

## Case Study



### Stagecoach EV Charging Depot Installation, Manchester

## Overview of Works

Working in partnership with Principal Contractor, Centrica, Ipsum was delighted to secure this green transportation scheme project with Stagecoach to deliver the design, installation, connection and commissioning of HV Services to their new 1.5MVA EV Charging Depot in Manchester. This formed a crucial part of their on-going decarbonisation strategy, igniting a new era in public transport through the introduction of a fully electric fleet of double-decker buses across Greater Manchester's busiest routes.

#### Contestable works on behalf of Stagecoach included:

- » Electrical and Civil Design for Electricity North West (ENWL).
- » Cable Trenching from the ENWL Point of Connection (POC) to the ENWL 11kV Substation.
- » Double Circuit install from 11kV ENWL POC to the 11kV Substation.
- » Ring Main Unit, Metering, GRP Housing and Metering Kiosk install.
- » Supply and install of Earthing and Multi-Core Wiring.
- » Commissioning of the ENWL 11kV Switchgear & Protection Scheme.

#### Ipsum also carried out the following 11kV client-side works:

- » Electrical and Civil Design of Switchgear, Transformer & LV Panel.
- » Cable Trenching from the Substation to the customer LV Panel.
- » Supply and install of 11kV Cables from the ENWL 11kV Switchgear to the customer 11kV Switchgear.
- » Supply and install of customer 11kV Circuit Breaker.
- » Supply and install of 11kV Cables between customer 11kV Switchgear and customer 11kV Transformer.
- » Install of 2MVA, 11kV/LV Transformer and LV Feeder Pillar.
- » Supply and install of LV Cables between Transformer and LV Panel.
- » Supply and install of LV Panel, & Earthing of Multi-Core Wiring.



## Key Challenges

Due to the live nature of the busy depot, meticulous project planning and programming was of critical importance, ensuring our site activity at no point disrupted regular depot operations. This could of resulted in late bus arrivals & departures, thus inviting reputational risk. By working as a collaborative partner with Stagecoach and Centrica, Ipsum was able to efficiently plan and deliver all disruptive works out-with busy periods, ensuring all bus timetables were maintained, satisfying both Stagecoach and their passengers. Our meticulous planning process set a benchmark standard and has been mirrored continuously in future projects.



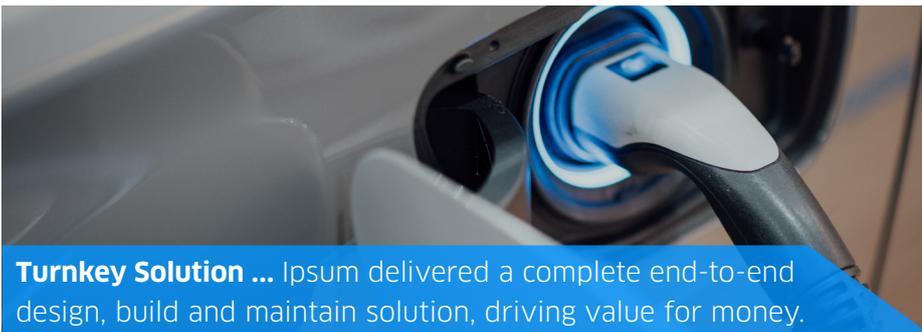
## Project Management & Delivery

Ipsum setup a Pre-Start Meeting with Centrica to firm up project specification and timescales, site setup proposals and key points of communication for all site contractors. We conducted a comprehensive survey with Centrica, ensuring project designs and specifications aligned, highlighting any necessary variations, and confirming all permission requirements from end-client and other stakeholders.

The survey also enabled our team to finalise our project programme and safe systems of work, working with our in-house SHEQ specialists to develop in-depth RAMS; all of which were shared with Centrica to support the development of the Construction Phase Plan. In tandem with this, Ipsum developed our Procurement Schedule and placed orders with all key suppliers to ensure compliance to programme.

Ipsum deployed a dedicated team to the project consisting of an Operations Manager, Project Manager and Site Supervisor, thus implementing multiple layers of management to ensure consistent performance levels and compliance to project programme. Our dedicated Project Manager held weekly meetings with Centrica and Stagecoach to provide regular progress updates, in addition to daily site engagement and digital communications.

As part of these meetings, any required amendments to design or programme were agreed and implemented, with walk-rounds conducted with all parties to show quality of works delivered and on-site compliance to safe systems of work and environmental objectives.



“This was a very exciting project to be part of, and one that we believe to be an industry benchmark which will inspire other businesses to make the transition to an innovative EV network. As part of our own net-zero emission objectives, Ipsum are on track to introduce an all-electrical vehicle fleet by 2030, and the Stagecoach contract has demonstrated the multiple benefits this will bring to the business.”

Robert Penty, Ipsum  
Head of Major Projects and Private Connections



**Complete Turnkey  
EV Installation Solution**



**Zero-Harm  
Service Delivery**



**Collaborative Partnership  
Delivery Model**



**Meticulous Planning  
& Programming of Works**



**'Right First Time'  
Service Delivery**

