

Case Study

The Background

The Brisbane Metro Depot works is a 10-hectare Metro vehicle fleet depot in Rochdale, QLD. The depot is the home for Brisbane's new Metro which will deliver fast and frequent travel between the suburbs and the inner-city through a fleet of high-capacity electric metro vehicles, the first of their kind in Australia.

The depot includes:

- Storage and maintenance workshops for the new battery electric Brisbane Metro fleet.
- Flash charging technology which can recharge a Brisbane Metro vehicle in under six minutes.
- A large solar photovoltaic system comprising 2,300 panels to offset some operational demands for Brisbane Metro.
- A 15-bay maintenance garage, offices, training areas and staff facilities
- A 5-star Greenstar project rating for its sustainable design, with the site using harvested rainwater and recycled water for vehicle washing.

The Challenges

With the site spread across 10 hectares and containing multiple buildings over large distances, the project had a major challenge in delivering a wireless emergency lighting system across the site without significant backbone hardware. The on-site buildings, which consist of maintenance workshops, administration buildings, and fast charge centres, all require emergency lighting. This was made all the more challenging as they needed to be monitored from a single-head unit, despite the fact the buildings were all 100m+ apart.

Further to the monitoring of the general emergency luminaries, the project required emergency lighting within Hazardous Areas (HA) where specialised HA lighting was installed. This presented a secondary challenge to the project as these third-party HA-rated emergency luminaires also needed to be managed by the site's emergency lighting system.

Project Name

Brisbane Metro Depot

Location

Rochdale, Brisbane QLD

Completed

2024 (completed)

Number of Fittings

200

Product range

L10 Lithium Nanophosphate

Testing system:

Zoneworks Hive

Electrical Contractor:

Tyrone Electrical QLD

End User:

Brisbane City Council

“ New emergency lighting installation for a transport project - a first of its kind in Australia. ”

ZONEWORKS[®]
XT HIVE

L10 LITHIUM NANOPHOSPHATE[®]
OPTIMUM
NOTHING ELSE COMPETES WITH NANOPHOSPHATE[®]

Solutions Provided

Zoneworks HIVE combined with L10 Nanophosphate fittings was the ideal emergency lighting solution for the project.

Zoneworks HIVE was able to provide a wireless system across the site using just three controllers that linked back to a server. These were connected via the client's network. This was then commissioned and handed over in stages, driven within the project's construction timeline.

- Clevertronics L10 Exit and Emergency luminaires were selected to support the long-term sustainable design and warranty objectives.
- During the design phase, the Clevertronics design team supported the contractor in optimising and providing compliance checks of the emergency lighting design to ensure efficiency while maintaining compliance with required standards and codes.
- Clevertronics was able to monitor the third-party emergency fittings using the Zoneworks HIVE wired data bridge. This gateway bridge allows the hazardous-rated emergency lights to communicate and be managed on the Zoneworks HIVE system.



Results

The Brisbane Metro Depot's emergency lighting system has been successfully handed over to Tyrone Electrical and the client, with 100% of the fittings commissioned and tested. The site now has full monitoring and automatic testing capabilities for all the emergency and exit lights via the Zoneworks HIVE system. With the 12+ years design life of the L10 luminaires, the site will no longer require ongoing maintenance during this period.

This site will be supported by Clevertronics Lifetime Technical Support program that ensures its Zoneworks HIVE system has access to the latest software while providing technical support for the facility and maintenance contractors who help maintain the site.

Products Used



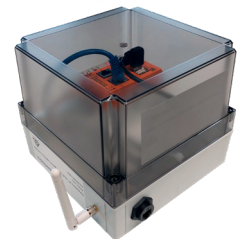
Cleverfit



Lifelight Pro



Supalite



Hive Controller



Zoneworks Data Bridge



Cleverfit Weatherproof

