



**Offshore Wind Farms
EAST ANGLIA ONE NORTH
PINS Ref: EN010077
and
EAST ANGLIA TWO
PINS Ref: EN020078
Deadline 9**

This document responds to each point made by the Applicant in 'Applicant: East Anglia TWO and East Anglia ONE North Limited
Document Reference: ExA.AS-27.D8.V1'

<https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010077/EN010077-004574-ExA.AS-27.D8.V1%20EA1N&EA2%20Applicants%20Comments%20on%20SEAS%20Deadline%206%20Submissions.pdf>

by

SEAS (Suffolk Energy Action Solutions)
EA1N – EN010077 / SEAS ID no 2002 4494
EA2 – EN010078 / SEAS ID no 2002 4496

Matters Arising

This point-by-point response to the Applicant's comments on our submissions in the following pages uncovers the following concerns:

1 Serious deficiencies in the 2018 Surveys.

2 The Applicant has had more than 3 years to survey the cable corridor at the appropriate season, and until prompted by NE in 2021, has consistently failed to identify the important and priority habitats in the Aldringham River Hundred Special Landscape Area (SLA), of which it should have been aware since the Scoping Phase in 2017. It has too frequently dismissed arable margins and hedgerow as species poor. It has underestimated the size and extent of important environments that will be lost: for instance, 68x40 metres on both riverbanks, both parallel hedgerows lost in Fitches Lane, redshank and lapwing protection zones impacted, B-line split, meadow in stewardship bisected, impacts on SPA/SSSI east and south from works outside the statutory areas. When the Applicant carried out surveys this year, the results were unsafe, having been left until mid-winter when satisfactory botanical identification cannot be carried out.

3 How many errors must there be for ExA to discount the entire set of flawed surveys, on which the cable corridor has been planned?

4 Expert testimony in normal professional scrutiny (for instance, in law, science and medicine) must be impartial. Interests must be declared, and rules are applied to endeavour to ensure that expert help is above suspicion. In this major NSIP, the surveys have been organised and carried out by the Applicant. Royal Haskoning cannot be considered independent from the aims of the Applicant nor objectively impartial. Why is such a major public service as national planning not seen to be protected from possible or likely sources of bias?

5 Chartering for ecologists exists since 2013. Few of the named surveyors have been chartered and so they lack the protection, supervision and guidance of their chartering body, CIEEM. The experience of early career surveyors is something which concerns CIEEM.

6 SEAS is aware that surveys were often outsourced — who supervised these findings from outsourcing firms and who oversaw their analyses and integrated them into planning?

7 We request comprehensive, formal surveys of the cable route to be carried out in the correct season by fully qualified ecologists and chartered who are completely independent of SPR, Royal Haskoning, or National Grid.

8 Biodiversity Net Gain (BNG) at best is limited in scope, and in current circumstances it verges on nonsense. The Wildlife and Countryside Link, 'Habitat Loss from Major Infrastructure Projects, the case for action', April 2021, has just published its findings with a call to halt the accelerated loss of Nature under the pressure from development. BNG (along with NSIP status) is used to justify inadequate protection and inappropriate loss of our remaining wildlife. Can we please ensure that this project avoids contributing to the loss?

9 Dangerous haste: the Applicant has repeatedly justified its urgent push for speed by referring to the government's declared policy to achieve significant decarbonisation through offshore windfarms by 2030. However the Applicant is happy to not be guided by government policy on environmental protection (eg 'The Dasgupta Review'), and says so. But should they be able to pick and choose policies? Or even prioritise one policy above another? The Applicant's insistence on ignoring the BEIS Review is contrary to the increasingly clear message from Government: "The White Paper even specifically mentions the east coast of England and the need for a more "strategic approach" suggesting the use of hybrid, multi-purpose interconnectors, which are already being explored by developers in the UK and other countries, to get the most from our offshore wind and transmission assets." (Dr Thérèse Coffey, Secretary of State for Work and Pensions, MP for Suffolk Coastal).



SEAS REPRESENTATION

NB — Numbering and text in columns A&B are copied from the Applicant’s document

THE APPLICANT’S RESPONSE Deadline 8 Submission — EA1N&EA2 Applicants Comments on SEAS Deadline 6 Submissions Biodiversity

SEAS RESPONSE

1 The riparian woodland’s benefits to the river and the SSSI are outlined.

Applicant has not responded despite recording SEAS’ point.

The Applicant’s response does not address the loss of these benefits.

The river’s essential role in connectivity, maintaining the character of the dependent SSSI areas south downstream, the lapwing conservation area south east of the crossing, and impacting the SSSI to the east have not been addressed. Only the Sandlings SPA was addressed (AP-043, para 2.111).

AP-044 acknowledges that effects on water bodies would be manifested downstream of the onshore indicative development area but does not address the southern sections of the Aldeburgh-Leiston SSSI, so does not consider the effect of the River Hundred on its own wetlands. This SSSI is only briefly mentioned in APP-070, and any LSE are not considered. This early omission makes the whole subsequent project unsafe, being reactive to later objections rather than through-planned. SEAS submitted DEFRA mapping of likely impact zones which clearly shows that the watercourse crossing is risky (<https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010077/EN010077-004667-DL8%20-%20SEAS%20-%20Biodiversity%20and%20HRA%20-%20Part%20A.pdf>).

It is not surprising that emergent vegetation was sparse in snowy February. The survey was carried out at the wrong time of year.

