

From: Simon Davis
Sent: 19 August 2020 10:52

Subject: BN/50/20/PL Land W of Fontwell Avenue - drainage

Dear Maddi,

I have had further comments from our engineers (Laura Gibbons). Please see below and I look forward to your response.

FYI, please note that our Engineers are on holiday in the near future - Laura Gibbons is on leave for a week w/c 31st Aug and Paul Cann is on leave w/c 24th for two weeks. I am also on leave for 4 days w/c 24th Aug.

Here are the comments from Laura's email to me.

--

The summary table below shows that all soakaways are still deep and are all within 10m of buildings. I note they state the soakaways need to be 8-10m from buildings, but it would be good to know whether this is 8m or 10m.

Catchment	Depth of Soakaway	Approximate Distance from Soakaway to nearest building	Comments
A	2.165m	8.2m	23m long on drawing, 24m calculations.
B	1.985m	8.5m	Under road, query acceptability of this. Are roads for adoption?
C	2.065m	8.2m	
D	1.8m	8.8m	
E	1.85m	8.5m	
F	2.075m	8.6m	
G	2.18m	8.6m	
H	2.235m	9.5m	5.5m from Fontwell Avenue. Doubtful this will be acceptable. If 8-10m easement to buildings is required, this will likely also

be required from
adjacent highway.

In my previous correspondence I stated " I would note that the ground investigations completed have found chalk at between 1.35m and 2.5m depth at the windowless sample locations. Soakaways are proposed between 1.4m and 2.45m depth, therefore these could be directly into the chalk and provide a pathway for pollutants to the aquifer. Portsmouth Water have indicated that the use of deep soakaways would likely not be supported by them due to the risk of contamination pathways being created."

As the application is seeking to agree a layout we maintain our holding objection at this time as it has not been adequately demonstrated that a drainage solution can be achieved with the proposed layout. We would like to see calculations and a layout with soakaways kept shallower, with a total depth of 1.4m, this would replicate a worst case scenario if it is found that the chalk starts at relatively shallow depths at the proposed locations of soakaways. It must be demonstrated that there is adequate space for this with the required easements before the layout is approved." The reply received and information submitted seem to suggest that shallower soakaways are not achievable with the proposed layout, i.e. ensuring minimum falls on the pipework in the catchment they serve is limiting the design. I am unconvinced that an additional filtration layer will provide the necessary treatment of surface water prior to discharge without a cohesive soil below (this is after further reading of CIRIA C753). Any proposal to effectively uncap the chalk in locations is not supported by us due to the risk of dissolution of chalk, pollution of the groundwater, and groundwater inundation into the drainage system. We know that the groundwater abstraction borehole nearby suffers from artesian conditions in extreme wet winters. It may be that swales are required to convey water, or the layout needs to be changed to provide sufficient easement to soakaways.

Our holding objection remains in place at this time. A potential shallower solution must be submitted evidencing that it is possible to drain the site if chalk is found more widely at shallow depths.

--

Kind Regards

Simon J Davis MRTPI
Principal Planning Officer
Directorate of Place

T: 01903 737874
E: simon.davis@arun.gov.uk

Arun District Council, Civic Centre, Maltravers Rd, Littlehampton, West Sussex, BN17 5LF
www.arun.gov.uk

Arun is a CIL Charging Authority, for more information go to www.arun.gov.uk/cil

Sign up to our newsletter [here](#)

