



BALRANALD KEY WORKERS ACCOMMODATION

DESIGN REPORT - VOLUME 1
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APPENDIX 1 – ARCHITECTURAL DOCUMENTS

An aerial photograph of a river delta, likely the Riverina region, showing a complex network of waterways and a grid of land parcels. The text is overlaid on the image.

In the spirit of reconciliation, we recognise the Muthi Muthi people as the Traditional Custodians of the Riverina region their connections to land, water and community. We pay our respect to their elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples today.



1.0

EXECUTIVE SUMMARY

1.0 EXECUTIVE SUMMARY

The Balranald District Hospital is heavily reliant on transient workers to provide the level of clinical staffing required. These workers are generally either, “Fly in, Fly out” (FIFO), or “Drive in, Drive out” (DIDO). Current accommodation for these workers is not reflective of contemporary requirements with regard to comfort and amenity, therefore we are proposing to develop new individual accommodation units to house these staff.

The key objective of this project is to provide eight individual accommodation units within four cabins for transient workers. These units will be supported by a shared barbecue area.



Site from Cabin 2 Location



Adjacent Buildings



View from site to Balranald Hospital



View of site from carport

An aerial photograph of a residential neighborhood, showing houses, streets, and green spaces. The entire image is covered with a semi-transparent teal overlay. In the upper left corner, the text '2.0 SITE REVIEW' is displayed in a bold, black, sans-serif font.

2.0

SITE REVIEW

2.0 SITE REVIEW

2.1 LOCATION

Balranald is located in the Wzestern edge of the Hay plain. It is located 853km from Sydney and 555km from Adelaide.

Balranald District Hospital is a small rural hospital which addresses the needs of the surrounding area. The Balranald District Hospital provides locally based services across emergency, acute, sub-acute, medical inpatient and nursing home type services

