



Project Overview

Client: Permission Homes
 Engineer: DR Murray & Associates
 Description of works: Design, supply & install precast concrete piles to form foundations.



TECHNICAL DETAILS

Pile Type: Precast Concrete
 Pile Length: 6m - 8m
 Pile Testing: 5% Dynamic Testing & 6no. Static Tests
 No. of piles: 1359no.
 Pile Size: 250mm sq
 Working Load: Up to 450kN
 No. of ground beams: 3500 lin.m Precast
 2800 lin.m In-Situ
 Ground beam size: 450mm sq



NPL were contracted to design, supply, and install precast concrete piles and Groundbeam package for a residential development on Etna Road in Falkirk. The project was completed in 5 phases and consisted of housing and blocks of flats.

Over the project's 5 phases, NPL installed almost 11,000m of 200mm square precast piles and installed both precast ground beams and in-situ ground beams 3500 lin.m of precast ground beams were installed, while 2800 lin.m of in-situ ground beams were cast over the duration of the project. The use of precast ground beams helps to accelerate the foundation installation process, while in-situ cast ground beams can be easier to manage in area of the site troubled by obstructions.

NPL conducted dynamic tests on 5% of the total piles over 21 visits, as well as overseeing the 6 static tests requested by the client and consulting engineer.

