Date: 11 April 2024
Our ref: 471140
Your ref: TR010059

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A1 in Northumberland – Morpeth to Ellingham Case Team
National Infrastructure Planning
The Planning Inspectorate
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BY EMAIL ONLY

Dear A1 in Northumberland – Morpeth to Ellingham Case Team

Consultation: Application by National Highways for an Order Granting Development Consent for the A1 in Northumberland – Morpeth to Ellingham Project
Interested Party Reference number: 20026931

Thank you for your consultation on the above dated 27 March 2024 which was received by Natural England on 27 March 2024.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

SUMMARY OF NATURAL ENGLAND'S ADVICE

- Natural England agrees with the approach to assessing impacts from ammonia and the conclusions regarding their ecological impacts;
- The applicant's updated air quality assessment demonstrates that the proposal will likely result in damage to the River Coquet and Coquet Valley Woodlands Site of Special Scientific Interest (SSSI) and deterioration of Duke's Bank ancient woodland;
- Natural England disagrees that the previously agreed Woodland Creation Area is sufficient to compensate for the additional impacts identified;
- Natural England's view is that the existing compensation strategy was agreed based on the effects that were previously identified. As the applicant has identified additional significant effects that were not considered previously, additional compensation is required;
- Natural England advise that additional woodland planting, connected to the SSSI, would be the most effective way of compensating for the additional effects that have been identified;
- Natural England and the Applicants have discussed a potential compensation area (location and extent), which we agree would be acceptable subject to the land being secured. If this land is not available, we will continue discussions with the Applicants about other potential compensation areas.
- Natural England recommend that a comprehensive Landscape and Ecological Management Plan is provided by the Applicant to set out how the Ancient Woodland Strategy and any additional compensation planting will be delivered.

Detailed Advice

Natural England has reviewed the *Updated Biodiversity Air Quality Assessment* (March 2024) and *Updated Outline Construction Environmental Management Plan* (March 2024) that have been submitted by the Applicant and we will continue to engage with them to work towards an agreed position.

Due to the predicted increase in ammonia concentration, the *Updated Biodiversity Air Quality Assessment* (March 2024) states there will be a "major adverse" or "very large adverse" negative effect on Duke's Bank Wood, an ancient woodland, designated as part of the River Coquet and Coquet Valley Woodlands SSSI. This is a significant effect on a nationally designated site – notified as one of the few such woodlands left in Northumberland.

The report correctly sets the critical level of ammonia concentration (1µg/m^3) applicable to designated habitats with important lower plant assemblages, and the exceedance level at 1%. The modelled data show the majority of points exceed the 1% level, particularly downstream of the proposed bridge where exceedance reaches nearly 22% at one point, and that the total area subject to elevated ammonia concentrations would be 2.5ha This should be considered in the context of a background ammonia concentration at the critical level of 1µg/m^3. Natural England's advice is that where the critical level is exceeded, adverse impacts to relevant sensitive habitats is likely. Therefore, our advice is that the proposal is likely to lead to the deterioration of the ancient woodland habitats that the SSSI was designated for, and an irreplaceable habitat, and could inhibit restoration of the site in this location. In line with paragraph 186 of the National Planning Policy Framework, where these effects cannot be mitigated, a suitable compensation strategy should be agreed.

Section 6 of the updated report adequately summarises the existing literature on both nitrogen deposition and the effects of ammonia on woodland ecosystems. Changes in the composition of ground flora, bryophyte and lichen communities are known effects of ammonia on the lower plants of Broadleaved, Mixed and Yew woodland (Ammonia :: Broadleaved, Mixed and Yew Woodland | Air Pollution Information System (apis.ac.uk)). Although there isn't a species inventory for the site, as an ancient woodland comprising upland mixed ashwood, upland oakwood and wet woodland, it is correct to presume that the lower plant community is likely to be of ecological importance and apply the precautionary principle.

The Ancient Woodland Strategy for the proposal sets out a Woodland Creation Area to compensate for impacts to the SSSI and the loss of ancient woodland. This strategy was agreed in consultation with Natural England, with all relevant factors considered at that time. Natural England recognises that the existing compensation strategy is likely to reduce airborne and waterborne nitrogen inputs to the SSSI. However, we understood this to have been part of the original discussion and therefore included in the compensation agreed to-date. In addition, the *Updated Biodiversity Air Quality Assessment* (March 2024) shows that the area that will be exposed to elevated ammonia concentrations is on both sides of the A1 but is more significant on the east side. Although the existing compensation strategy may offset the impact of some of the additional ammonia, these benefits would be concentrated on the west side of the A1.

We therefore expect additional compensation for the predicted increase in ammonia concentration effects to the SSSI detailed in the updated report. In our view, the most appropriate compensation would be an additional area of woodland planting connected to the SSSI. We have agreed such an area (location and extent) for compensation with the Applicants following negotiations subject to the land being secured. The Applicants are also investigating a number of alternative sites should that land not be available and we continue to discuss that with them. We will continue to work with the Applicant to come to an agreement on this matter.

Natural England advises that additional compensation should follow best practice as set out by the Chartered Institute of Ecology and Environmental Management (CIEEM): "Replacement ratios of compensatory habitat greater than one-to-one are frequently appropriate because of the uncertainty

inherent in compensation, particularly in cases which require…habitat creation. Increased replacement ratios can also help take account of the time lag in delivering compensation and regaining the same maturity, complexity and diversity of habitats and the full complement of associated species." (*Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.1*., CIEEM 2018). Additionally, "… compensation measures should achieve long-term results. Their duration should match the duration of the impact." Natural England expects that a compensation strategy should accord with these guidelines.

Natural England advises that additional woodland planting can act as a buffer between the SSSI and adjacent agricultural land/impacts. By providing a larger core area and reduction in edge effects, compensatory planting connected to the SSSI could provide an opportunity for mature woodland suitable for a rich lower plant assemblage to develop in the long term. We recommend that these factors should be taken into account when scoping potential new planting areas.

This would also align with the best practice guidance set out by CIEEM: "Any replacement area should be similar in terms of ecological features and ecological functions that have been lost or damaged, or with appropriate management have the ability to reproduce the functions and conditions of those ecological features. Compensation should be provided as close as possible to the location where effects have occurred and benefit the same habitats and species as those affected" (CIEEM 2018). Although it would be difficult to replicate the conditions that have given rise to the existing habitats, a new woodland is more likely to be colonised by the lower plants which are typical of ancient woodland if it is sited close to an ancient woodland (*The Conservation of Lower Plants in Woodland*, N.G. Hodgetts, JNCC 1996).

Natural England does not have specific comments to raise on the Updated Outline Construction Environmental Management Plan (March 2024). However, we recommend that to ensure that all compensatory woodland planting (agreed and recommended) delivers the best ecological outcome the Applicant should set out a long-term management plan for the planted areas. For example, a comprehensive Landscape and Ecological Management Plan. Given the timeline for the Secretary of State to make a decision on this application, such a plan could include a commitment to securing a specific hectarage of additional woodland planting, even if the land has not yet been secured. It should also set out how the planted areas will be managed to ensure that the woodland reaches maturity.

For any queries relating to the specific advice in this letter only please see contact details below. For any new consultations, or to provide further information on this consultation please send your correspondences to consultations@naturalengland.org.uk.

Yours sincerely

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