We continue to record species and share photos to gain a clearer picture of this woodland. If a proper survey had been carried out in 2017-8 which included this woodland, the means of achieving the cable corridor should have looked quite different.

The Applicants revisited the site of the Hundred River crossing on 15-16th February 2021 (REP6-035) and again assessed that while potentially suitable habitats are present, this are limited at the location of the crossing. Furthermore, no emergent vegetation was identified during the 2021 survey and limited bankside vegetation (key species being bramble *Rubus* spp., nettle *Urtica dioica*, teasel *Dipsacus* and perennial rye grass *Lolium perenne*) was recorded.



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SEAS RESPONSE

<p>2 The ancient river irrigation systems are sketched as a means of ensuring reliable distribution of channels of river water, and their benefit as a remaining foothold for species like the Hairy Dragonfly.</p>	<p>No evidence of suitable habitat to support significant populations of invertebrates was noted during the 2018 extended Phase 1 habitat survey (APP-503 and APP-504) or the subsequent 2019 update survey.</p> <p>Irrespective of survey findings to date, the Applicants have committed to the implementation of mitigation measures (Table 22.4, Chapter 22 of the ES (APP-070)) that will reduce impacts on all invertebrates if present. In addition, the Applicants have committed to undertake pre-construction surveys, and should the presence of invertebrates or suitable habitat for invertebrates be identified, appropriate mitigation measures (where required) will be implemented through the final Ecological Management Plan (EMP) secured under Requirement 21 of the draft DCO (an updated version has been submitted at Deadline 8, document reference 3.1).</p>	<p>This is designated a nationally important invertebrate connectivity corridor and unfortunately the cable route follows it. BugLife says that the presence of a B-Line, while not statutory, should be treated as though important populations are present.</p> <p>With inadequate surveys, the examining authority cannot be confident that the mitigation measures evoked can be relied upon to deliver adequate, required mitigation. That has important consequences for the impact on statutorily protected areas as well as those not yet taken into account (like the wetlands and the lapwing conservation area in 1C).</p>
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SEAS RESPONSE

<p>4 The vulnerability of the groundwater to trenching is illustrated and its consequences raised again.</p>	<p>The Applicants provided a description of the baseline and assessment of potential impacts in respect of groundwater within Chapter 20 of the ES (APP- 068). With regard to potential impacts to groundwater specifically associated with the crossing of the Hundred River, the Applicants propose mitigation within the Outline Watercourse Crossing Method Statement (an updated document has been submitted at Deadline 8, document reference ExA.AS-5.D8.V3), including seeking the relevant permits for the works and further consultation with the Environment Agency.</p>	<p>SEAS would welcome a robust and ingenious approach to minimising disturbance in this ecologically sensitive area, where geological advice would normally be to find another site (para 4 https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/EN010077/EN010077-004131-6.SEAS%20ISH7%20-%20Post%20submission%20on%20Terrestrial%20Ecology%20-%20DEADLINE%206.pdf). We are surprised and disappointed that, without yet adequately assessing the downstream impacts, the Applicant has not provided one. Equally, spring and aquifer vulnerability for the area in the order limits has not been considered, especially as a number of dwellings close by are dependent on aquifer water.</p>
<p>5 SEAS would like to thank Sarah Frances and Susie Curtis, herbologists, for their generous help in illustrating and identifying the rich variety of plant species in the riparian environment of the Hundred River, and for the gift of their own photographs from their regular logs of frequent visits to the area. High quality images are provided.</p>	<p>Noted.</p>	<p>SEAS has been offered help from local experts in logging the riparian woodland and meadows and will continue to collect photos as data and send data to the County Recorder. We offer images from last season as evidence of features that the Applicant has missed. The point of SEAS' photographs is simply to provide evidence from people who know the area well and have visited it in all seasons, given the limitations enforced by the (winter) Examination Timetable.</p>



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SEAS RESPONSE

6 Other terrestrial Ecology — SEAS offers photographs of areas either not visited by the Applicant, or where the Applicant has not found evidence of important species. SEAS intends to illustrate that, despite the Applicant not being able to record rare species, like Nightingales or Bats, these are locally known, their habitat is still present, and that therefore the ‘industry standard’ process of analysis is not providing adequate data in this case.

The Applicants have consistently acknowledged the ecological value of the areas of woodland adjacent to the Hundred River. The area around the Hundred River was identified during the extended Phase 1 habitat survey (APP-503 and APP-504) and within Chapter 22 of the ES (APP-070) as providing suitable opportunities for foraging and commuting bats and therefore a suite of surveys was undertaken between June and October 2018.

As presented in Appendix 22.6 (APP-507), a range of different bat species have been recorded throughout the area, with common pipistrelle being the most abundant species recorded. However, soprano pipistrelle *Pipistrellus pygmaeus*, nathusius’ pipistrelle *Pipistrellus nathusii* and barbastelle *Barbastella barbastellus* were also recorded.

Furthermore, bats were observed along the public footpath immediately adjacent to the woodland, as well as within the woodland area to the east of this transect area.

We disagree. APP-503 and APP-504 extended surveys do not adequately survey the woodland west of B1122. The focus is on bat and water vole potential in this target note just south of the order limits: ‘TN(11b) alder woodland’; and, ‘alder and willow, ivy clad tree, River Hundred good bat commuting habitat’.

