

CASE STUDY
Tilbury Power Station



Greenpiling

PROJECT OVERVIEW:

Client: National Grid
Sub-contracted to: SEESA
Engineer: Mott MacDonald
Sector: Industrial (Infrastructure)
Value: £1.65m

Description of Works: Design, supply and installation of piles to form part of the foundations for a new electricity sub-station building

TECHNICAL DETAILS:

Type of Piling System: Pre-cast Concrete and Steel Tubular
Soil Conditions: Made Ground/Clay/Silt/Gravel
Max Load kN: 500kN
Length of piles: Up to 28m
Type of testing: Static
No of piles installed: 1230 No.
Diameter of piles: 250, 273 and 340mm

Green Piling were sub-contracted to install pre-cast concrete and steel tubular piles. The works took place over 27 weeks and incorporated raking and restricted access piling. The raking piles were fully welded and subject to sonic integrity tests. Restricted access piling was installed under overhead power cables and had to be driven in 2m sections and concrete filled to accommodate tension and horizontal loads. See table below for breakdown:

1018 No.	250mm square pre-cast concrete piles	26.5m
94 No.	273mm diameter steel raking piles (1:4)	28m
118 No.	340mm diameter steel piles (restricted access)	18m and 24m

In total 19 No. static tests were completed.

