

PACNET DATA CENTRE



PROJECT DETAILS

PROJECT LOCATION:
133 Liverpool Street, Sydney
NSW 2000

COMMENCEMENT DATE:
July 2012

COMPLETION DATE:
July 2013

TYPE OF CONTRACT:
Construct

CONTRACT VALUE:
\$8 million

GROSS FLOOR AREA:
3,500 sqm.

PROJECT MANAGER:
Anthony Greenaway

**CONSTRUCTION
MANAGER:**

OVERVIEW TRADE PACKAGE

- This project was to convert 2 old disused levels into usable data centre floor space increasing their capacity by 600 rack spaces and integrate with their existing facility located on level 1.
- Refurbish Existing Main Switchboard
- Refurbish Existing Generator Switchboard
- Supply and Install new Main Switchboard
- Supply and install cable ladder throughout levels 2, 3, mid level plantrooms and roof top plantrooms
- Fitout lighting, power and data to levels 2 and 3
- Supply and install submains
- Supply and install Cbus controlled lighting system
- Supply and install Legrand centrally monitored emergency lighting control system
- Supply and installation of main distribution boards, MCCs, ATSS, UPS boards and light and power boards
- Carry out load bank testing and commissioning

PROJECT CHALLENGES

- No loud noise (drilling, hammering, etc) between 8am and 5.30pm and zero noise between 12.00 noon and 1.00pm
- All material for project was required to enter the building via steep, narrow loading dock and standard passenger lifts, this required items to be either custom made or cut down to fit.
- No material could travel within lift between 8am and 5.30pm.
- Designing, transporting and installing 70 switchboards to fit in the existing passenger lifts with little to no storage space.
- Coordinating, transporting and installing 80,000m of submains to fit within the existing passenger lifts with little to no storage space. This involved up to 4 cable deliveries per day
- Sourcing, transporting and installing 2,600kW of load banks to fit within the existing passenger lifts for Integrated System Testing.
- Creating new electrical risers between basement and roof (almost 100m) through disused lift shafts and ventilation shafts. This required the services of abseiling specialists for the installation of anchor points and safety lines to ensure works could be carried out safely.
- Refurbishing of main switchboards required the entire buildings power supply to be isolated, as this affected an existing live data centre, bank and 2 other operators the works were well planned and carried out in windows after hours and over the weekend.
- Construction of suspended concrete encased conduits through existing plantrooms to accommodate future mid level Ausgrid chamber substation.

PROJECT SPECIFICS

- 30,000 man hours with no LTIs
- 80,000 of submains
- 5,000 of cable ladder/tray
- 70 switchboards
- Bulk of works completed in 24 weeks