SEAS is concerned that, as the woodland to the east of the B1122 was missed in early surveys (for instance, APPs 070, 277), it was not taken into account when initial decisions were made. Chapter 22 of the ES does not mention the woodland east of the B1122 and does not include its acreage in the calculations of woodland to be felled. Mitigation was therefore not included, and the replanting area assigned to broadleaf woodland is not large enough, especially as the riparian woodland was not included in the original calculations. Certainly no area in the plans can replicate a riparian, possibly wet woodland.

We would expect surveys to recommend further investigation: APPs 280, 281, 507 attempted bat surveys, but did not assess the riparian woodland in their scope. Bats are regularly seen there by residents in any case.

There is no public footpath adjacent to the riparian woodland so these bat sightings refer to somewhere else, which I am afraid is not clear here.



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SEAS RESPONSE

<p>7 SEAS considers the mosaic of habitat joined by hedgerow which the trenching will bisect and gives examples of the rich diversity of species recorded there. Old hedgerows have old biome; the construction project will be destructive to this.</p>	<p>The Applicants have set out a comprehensive suite of measures for the implementation and ongoing management of planting within the Outline Landscape and Ecological Management Strategy (OLEMS) (an updated version has been submitted at Deadline 8, document reference 8.7), which includes the active watering of landscape planting.</p>	<p>SEAS would prefer the retention of these protected borders, some of which are much more than a century old, and their earth, by finding other means of crossing them.</p>
<p>8 Evidence of knowledge of Badgers at the substation site was requested with photos of sett entrances provided. The ecologist said the setts would be destroyed under licence.</p>	<p>The Applicants have recorded the presence of active badger setts at the onshore substation locations. Four outlier setts are proposed to be closed (under a Natural England licence), as they are located within areas currently identified for landscaping within the Outline Landscape Mitigation Plan contained within the OLEMS (document reference 8.7). A draft mitigation licence has been submitted to Natural England to obtain a Letter of No Impediment.</p>	<p>Noted. We object to the destruction of the badgers. Please see 58 8.1 8.1 C.</p>



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SEAS RESPONSE

9 1.1 At the proposed crossing point, the River Hundred is bounded by priority deciduous woodland that offers flood protection and filtration of contaminants from the water, thanks to its ancient bankside planting and coppicing. It provides flow regulation and cooling to the benefit of the SSSI and RSPB Reserve which is close downstream.

10 1.2 1.2 This riparian area is ecologically important and protected.

11 1.3 No mitigation has been proposed for this protected environment.

The Outline Watercourse Crossing Method Statement (an updated version has been submitted at Deadline 8, document reference ExA.AS-5.D8.V3) considers the potential impact of the Projects on the Hundred River and the features it supports and includes a number of measures developed to ensure the works do not result in unacceptable adverse impacts. These measures can be summarised as follows:
Specific ecological mitigation measures within the final EMP prepared to discharge Requirement 21 of the draft DCO (document reference 3.1);

- Where pre-construction surveys identify the presence of fish or eels, provision will be made for the upstream / downstream migration;
- Periods of low flow will be chosen to undertake the crossing works wherever practicable;
- Where there is a risk of sediment run-off, sediment interception techniques would be used;
- Any over-pumping at the Hundred River crossing would be undertaken in a manner that ensures the flow rate downstream of the crossing is the same as upstream;
- Following laying of the duct or onshore cables, subsoil and topsoil will be replaced, and the riverbank reprofiled and replanted. The specification will be set out in the final Watercourse Crossing Method Statement;

The latest MAGIC maps show that works of the River Hundred can be expected to impact the Sandlings SPA to the east and the SSSI wetlands to the south (see 1C).

Latest national guidance on climate heating recommends the retention of cooling woodland to protect aquatic life as well as features downstream.

Heron, otter, kingfisher and egret, present at the crossing point, are already reliable indicator species of fish, also of eels, amphibians and molluscs which are known to exist in the wetland fen and their remains have been seen north of it. Stickleback are readily identified; mussel shells have been noted. (1)

The water levels in the SSSI and North Warren reserve are maintained in a delicate balance on which several rare species rely (e.g bittern) — RSPB regulate the river levels by sluice system.

The replanting of the riverbank cannot replicate the current beneficial ecology of mature alder.