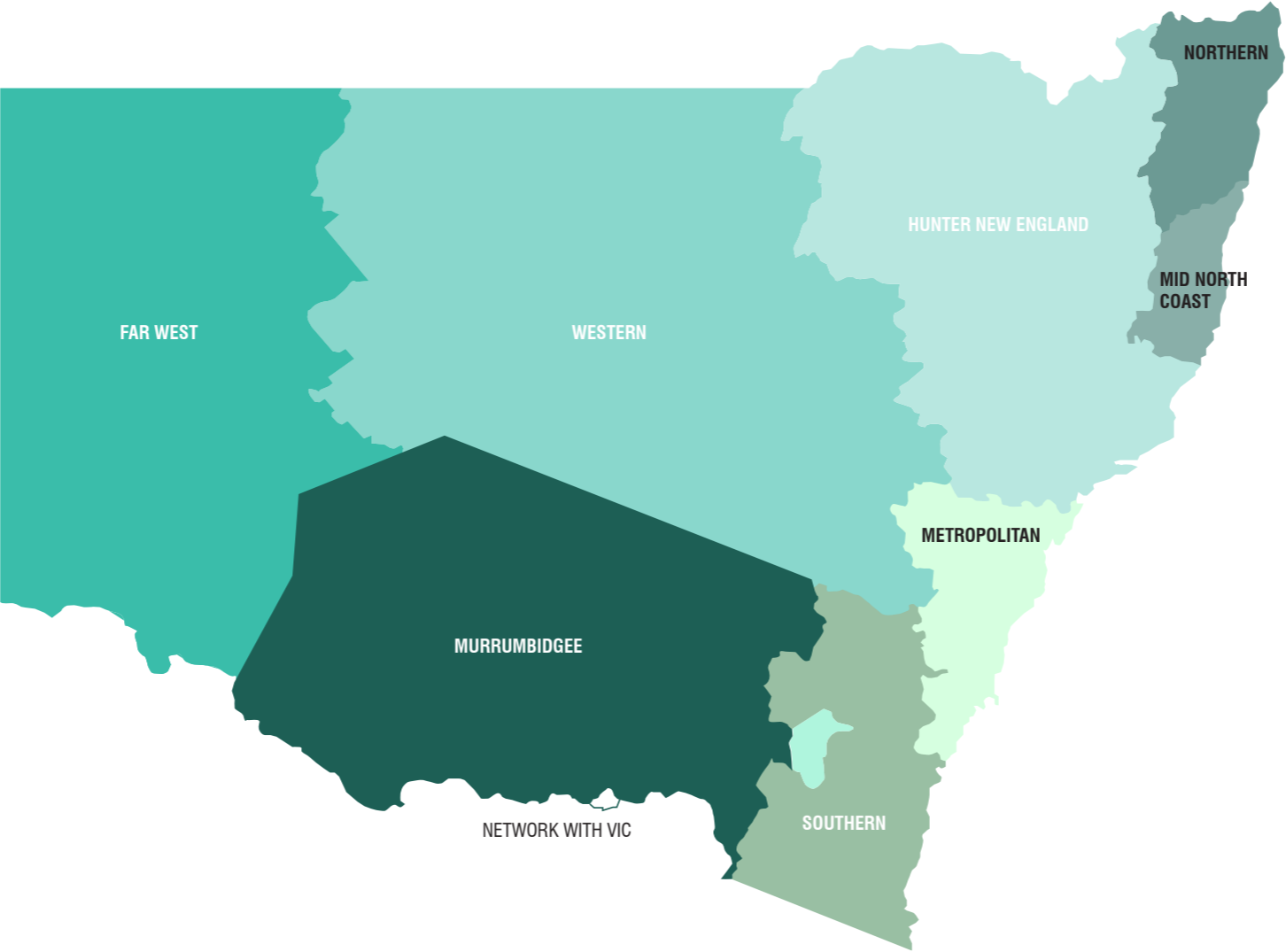


Figure 2.1 - NSW Local Health Districts



Figure 2.2 - Far West Local Health District

2.0 SITE REVIEW

2.2 THE SITE

Balranald is located where the Sturt Highway crosses the Murrumbidgee river. Balranald has a semi-arid climate with hot dry summers and cool winters.

Balranald District Hospital is located to the south east of the CBD on the outskirts of the town. The proposed site is adjacent to the Sturt Highway, which is a significant freight link between Adelaide and Sydney.

