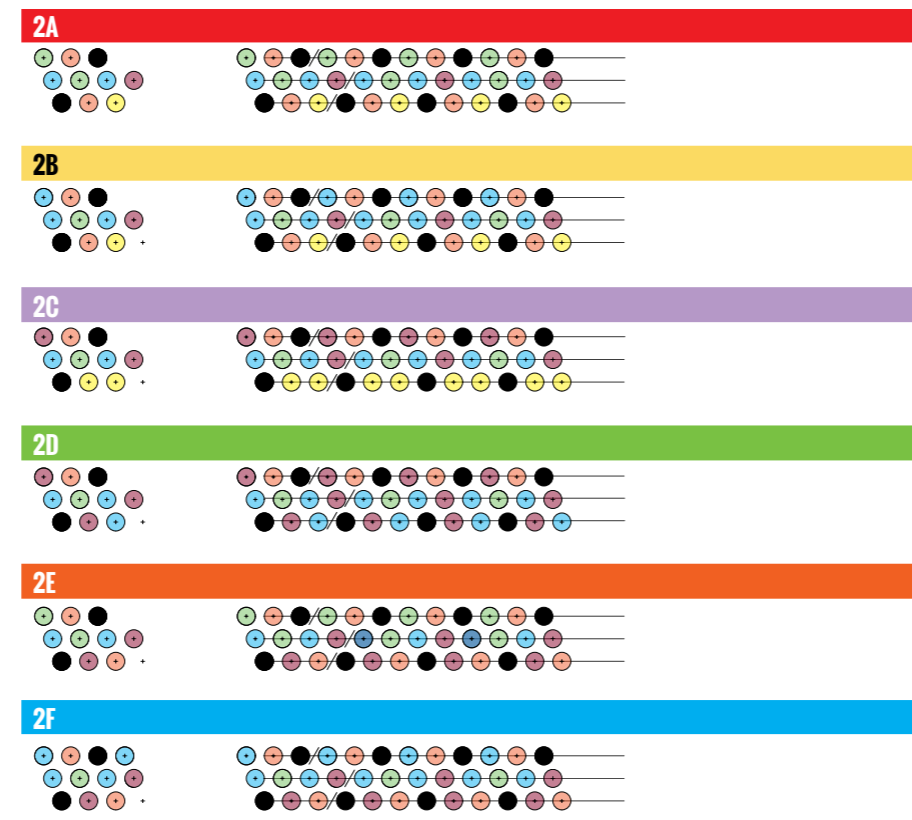
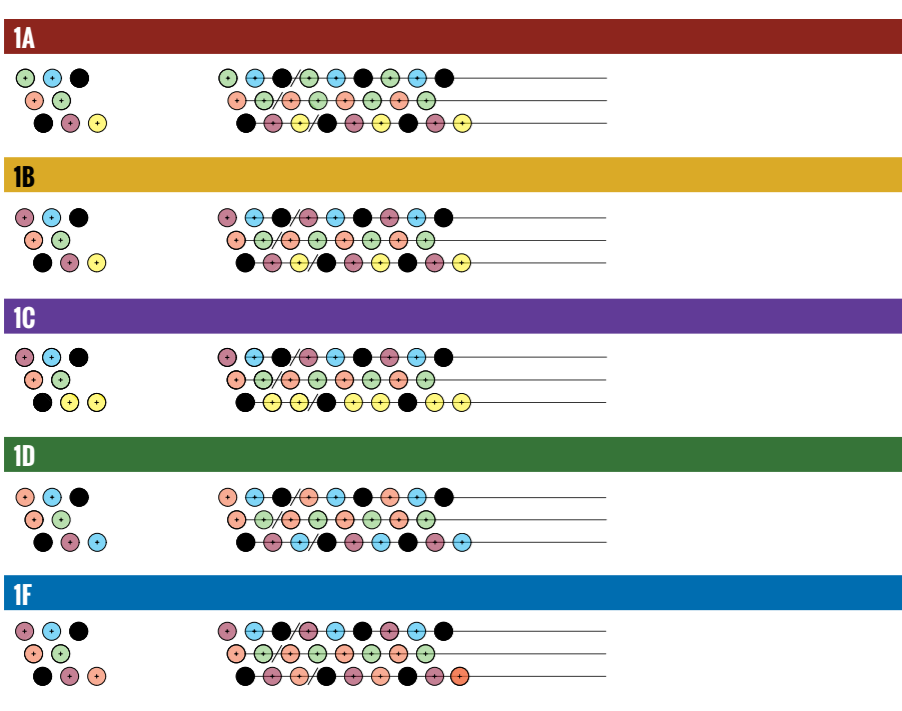
- Totara (*Podocarpus Totara*)**
- Kowhai (*Sophora microphylla*)**
- Kapuka (*Griselinia littoralis*)**
- Tarata (*Pittosporum eugenioides*)**
- Kohuhu (*Pittosporum tenuifolium*)**
- Houhi (*Hoheria angustifolia*)**