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SEAS RESPONSE

	<ul style="list-style-type: none"> The construction footprint of the crossing will be reinstated as soon as practicable following completion of the crossing works. Furthermore, the Applicants have undertaken and submitted a screening for Likely Significant Effects and an assessment of Adverse Effect on Integrity (AEol) of the Sandlings Special Protected Area (SPA) arising from the works associated with the Hundred River crossing (an updated Outline Watercourse Crossing Method Statement has been submitted at Deadline 8, document reference ExA.AS-5.D8.V3). The assessment concludes that the works associated with the Hundred River crossing will not result in AEol of the Sandlings SPA. The precise working method for crossing the Hundred River will be agreed through the discharge of DCO Requirement 22(2)(k) post-consent and through an application for a Flood Risk Activity Permit from the Environment Agency prior to commencement of the onshore works. Natural England will also be consulted during the preparation of the final Watercourse Crossing Method Statement. The potential for downstream impacts on the Sandlings SPA and its qualifying features will be managed through the implementation of the identified mitigation measures to minimise sediment generation from construction activities associated with the crossing of the Hundred River. 	<p>SEAS feels that Applicant’s screening for LSEs and AEol is too optimistic as it ignores the delicately balanced SSSI wetlands to the south which rely on the River Hundred, and the wholesale removal of long-established riparian ecology on site, complete with disruption to the underground springs in the valley.(2)</p> <p>According to MAGIC, the Sandlings to the east will be impacted by the disturbance and loss of habitat for protected species (nightingale, snipe, turtle dove, nightjar and woodlark), plus the catches that reach Areas 5 & 6 of the SPA will readily transmit through water any adverse effect — DEFRA’s map is available here (https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/EN010077/EN010077-004667-DL8%20-%20SEAS%20-%20Biodiversity%20and%20HRA%20-%20Part%20A.pdf).</p> <p>The permanent loss of alder and poplar protection at the crossing will become problematic both for the integrity of the river bank and for flooding. Sediment deposition by the River Hundred is a feature of the site, of the downstream wetlands and wet woodland of the SSSI.</p> <p>The wholesale loss of riparian woodland at crossing in a rewilded state will cause a fundamental, permanent, alteration of a vital river and will have repercussions. No mitigation is possible for this protected environment without a profound rethink of resources available and of the value of the existing, biodiverse ecology.</p> <p>The ‘poor quality’ meadow on the east bank is in fact an environment in long-term Stewardship (see 16.2.1 A).</p> <p>SEAS want a tunnel solution to this crossing (https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/EN010077/EN010077-004668-DL8%20-%20SEAS%20-%20Biodiversity%20and%20HRA%20-%20Part%20B.pdf) or else another site.</p>
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SEAS RESPONSE

12. 1.4 The applicant does not have enough land to replace all the woodland scheduled for destruction.

13 1.5 The applicant certainly has no sites available to replace riparian woodland.

Having verified the results of the 2018 extended Phase 1 habitat survey through the site visit undertaken in February 2021, the Applicants are confident that there is sufficient area within the Order limits to replace woodland on a like-for-like basis to that lost as a result of the Projects.

The EP1 gave no recommendations to assess this woodland. This site visit should have been completed in time for ExA and at the appropriate time of year. ExA.AS-5.D8.V3 is based on flawed analysis and so is not safe.

The Applicant has no riparian land on which to replant a riparian woodland and the acreage granted to broadleaf planting is too small. The Applicant is eliminating the existing biodiversity corridor between the southern wetlands and the inland section of the riparian environment. The river also feeds the Sandlings SPA within 600m of the crossing point through the wide spread of its catches.

The Applicant proposes to remove century-old wetland trees and has no suitable environment in which to replace them. Like-for-like is not possible.

Shaving a metre or two off the width of the cable corridor is not credible mitigation.



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SEAS RESPONSE

14 1.6 The River Hundred and its woodland have hardly been considered as receptors and will effectively be sacrificed as plans stand.

The Applicants note that the Hundred River is considered as a receptor within Chapter 20 of the ES (APP-068) relating to water resources and flood risk and is referred to throughout Chapter 22 of the ES (APP-070) in relation to its ecological function as a waterbody.
The OLEMS (document reference 8.7) sets out details of the ecological mitigation areas available within the Order limits, those within which woodland planting will be delivered and those within which further woodland planting may be delivered if a need is identified during pre-construction surveys and in consultation with the relevant planning authority.

The River Hundred is assessed as low sensitivity and high value and a variety of mechanical means are proposed to enable both the continued flow of the river and to restore its profile after 2 months of trenching (para 96), although the direct loss of geomorphological features and resulting instability are predicted, plus harm to aquatic creatures from oxygen loss. Vegetation will also be removed and not replaced like-for-like, while the presence of Himalayan Balsam in the order limits of the riparian woodland (an invasive species) has not been noted.

The river's ecological function for the valley and SPA are not fully considered. Lost woodland and halted flow will impact the temperature of the water downstream, in particular the stream feeding the SPA. Construction will permanently lose the protection of the alder woodland in extracting phosphates (the water a little way downstream in the fens is good) and regulating the energy of the river's flow while offsetting flooding, and will contribute to climate change through loss of carbon capture and water cooling.

Replanting the riparian woodland is impossible (see 13.1.5).

In view of this imbalance, we retain our assessment of the river and its woodland as 'hardly considered as receptors'.



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SEAS RESPONSE

<p>15 1.7 The Applicant states there is no alternative to this route. In that case, the project should not continue.</p>	<p>The Environmental Impact Assessment process requires the consideration of alternatives in order that selection of the most environmentally appropriate options can be evidenced. The Applicants undertook a rigorous site selection process before determining that the Projects could not go ahead without the Hundred River crossing. Through the site selection process as explained within Chapter 4 of the ES (APP-052), the Applicants have sought a cable route that first avoids and then minimises potential environmental impacts in the round.</p>	<p>What alternatives to the River Hundred crossing in Aldringham to get to Friston have been presented?</p> <p>Avoiding and minimising environmental impact requires all potential impacts to be identified first.</p>
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SEAS RESPONSE

16 2.1 The meadow has been in Stewardship for some years.

17 2.2 This means that there are restrictions on grazing, treatment and spraying. These rules have been observed for at least a decade. The present farmer keeps Red Poll Cattle on the meadow and manages their grazing by moving them up and down the valley. The grazing marsh is biodiverse.

18 2.3 The channels at 90 degrees to the river are historic irrigation catches for grazing meadows. These marked drains in the riparian meadow are well vegetated and suitable habitat for Hairy Dragonfly.

