

TECHNICAL NOTE: ECOLOGY COMMENTS RELATING TO PRESTON MARSHES SSSI

CA/23/00484

Land at the Hill, Bekesbourne Lane, East of Bekesbourne Hill,
Bekesbourne, Canterbury, CT4 5EA

01 December 2025

1.0 INTRODUCTION

- 1.1 The Inspector has received the comments from Natural England (NE) (Letters dated the 2nd June 2023 (CD3.22), 23rd August 2023 (CD3.26), 9th November 2023 (CD3.53), 23rd May 2024 (CD3.54) and email to the LPA of the 29th July 2024 (CD3.55). The Inspector has noted that NE's consultation response prior its email to the LPA referred also to the effect of the development on the Preston Marshes Site of Special Scientific Interest (SSSI) (it is acknowledged that this is not a European Protected site but any possible effect on it is still a relevant consideration). The Inspector has asked what effect on the SSSI NE was concerned about and was this matter resolved prior to the Council determining the application (and if so, how), and if not, it will be necessary to resolve this as part of the evidence.
- 1.2 This technical note has been prepared to address the Inspector's queries in respect to the potential for impacts to Preston Marshes SSSI.

2.0 BACKGROUND

- 2.1 The FRA (CD1.15, CD2.10 and CD2.50) confirms that the nearest ordinary watercourse is a drainage ditch located within the site boundary flowing offsite, crossing the site in an easterly direction before running along the eastern boundary in a northerly direction towards The Hill.
- 2.2 The FRA (CD1.15, CD2.10 and CD2.50) also confirms that the site falls within the Nailbourne and Little Stour sub-catchment. The Nailbourne is a smaller tributary of the Little Stour. The Little Stour is formed by the confluence of the Nailbourne and the Silver Dyke, near Littlebourne.
- 2.3 The Little Stour is part of the River Stour Catchment. The Stour is the major river catchment of East Kent. Its largest river is the Great Stour, the second longest river in Kent. The Stour catchment encompasses many other watercourses from the smallest streams to major tributaries. The Little Stour is a part of the wider River Stour catchment area that includes internationally important sites such as Stodmarsh SPA/SAC.
- Stodmarsh SPA/SAC
- 2.4 Stodmarsh is a wetland site resulting in part from subsidence under the valley of the Great Stour and aggregate extraction but lies within the natural floodplain of the river. There are a range of wetland habitats including open water, reedbeds, grazing marsh and alder carr. The site supports several uncommon wetland invertebrates and plants and provides breeding and wintering habitats for important assemblages of wetland bird species, particularly waterfowl.

- 2.5 The Stodmarsh SPA, SAC and Ramsar wetland lies approximately 2.3km north of the site boundary. The Stodmarsh Catchment no longer includes the catchment of the Little Stour (the implications of this are discussed further below under Development Proposals and Natural England Consultation Responses)
- 2.6 Natural England undertook a review of all the Nutrient Neutrality catchment areas in June 2024. The review considered updated surface water catchment data and evidence held by both Natural England and the Environment Agency. The update has removed an area of the surface water catchment due to insignificant connectivity with the unfavourable sections of Stodmarsh SPA, SAC and Ramsar site (the Habitat site).

Little Stour

- 2.7 The Little Stour is located to the east of the Application Site. The Little Stour is a small river with a strong chalk river influence. Chalk rivers are a priority habitat, and although the habitat has been significantly influenced by a historic series of mill structures, the river provides an important wildlife corridor. The Little Stour itself does not have a single overarching national or international wildlife designation.
- 2.8 Littlebourne Stream Local Wildlife Site (LWS) is located 0.34km southeast of the Application site, and comprises part of the Little Stour River, and associated grassland, deciduous woodland and connecting ditches and dikes, including Silver Dike.
- 2.9 The Littlebourne Stream LWS (as identified in the FRA) is connected to the Application Site hydrologically through the ditch network.