### Shelterbelts currently being implemented



### Fractal shelter patterns

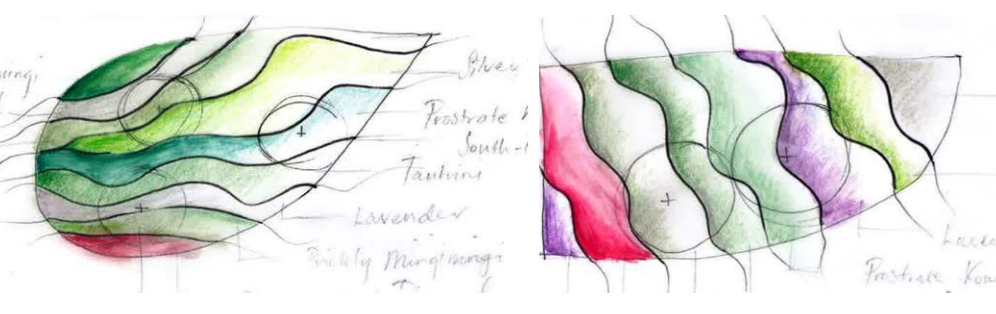
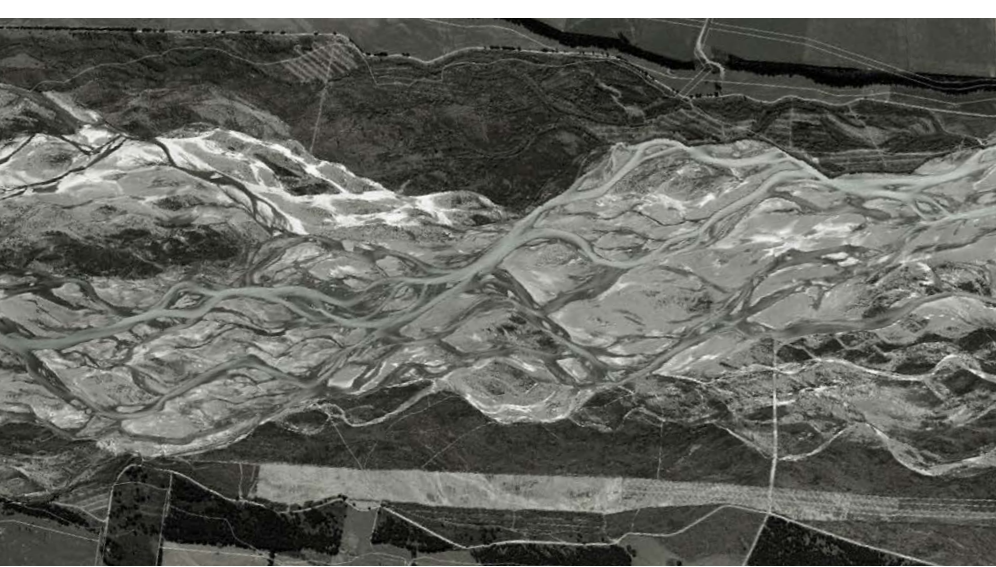


## Milking Shed Plantings

Planting at the milking sheds is an opportunity to provide these places with character, shelter and amenity. Native and exotic shrub species are selected from a palette for each shed and planted according to a braided river pattern.

