

PROPOSED NEW DWELLING LANEHEAD GARDENS SANDWITH
REF: 4/22/2216/0F1
APPLICATION FOR APPROVAL OF DETAILS RESERVED BY CONDITION.
CONDITION 3 SURFACE WATER DISPOSAL

THE SITE

The site proposed for the new dwelling has ground conditions which are poor for surface water disposal. Heavy clay exists to about a depth of 750mm with sandstone under but depths of the clay vary over the site but none are shallower than 750mm.

The existing old Nursery had rain water pipes discharging to trapped gulleys, and then leading to what we believe are soakaways. However during heavy rain localised flooding occurs close to the gulleys indicating that the disposal system as installed was not "fit for purpose".

It was therefore proposed to carry out further investigations and follow the rules as laid down in the Surface Water Hierarchy document.

ATTENUATION MEASURES

Three test holes were dug all in accordance with BRE 375, which details soakaway testing and designs. The holes were filled with water. After two days no movement was noted in two holes and the third hole water level had dropped 55mm as measured. These tests clearly proved that discharge to ground would have to be carefully considered and designed properly in order to ensure compliance.

SURFACE WATER HIERARCHY

1. Water Course-

There are no water courses close to the site which is on higher ground above the village of Sandwith. There is a water course in the village but connection to it would entail crossing land in at least three different ownerships and the distance from the site to the water course is long and this option is not feasible.

2. Public Sewers-

There are no public sewers close to the site, the nearest one is in the village of Sandwith some 700m away from the site. It is not feasible to connect in to a public sewer due to distance and crossing land not in the applicants ownership.

3. Discharge to ground-

The third option of discharging to ground is the only feasible way of disposing of surface water from the new dwelling. It is only from the roof of the new dwelling as all surfaced areas will be constructed out of sustainable materials, so all paths and driveways will not be included.

SURFACE WATER DRAINAGE SCHEME

It is proposed to install a crate system of suitable size (to be designed by JDP of Longtown Ltd), which will accept the surface water and attenuate the discharge of water from the crates in to a perforated French drain of suitable length to discharge the small attenuated volume of surface water to ground. It is further proposed to install the French drain deep enough, to allow some surface water to discharge in to the sandstone layers evident below the clay strata.

Furthermore a Rainwater Harvesting System may be considered to further reduce the discharge of surface water from the roof, where rainwater could be reused in the new dwelling, if it was proved to be necessary.

SUMMARY

By these proposed methods of surface water disposal we consider that Condition No 3 will be satisfied and therefore the application for approval should be discharged.

Richard J. Lindsay
5/8/24