Preston Marshes SSSI

- 2.10 The Preston Marshes SSSI lies 3.3km northeast of the application site and contains the last significant area of fen vegetation in the Little Stour valley, mostly consisting of priority habitat reedbed as well as scattered willow scrub. There is a diverse plant community here, and the habitat attracts many breeding and wintering birds. The combination of peaty soils and calcareous water (derived from the Little Stour) has produced a diverse plant community.
- 2.11 The Preston Marshes SSSI is not a component part of the Stodmarsh SAC/SPA/Ramsar site.

Proposed Development and Potential Ecological Pathways

- 2.12 Surface water from the site discharges to the Little Stour at a point upstream of the Stourmouth Pumping Station. Consequently, this means that there is limited hydrological linkage between the district's wastewater treatment facilities and the Little Stour.
- 2.13 The ultimate destination of surface water flow from the Application Site once it enters the culvert in the north of the Site is the Little Stour River which joins the River Stour downstream of the Stodmarsh SAC/SPA.
- 2.14 Colin Whittingham from RSK LDE confirms the FRA (CD1.15, CD2.10 and CD2.50) is based on the pro-rata loH 124 method to estimate the Greenfield surface water runoff for the equivalent proposed developable area of the site (9.17ha), using the HR Wallingford Greenfield runoff rate estimation tool centred at the site. The infiltration testing report concluded that the soils are not suitable for infiltration and therefore no infiltration from the site has been included in the calculations or drainage strategy.
- 2.15 Based on the topography of the site, only 6.30Ha of the site currently drains towards the proposed outfall point with the remaining 2.87Ha of the southern catchment falling towards the southeast corner where there is no known outfall. It is proposed to discharge surface water from the site limited to greenfield runoff rates to ensure flood risk off site is not increased. Due to some of the site not falling towards the

proposed discharge point of the ditch along the eastern boundary of the site, only the contributing catchment has been considered. For this reason, it is proposed to limit the offsite discharge from the drainage network totalling 11l/s (the QBAR greenfield rate for the current contributing area) to be split between the two proposed basins.

- 2.16 The attenuation volumes in the basins have been based on guidance provided by KCC acting as the LLFA. The basins will provide surface water storage and attenuation for the 1 in 100-year storm plus 45% climate change event including an allowance of 10% for urban creep. A climate change allowance of a 45% increase has been used based on the Environment Agency's Peak Rainfall Intensity Allowances published in May 2022. The guidance recommends to design for the upper end allowance in the 1% annual exceedance probability event for Development with a lifetime beyond 2100.
- 2.17 Water quality has been considered using the Simple Index Approach (SIA) developed by CIRIA to support the implementation of the water quality management design methods set out in the SuDS Manual. The result of this assessment shows that the SuDS components used for the indicative surface water drainage strategy provide adequate pollution mitigation, with the mitigation score exceeding the pollution hazard level. As the southern basin is located within Groundwater Source Protection Zone 2 then additional pollution mitigation may be required at detailed design, this could be provided as permeable paving or other features. The full design of the SUDs system can be secured through a suitably worked planning condition.
- 2.18 Given the application site also lies downstream of Stodmarsh, there is no pathway for an impact from nutrient input from development and a likely significant effect on water quality at the statutory site, from development was also considered unlikely.
- 2.19 There are not considered to be any unacceptable impacts on the Littlebourne Stream LWS. The wastewater proposals are (now) intended to connect to the mains network rather than be fed through an on-site Water Recycling Centre. Surface water would be captured by on-site attenuation and then released at a controlled rate (no greater than greenfield run-off rate) into the ditch network. As part of the surface water attenuation, details demonstrating that there will be no pollution risk to receiving waters are also to be secured by condition, which together with the controlled runoff would ensure that the proposals would avoid an adverse impact on the Littlebourne Stream LWS and connecting designations further along the Little Stour (see comments below on Preston Marshes SSSI).