### Patterning strategy

Planting patterns at the milking sheds draw inspiration from the braids of the nearby Waimakariri River. Swathes of native and exotic shrubs traverse the slope of each round yard in undulating forms. Clumps of Lancewood and Ti trees create vertical interest without detracting from the outlook from each shed. Exotic feature trees at the entrance to each shed give character and create distinction between otherwise identical set-ups.



### Site survey images



### Concept exploration

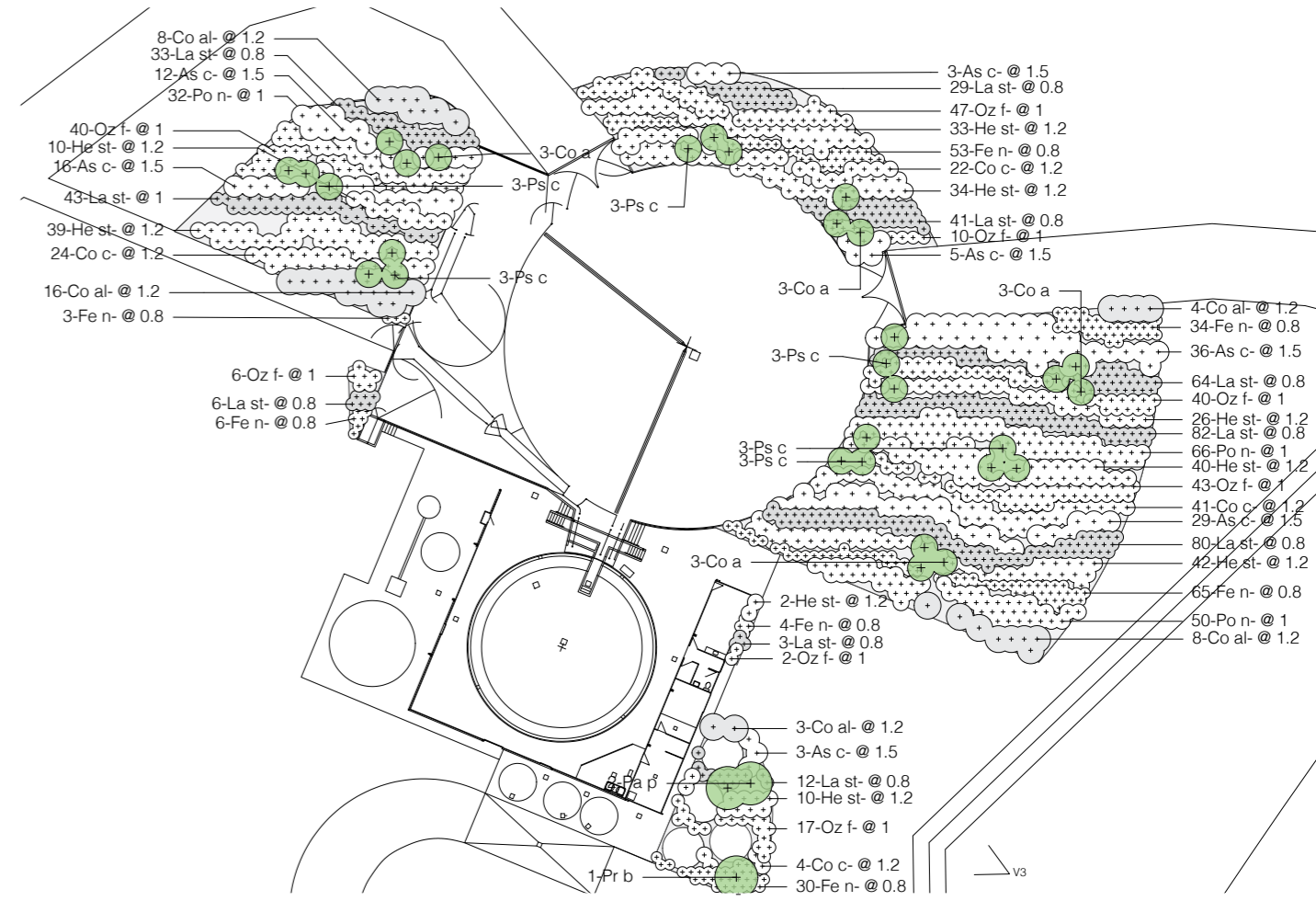


### Milking sheds species palette

PER FARM: Sets of species used within the milking shed plantings, the number of types and palettes.

