

ALEXANDER

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ACCREDITATION AND ORGANISATIONS



HANNASTOWN 275kv SUBSTATION UPGRADE

CLIENT	Northern Ireland Electricity
DESIGN ENGINEER	PB Power
CONTRACT VALUE	£250,000
CONTRACT PERIOD	5 Months



DETAILS

As part of Northern Ireland Electricity's continuing upgrade and renewal of their transmission infrastructure and network assets William & Henry Alexander (Civil Engineering) Limited were awarded the civil works contract at Hannahstown Substation in Belfast to construct a new Prop transformer base and a number of additional electrical equipment plinths and bases.

The prop base required the installation of 90nr 300mm dia CFA piles, a 3m basement excavation and 9m high reinforced concrete blast walls. Overall the base was constructed using approx 35t of rebar and 440m³ of concrete.

HEALTH, SAFETY & ENVIRONMENTAL CONSIDERATIONS

This work was all carried out within the existing 275kv Sub-Station complex which remained live and operational at all times. All operatives on site had to receive specific NIE training to be able to work the site. Specialist small plant had to be used on the site to be able to maintain safe clearance distances from live electrical plant and strict noise and requirements were in place due to the close proximity of public residence areas and also strict vibration limits were imposed so not to cause interference with sensitive trip switches on electrical equipment hence Alexander's opted to use CFA piling over traditional precast piling.