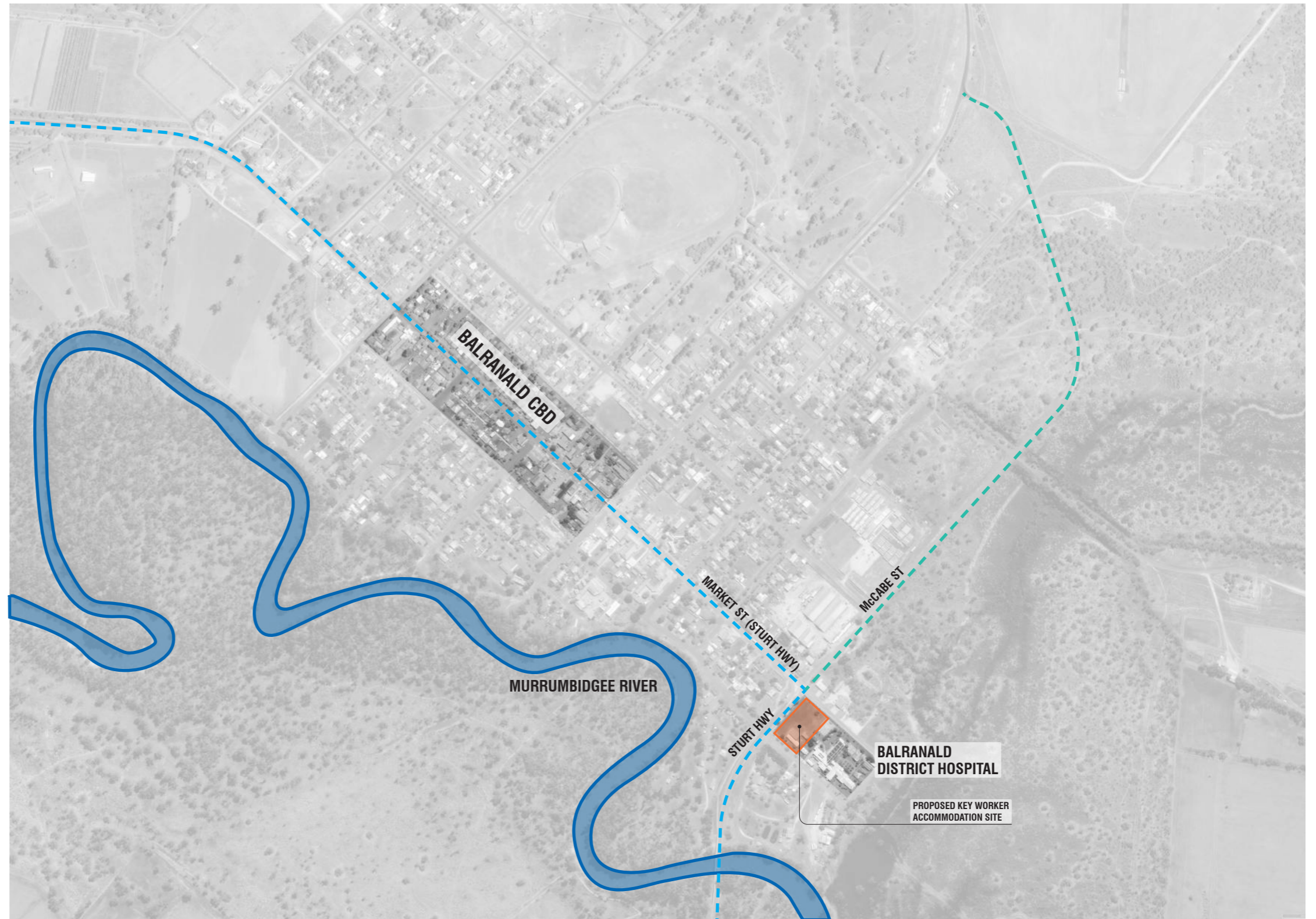


Figure 2.3 - Site Location

An aerial photograph of a suburban neighborhood, featuring a mix of residential houses, streets, and green spaces. The entire image is covered with a semi-transparent teal filter. In the upper left corner, the text '3.0' is displayed in a large, bold, black font, and below it, the words 'ARCHITECTURAL DESIGN' are written in a smaller, bold, black font.

3.0

ARCHITECTURAL DESIGN

3.0 ARCHITECTURAL DESIGN

3.1 HOW GOOD OUTCOMES ARE ACHIEVED

- Some keys to a good design outcome are:
- Respectful to both the existing heritage-built form and landscape context of the site
 - Acknowledge the street-scape and general surrounding character
 - Complimentary in both form and general surrounding character
 - Provides contemporary accommodation model, reflecting current worker expectations
 - Resilient and easily maintained to provide a durable, low maintenance asset.

As the site is adjacent to the residential zone of Balranald, the units need to sit within its context and not detract its neighbours. By using a minimal colour palate and simple forms, the proposed building will not visually distract from the surrounding streetscape. The units are single story to reduce the visual impact of the complex.

The material selections are resilient to the harsh climate and are of high quality. The materials chosen need minimal upkeep. They are resilient to UV damage and are all prefinished to eliminate the need to repaint.

3.2 OPTIONS EXPLORED

The previous inherited option located the cabins in the Northern portion of the site. Cabins 2 and 4 have been relocated further South into the site to mitigate the risk of trucks overturning onto the Sturt Highway and colliding with a cabin.

A perimeter fence has been added from the previous option to prevent accidental thoroughfare through the site and to increase privacy.

