

# Residential development off Middleton Road, Heysham

## Project Description Sheet



### Location

Middleton Road, Heysham

### Client

Holden Homes Ltd

### Commenced

June 2006

### Key Project Elements

Mainline widening and ghost island design

Section 38 Highways Adoption

Section 104 Foul & Surface Water Adoptions

Attenuation Design

PSA Design were commissioned by Holden Homes Ltd to undertake the highways and drainage design works for a proposed 40 house development in Heysham, Lancashire

Due to the size of the proposed development it was necessary to widen Middleton Road to accommodate a new ghost island junction.

The Client requested that both the highways and sewers be designed to adoptable standards with the intention of securing both Section 38 and 104 agreements.

Highways were designed utilising the Key-TERRA-FIRMA 3D computer modelling package. Output including layouts, long sections, detailed setting out information and construction details were issued to Lancashire County Council to progress the Section 38 agreement.

Foul and Surface water sewers were designed using WinDes Micro-Drainage package. United Utilities requested that the outflow from the site be restricted to prevent overloading the current network. It was therefore necessary design a storage system within the design to attenuate the outflow. Detailed drawings and schedules were submitted to United Utilities to progress the Section 104 agreement.