My reference GK/LV8000

ask for Graham Kean

date 16 May 2022

Wealden District Council
Council Offices, Vicarage Lane
Hailsham
East Sussex BN27 2AX

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MEMORANDUM

Mr M Taylor, Planning

your reference

Planning Application WD/2022/0648/MAO
Land at Mockbeggars Farm, London Road, Uckfield

I write further to your memorandum of 6 May 2022 regarding the above planning application and I would have the following comments.

Flood Risk

The site lies wholly within EA Flood Zone 1 so the sequential test is met and the exception test is not required for this site. The site does not appear to be at risk from tidal, sea or fluvial flooding or from failure of a drainage asset such as a canal or reservoir. The site is at very low risk of flooding from surface water apart from a low risk flowpath across the southern part of the site. There is no reliable site-specific information on groundwater.

There are no ponds or watercourses shown on the EA mapping within the application site. The nearest ordinary watercourses shown on the EA Flood Map rise on the opposite side of London Road to the application site and flow south-westwards. There is a pond just north of the application site. However, the Flood Risk Assessment (Appendix D) describes a ditch dividing the two parts of the site and an existing drainage system both open and piped in the area to the north-east of the site.

There are no records of flooding close to this location within this Council's land drainage database.

The Geological Map states that the site is on the Ardingly Sandstone Member of sandstones.

Surface Water Drainage

There are no adopted, public surface water sewers in the vicinity of the site so this method of drainage is unavailable.

Infiltration is the first recommended drainage method in the SUDS hierarchy and the underlying mapped geology of the site suggests that this is possible solution for this site.

Two different surface water proposals have been put forward for this site. The first option is to use infiltration both from the base of the permeable paving and from two infiltration basins. No on-site testing to BRE Digest 365 has occurred to establish the actual infiltration rates (if any) to confirm this. This solution will also require groundwater monitoring for the winter season (6 months) to show that a 1.0m vertical separation can be achieved between the base of the soakage features and the highest groundwater level recorded.

The second option is to use the same permeable paving accompanied by swales as a cleansing and storage device with the water then draining to two attenuation ponds. From these ponds, water drains via hydrobrakes to the private drainage system to the north-east of the site and eventually to the ordinary watercourse on the west of London Road. The private drainage system is stated to be in the same ownership as the site (paragraph 2.10), despite not being outlined in blue on the site plan. There is no information as to the condition and size of this private system and as to whether it has the capacity to deal with the proposed flows from the site. In this option, the ponds can be lined against groundwater if required.

The calculations with this report for the infiltration option are purely theoretical and will need to eventually be replaced with the real site values from the infiltration testing to BRE Digest 365. In considering either of the drainage principles proposed for the site, the Lead Local Flood Authority, ESCC, will require full detail in the drainage calculations used to design the system and Wealden, as the planning authority, would support this request. The calculations should prove that the final design can accommodate the site runoff rates for the standard 1 in 100 year rainfall event plus 40% climate change.

I note that the maintenance activities for the surface water drainage system are to be undertaken by a site management company to be set up by the site owner. The maintenance plan will be required when the drainage design is finalised and before first occupation.

Notes

Any new outfall to an ordinary watercourse will require Ordinary Watercourse Consenting from the Lead Local Flood Authority, over and above any planning permission which may be may be granted.

Provision of the foul sewage arrangements is for Southern Water to comment on.

Conclusion

In my opinion, the information provided within this application is adequate for this application subject to the caveats mentioned above. I am unsure at what stage of the planning process a decision must be made on which surface water drainage solution to use.

Should you be minded to allow planning permission, I would wish to see the following **conditions** applied namely:-.

"No development shall take place until full details of the surface water drainage scheme, have been submitted to and approved in writing by the local planning authority. The surface water drainage scheme should be confirmed as deliverable by an assessment of the site's potential for disposing of surface water by means of a sustainable drainage system. The submitted details shall include the following:

i. Supply detailed plans, layouts and sections of the proposed drainage system and pollution/silt control devices and construction details of any non-standard features (both options).

ii. Provide a full management and maintenance plan for the development which shall include the setting up of any necessary company to secure the operation of the scheme throughout its lifetime (both options).

iii. Supply full hydraulic calculations to the correct level of climate change (40%), to the satisfaction of the Lead Local Flood Authority using infiltration rates based on site specific testing (both options).

iv. Provide evidence by means of site specific testing during the 6 month winter period that groundwater levels are such that a 1.0m vertical separation can be achieved between the base of any infiltration devices and the highest groundwater level measured (option 1).

v. Provide evidence by means of a CCTV survey or similar that the receiving private watercourses and pipework are in sufficient condition to receive the calculated flows (option 2).

NOTE: Attention should be given to non-statutory technical standards for sustainable drainage systems, the ESCC "Guide to Sustainable Drainage Systems in East Sussex" and the total costs of implementing the drainage scheme, that is design, construction and maintenance costs.

REASON: To reduce the risk of flooding, both on and off site, to improve and protect the water quality and improve habitat and amenity having regard to the guidance set out in the National Planning Practice Guidance and at paragraphs 163 and 165 of the NPPF and any local plan policies where appropriate according to the local planning authority, for example WCS14 of CSLP, saved policy CS2 of the Wealden Local Plan."

Please contact Graham Kean if you wish to discuss the matter further or to meet on site.

Graham Kean
Engineer and Countryside Officer