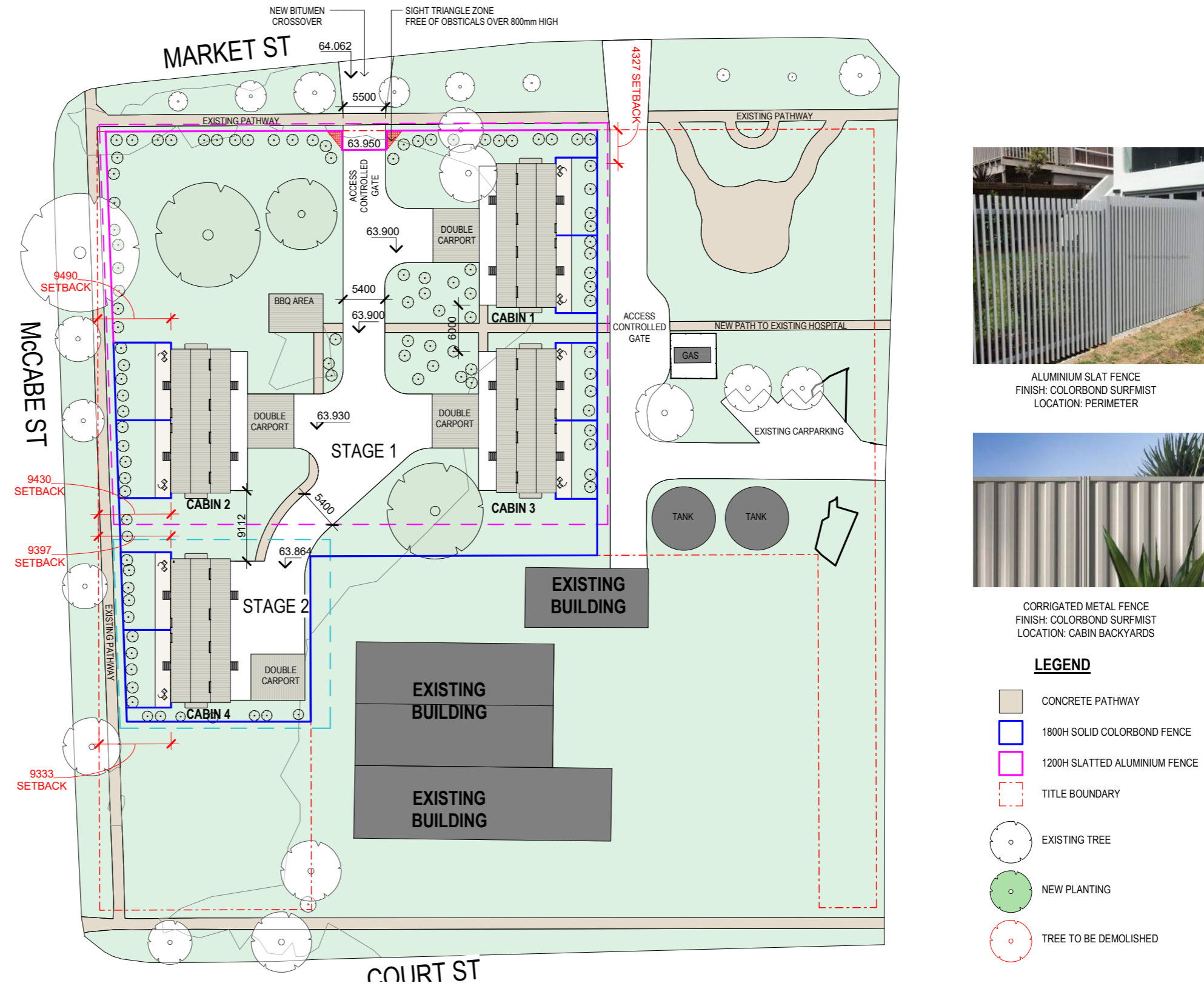


Figure 3.1 - Site Plan

3.0 ARCHITECTURAL DESIGN

3.3 CONNECTING WITH COUNTRY

QUESTIONS TO CONSIDER	YES	NO
Will the works disturb any culturally modified trees?		✓
Are there any known items of Aboriginal heritage located in the works area or in the vicinity of the works area (e.g. previous studies or reports from related projects)?		✓
Are there any other sources of information that indicate Aboriginal objects are likely to be present in the area (e.g. previous studies or reports from related projects)?		✓
Will the works occur in the location of one or more of these landscape features and is on land not previously disturbed? <div><div>• Within 200m of waters.</div><div>• Located within a sand dune system.</div><div>• Located on a ridge top, ridge line or headland.</div><div>• Located within 200m below, or above a cliff face.</div><div>• Within 20m of, or in a cave, rock shelter or a cave mouth</div></div>		✓

There is no need for an Aboriginal Cultural Heritage Due Diligence Assessment. There is no impact to any Aboriginal Heritage objects or items.

If required, the Mutthi Mutthi community will be engaged by Health Infrastructure to provide input to the design team to incorporate local Indigenous design principles and themes into the proposal.

