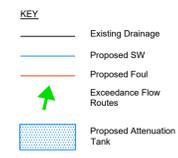


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Notes:

1. This drawing is to be read in conjunction with all relevant architect's and engineer's drawings.
2. It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement.



Drainage Strategy

Surface Water
 The site is located within flood zone 1 with a low risk of flooding from rivers or the sea. See separate Flood Risk Assessment document.

The site is currently greenfield and slopes steeply south to north from the existing residential properties along Cliffe Lane down to Ferrand lane which forms the northern boundary. Yorkshire Waters records show the nearest public sewers is a 225mm Foul sewer in Cliffe Lane.

There is a surface water drain running in Ferrand Lane which outfalls into a watercourse adjacent to Fanwood Activity/Scouts Centre. This watercourse connects onto Nan Hall Beck which is a tributary to the River Spen.

NPPF guidelines require that surface water arising from a developed site should as far as practicable be managed in a sustainable manner to mimic the surface water flows arising from the site prior to development.

The national planning policy guidance sets out the hierarchy of drainage to promote the use of sustainable drainage systems. The aim of the hierarchy is to drain surface water run-off as high up the drainage hierarchy as reasonably practical.

1. Into the ground (Infiltration).
2. A surface water body.
3. To a surface water sewer.
4. To a combined sewer.

Consideration has been given to the use of infiltration as a drainage solution. Site Investigations have been carried out on the site previously which included percolation testing. The measured infiltration rate was 9.73 x 10.0 ml/s. This is a low value figure and given the topography of the site there is a risk of any infiltrated water re-emerging out of the banking at the lower parts of the site along the northern boundary.

On the basis we consider infiltration is not a suitable means for the disposal of surface water from the site.

We therefore propose the surface water run off is discharges to the drain in Ferrand Lane which outfalls into the watercourse beyond the activity/scout centre.

On the previous application on this site a discharge rate of 16.1L/sec appears to have been agreed with Kirklees Council. We have based the design on these principals. The proposed flows will be attenuated to 16.1L/sec in a 1in100 year storm with a 40% allowance for the effects of climate change.

This can be achieved using a 171mm diam Hydrobrake Optimum control device and providing underground storage in a cellular tank measuring 46m x 15m on plan x 1.6m deep. See microdrainage calculations.

Foul Drainage
 The foul drainage will drain will be pumped up to Yorkshire Waters sewer in Cliffe Lane.

Maintenance
 The intention is to have the new foul and surface water drainage networks adopted by Yorkshire Water under a S104 agreement.



Proposed Drainage Plan 1:500

Catchment Area Plan 1:2500
 Total Catchment Area = 17640m2

P2	Title Changed	02-8-23
P1	Further details added	21-7-23
No.	Revision	Date Drwn

Status



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Client	Quarters Gomersal		
Project	Cliffe Lane Gomersal		
Drawing title	Drainage Strategy		
Drawn	PB	Chkd	
Date	July 2023	Scale	1:500
Contract No.	22691-C-DR	Drng No.	0105
Revision			P2