Department for Transport

By e-mail to Planning Inspectorate

15 June 2022

F.A.O. Rachel Dominey, Senior Planning Officer

Dear Ms Dominey,

A47 North Tuddenham to Easton dualling scheme TR 010038

As you have requested further information from various parties in your letter of June 1, can I take this opportunity to reiterate **ecological** and other concerns I have brought out in my various representations to the examination. Also I point out an **important report** which appeared during the examination, and which has a great bearing on this scheme.

Below is an extract from the Environment Agency's press release:

A new chalk stream strategy, published today (15 October 2021) by Catchment Based Approach's (CaBA) Chalk Stream Restoration Group (CSRG), sets the future direction needed to protect and enhance England's chalk streams.

This document emphasises the international importance of England's chalk streams, and includes the River Tud in its list (in its Appendix H). The document directs a programme of restoration of chalk rivers and their bankside catchment areas. I provide further detail below. In the light of this document having been published since they gave the scheme their consideration, I think it is imperative that **Natural England and the Environment Agency be requested to review their response** to the proposed scheme.

Ecological concerns -

A) The River Tud is a chalk river/stream

This river is a tributary of the Wensum (itself an SAC, upstream of the confluence), which flows into the Broads Area SAC. Rivers in general are a habitat of principal importance under section 41 of the NERC Act 2006.

1) CSRG report

The very comprehensive report from the CSRG, detailed above, identifies the Tud as a chalk stream, and proposes special protection for such streams, with an implementation plan to be published October 2022. The group is made up of representatives from the Environment Agency, Natural England, Ofwat, Water UK, WWF, Angling Trust, Salmon and Trout Conservation, The Rivers Trust, Wild Trout Trust and Wildlife Trusts.

Further extracts CABA's website:

CABA website: recommendations are now in a scoping phase and will be reviewed and – if carried forward – planned over the following months. An implementation plan will be published in October 2022.

And from the press release:

- a) Implementing this strategy takes us a step closer to meeting the *Government's 25 Year Environment Plan target* of 75% of England's chalk streams to get to their natural state as soon as practicable. (my emphasis)
- b) Chair of Natural England Tony Juniper said: "Chalk streams are unique natural features, and considering that most such rivers in the world are found here in England, we have a particular responsibility to ensure that they are in good health."

The report heralds a plan to restore many chalk streams to their original, high-quality state. It is surely doubtful that this can be achieved for the Tud if a large road is placed, on an embankment, within several metres of the river; in one place (the highest-quality area) it actually crosses the river. This will reduce severely the possibility of restoring those catchment areas which may need such work. It is inevitable that the banksides and catchment areas will be badly affected by the road, both during construction, and during operation. Several lagoons are planned to be placed in the flood plain of the river, restricting the options for restoration work.

The report includes this recommendation for action on water quality.

10. Highways Roads are the primary pathway of sediment to chalk streams from their catchments and therefore roadside drainage grips should not feed directly into chalk streams or unplugged drains which feed into chalk streams. Highways Agency standard practice for construction / maintenance of roadside grips that discharge run-off to chalk streams must either: discharge to plugged ditches or to settlement areas.

I recommend that the applicants' proposals for drainage be assessed again for conformance within this recommendation.

2) **Botanical Surveys**

Below is an extract from a report from a local Citizen Science group which has surveyed the Tud valley:

- Along the lower slopes of the Tud valley just above the floodplain there is a sequence of natural springs which feed exceptionally good quality water into the floodplain and support the plethora of floodplain habitats (marshy grassland, marsh and swamp communities, alder and willow carr woodland).
- Floodplain marshes are classed as Priority Habitats and are described by the JNCC as being particularly biodiverse and important for insect life and breeding birds.
- Added to this the Tud valley at this point has a higher-than-average amount of semi natural habitats - woodlands and pasture land (rather than more usual for Norfolk arable). These habitats do not create nutrient rich run off as fertilizers are not added and so in turn help protect the ecology of the river itself.
- The proposed A47 dualling would occur within the corridor of the Tud. This poses an issue as the construction work is above the floodplain and thus is a potentially damaging operation, and will interfere with the delicate hydrology of the River.

Also the group has identified aquatic plans indicative of a chalk stream, which include water-crowfoot, water star-wort, and Chara stonewort (which is a noted 'Priority Species' according to the JNCC). It is noted that the botanical survey in the application documents does not include an aquatic macrophyte survey, and so these species have not been recorded in that survey. No explanation is given as to why such a survey was not done. Also, nowhere in any applicant's reports have I seen the Tud described as a chalk stream, which is strange, as it is such an important classification. Perhaps if an aquatic macrophyte survey had been done, this conclusion would have been unavoidable.

I recommend that an **aquatic macrophyte survey be carried out** on the river. There is no doubt that parts of the river are of better quality than others. Some are clearly of the quality which would qualify for County Wildlife Site Status. This requires that a survey be carried out on the whole length.

B Other habitats and species

In addition to the river itself, there are priority habitats which would be affected badly by the scheme.

- 1) At least 14 Important **Hedgerows** would be bisected. 7 of them are to be removed. In total, at least 3.5km of hedge is to be removed, of which 1.65km is 'important'. Hedgerows are a habitat of principal importance.
- 2) The scheme is rated as 'large/major adverse' for **birds.** Several trees which serve as barn owl roosts are to be removed.
- 3) The scheme is rated as 'large/major adverse' for **bats.** There are concerns over adequacy of proposed mitigation for bats; in Vol 9, 9.6 Applicant's response to Examining Authority's First Written Questions (ExQ1), the responses in Q3.0.13 states that a large part of the remaining uncertainty over bat impacts (and the reason why the residual impacts are classed as large adverse) is the unknown value of the 'hop-over' mitigation for impacts on connectivity. However, later in the same section, reference is made to the refusal by NE and HE to accept bat gantries as mitigation whilst monitoring and review is still underway. Why then, are 'hop-overs' being proposed without robust evidence, whilst bat gantries are rightly being avoided?

At the ISH hearing on 6 January 2022, the applicant's bat expert confirmed that she was unaware of any proven mitigation for impact created by a road.

Also, the Applicant's written summary of oral submissions at ISH2 – Agenda item 4, page 18 refers to the review of existing bat surveys and highlights ongoing bat surveys in 2022. Surely no decision on the scheme can be made **until those surveys are complete** and reports available?

4) **Botanical** APP-096 Botanical Survey recommends that the scheme be put through Natural England's biodiversity Metric 2.0 "to produce a plan for a measurable net gain". **Has this been done?** I have seen no evidence of this.

As stated in the Applicant's botanical Survey report from Wild Frontier Ecology, and quoted from Section 15 of NPPF and Section 5 of NN-NPS, avoidance of impact should be the first option. As regards harm to the environment, it is clear that a road further from the river, and not creating a new crossing, would create less impact, yet that option has been rejected. This is surely against government policy.

Thank you.	
Yours faithfully,	
Richard Hawker	IP20028320