

PROJECT:	RPH B & C Block Hydrant Upgrade
LOCATION:	Wellington St, PERTH WA 6000
SCOPE OF WORK:	Fire Hydrant Upgrade
COMPLETION DATE:	February 2021
CONTRACT VALUE:	\$262,000.00

Royal Perth Hospital was first established in 1855 and is WA's longest serving hospital providing 450 beds for adults and is also classified as a teaching hospital located on Wellington Street within the Perth CBD.



Firesafe were awarded the contract to upgrade the Fire Hydrant system to the B & C Blocks at the Royal Perth Hospital. The upgrade of the system was to cover the three floor levels of these blocks with the provision to extend the system to serve additional buildings in the future.

SCOPE DETAILS

Within our scope, we were tasked with the design, supply and installation of:

- A compliant Fire Hydrant system in accordance with AS2419:2005
- Installation and commissioning of a single end suction hydrant pump compliant with AS2941-2013.
- Supply and installation of 2 x 12.5Kl effective capacity fire water storage tanks compliant with AS2304.
- Supply, install and commission a Fire Detection & Occupant Warning system in compliance with AS1670.1 – 2018 & AS3000-2007.

The installed fire hydrant system was designed on the requirements of two hydrants being required to operate simultaneously. Both internal and external hydrants have been installed throughout the site. The existing system was a feed hydrant system fed off the street mains, the upgrade incorporated replacing the existing system by installing a duty diesel pump and new hydrant mains feeding Blocks B & C, with provision to enable future extensions to Blocks D, E & F.

The fire pump is a single end suction hydrant pump set which is housed within a sound attenuation weatherproof enclosure instead of the standard fire pump room. The enclosure is powder coated steel with ventilation and has an external bell, strobe and wired distribution board with an external junction box.

New Fire rated cabling has been installed to the C Block Data Gathering Panel to enable programming of the Fire Pumps to the main FIP.

A dedicated power supply has also been installed from the electrical distribution board within the B Block which incorporated a DB Fire within the Fire Pump Room.



CHALLENGES & SOLUTIONS

Throughout the project we were faced with various challenges:

- The site was a fully operational Hospital whilst we conducted our works. We had to have precise forward programming of our works with the client and other trades to ensure there was minimal disruption to the day to day functioning of the hospital.
- Recent times with the COVID 19 restrictions added obstacles aligned with working conditions associated with site works and access to areas of the hospital.
- The external works of our newly constructed compound was required to meet the City of Perth standards.
- Deliveries were critical to be timed for early morning as Wellington Street is a congested traffic area during peak hour traffic.
- We encountered issues with drawings and Building License approvals which was out of our control, however we were still able to complete this project within the timeframe and to the satisfaction of the client.