19 2.4 The riverside meadows are still locally prized for grazing as non-riparian grass cannot support large animals on these sandy soils in our dry summers.

20 2.5.2.5 Downstream, more constructed channels lead into what would have been managed reed beds for domestic use (such as, thatching, light, and beekeeping). These are now managed for the benefit of the RSPB reserve. Below is a widened channel leading to fen.

21 2.6 The Hundred River has a sluggish flow in summer and is a sympathetic environment to aquatic stages of invertebrates. These are food for fish, and the birds and mammals, like Otters, that feed on them. The winged stages support bats and birds, like Swifts and Swallows, that hunt above the surface of the water.

No evidence of suitable habitat to support significant populations of invertebrates was noted during the 2018 extended Phase 1 habitat survey (APP-503 and APP-504) or the subsequent 2019 update survey.

The Applicants revisited the site of the Hundred River crossing on 15th-16th February 2021 (REP6-035) and again assessed that while potentially suitable habitats are present, this are limited at the location of the crossing.

As presented in section 22.5.3.4, Chapter 22 of the ES (APP-070), the Hundred River was assessed as providing suitable habitat for both otter and water vole and therefore was subject to presence / absence surveys. Despite suitable habitat being present, no evidence of otter or water vole was recorded during the surveys, nor does Suffolk Biodiversity Information Service (SBIS) hold any records. These species were therefore assumed to be absent for purposes for the Ecological Impact Assessment undertaken to inform the Applications. The Applicants recognise these species are mobile and therefore, given the presence of suitable habitat, a pre-construction survey (within the optimal survey window) for both species (and invertebrates) will be undertaken to inform the requirement for mitigation measures and/or licensing requirements. The commitment to pre-construction surveys is specified within section 5.13.3 of the OLEMS (document reference 8.7).

The Applicant revisited the river in winter when it was in spate. Spring and summer flows are characterised by lush vegetation growth in the river and on the banks. Habitat and food supply are therefore both present, as are indicator species (bat, swallow, swift, heron). Many dragonflies are observed annually including the hairy dragonfly. The Applicant did not survey the water catches into the meadow on 15-16th February 2021 which also provide suitable habitat for invertebrates and amphibians.

SEAS has provided a photo record of an otter ring in the river in 2020 and narrative from local residents of the commuting and hunting habits of otters. Coppiced alders are favoured nest sites for otters and line the river at the crossing point and inland from the river. Otter is regularly recorded in North Warren, which is a few hundred metres downstream, and is not confined there.

Water vole is regularly recorded in North Warren and is not confined there.

Habitat and food are both present for both creatures and their commuting preferences are well known.

What will the Applicant do if these creatures are found? There is no robust discussion or resources planned for reestablishing populations elsewhere.



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SEAS RESPONSE

3 Riparian Meadow		
<p>22 3.1 The ditches in this meadow each support trees, bushes, bramble and other plants.</p>	<p>As presented in Chapter 22 (APP-070), suitable habitat for common reptile species was recorded and whilst no specific reptile survey has been undertaken, appropriate mitigation measures to ensure the legal protection of common reptile species have been identified. These measures are presented in the OLEMS (document reference 8.7). Furthermore, a reptile Precautionary Method of Working (PMoW) will be produced and implemented during the works where reptile habitat is recorded. The written details of the reptile PMoW will be included within the EMP which, under Requirement 21 of the draft DCO (document reference 3.1), must be approved by the relevant planning authority in consultation with the relevant statutory nature conservation body prior to works commencing. In addition, the implementation of the reptile PMoW will be supervised by the Ecological Clerk of Works (para. 229, APP-584) to ensure compliance.</p>	<p>The Applicant put out reptile mats at the beginning of snowy March this year. No reptiles would be moving then. This applies to the mats at the Sandlings SPA at Sizewell as well as to the riparian meadow.</p> <p>SEAS has provided a photo of slow worm on 21st March 2021 at the River Hundred. https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010077/EN010077-004669-DL8%20-%20SEAS%20-%20Biodiversity%20and%20HRA%20-%20Part%20C.pdf and lizards and snakes are now making an appearance (14 April).</p> <p>There is no robust, detailed plan or resources allocated to conserve and sustainably move these creatures when they are found. Many reptiles and amphibians thrive in the riparian meadow and use the river.</p>



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SEAS RESPONSE

23.2 3.2 In brief summary, the sward is mixed grasses, with long grass retained in several areas. Heron, an indicator species, forages in the grass, in which are found Frogs and Toads.

24 3.3 These images, taken in summer, indicate the presence of Rumex. Rumex is used as food plants by the larvae of a number of Lepidoptera species.

25 3.4 Patches of long grass provide habitat and forage for a variety of animals including Voles which support another indicator species that nightly quarters the meadow: Barn Owl.

26 3.5 We can see that the long grass has been allowed to seed. The contrast between the irrigated area and the wet meadow is stark. Long grass, as well as bare, sandy areas make this area a good place for basking reptiles. Common Lizard, Grass Snake, Slow Worm and Adder are known all along the river and fen.

27 3.6 3.6 Achillea Millefolium (Yarrow), can be seen in this series of snaps, and Nettle, Dandelion, Clover, Thistle and Plantain. Yarrow is used by cavity-nesting birds, including the Common Starling, to line their nests. Numerous invertebrates feed exclusively on Yarrow. Leaf Miners, Case Bearers and Pugs also favour it. Chrysanthia Viridissima feed on it.

