

CASE STUDY HMP Shotts



PROJECT OVERVIEW:

Client:	Scottish Prison Service
Sub-contracted to:	Laing O Rourke
Engineer:	Arup
Sector:	Public Sector
Value:	£105k
Description of Works:	Design, supply and install piles to form part of the foundations for a new housing block at HMP Shotts.



TECHNICAL DETAILS:

Type of Piling System:	Steel Tubular Piles
Soil Conditions:	Made Ground/ Clay/Mudstone/ Sand
Max Load kN:	Up to 1200kN
Length of piles:	Up to 10m
Type of Testing:	Dynamic
No. of piles installed:	200 No.
Diameter of piles:	244mm & 340mm



Green Piling Limited was subcontracted by Laing O Rourke to install steel tubular piles at HMP Shotts. We worked closely with our client at tender stage on an alternative pile layout which was based on fewer, more heavily loaded piles. This layout was later adapted on site as it proved to be a more economical solution to what was originally proposed.

244mm diameter steel tubular piles were installed for the retaining wall with 340mm diameter used for the main building.

Maintained load testing was carried out to 3000kN on 340mm diameter piles and prelim test pile. Ground anchors were used as reaction piles to resist test load.

