**Scheme Details**

Outline Planning Permission was sought for a residential development on partially greenfield land. An existing dwelling was to be demolished as part of the scheme. As Code for Sustainable Homes (CSH) was a new requirement, the client’s Architects wanted to ensure that the scheme would be designed with CSH in mind.

Waterco recommended that a full Preliminary Drainage Assessment be carried out as its recommendations would satisfy both current planning and future CSH requirements. This was a cost effective approach for the client as it allowed them to identify constraints and solutions, before submitting the Planning Application.

**Outcomes**

**Foul Water**

Dŵr Cymru Welsh Water (DCWW) was contacted to supply the existing drainage records. As the site sloped away from the sewers, a full gravity fed sewerage system would not be feasible. Waterco recommended that a sewage pumping station would be required and regulations meant that no houses could be located within 15m of the pumping station. By advising the Architect on the plans and location constraints, the layout was revised before the Planning Application was submitted but was still able to accommodate all sixteen houses.

**Surface Water**

Four percolation tests were carried out, and three of them were unsuccessful. Calculations were required to assess the change in the rate and volume of run off, as the development increased the amount of impermeable surface on site. Part H of the Building Regulations requires developments to discharge surface water by infiltration i.e. soakaway where possible. As the percolation test proved that this method would only be viable for part of the site, Waterco established an agreement in principle with the Environment Agency to discharge attenuated water into a brook within the site.

**Code for Sustainable Homes**

Our report will enable the future project to achieve the mandatory elements and evidence for the design stage of Sur 1 and Sur 2. A Flood Risk Assessment was completed and showed that the site was not at risk of flooding, and therefore qualified for two Sur 2 Credits.