Applicant has not responded despite recording SEAS' point.

Barn owls are likely to use much of the local farmland area for foraging. According to the Barn Owl Trust¹, arable land is relatively good for barn owl foraging and, birds require only 14 to 21ha of rough grassland in arable habitats within 2km to meet their foraging requirements, which is only around 1.1 to 1.7% of the total area. This is likely to help explain why the barn owl population in Suffolk has a favourable conservation status and according to the Suffolk Community Barn Owl Project², hosts some of the highest densities in Britain. Based on this evidence, local breeding barn owls are likely to continue to utilise suitable foraging habitat throughout the area, and any localised loss of rough grassland is unlikely to substantially impact any individual's breeding or survival or affect the population status.

Yarrow is a relatively common species that flowers from June onwards. Any localised losses of this or other common plant species are unlikely to affect the ability of common breeding bird species to gather sufficient nest material from the local area and prevent successful breeding.

We are puzzled by this narrative. You ignore the quality of the meadow and focus on the barn owl.

What we are attempting is establishing, through photographic records and logs from those of us who live here, at the right time of year, an overview of the biodiversity of the meadow and its inhabitants.

The density of barn owls in Suffolk is indeed a small triumph after many years of raising awareness, preserving and extending habitat and food sources. However, we are describing the barn owl as an indicator species, not a rare one. An indicator species is a species whose presence, absence, or relative well-being in a given environment is a sign of the overall health of its ecosystem. By monitoring the condition and behaviour of an indicator species, we can determine how changes in the environment are likely to affect other species that are more difficult to study.

The yarrow and pine and monoliths are also part of this record of the environment in that they indicate food, habitat, roosts, hibernation sites and protection for a number of species. We are aware that they are not all rare though they may be desirable for biodiversity.

We note their abundance here as indicative and beneficial elements of this receptor.



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28 3.7 Pinus — seen as monolith and also living specimens in these images — produces forage for Lepidoptera, Panolis Flammea. Its seeds are eaten by Crossbill, Jay, Nuthatch, Siskin, and Woodpecker. Its pollen is thought to play a vital role in detrital food webs such as enabling fungi to decompose nutritionally lacking litter, and moving matter between terrestrial and aquatic food systems. (We demonstrated in our last submission that the woodland floor supports fungal networks also.)

Scots pine is relatively common in the local area, forming areas of plantation and being established on the widespread sandy soils.

Should any trees in the Hundred River area become unavailable to bird species due to the proposed works, it is likely that birds would be able to locate sufficient resources elsewhere in the local area.

More than 2 acres of trees will become permanently and rapidly unavailable after wholesale felling of the woodland on the west of the Hundred River. Current research disagrees with the Applicant’s assertion that life forms will simply move somewhere else. Research shows on the contrary that habitat loss and fragmentation are cumulatively damaging to a population (3).



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<p>Aquifer Vulnerability</p>		
<p>29 4.1 The area’s aquifers have a typically moderate to low yield close to the surface and so the riparian meadow and woodland are considered of medium to high vulnerability (DEFRA).</p> <p>4.2 We refer to the Applicant’s own Archeological test trenches of 30 November 2019 which rapidly filled with groundwater.</p> <p>4.3 The area is sandy so any contaminants from trenching will be quickly and widely spread through groundwater and are likely to also be readily dispersed by the irrigation channels and the main river flow.</p>	<p>The Applicants note that, given the time of year such trenches were excavated, the ground would likely have been wetter given seasonal rainfall.</p> <p>The Applicants have provided measures within the Outline Watercourse Crossing Method Statement (an updated version has been submitted at Deadline 8, document reference ExA.AS-5.D8.V3) that will be carried forward to the final Watercourse Crossing Method Statement to control release of contaminants</p>	<p>SEAS has been unable to locate any owners reliant on well water in Aldringham who have been contacted by SPR about their domestic supply.</p> <p>As we logged, there was no rain during the excavation and the flooding was rapid, filling the trenches within winter daylight hours. The establishment of North Warren RSPB Reserve in the SSSI found that small springs are abundant in the valley(4). The RSPB’s experience of removing trees and leaving the hollow to be filled in by spring water is now repeated nationally in the creation of wetlands.(5)</p> <p>This is why the riparian meadow remains green in our dry summers, and the riparian woodland is able to support moisture-loving species.</p> <p>On old OS maps drawn prior to the dwelling construction in Gypsy Lane, the area of the riparian woodland is shown as a marsh.</p> <p>Release of contaminants by construction work will be compounded by the unobstructed flow of water in the wet ground conditions.</p>



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30 4.4 The level of the distributed water is also critical downstream where loss of, or excess, water levels threaten the habitat of the Bittern (for instance) and the sensitive plants of the brackish water meadows closer to the sea. A high degree of micromanagement and monitoring is required by the managers of the SSSI and Nature Reserve.

The Applicants have provided measures within the Outline Watercourse Crossing Method Statement (an updated version has been submitted at Deadline 8, document reference ExA.AS-5.D8.V3) that will be carried forward to the final Watercourse Crossing Method Statement to control release of contaminants.

SEAS welcomes the Applicant’s discussions with Anglian Water and the Environment Agency but we find no mention at this stage of being conscious of the needs of the SSSI to the south. However the Outline Watercourse Crossing Method Statement raises grave concerns. It perpetuates errors in the EIA 2018 Extended Habitats Report.

