

DRAINAGE STATEMENT
HONEYWELL LANE, BARNSELEY
FOR
MILLER HOMES LTD

The proposed scheme comprises the development of 2.4 ha of former sports pitches at Barnsley College for residential use.

Ground conditions

A Phase 2 intrusive site investigation, including trial pit excavation, borehole drilling and percolation testing, was carried out by Eastwood & Partners in September 2015. The investigation encountered made ground of increasing depth towards the east where the site was raised to provide level playing fields. Natural ground comprised sandy, gravelly clay over strong sandstone bedrock. The bedrock is sitting below topsoil at the western end of the site and deepens to 2.5 m below ground level at the eastern end of the site. Percolation testing was unsuccessful in the northern and central areas of the site but yielded good results in the south-eastern corner of the site where the site is elevated some 3 m above Honeywell Lane.

SuDS

Surface water disposal is considered in accordance with the drainage hierarchy in Building Regulations Part H 2002 and Planning Practice Guidance “Reducing the causes and impacts of flooding”, paragraph 080. These state that disposal via SuDS methods should be considered as the first option and that disposal to the public sewer should be considered only when SuDS methods and disposal to the watercourse are shown to be unsuitable.

Infiltration type SuDS such as soakaways and infiltration basins are not considered viable on the site. The location where soakaways were successful is where land is substantially raised above adjacent ground level. It is considered that there would be a risk of groundwater seepage affecting neighbouring properties and the nearby railway line if infiltration SuDS were used in this area.

There are no watercourses in the vicinity; surface water disposal will be to the public sewer.

Surface water disposal

There is a public surface water sewer in Honeywell Lane. The site will drain by gravity to this sewer at a restricted rate of 5 l/s, or as agreed with Yorkshire Water. A minimum of the 1 in 30 year surface water runoff will be stored below ground in oversize sewer pipes. This system will be offered for adoption by Yorkshire Water. Surface water runoff in excess of the 1 in 30 year rainfall up to the 1 in 100 year plus climate change rainfall will be stored above ground within public open space. This area will be maintained by a management company.

Foul disposal

There is a public combined sewer in Honeywell Lane. The site will drain by gravity to this sewer.