Petersgate Infant School Extensions
Drainage Statement

General

The Petersgate Infant School is located in Clanfield, Hampshire, off Green Lane, postcode PO8 0JU.

The proposal is to build two new extensions to provide the additional teaching facilities. There will be some external works involved and the total development area will comprise 1130m^2 of development area.

The Environment Agency maps indicate that the site is located within Flood Zone 1 where the annual lowest annual probability of flooding occurs, that being less than 1 in 1000 for any given year. As the site is in Flood Zone 1 and development area is less than 1 hectare no Flood Risk Assessment will be required to support the planning application.

Foul Water

Southern Water sewer records show the public foul water sewer crossing the existing car park to the south of the school. It is anticipated that the school has a connection to this public sewer at manhole 4705, located in the access road. This is to be confirmed on site.

The existing foul water drainage for the school is mostly internal and 100mm in diameter. When the drainage system was installed provision was made for future extensions and a 100mm stub exits the building to the north to provide a connection point for extensions should it be needed. This stub is to be exposed once the contractor starts on site and the invert level of this pipe confirmed to the drainage engineer. The existing levels on the foul water drainage shown on Sketch WN001 are interpolated, based on the levels on the internal manholes measured on site.

A new 100mm diameter foul water pipe is to be installed to serve the proposed extensions and to connect to the existing pipe. The total increase in foul water discharge has been calculated, based on the discharge units method, as 0.4l/s.

The condition and capacity of the private drainage will be confirmed as suitable for the additional flows.

Surface Water

A site investigation undertaken on the 29/05/12 confirmed that the geology of the site is Seaford Chalk Formation. The ground conditions are described as chalk and clayey silty gravel. A falling head soakaway test was completed as part of the site investigation and this confirmed the suitability of the ground for infiltration systems. The calculated infiltration rate used for sizing the proposed soakaway is 2.84 x 10^{-4}m/s. This is to be confirmed by the contractor on site using the BRE365 method. No groundwater was encountered in boreholes during the site investigation.

There are no watercourses or public surface water sewers in close proximity to the site. The site currently discharges to ground via a number of soakaways. Some of those soakaways will clash with the proposed foundations and will need to be abandoned and backfilled with the suitable material.

Surface water will continue to discharge to the ground and the proposed soakaway has been sized to serve the proposed extensions and hardplay and to collect the surface water from the abandoned soakaways. To avoid flooding from gullies and channels in the lower parts of the site the soakaway has been designed to hold the rainfall from the 1 in 100 plus 30% allowance for climate change storm event.