Impact Risk Zones

- 2.20 Impact Risk Zones for Sites of Special Scientific Interest (SSSI IRZs) have been developed by NE for local planning authorities (LPAs) to determine if a proposed development is likely to affect a terrestrial SSSI and when to consult Natural England. The SSSI IRZs are a Geographical Information System (GIS) tool for rapid initial assessment of the potential risks posed by development proposals to SSSIs and those Special Areas of Conservation (SACs), Special Protection Areas (SPAs) or Ramsar sites that they underpin.
- 2.21 IRZ for SSSI's define zones around each site which reflect the sensitivities of the features for which the site is notified and indicate the types of development proposal which could potentially have adverse impacts and need further consideration. In certain locations they also include Natural England's statutory advice for certain development types.
- 2.22 Relevant development types for which potentially adverse impacts for Stodmarsh have been identified by NE on its IRZ website constitute:
- Infrastructure- airports, helipads and other aviation proposals

- Air pollution -livestock & poultry units with floor space greater than 500m², slurry lagoons greater than 750m², and manure stores greater than 3500 tonnes
- Combustion -general combustion processes greater than 50mW energy input
- Include energy from waste incineration, landfill, gas generation plan, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/combustion.
- Discharge-any discharge of water or liquid waste of more than 20m³/day that is discharged to ground (i.e. to seep away) or to surface water such as a beck or stream.

- 2.23 LPAs can use the SSSI IRZs (SSSI Impact Risk Zones (England) Natural England Open Data Publication) to consider if a proposed development is likely to affect a terrestrial SSSI and those SACs, SPAs or Ramsar sites that they underpin and when to consult Natural England to seek advice. Where the SSSI IRZs include Natural England's statutory advice or indicate a risk is unlikely, LPAs can use the SSSI IRZs to instantly generate a formal consultation response.
- 2.24 Consideration of the Natural England Defra Open Data Publication impact risk zone website ([https://irz.geodata.org.uk/IRZ/step3.php?irzcode=0301000530050%C2%ACes=&location=619333,156347%20%20\(IRZ%20polygon%20centre\)](https://irz.geodata.org.uk/IRZ/step3.php?irzcode=0301000530050%C2%ACes=&location=619333,156347%20%20(IRZ%20polygon%20centre))) confirms that for this development Natural England do not need to be consulted on the proposed development at this location as it is not the type of development that would trigger the need for NE to be reconsulted.
- 2.25 The Impact Risk Zones for Sites of Special Scientific Interest (SSSI IRZs) indicate that at the location selected, the proposed development is unlikely to have a harmful effect on terrestrial Sites of Special Scientific Interest (SSSIs) and the Special Areas of Conservation (SACs), Special Protection Areas (SPAs) or Ramsar sites that they underpin (applying to Stodmarsh).
- 2.26 For Preston Marshes SSSI the Site does not lie within the identified IRZ. Therefore, Natural England would not need to be consulted on the likely impacts of development on this SSSI.

Natural England Consultation Responses

- 2.27 NE's letter of the 2nd of June 2023 (CD3.22) related to
- the mitigation of any impacts associated with an increase in nutrients entering the Stodmarsh Designated Sites and in NE's view all foul drainage should be connected to the main sewage network.
 - A HRA completed by the LPA that considers the mitigation and the measures to maintain and monitor the mitigation in the lifetime of the development.
- 2.28 NE's letter of the 23rd August 2023 (CD3.26) sought clarification as to whether an interim approach was required until a certain number of occupied homes were connected to the proposed WwTW; and consideration of impacts to Preston Marshes SSSI because of the proposal
- 2.29 NE's letter of the 9th November 2023 (CD3.53) sought clarification in relation to the proposal of additional mitigation measures to negate the remaining nutrients following the implementation of SUDS and upgrades to Newnham WwTW; and consideration of impacts to Preston Marshes SSSI because of the proposal.
- 2.30 The Flood Risk Assessment (FRA) (CD1.15, CD2.10 and CD2.50) identified that there was potential for impacts from nutrient input in the absence of mitigation at Preston Marshes SSSI, from flood events in the Little Stour River. Natural England noted the uncertainty (in their letters of the 23rd August (CD3.26) and 9th

November 2023 (CD3.53)) highlighted within the FRA (CD1.15, CD2.10 and CD2.50) regarding the impact of nutrient influx from flood events on Preston Marshes SSSI and requested this to be considered.