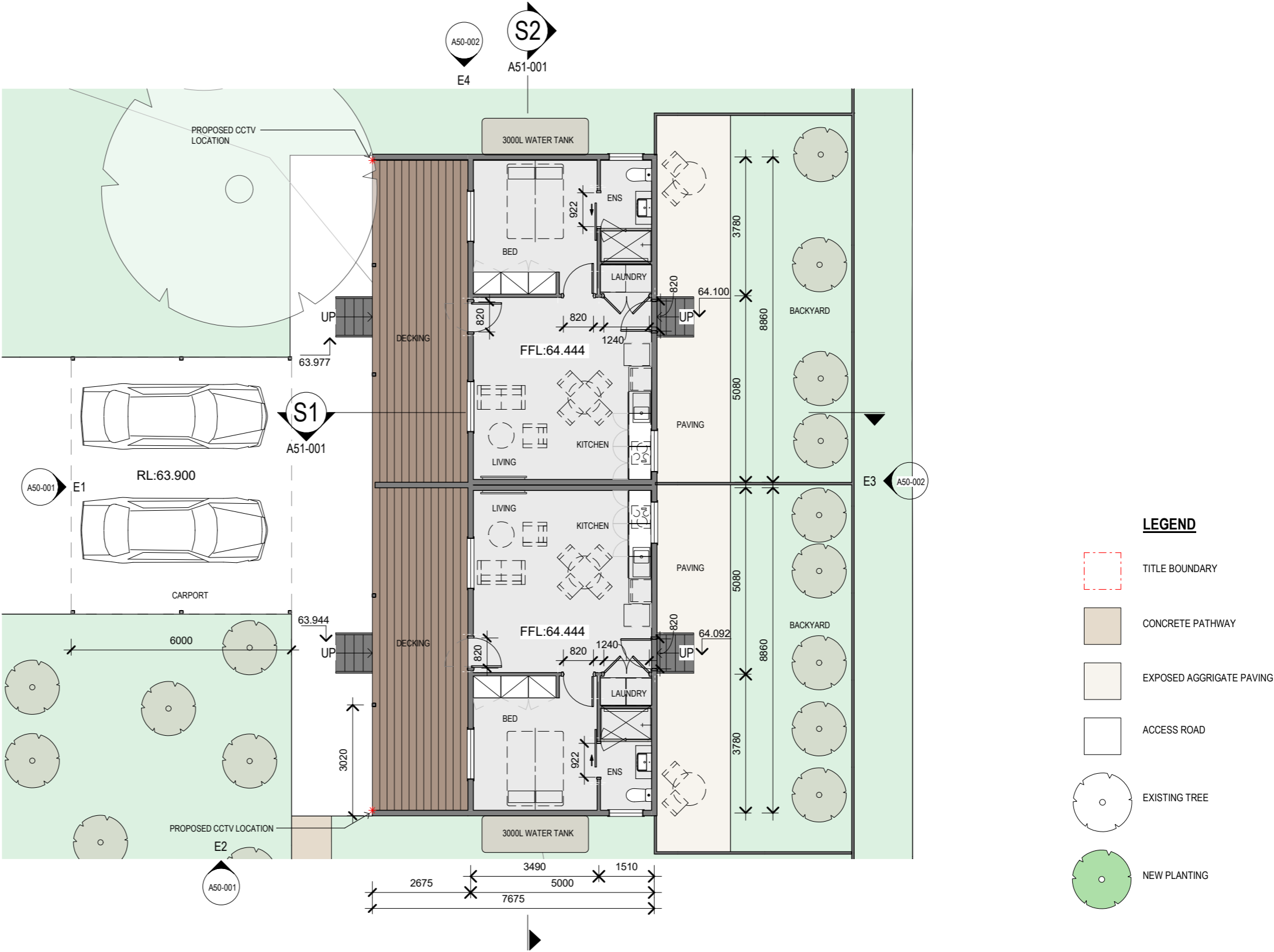


Figure 3.3 - Typical Floor Plan

3.0 ARCHITECTURAL DESIGN

3.4 PLACEMAKING AND DESIGN

The proposed accommodation cabins lie to the West of the hospital. The complex comprises of four transportable cabins.

The complex is split into building stages, with Cabins 1-3 part of Stage 1, and Cabin 4 part of Stage 2. Cabins 1-3 are located on the Market Street end of the site. This is the main street of Balranald and is part of the Sturt Highway. This allows for easy vehicular access from both the CBD and the hospital site.

The Northern corner of the site is a significant intersection on the Sturt Highway. There have been three incidents in the last 20 years where trucks have overturned onto the Sturt Highway. This is a significant safety issue. The surrounding houses have implimented concrete bollards in their gardens to mitigate this risk. This risk has driven the descision to locate Cabin 4 to the South of the site.

Each individual accommodation unit shares a covered deck leading to their respective entrances. Each cabin has an undercover double carport to service both units.

The perimeter of the site is fenced by a aluminium slat fence. The slatted fence acts as a permeable barrier to define what is public and what is private space, discouraging accidental thoroughfare through the site. The private backyards of the cabins are fenced off with Colorbond fences to increase privacy.

The gable roof of the shared indoor entertainment space shares an architectural language with the surrounding housing stock, referencing the barn typology seen throughout the town. The material pallete selected is simple as to not overbear the surrounding buildings. The chosen materials are also hardweraring, requiring little upkeep.

A shared undercover barbecue area is located at the Northern corner of the site and is acessed via concrete pathways from each cabin.