A. NE has designated this area as Priority Habitat Deciduous Woodland, Aldringham. This is not mentioned.

B. In para 27, SPR describes a ‘small area of woodland’. It is around a hectare. Is that small?

C. This document refers to gorse, holly and chestnut. That is a different woodland (see 24 4.5 4.5 C, below)

D. Para 29 "Impatiens glandulifera (Himalayan Balsam), an invasive non-native species, was recorded along the Hundred River outside the Order limits, approximately 123m upstream". Incorrect: Himalayan Balsam is prevalent within the order limits, is indicative of wet environment, and has already begun to spread into the SSSI downstream. This shows the excellent connectivity of the riparian corridor, which the Applicant does not accurately assess. Adequate methods to prevent LSEs are therefore lacking.

E. Para 84 “Areas of woodland removed between the Hundred River and Aldeburgh Road will be replaced in areas which does not interfere with the operation of the onshore cables, and otherwise with shallow rooting shrub mix, species rich grassland and hedgerows”. Where does SPR hope to find a riparian environment close by where it can meet the challenge of replanting a protected woodland network which is likely to be wet?



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<p>31 4.5 4.5 The advice of the Irish Geological Survey in these circumstances is to find another site. (Geological Survey, Ireland, ‘Assessing Groundwater vulnerability,’ 2021)</p>	<p>The Applicants question the applicability of the Irish Geological Survey for the Projects being undertaken in England, although note this advice.</p>	<p>We understand that the Earth’s geological processes follow the same principles across the Irish Sea. The Irish Geological Survey explained its concerns for contamination and guidance to avoid it, to EU standards, succinctly and on a freely available site, which was available and affordable to us.</p> <p>We have not yet managed to come across a householder in the Aldringham area who relies on well water and who has been contacted by the Applicant in preparation for these works that may well breach the aquifers that service their homes.</p>
<p>5 The Riparian meadows of the River Hundred in Aldringham by Sarah Frances and Susie Curtis (list of plants and photos)</p>	<p>The Applicants note these submissions and have no further comment.</p>	<p>The point of SEAS’ photographs is to provide data from all seasons, given the limitations enforced by the (winter) Examination Timetable.</p>
<p>Other Terrestrial Ecology</p>		
<p>35 6.1 6.1 The Applicant’s latest surveys examined some of Fitches Lane and the attached wood, but not the arable land adjacent, much of which is in, or eligible for, national stewardship schemes.</p>	<p>The Applicants have described the baseline of and assessed potential impacts regarding environmental stewardship schemes within Chapter 21 of the ES (APP-069). This assessment identified the land within the Order limits west of Fitches Lane is not currently subject to environmental stewardship scheme agreements.</p>	<p>DEFRA (MAGIC mapping) identifies the woodland on both sides of the B1122 as Woodland Priority Habitat Network, and in their Network expansion zone as well as being on the National Forestry Inventory.</p> <p>The arable areas west of Fitches Lane contain Higher Level Stewardship Target Areas (England) and Countryside Stewardship Agreement Management Areas (England), with Priority areas for Countryside Stewardship measures addressing Lapwing and Redshank habitat issues</p>



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<p>36 6.2 6.2 The hedgerows bounding both sides of Fitches Lane are treated as one rather than two in parallel. Both hedges will be removed. They are recorded as species poor by the Applicant. This is Fitches Lane — not species poor.</p>	<p>The Applicants note that the length of hedgerow associated with Fitches Lane required for removal in this area is important hedgerow marked 21 on sheet 5 of 12 of the Important Hedgerows and Tree Preservation Order Plan (REP3- 010).</p>	<p>Our photo clearly shows two sides to Fitches Lane, therefore 2 parallel hedges, not one.</p>
<p>37 6.3 The Lane has been in existence for centuries. The Applicant’s ecologist says they could not penetrate the areas of scrub.</p>	<p>At the time of the 2018 and 2019 ecological surveys, the ecologists noted areas of dense scrub which prevented their access for health and safety reasons. These limitations are acknowledged by the Applicants but in spite of these limitations, the findings from the ecological surveys do not undermine the conclusions (and in turn the identified mitigation measures) that are presented in the ES Chapter 22 (APP-070) and/or the OLEMS (document reference 8.7).</p>	<p>The wood has been habitat for migrating birds, including the Nightingale, for longer than living memory. The photos of scrub / bramble stands provide a record of the habitat for these birds. The conclusions are too ready to find nothing worthy of protection.</p>
<p>38 6.4 The impenetrable scrub and bramble stands are excellent nesting areas for our breeding Nightingales.</p>	<p>Although dense scrub may be suitable habitat for nightingale, no records of the species were made in proximity to the Hundred River crossing area during baseline ornithology surveys in 2018 and 2019, or provided in RSPB historic data since 2009 (as presented in Chapter 23 Onshore Ornithology (APP-071)). Should any active nightingale territories be located in the vicinity of the proposed works, efforts would be made under the Breeding Bird Protection Plan to ensure that breeding would continue without disturbance.</p>	<p>The species is well-known in this area though it has not been recorded formally, apparently. SEAS plans to contact the County recorder about more comprehensive recording.</p>



