

## CASE STUDY

### A876 Upper Forth Crossing, Kincardine



## Greenpiling

#### PROJECT OVERVIEW:

**Client:** Morgan Vinci

**Sub-contracted to:** Morgan Vinci

**Engineer** WA Fairhurst

**Sector:** Civils

**Value:** £127k

**Description of Works:** Installation of piles to form part of the foundations for a bridge approach

#### TECHNICAL DETAILS:

**Type of Piling System:** Steel Tubular

**Soil Conditions:** Made Ground/Alluvium/Glacial Til/  
Coal/Sadnstone

**Max Load kN:** Up to 1500kN

**Length of piles:** Up to 27m

**Type of testing:** Kentledge

**No of piles installed:** 210 No.

**Diameter of piles:** 340mm.

Green Piling undertook the installation of steel tubular piles to form part of the foundations for a bridge approach. The bridge approach is part of the construction for a new 1.2km long bridge across the Forth Estuary with 6.4km of approach road.

Piles were installed over 3 separate visits and in total 210 No. 340 diameter steel tubular piles were driven up to 27m to support working loads of up to 1500kN.

A method and sequence was agreed between Green Piling and the Client to ensure the piles were installed on time and with reduced wastage.

The under piles were driven to a length of 10-12m and left to project approximately 750mm out of the ground for extension. The appropriate lengths of extension pieces were welded into place whilst in situ. During the intervening period static pile testing was completed on the under piles prior to driving the subsequent piles. The tops of the piles were then welded into place and driven until set.