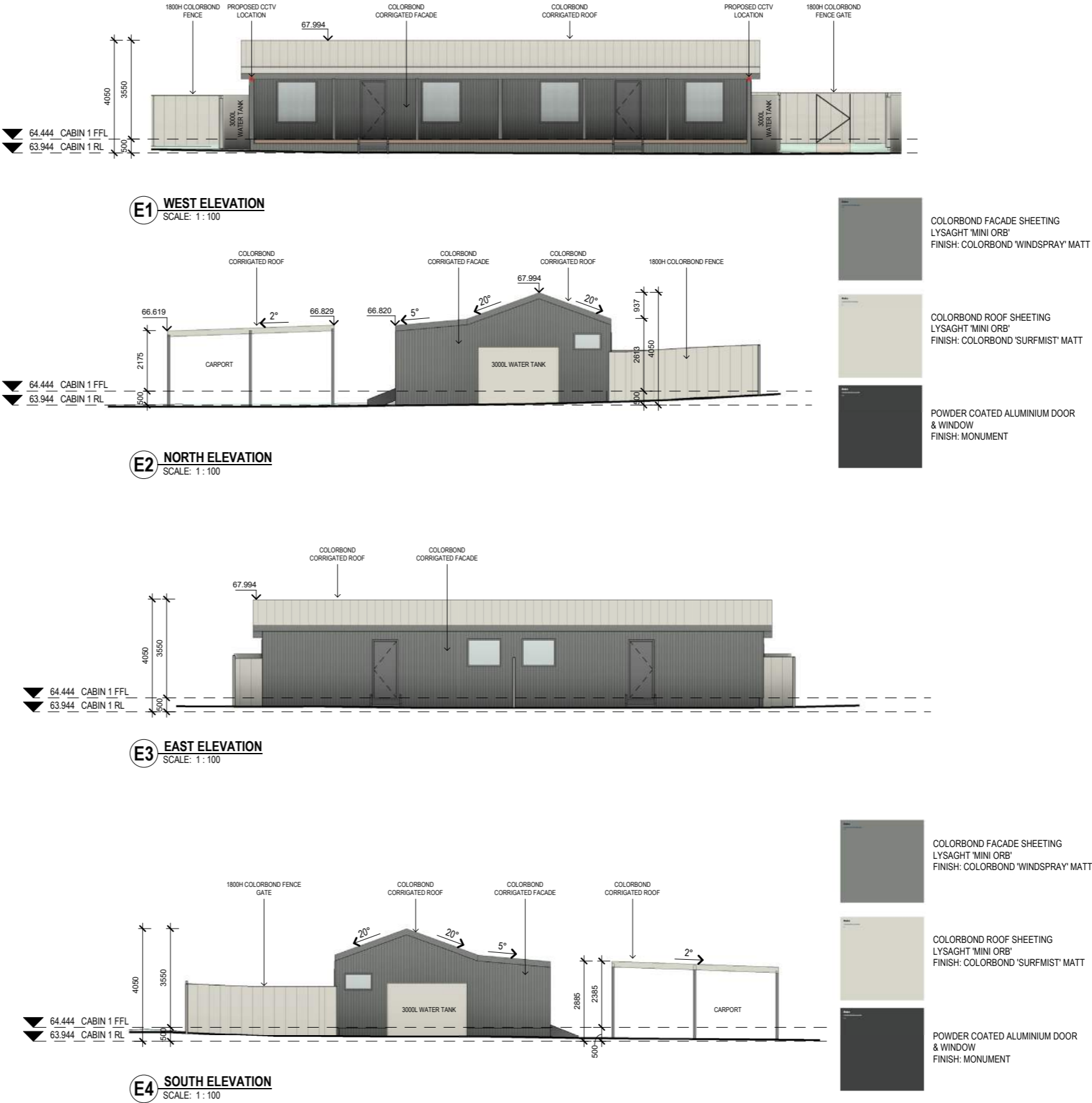


Figure 3.4 - Building Elevations

3.0 ARCHITECTURAL DESIGN

3.5 SUSTAINABILITY

The building design has been based around a modular off-site fabrication. This method of fabrication will ensure a well-sealed building envelope, with appropriate level of insulation for the hot and dry temperate climate of Balranald (NCC climate zone 4).

Supporting sustainable objectives, off site fabrication results in reduced building waste through the construction process and a high level of recycling of the building waste produced. Sustainable outcomes realized through the prefabrication process include:

- Reduction in building waste by 80% when compared to traditional construction
- Recycling process for building waste that does occur
- Improved building sealing and insulation
- Renewable timber construction over structural steel sub-frame
- End of life recyclability

Fixtures and fittings will be selected to provide efficiency for both water and energy use, aligning with the NCC.

3.6 ACCESS REPORT

The project brief does not include an allowance for accessible units. The cabins are non-compliant, and would require a significant redesign to satisfy AS 1428 requirements. If a staff member is employed who requires accessibility compliant accommodation, HI would source fit for purpose accommodation or make the necessary modifications to the existing accommodation.

