

PROJECT FACT SHEET

Customer: John Holland

Project: Mackillop Catholic College

Project Profile: The project involved Supply and Installation of the Electrical HV & LV, Communications, Fire and Security services for the Mackillop Catholic College at Johnston, Palmerston.

Nilsen Scope of Works:

- The HV works included extension of existing 11kV PWC 400sqmm network from Farrar Blvd to a new indoor sub-station located within the new College and install 2 RMUs.
- Nilsen designed and constructed Main Switchboard is located within this room providing sub main supplies to seven Distribution boards located throughout the complex as well as mechanical Chiller supplies, power factor correction units and provision for future stage electrical requirements.
- Nilsen installed a Siemon Cat 6A communications distribution system incorporating Fibre Optic backbone cabling linking five communications cabinets distributed throughout the buildings.

Project Challenges:

Early in the program there were design issues requiring a delay to the original completion date. Nilsen offered an alternative cost/time saving arrangement for the distribution of the submain cables from the designed underground reticulation which required nylon jacket cable having a lengthy supply lead time.

Nilsen Innovations:

An innovative change to the standard emergency lighting system and control that Nilsen proposed and subsequently was accepted by the client was to use CBI monitoring relays in lieu of the timer, contactor and pushbutton method usually installed. The advantage of this relay is twofold, in that it reduces the amount of cabling to be installed in the field, but more so, the relay monitors all lighting circuits and in the event of power loss to any lighting circuit it engages a contactor to bring on all emergency lighting circuits providing.