

Proposed Drainage Strategy - November 2022

Proposed drainage strategy for proposed new build vehicle body repair workshop at W.Milligan and Sons, King Street, Millom, Cumbria. LA18 4BW. Planning reference 4/22/2437/0F1.

When the plans were first done with the architect Paul Townsend, he recommended we use W.J.A. Armer – Site Surveyors or Lancaster in order to provide a topographical survey.

The existing drainage and sewers were reviewed and it was suggested that a soakaway for surface water would be the preferred option for planning and this formed part of the application.

As the land is very close to the Duddon estuary and the existing building was built on a raft foundation, it was advised to get a flood risk assessment and a ground investigation.

This would help with regard to planning, flood risk, and confirm our planned drainage strategy as infiltration or into a surface water body. It was suggested that to just go straight to the existing rainwater gulley would not be acceptable for the planning authority.

We contracted R.G Parkins of Kendal and they completed an in depth Flood Risk Assessment, gave advise on a drainage strategy, and referred us to a third party they would liaise with to complete ground investigation works.

We contracted GEO Environmental Engineering of Cockermouth to undertake the groundwork investigation and testing. The testing was completed on 17.11.2022.

The results from GEO were accompanied with the quotes;

"The hierarchy being considered, shallow groundwater and evidence of contamination has been noted beneath the site and therefore soakaways would not be effective" ..."Shallow groundwater was encountered at all locations, in some instances as shallow as c.0.15m below ground levels"

We revised the plans to move the surface water in to the existing nearby rainwater gulley which runs a few hundred yards into the combined sewer.

However, on discussion about the fall on the nearby gulley and due to the fact it has historically flooded. We have decided instead to run the surface water pipe parallel with the foul and connect to the main sewer at the same point. Plans were updated to reflect this and re submitted.

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