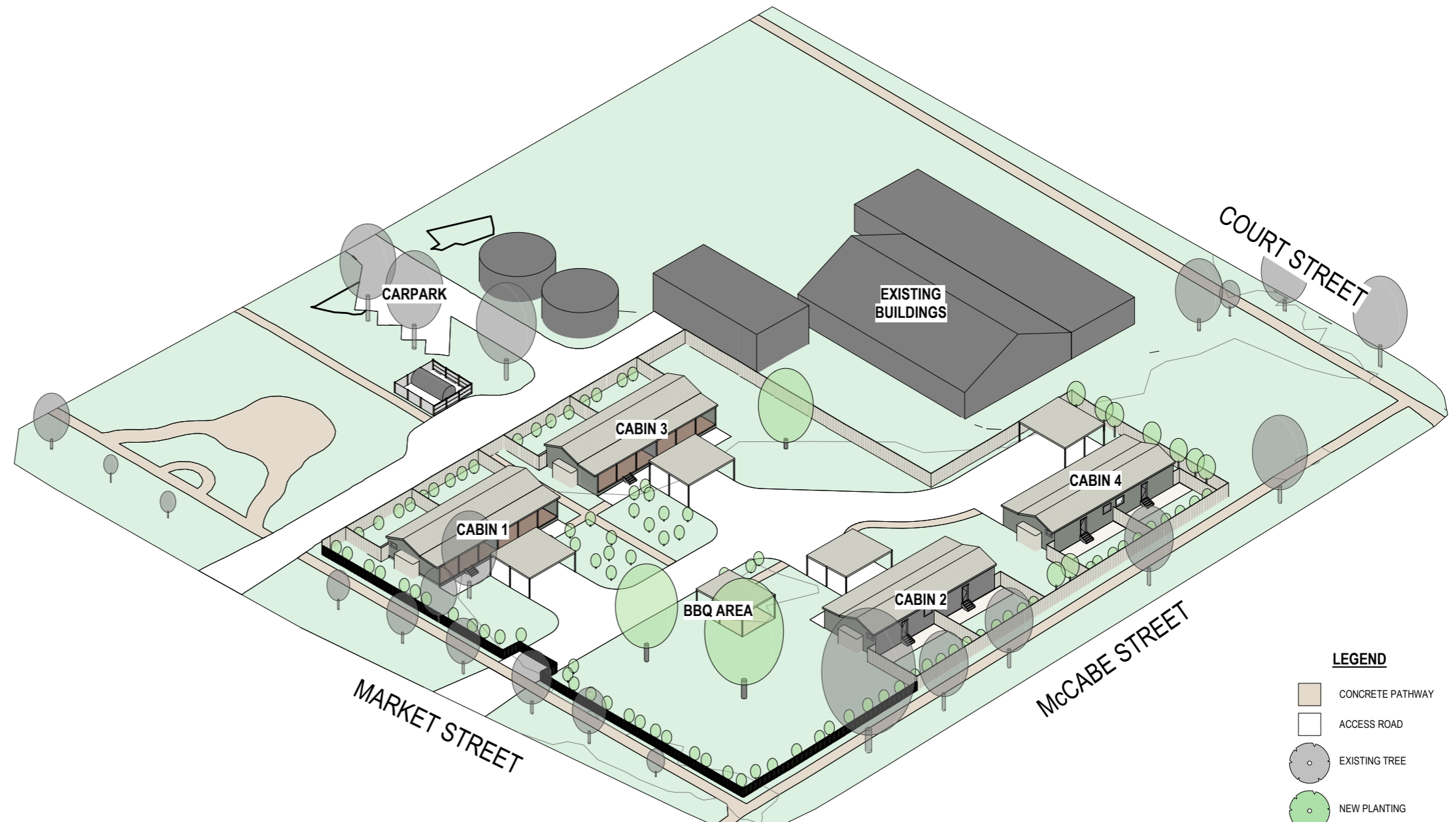


Figure 3.5 - Massing Study

3.0 ARCHITECTURAL DESIGN

3.7 CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN PRINCIPLES (CPTED)

Natural Surveillance:

- The proposed Balranald Key Workers Accommodation complex is set back from Market and McCabe street. This creates clear sidelines from the entrances to the street.
- The slatted aluminium perimeter fencing does not obstruct views, minimising opportunities for intruders to hide while providing a degree of privacy for the occupants of the units.
- The outdoor barbecue space is designed to encourage guest to gather. This creates a natural platform for surveillance.

Access Control

- The sight-lines from the street to the doors of the units are clear, further discouraging intruders.
- Individual access to each unit is provided to the residents, allowing access to be controlled.