CLIMPS	CONSTANT SPECIES	FEATURE TREES	GRASSLAW SPECIES	MATHYS	EXOTIC SHRUBS
ALL	ALL	2	2	3	1

### Planting plan for Farm 14 milking shed



### Planting at Farm 14 milking shed

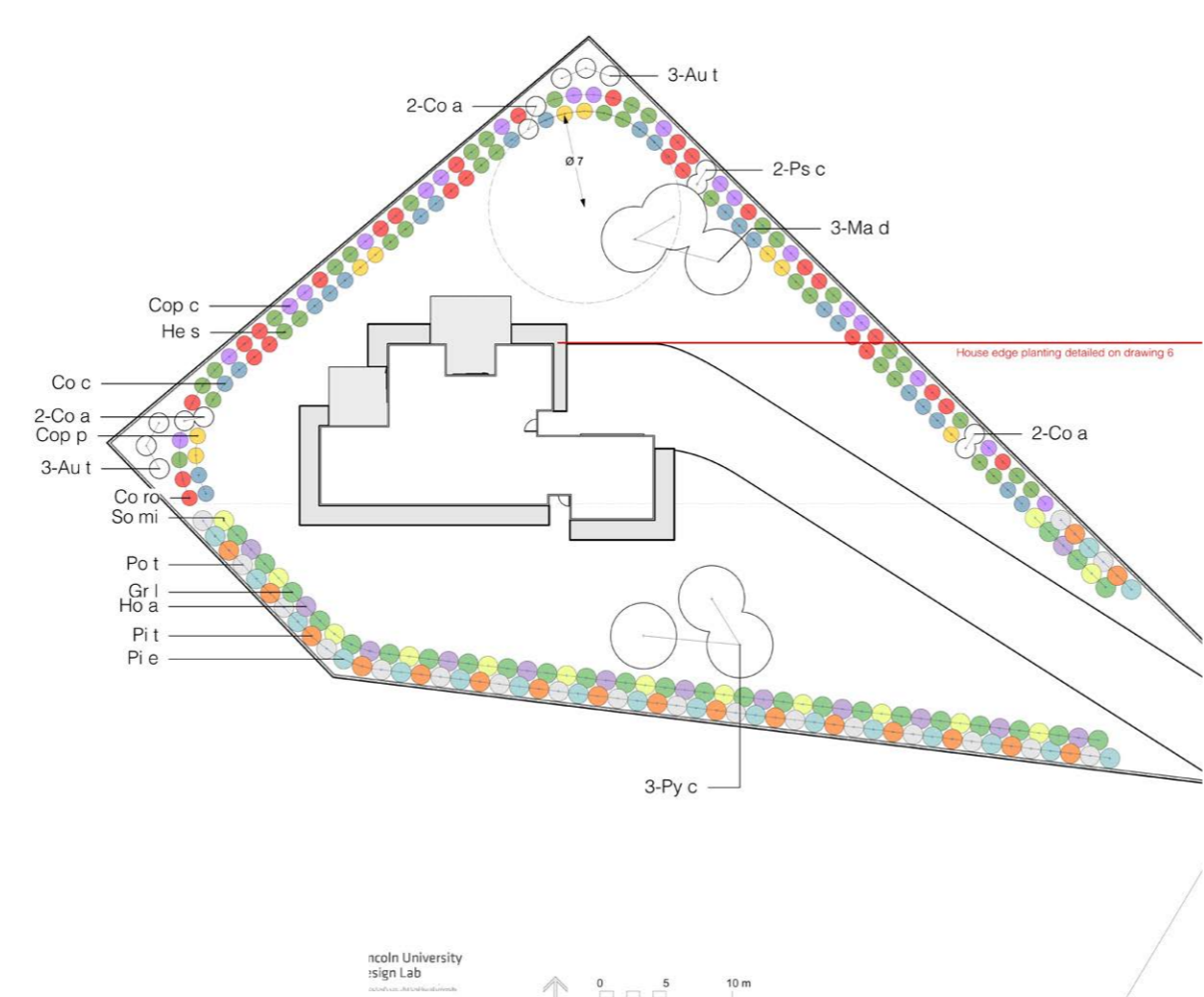
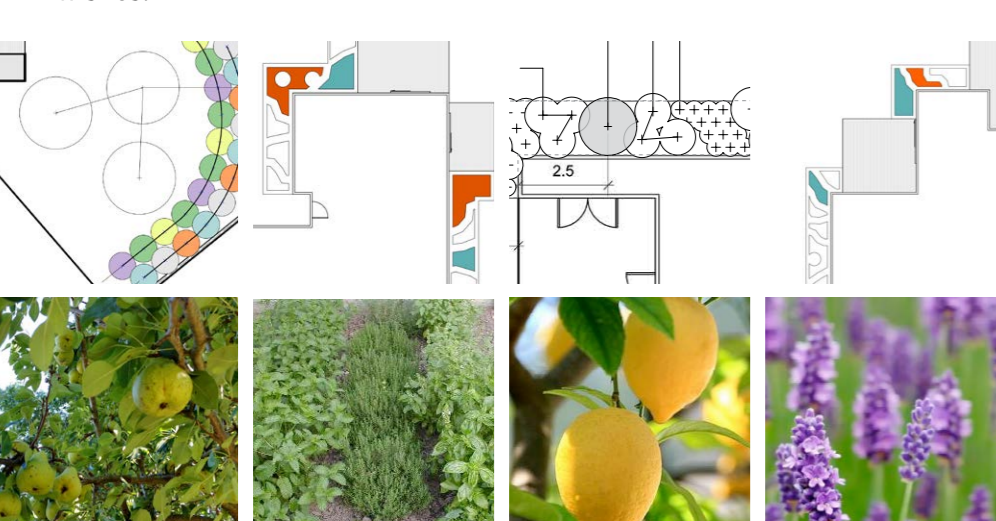


## Around the houses

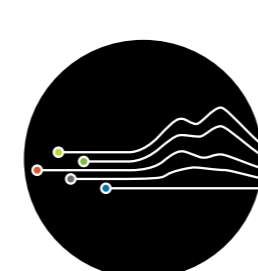
The approach with the farm houses was to create distinctive, liveable sections, with sufficient shelter and privacy. Decisions were made based on providing a high amenity, low-maintenance planting system with the capacity to provide a resource for farmers and their families (through productive, edible and useful species).

### Patterning strategy

The system has been designed to create difference and intrigue across the development, so that no two sections are the same. It works in support of the overall development concept at a larger scale, while fostering meaningful engagements with landscape at the experiential level. The system is considerate of both the low-maintenance farmer and the keen gardener, leaving opportunities for further development as the occupant wishes.



## Progress



Lincoln University Design Lab  
www.designlab.ac.nz  
contact: mick.abbott@lincoln.ac.nz

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