



Chaddesden Curve Drivers Walkway Lighting

As part of a wider remodelling scheme taking place across the City of Derby, AmcoGiffen were entrusted with the installation of low level lighting on two new drivers walkways situated on the inner and outer curve at Chaddesden Sidings. The project enabled drivers to disembark from the train cabin and access the entirety of the train, in situations where they are unable to walk through and access the train from the cabin. AmcoGiffen delivered civils and electrical designs on this project.

Scope of works

Design for all mechanical and electrical engineering work associated with two new drivers walkways both of which require low level lighting.



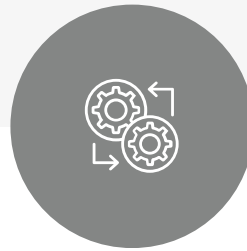
ELECTRICAL DISTRIBUTION

Electrical distribution survey of REB DCI28M028; the location of which the new lighting derives its power



LIGHTING INSTALLATION

Lighting of the two new drivers walkways



INTEGRATION WORK

Integration of existing cable routes with new duct routing and draw pits



EFFICIENT SOLUTIONS

Provision of modern energy efficient fittings to achieve required lighting levels

Innovations applied

- Integrated mechanical and electrical engineering alongside civils design of proposed cable containment to avoid problems during construction
- Liaison with installer and suppliers for the integration of bespoke solutions to allow for simpler installation

AMCO·GIFFEN

E&P Design Team Case Study



Chaddesden Curve Drivers Walkway Lighting

End Client	Network Rail
Principal Contractor	AmcoGiffen
Design Period	2019
Design Stage	GRIP Stage 4 - 8
Specialist Software	Dialux Evo, Bentley Hevacomp, Bentley OpenBuildings Designer

Benefits Provided



SUCCESSFUL COLLABORATION

Successful collaboration with between electrical and plant alongside civil design teams throughout the project particularly with regards to topographical surveys, handrails and lighting positions/fixings



LOW ENERGY SOLUTIONS

Low wattage LED lighting providing cost savings due to low energy consumption

Challenges

Due to the existing topography not extending to the outer walkway, AmcoGiffen based their designs on OS tiles combined with additional surveys capturing datum points for the entire walkway. This resulted in aligning the two together to progress the layout and lighting calculations.