

PROJECT:	Carnarvon Residential Aged Care
LOCATION:	CARNARVON WA 6701
SCOPE OF WORK:	Wet/Dry Fire Protection
COMPLETION DATE:	August 2021
CONTRACT VALUE:	\$190,000.00

The new Carnarvon Residential Aged Care facility recently built on behalf of the WA Country Health Service is co-located at the Carnarvon Hospital to enable integration with other health services.



The facility consists of 38 residential beds which includes accommodation for families and ensures local people will feel at home whilst accessing culturally sensitive care in their local community.

SCOPE DETAILS

Within our scope, we were contracted by Crothers Construction with the design and installation of:

- A compliant Automatic Fire Sprinkler system in accordance with AS2118.4 -2012
- Diesel Fire Pump in accordance with AS2941-2013
- Single full capacity 8kL Water Storage Tank in accordance with AS 2304
- Fire Detection & EWIS system in accordance with AS1671.1-2018 and AS1670.4-2018

Sprinkler Control Valve assemblies have been installed in the Fire Pump Room and the sprinkler system is interfaced with the Fire Indicator Panel.

If the sprinkler head activates, a signal is sent to the FIP via a pressure switch, which will activate the Occupant Warning System and transmits a signal to the fire monitoring authority.

The fire pump supplies the fire sprinkler system and consists of 1 x diesel duty pump and 1 x jacking pump. There is also an electrically driven automatic pressure maintenance pump (jockey pump) installed. This pump pressurizes the system in the event of a small loss of pressure. It is automatically operated or can be manually operated from the pump control panel. These pumps are housed in the fire pump room located externally to the building.

The fire water storage tank is a singular tank complete with required inlets and outlets, access ladders, platforms and hatches and draws water from a dedicated town main connection.

The Fire Indicator Panel is located in the main entry lobby of the building, the detection system monitors the pumps, sprinklers, valves, pressure switches and various mechanical services.

There is a Red Strobe Light and Bell located outside the front entrance of the building which enables the fire services to easily locate the FIP. There is also a EWIS system installed which broadcasts alerts and evacuation tones throughout the facility, this system also allows communication between various areas via Warden Intercom Phones and the Emergency Control Panel.



CHALLENGES & SOLUTIONS

Throughout the project we were faced with various challenges:

The works for Carnarvon Aged Care incorporated the demolition of existing facilities and associated services which were connected to the existing hospital site facilities. Throughout the works, the existing hospital and part of the existing aged care facility remained fully operational therefore Firesafe had to continually communicate with the staff and other services when carrying out works.

Given the remote location of the project, there were some challenges regarding logistics, particularly the timing of having labour attend site to undertake works that were dependent on other trades completing works prior thereto. In some instances, other trades had not arrived on site as scheduled, thus hampering Firesafe efforts to complete works on time and within our budget.