Hinxton Parish Council (HPC)

14 January 2022 comments on

Proposal: Submission of details required by condition 45 (Strategic Surface Water

Drainage Strategy) of outline planning permission S/4329/18/OL Parent permission: S/4329/18/OL

Site address: Wellcome Trust Genome Campus Cambridge Road Hinxton Saffron Walden

Parent permission: S/4329/18/OL

No.	Item	Comment
1.	Section 2: Design Principles	The strategy document distinguishes the campus Land (DA2) from the expansion land (DA1 and DA3).
		Within the expansion land DA1 and DA3 the applicant surmises that all surface water will be contained within the site, with all new surface water infrastructure to discharge via infiltration to ensure aquifer recharge.
		Within the campus land the assumption is that the primary surface water drainage will be an extension of the existing drainage network that discharges via attenuation features to the river Cam.
		We understand that a detailed design stage more infiltration testing will need to be undertaken to better understand the infiltration rates across the DA1 and DA3.
		We note the system is to be designed not to flood any part of the site in 1:30 year storm (3.3% AEP); and
		That the system should be analysed for "the 1:100 year storm event (1%AEP) + 40% climate to ensure the resultant surface water run off can be safely contained within the site without flooding buildings or critical infrastructure".
2.	Section 3	
	Primary surface water infrastructure	
2.1	Campus land DA2	The campus land discharges is ultimately into the River Cam.
2.2	Expansion land DA1 and DA3	The applicant states there is no requirement to design or construct any primary infrastructure because the site is underlain by a consistent chalk strata that will allow the infiltration of water from each phase to occur within each phase.
2.3	Appendix A Environmental Statement Para 3.1.4	The Flood risk data is taken from the Cambridge County Council Surface Water Management Plan (2014) which in an era of rapid climate change is very out of date.

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		The related statement that "Hinxton has been subject to a small number of incidents of customer complaints, all relating to highway drainage" is inaccurate and outdated. See further comments below.
3.	HPC Response and Summary Position (see also the photos at Appendix A, taken in December 2020. There is nearly 4ft of water in the ford)	The Wellcome strategy provides analysis of flood risks and aquifer recharge on the proposed Expansion Land . But it treats this Expansion Land as largely "self-contained". The proposed solutions are far too narrowly focused, especially given the prospect that climate change will bring increased runoff from the site, greater variability of rainfall and hastening aquifer depletion. Why does the flood risk modelling speak only of "not flooding any part of the site" in a 1:30 year storm? What about the impact on the village on Hinxton? All of the run off from the ground sealed as a result of the proposal will inevitably flow to the river Cam without the existing percolation and absorption of the agricultural land which currently occupies the Expansion Land. During periods of heavy rainfall the effects could be particularly severe on the land and fields along the river Cam. Indeed, the WGC campus has been subject to flooding issues, and the Sanger Institute Buildings themselves were flooded in 2001 (see the Buro Happold Environmental Statement, Vol 2 – Foul and Surface Water Drainage Strategy – December 2018 at paragraph 3.1.4). SCDC's Planning Report of 24 October 2019* (Section 16) mentions the expectation that appropriate mitigation shall be put in place. The Wellcome strategy document does not provide appropriate mitigation. The increased flood risk will not be at the proposed Expansion Land, but on the land and gardens near the river in Hinxton Village, and on up and downstream villages. Last winter (December 2020 onwards) there was extensive flooding in the village (see the photo log at appendix A) with the road closed for several months. Further, within the village itself, drains are also getting blocked from debris carried down from a1301 down north end road. The Environment Agency is increasingly involved. Rainfall patterns are increasingly hard to predict, per the attached report from the Carbon brief. https://www.carbonbrief.org/how-much-flooding-is-in-the-uks-future-a-look-at-the-ipcc-report
		It is quite legitimate for Greater Cambs planning to look at the impact of climate change on peak river flow and to acknowledge

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		that it may not be the same for all rivers in a management catchment, as part of their wider evaluation of surface water run off mitigation.
		https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances#peak-river-flow-allowances
		If the Wellcome development increases surface water run off even to a limited degree, the potential for flooding in the village of Hinxton is material (and should be explicitly addressed as part of Wellcome's flood risk mitigation strategy).
		Among other buildings at risk is the historic Hinxton water mill, owned by Cambridge Past Present and Future (CPPF) and the adjacent Mill House.
		The mill race, sluices and associated channels are almost all on Wellcome land. The sluices and race are aged and fragile and their breach would risk flood damage for a substantial distance downstream through Duxford and beyond. Hinxton Parish Council, with CPPF, the Cambridge Trout Club, and the farmer whose family have farmed the land for generations all consider that Wellcome should construct a simple compound weir where the mill race departs from the original river bed.
		This would pre-empt such a breach. It would also ensure more efficient use of the water meadows for water retention both to recharge a particularly important (because it is deep) section of Cam aquifers and also to protect the lower Cam valley. This would be a low-maintenance solution that would reduce flood risk and provide both environmental enhancement and heritage protection.
		This proposal has been put to Wellcome by Hinxton PC on several occasions, but is ignored as a result of the culpably narrow focus of the strategy's analysis.
		The introduction of a compound weir would not only protect Hinxton but also the road that to lckleton past the Sanger Centre boundary, which floods regularly in moderate to heavy rainfall. The weir would be able to direct the excess rainfall into the flood meadows more efficiently.
4.	HPC Photo Log	At Appendix A - photos showing the flooding of Hinxton Village last December 2020.
		You can see there is nearly 4ft of water in the ford.
5.	Compound Weir	HPC's compound weir proposal is attached again as Appendix B.
	SCN	

Appendix A Flooding in Hinxton Village – December 2020



























Appendix B Compound Weir Proposal