Territorial Reinforcement

- The slatted aluminium perimeter fence acts as a permeable barrier to define what is public and what is private space.
- Landscape treatments will further define the boundary between public and private space, discouraging accidental thoroughfare through this area.

Space Management

- The use of aluminium profiled cladding reduces the effective surface area for graffiti
- The material choices require minimal upkeep. This will allow the units to look newer for longer, reducing the chance of vandalism

Controls

- The pedestrian pathways to the units will be lit. The entrance gates to the units and shared space will be illuminated to deter intruders.
- The lighting will be provided by energy efficient fittings with switches to save energy

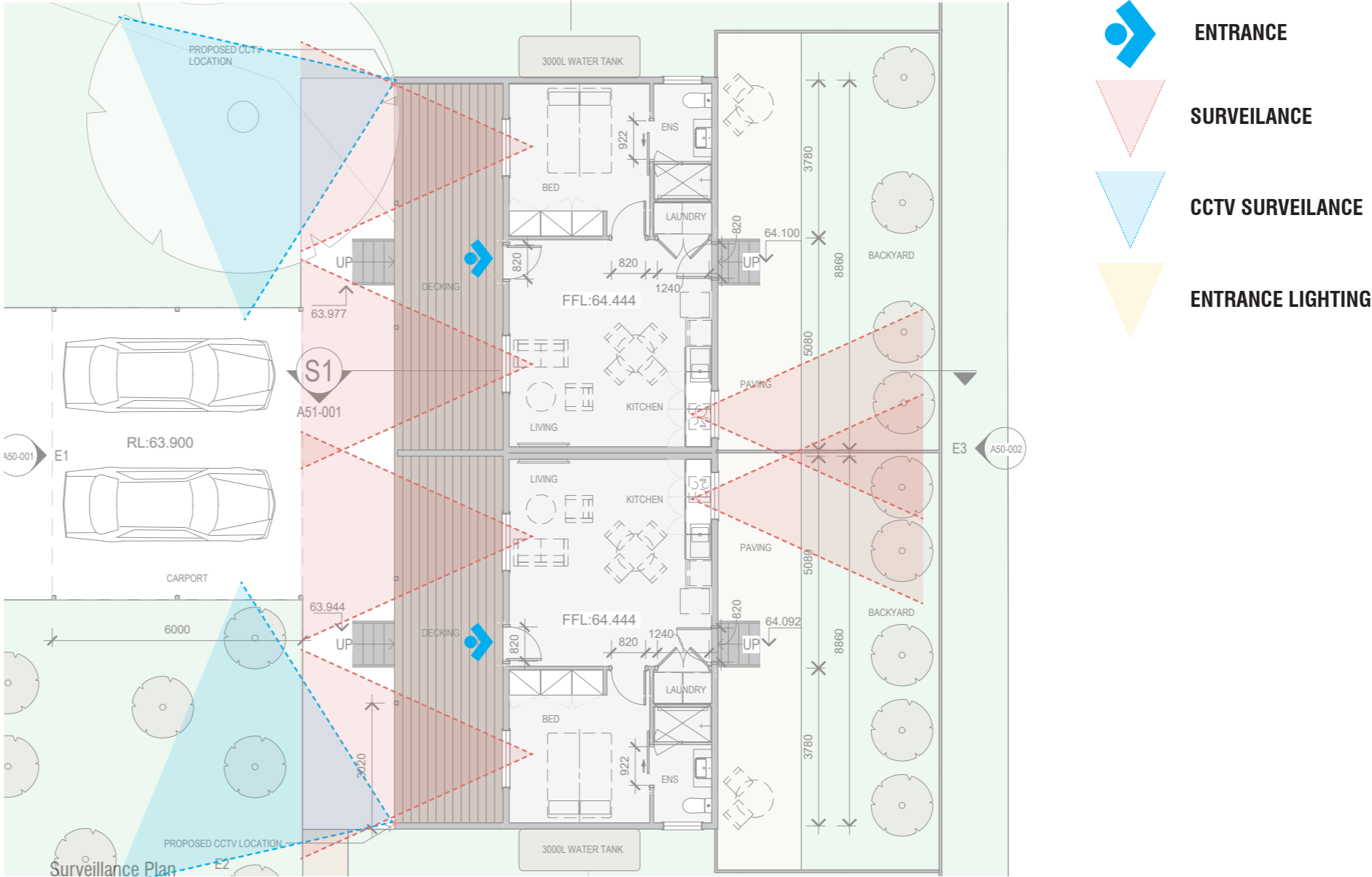


Figure 3.5 - Surveillance



Figure 3.7 - Entrance Lighting Section