

NOTE FOR INSPECTOR

RE LAND AT NORTH OF EAST HANNEY - STRATEGIC FLOOD RISK ASSESSMENT

25 JULY 2018

1. To support the Vale of White Horse Local Plan 2031 Part 2: Additional Sites and Detailed Policies, the council instructed AECOM to undertake a Strategic Flood Risk Assessment (SFRA) in accordance with national policy to support the plan and the application of the Sequential Test at key stages of the plan's preparation:
 - **(WWF03)** Level 1 SFRA Technical Note published in March 2017 (Preferred Options) – assessed larger sites e.g. South of East Hanney and East of East Hanney
 - **(WWF03.1)** Level 1 SFRA Update published in October 2017 (Publication Version) – assessed smaller sites, inc North of East Hanney and North-East of East Hanney
 - **(WWF03.2)** Level 1 SFRA Update published in February 2018 (Submission Version) – updated assessment following EA response to the site allocation North of East Hanney
2. The Level 1 SFRA addressed all sources of flooding, including fluvial, surface water and groundwater flooding based on best available desk-top information and data at that time, specifically Environment Agency's Risk of Surface Water Flooding Map and Areas Susceptible to Groundwater Flooding Map as recommended in the Planning Practice Guidance
3. The SFRA identified no risk of fluvial flooding relating to the site allocation to the North of East Hanney. This site is located in Flood Zone 1, with a small area of Flood Zone 2 as a result of a low point in the hydraulic modelling rather than hydraulically linked to a watercourse, as confirmed by the Environment Agency. The SFRA was consulted with the Lead Local Flood Authority, the Environment Agency and based on available evidence at that time.
4. East Hanney Parish Council submitted new evidence as part of their Matter 4 Hearing Statement in June 2018, relating to surface water flood risk in respect of the proposed allocation at land at north of East Hanney.
5. The Parish Council's additional evidence undertaken by Water Resource Associates in November 2017 identified the following key issues:
 - flood risk is due to a combination of high groundwater levels and surface water unable to be infiltrated

- monitoring of groundwater levels at an adjacent area is consistent with surface water ponding levels on the lower part of development site
 - flooding occurs during the winter months following wet periods when shallow groundwater reaches the surface
 - soils are permeable and permeable geological layer is shallow before it hits the impermeable clay; geology becomes saturated rapidly during prolonged rainfall and soils become waterlogged causing water to rise to the surface and surface water to accumulate at ground level
 - photographs show large, shallow puddles over lower areas of the site
 - assumes that flooding frequency could be every 2-3 years
6. In response to the receipt of this information, the Council considered it prudent to undertake further assessment of this new evidence and also to provide an assessment of the flood risk evidence provided by the site promoter through their site-specific Flood Risk Assessment (FRA).
 7. The Council has sought independent verification of this new information from its retained flood risk consultants – AECOM, and also from the Council's drainage engineer.
 8. The existing Flood Risk Assessment and drainage strategy prepared by the site promoter relies on a proposed infiltration based SuDS system, however evidence submitted by East Hanney Parish Council and the evidence contained within the site promoter's FRA suggests that infiltration would not be a reliable drainage solution.
 9. AECOM's advice is that mitigation would be required to manage surface water both on the site and to ensure that run off can be discharged at greenfield runoff rates from the site. In addition, sufficient on-site storage would need to be created, site levels would need to be raised above the existing ditch levels and a greenfield run-off rate to the ditch would need to be consented by the Lead Local Flood Authority.
 10. Without further information and investigation, the currently available evidence regarding the potential for flood mitigation at the site is inconclusive. Whilst the council continues to support the general principle of development at this site, it considers that a cautious approach is appropriate to ensure that the question of flood mitigation is given sufficient detailed consideration. As such the Council will propose a modification to remove the proposed allocation of land at North of East Hanney for residential development from the Part 2 plan. The council proposes to consider this matter and the suitability of this site for allocation through a future local plan review.