

*Via National Infrastructure Planning
On-line portal*

Our refs: AE/2021/126454/01-L01,
20028349

Your ref: TR010038

Date: 14 September 2021

Dear Sir/Madam

**APPLICATION BY HIGHWAYS ENGLAND FOR AN ORDER GRANTING
DEVELOPMENT CONSENT FOR THE A47 NORTH TUDDENHAM TO EASTON
PROJECT**

EXAMINING AUTHORITY'S FIRST WRITTEN QUESTIONS

Please find below responses from the Environment Agency to the Examining Authority's first written questions.

Section 15. Water Environment

Q15.0.1 to EA NCC, BDC, BC, SNC

ES Chapter 13: Road drainage and the water environment [APP-052], are the parties content with the Applicant's Flood Risk Assessment (FRA) and drainage proposals? If not, please explain why and what additional information is required.

As stated in our Written Representation, submitted at Deadline 1, we are generally satisfied with the Applicant's FRA and the proposed approach to managing fluvial flood risk across the scheme. We have however requested some further details, which we have discussed with the Applicant and they have resolved to provide.

The Applicant is preparing further information for inclusion as an addendum to the FRA to demonstrate that the required flood storage compensation can be delivered at the proposed River Tud crossing. We are satisfied with this approach and look forward to reviewing the addendum.

Regarding our questions in respect of the potential requirement for flood compensatory storage on the Oak Farm tributary, we understand that the Applicant is undertaking further work in consultation with Norfolk County Council as the Lead

East Anglia area (East) - Icen House

Cobham Road, Ipswich, Suffolk, IP3 9JD

General Enquiries: 08708 506506 Fax: 01473 724205

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Email: enquiries@environment-agency.gov.uk

Website: www.environment-agency.gov.uk

Local Flood Authority. The Applicant has proposed that an action will be added to the Record of Environmental Actions and Commitments in the Environmental Management Plan (EMP) to enable us to review and comment on the detailed proposals as a named consultee in respect of Requirement 4. We are satisfied with this approach.

In respect of the uncertainty over the possible need for compensatory flood storage on the Hockering watercourse, we understand from the Applicant that the flood model for that watercourse is being updated. This should provide a better understanding of the implications of the scheme on this watercourse, and further detail on any required flood management measures will subsequently be provided. Again, we are satisfied with this approach and look forward to reviewing that information.

Q15.0.6 to EA, NCC, BC, BDC, SNC

ES Chapter 13: Road drainage and the water environment [APP-052], paragraph 13.7.6 states that as the works will not impact on the water environment, the River Wensum is not considered a direct receptor. Are the parties content with this conclusion and the justification given for it?

We can confirm that we are content that the River Wensum is not considered as a direct receptor and that the proposed works will not impact directly upon it.

Q15.0.7 to EA, NCC, BC, BDC, SNC

ES Chapter 13: Road drainage and the water environment [APP-052], paragraphs 13.7.65-13.7.69, are the EA and the Councils content that these are correct?

We can confirm that paragraphs 13.7.65 – 13.7.69 are correct.

Q15.0.11 to EA, NE NCC, BC, BDC, SNC

ES Chapter 13: Road drainage and the water environment [APP-052], paragraph 13.9.15 refers to the provision of replacement ponds. Are the parties satisfied that the replacement proposals will deliver the necessary mitigation? Do they provide an improvement to the current situation?

The proposal for each pond lost to be replaced with an equivalent (not an attenuation pond), and for the replacements to be constructed prior to the loss is reasonable. The detailed design will require careful consideration to secure ecological mitigation and benefits. Issues to consider will include how to ensure that water levels are appropriately managed in the new ponds, how the new ponds will be planted and how they will be managed in the future. We will further review the detailed proposals as part of the Landscape and Ecology Management Plan (LEMP) within the EMP under Requirement 4.

Q15.0.13 to EA NE NCC, BC, BDC, SNC

ES Chapter 13: Road drainage and the water environment [APP-052], paragraph 13.9.22 refers to the Drainage strategy (Appendix 13.2 (TR010038/APP/6.3)) which proposes all road drainage will drain by surface water outfalls to the River Tud and its tributaries at twelve locations, utilising nine new outfalls. Is this approach acceptable to parties and in their view, is it adequate to deal with surface water and does it make suitable allowances to cover the design life of the Proposed Scheme?

We can confirm that we are currently satisfied with the approach outlined in the drainage strategy for managing surface water during operation in respect of protecting water quality within the River Tud. As highlighted in our Relevant and Written Representations, we would wish to review the details of the new outfalls and the mitigation measures to be included at the detailed stage to ensure that these are also acceptable. In order to enable this, we requested that the Environment Agency be included as a named consultee in respect of Requirement 8 Surface and foul water drainage system.

We are pleased to note that in the dDCO Revision 1 [REP1-003], R8 has been amended to include the Environment Agency as a named consultee in respect of Part (1). We would however request that we are also a named consultee in Part (2).

Q15.0.14 to EA NCC, BC, BDC, SNC

ES Chapter 13: Road drainage and the water environment [APP-052], paragraph 13.9.29, are parties satisfied that these are sufficient allowances to cover the design life of the proposed scheme?

Climate change allowances associated with peak rainfall events and the management of surface water fall within the remit of the Lead Local Flood Authority, so we would defer to Norfolk County Council on this point. We would however just highlight for reference that the proposed attenuation ponds and basins appear to be located in Flood Zone 1, so there should be no issues associated with fluvial flood risk.

Q15.0.15 to EA NCC, BC, BDC, SNC

ES Chapter 13: Road drainage and the water environment [APP-052], paragraph 13.9.32, are parties content that these measures are sufficient to address the identified flooding? If not, please explain.

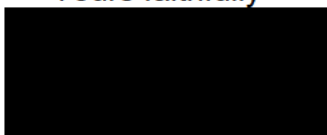
As highlighted in response to Q15.0.1, we are aware that the Applicant is undertaking further work in respect of the potential requirement for flood compensatory storage on the Oak Farm tributary in consultation with Norfolk County Council. We will review and comment on the detailed proposals as a named consultee in respect of Requirement 4 (EMP).

Q15.0.17 to the Applicant, EA

Consultation with the Environment Agency has led to an agreement of a 35% climate change allowance to be applied for the FRA [APP-124 and APP-125]. In July 2021 the peak river flow allowances were updated by the Environment Agency to reflect the latest projections in UKCP18. Can the Applicant and the Environment Agency confirm that the agreed climate change allowance is still applicable for the FRA.

As stated, updated peak river flow climate change allowances and accompanying guidance for Flood Risk Assessments were introduced on 20 July 2021. The DCO application for this scheme was submitted on 15 March 2021. Because the application was made prior to the updated allowances and guidance, it is appropriate for the FRA to use the previous allowances. We have based our advice for this scheme on the previous guidance. We would add that the July 2021 peak river flow climate change allowances for the area of the proposed scheme are actually lower than the previous allowances, meaning that in effect the proposed approach is more precautionary than would now be required.

Yours faithfully



MR MARTIN BARRELL
Sustainable Places - Planning Specialist



@environment-agency.gov.uk