

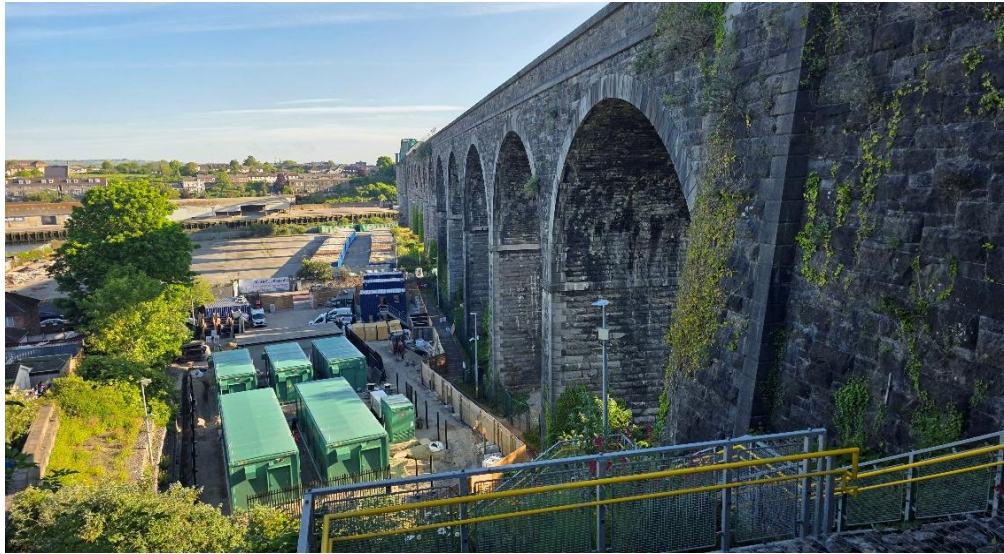
**Case Study:** Battery Train Charging Substation Commissioning at Drogheda DART+, Ireland

**Client:** Irish Rail (via ABB)

**Project Partner:** WJ Project Services

**Location:** Drogheda, Ireland

**Scope:** Commissioning supervision, SAT coordination, SCADA integration, and testing of traction power and auxiliary systems



## Project Overview

WJ Project Services were appointed by ABB as Lead Test & Commissioning supplier for the Drogheda traction substation, part of the DART+ electrification programme in Ireland. The installation integrates AC switchgear, transformer rectifiers, DC switchgear and a Battery Energy Storage System using an IEC 61850 based Integrated Protection & Control system.

## Approach

WJPS engineers managed the transition from construction to commissioning, carrying out site inspections and identifying outstanding works. Following completion, Site Acceptance Testing (SAT) was performed on individual equipment before progressing to Site Integrated Testing (SIT) of the full substation system.

## Commissioning & Training

Commissioning supervision covered auxiliary systems, DC traction equipment, traction and auxiliary transformers, diesel generation and containerised systems. WJPS also supported SCADA integration and coordinated specialist commissioning of the Battery Energy Storage System with ABB engineers.

## Equipment

Key systems included traction transformers, thyristor rectifiers, DC switchgear, auxiliary transformers, AC/DC UPS systems, diesel generators, SCADA/RTU panels and a containerised Battery Energy Storage System supporting traction power supply.

## Outcome

The project delivered coordinated site testing, integrated SCADA monitoring and fully commissioned traction and auxiliary systems, supporting reliable operation of the battery train charging infrastructure.

