APPENDIX 6

Tully De'Ath Consultants

Mr Scott Finch
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14308/AJP/05.01
16 September 2020

Dear Scott

Re: Land to the South of Dunlin Walk (18/506328/OUT) – Drainage Review

As discussed, ahead of Swale Council's planning committee meeting being held on Thursday 17th September 2020, members have raised concerns in relation to drainage issues with the proposed site and Iwade Primary School. In response to this, we have undertaken a full independent review of the drainage proposals developed by Kirk Saunders as part of the original outline planning application as well as a review of the Kingsley Smith letter dated 31 January 2019 and have the following comments:

The Kingsley Smith letter mentions that the existing sports pitch becomes waterlogged in the winter, and during heavy rainfall events surface water falls towards the school building. It is not known from the information provided whether the sports pitches currently have any land drainage systems or whether the ground levels of the sports pitches fall towards the school.

In reviewing the topographical levels on the development site (parcel 1), there is a general fall from west to east, where the school is located to the south. It is noted that levels on the BDW site are predominately the same or lower than the ground level along the boundary school playing fields. Consequently, any surface water run-off from the development site would tend to naturally remain on site or flow to the north east, away from the school. Therefore, it is considered unlikely that surface water run-off from the development site would contribute in any significant way to the current drainage issues mentioned within the Kingsley Smith letter and concerns raised by members. As part of the development proposal, a small earth bank is proposed (for ecological mitigation) adjacent to the school boundary that will help ensure surface water run-off within the new development is contained and prevented from flowing onto the school site.

The drainage strategy developed for the outline planning application has two options depending on further ground investigations. Where infiltration is not appropriate, surface water will be held on site via a below ground attenuation tank, which has a flow control unit restricting flows to 2 l/s, before connecting into the adjacent sewerage system. The flow rates have been restricted to get as close to greenfield runoff rates as possible. The surface water attenuation and flow control has been designed to accommodate a 1 in 100 year return period with an additional 40% allowance for climate change. Consequently, the risk of surface water flooding within and beyond the site is considered to be low.

If this option is developed, surface water will be removed from the site rather than soaking into the ground therefore significantly reducing the volume of surface water on the site compared to the current situation.

Alternately, and subject to intrusive infiltration testing, soakaways would be used to discharge surface water from the site into the ground, which effectively replicates what currently exists on the site. There would be no increase in surface water volume discharging into the ground as the site is currently greenfield. However, to

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alleviate any concerns, infiltration would only be used if it can be demonstrated that infiltration would not impact the groundwater or surface water levels on the school site.

The addition of the earth bank mentioned above would also protect the school from a design exceedance event by preventing any overland surface water flows to the south. This would apply to both drainage options.

To summarise, it is considered unlikely the existing site contributes in any significant way to the drainage issues that the school currently experiences, and with the implementation of the measures discussed above, the new development similarly will not have an adverse effect.

There are a number of planning condition regarding drainage that will need to be approved by the Council prior to achieving a full planning approval. Consequently, the mitigations measures proposed will be developed further in order to discharge these conditions and hence there will be further opportunities for representations.

Yours sincerely
for Tully De'Ath Ltd

[redacted]

Andrew Picton