- 2.31 NE's letter of the 23rd May 2024 (CD3.54) was in response to a consultation by Canterbury Council of the 4th April 2024 (Mr Gambrill). NE commented that the Council's appropriate assessment concluded that the authority was able to ascertain that the proposal would not result in adverse effects on the integrity of any of the sites in question. However, NE commented that further assessment and consideration of mitigation options was required by Natural England relating to which agreed nutrient credit scheme the applicant intended to utilise within the Stodmarsh catchment and evidence was needed for accreditation and approval by the LPA as Competent Authority; and evidence for land use for the last 10 years and professional judgement used as to what the land would revert to in the absence of a planning application.
- 2.32 No further comments were made in relation to Preston Marshes SSSI and there is no reason to suggest that NE were not satisfied with the evidence provided (to the Council by the Appellant) in relation to connectivity via the Little Stour.
- 2.33 NE also requested reconsultation once the information requested above, has been provided. NE's email to Mr Gambrill of the 29th July 2024 (CD3.55) indicated that no further consultation was made after NE's letter of 23rd May 2024. Nevertheless, NE confirmed that as the Site was no longer in the Stodmarsh Catchment (following changes made by NE and the EA to the Stodmarsh catchment in June 2024 that removed an area of the surface water catchment (the catchment of the Little Stour) due to its insignificant connectivity with the unfavourable sections of Stodmarsh SPA, SAC and Ramsar site). This revised area it is stated covers the area for which NE's Nutrient Neutrality advise applies for Stodmarsh SPA/SAC and Ramsar and for which NN strategic solutions are required. As a result of these changes NE no longer expected to be consulted on this Application.
- 2.34 The Decision Notice (CD5.03) of the 18th July 2025 (Planning officer Mr Andrews. No longer Mr Gambrill) refers to 2 RfR relating to water quality that specifically references impacts on the Littlebourne Stream LWS and adequate sewerage disposal. This would suggest that along with confirmation from NE of the 29th July 2024 (CD3.55) confirming the Site no longer fell within the Stodmarsh Catchment that the matter relating to concerns over water quality impacts to the Preston Marshes SSSI was resolved prior to the Council determining the application. By sending this later email NE confirmed that it did not need to be consulted on the proposed development as it is unlikely to have a harmful effect on terrestrial Sites of Special Scientific Interest (SSSIs) and the Special Areas of Conservation (SACs), Special Protection Areas (SPAs) or Ramsar sites that they underpin.

Requirement for an HRA/AA

- 2.35 Were NE to consider an HRA/AA to be required then it would have requested this as part of the consultation response of the 29th July 2024 (CD3.55) based on the identified development types within the IRZ for which an impact might occur. NE did not expect to be consulted further because it was satisfied that the Application proposals whilst falling within the identified Stodmarsh SPA/SAC/ Ramsar IRZ did not comprise the development types it identified within its SSSI IRZs as requiring further information.
- 2.36 No HRA/AA is required.

Inquiry considerations

- 2.37 Consideration has been given to impacts to receiving watercourses of surface water drainage and the potential for water equality effects as part of the Application. This applies to the consideration of potential

effects to Littlebourne Stream LWS. LWS's are areas identified as being of substantive nature conservation value at a county or district level and form a key component of the UK's ecological networks, complementing national and international protected areas like Sites of Special Scientific Interest, as such it is necessary to consider any effects of development.

- 2.38 In terms of the need to resolve any uncertainty and by way of clarification to assist the inspector this will be commented on in more detail within the relevant evidence presented by the Appellants Ecology, FRA and Foul drainage witnesses.

