



## PROJECT FACT SHEET



### MODBURY HOSPITAL UPGRADE

#### CLIENT: BUILT ENVIRONS

Nilsen has successfully completed a \$15 million electrical and communications upgrade to the Modbury Hospital. Along with several refurbished wards, the works also included a new main entrance and Outpatients Department and Palliative Care Unit buildings.

The scope of work comprised of main site infrastructure upgrades including HV, fibre and copper communications cabling, new main switchboards including generator control upgrades, electrical and communications installations to the refurbished and new facilities.

Work involved carefully planned shutdowns and cut overs to minimise any disruption of services to the operating hospital and associated health sites.

Prior to award, Built Environs rigorously reviewed our offer to build confidence that Nilsen had correct understanding of the scope and all the electrical and communication shut down requirements. Nilsen delivered the project successfully, on time and on budget, to the satisfaction of Built Environs and the Department of Health and Wellbeing.



Amongst the many electrical and communication shut-downs that occurred, the biggest achievement has been the Generator System upgrade. Nilsen hoisted the new Generator board down into the basement and set up temporary generators on ground level. Over the course of two nights, the generators were disconnected from the hospital and linked to the standby sets that were introduced. The generator board was then removed and the new one installed. The work was then reversed from the temporary arrangement and bring back on line the new generator board and generator controls for the hospitals generator sets. Every time this was done it involved significant critical work plans that had to be approved by all stake holders.

Time was of the essence during these changeovers as the hospital was left without generator backup during the tests which included set times for site wide momentary black outs.

DALI LED lighting with CBUS control was implemented throughout the new and refurbished areas highlighting a commitment to sustainability and the environment. Above the usual lighting control switches these areas also included timed and motion sensors to ensure that the power consumption was managed in the most efficient way possible. This was designed by consultants and further developed and optimised with the help of Nilsen on site.

End user engagement and consultation has been key to this project's success. Countless round table meetings with user groups and different departments of Health were undertaken for the many electrical and communication shutdowns. Critical work plans were developed and signed off by all that may have been impacted by the shutdowns. This was to ensure that all interested parties were kept well informed and their concerns were addressed so that disruptions were alleviated, kept to a minimum or coordinated for better time slots.



Nilsen obtained a 25 year SYSTIMAX communication system warranty for the communication network installed at the MHU site. Nilsen also obtained third party certification on all Cardiac and Body Protected Areas.

Being an operating hospital, Nilsen managed and coordinated electrical shutdowns to ensure no employee worked within a Live switchboard. This was coordinated via critical work plans and isolation permits/requests. Over 65,000 hrs of work were completed by Nilsen with no Lost Time Injury incidence.

Nilsen attended to all safety works and participated in the SEE SAY DO approach that Built Environs introduced. Nilsen conducted task observations, weekly site audits and monthly site inspections to ensure SWMS were utilised and that the site upheld the safety requirements for all employees.

Nilsen employed direct apprentices along with hired apprentices for this project to support the growth of the electrical industry. SA Power Network apprentices were also engaged which provided experience in commercial installations as part of their electrical apprenticeship. Nilsen also promoted a long-term tradesman to leading hand status with the full-time on-site Project Manager supporting them through the entire project.

