

## Mitchell Springs, Northern Territory



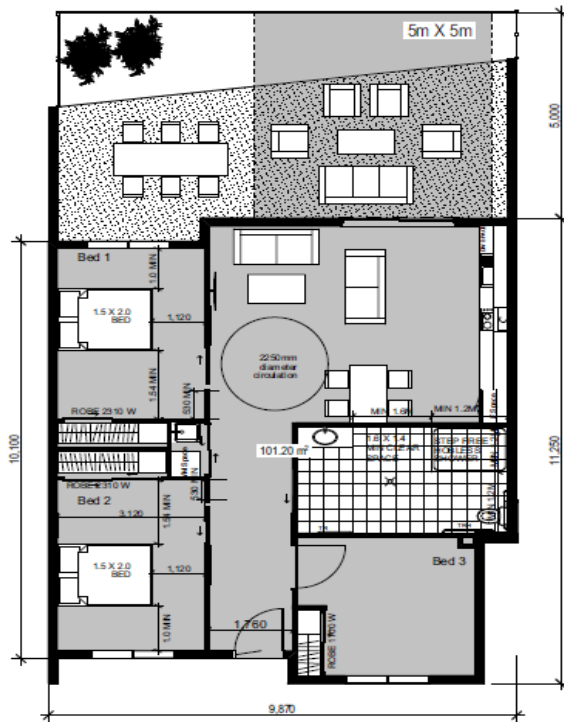
Mitchell Springs is a first for the Northern Territory, combining many elements to create a contemporary living space. The scope was to design and deliver 24 townhouses, 8 of which are registered with the National Disability Insurance Scheme. This project became the pathway to understanding Specialist Disability Accommodation (SDA) within the NDIS.

Designed and built on a strict budget, for affordability to be passed onto the occupant, the development necessitated a new level of innovation to meet specific Liveable Housing Association (LHA) accessibility guidelines whilst still producing a functional and aesthetically pleasing environment.

Stage 2 of Mitchell Springs sees the construction of a community room for use by all residents of Mitchell Springs, and to provide social services such as counselling, education, socialisation and rehabilitation for NDIS Participants.

Additionally, in stage 2 is a complete subdivision of over 4000m<sup>2</sup> land with current approval for a McDonalds Family Restaurant. McDonalds will provide numerous employment opportunities for young people and will improve social interaction for the occupants and the surrounding community.

Mitchell Springs offers a host of innovative and unique features. Eight of the twenty-four units have been designed, built and registered to meet the LHA standards for fully accessible dwellings. These apartments have two platinum-level bedrooms and a third standard-level accessible bedroom.



Extra detail beyond LHA requirements include extended thresholds to private open space, and electrical and bench top heights have been adjusted to maximise ergonomics for potential residents. Additionally, all entrances, common areas and pathways to all areas have been constructed with accessibility in mind. Each apartment can be further customised and retrofitted to meet their individual needs, and as required by the NDIS.

To minimise costs and complete the project within budget, many smart design initiatives were implemented. The main apartment floor plate design was repeated in four buildings for efficiency in materials, trades and engineering. Variation in colours and types of rendering was used, allowing the buildings to be aesthetically pleasing.

Amenities such as air conditioning units were intelligently located away from the private open spaces and positioned as closely as possible to indoor air conditioning units to reduce cost and

maximise efficiency. The car port was constructed with a semi-open design to provide an opportunity for green spaces, while also reducing costs, but still providing pedestrian coverage from car to dwelling.

Although budget was a major influencing factor in the development of Mitchell Springs, the standard of finish has not been compromised. The project has well-appointed three-bedroom layouts with good quality, contemporary internal fit-outs. The spaces are much larger than standard apartments, with wide hallways and spacious living and balcony areas ideal for family and the tropical Northern Territory lifestyle.

Expansive verandas and carports for each apartment were intentionally designed to assist with passive cooling and reduce the need for air-conditioning – cutting down on both cost and energy usage. Additionally, the clever location of the hot water pump on balconies and/or in gardens result in a cooling fan effect while in operation. This maximises running efficiency while minimising the passive heating from the outdoor unit.

Mitchell Springs implemented many innovative engineering solutions in its design. Carports were a unique, multi-faceted design feature of the complex skillion roof design, connected to the facade of the building with a pronounced, upturned eave. The carport roof system moves the stormwater away from the entrances to prevent rain inundation during the wet season, and the large upturned eave creates a channel large amount of stormwater away from the main building to drainage points.

The carport covers all communal walkways and access points to the apartments and assists with passive cooling for the ground level apartments, preventing direct heat of the extreme Northern Territory weather from reaching the main structure.

Response to the development so far has been hugely positive, with many saying this unique development is truly a first for the Northern Territory.