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<p>39 6.4 The wood offers cleared and canopied habitat favoured by Nightingale and Turtle Dove and the undisturbed biome of the Lane plus the ‘impassable’ areas offer invertebrate forage for many indicator species, like Bat, Nightingale, and larval forms of many other invertebrates, which also benefit from the proximity, on the northern edge of the wood, of the River Hundred. Adjacent to the south are arable fields. To the west is the village of Knodishall (Coldfair Green).</p>	<p>No turtle dove or nightingale territories were recorded in the vicinity of the wood in 2018 or 2019 baseline surveys, and no records from RSPB data from 2009 to 2018 were in this location (as presented in Chapter 23 (APP-071)). Should any active territories be located in the vicinity of the proposed works, efforts would be made under the Breeding Bird Protection Plan to ensure that breeding would continue without disturbance.</p>	<p>Residents hear nightingales regularly and look forward to their annual return. Their numbers have been dropping, however, with the challenges of climate change. The nightingale here is known as the Barley Bird as it returns when the green shoots of barley are seen in the fields. What efforts will be made to protect breeding pairs which are notoriously secretive and nesting males cease to sing? Turtle dove was once more present on my land (across the arable field from Fitches Lane) last year. The Applicant again ignores invertebrates recorded by us.</p>
<p>40 6.5 A buffer area for nesting birds of 5m is unlikely to be acceptable to any bird species more shy than a Robin.</p>	<p>The 5m buffer is a minimum distance to comply with the Wildlife & Countryside Act 1981, to ensure that nests, eggs or young of all species are not destroyed. Appropriate buffer distances surrounding a nest site would be species-specific and would be determined by the Ecological Clerk of Works, based on the nature and duration of works that would take place nearby. Any species listed in Schedule 1 of the Act would be afforded enhanced protection from disturbance to adults, by appropriate mitigation measures as part of the Breeding Bird Protection Plan.</p>	<p>You are planning to remove their habitat, so we are concerned to see what measures you will take. None of the mitigation offered for the birds of the Sandlings has been extended here. We argue that best practice should be followed, not minimum requirement.</p>



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<p>41 6.6 Despite unfruitful surveys by the applicant, Nightingale and Turtle Dove, plus other migrating warblers, are known to breed annually here and have done so for all of living memory.</p>	<p>No turtle dove or nightingale territories were recorded in the vicinity of the wood in 2018 or 2019 baseline surveys, and no records from RSPB data from 2009 to 2018 were in this location (as presented in Chapter 23 (APP-071)). Should any active territories be located in the vicinity of the proposed works, efforts would be made under the Breeding Bird Protection Plan to ensure that breeding would continue without disturbance.</p>	<p>Please see 39 6.4 C. The surveys were in any case at the wrong time of the year to observe breeding migrant birds, though the habitat should have been logged, as it is present for them.</p>
<p>42 6.7 Equally, use of these woods by various bats is well-known. While the Applicant’s equipment did not pick up the Brown Long- Eared Bat, Suffolk FWAG identified its presence in the area.</p>	<p>A desk-based exercise and field survey were undertaken in relation to bats, the findings of which were used to inform the Ecological Impact Assessment presented in Chapter 22 (APP-070). Biological records (including bat records) were obtained from the SBIS. The Applicants acknowledge that the brown long-eared bat is a common and widespread species distributed across Suffolk. However, the suite of bat surveys (emergence / re-entry, monthly activity transects and monthly static bat detector) did not record this species. Therefore, it was concluded this is species was absent in this particular area during the survey.</p>	<p>Cumulative loss of habitat threatens the longterm viability of species (3) See 28 3.7.C.</p>



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<p>43 6.8 6.8 If surveys described by the Applicant as ‘industry standard’ are failing to give an accurate picture of local ecology, we suggest that the form of such surveys seems wanting. Appealing to knowledgeable locals — and there are many around — will give protected and endangered species a better chance of visibility, before it is too late and they are pushed into local extinction.</p>	<p>All ecological surveys in support of the Applications were undertaken by suitably qualified ecologists within the optimal surveying windows. All surveys have been undertaken in accordance with industry guidance (such as but not limited to the Handbook for Phase 1 Habitat Survey (Joint Nature Conservation Committee (JNCC)). Furthermore, industry accepted species-specific guidance and standards have been used when assessing habitats for their suitability to support legally protected and notable species.</p>	<p>These surveys have too many errors and omissions for us to be confident in their strict application of JNCC guidance (see above).</p>
<p>44 6.9 This screenshot is from a video of a Nightingale who was singing in the southern hedge of Fitches Lane, where it adjoins the hedge in the adjacent arable field. The song was captured on video and can be made available for the library.</p>	<p>Noted.</p>	<p>This is a record of a nightingale in Fitches Lane (see 41 6.6 B)</p>
<p>45 6.10 Both hedges will have to be removed.</p>	<p>The Applicants note that the length of hedgerow associated with Fitches Lane required for removal in this area is important hedgerow marked 21 on sheet 5 of 12 of the Important Hedgerows and Tree Preservation Order Plan (REP3- 010).</p>	<p>Both sides of the lane are hedged. So the ecological damage is really twice as great.</p>



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<p>46 6.11 Fitches Lane and the paths through the wood are resources joining two villages, enabling children to walk to the Primary School, as well as offering places for children to play. Although there has been some development by the new owners in recent years (one owner’s child has a bike track in an area of the wood), we still hear our migrant birds return each spring. The construction will remove this resource and the Lane.</p>	<p>Noted. The Applicants note that a temporary diversion of the public right of way (PRoW) E-260/007/0 (from the western end of Fitches Lane towards Coldfair Green) will be required during construction. This temporary diversion will be implemented in accordance with the final Public Rights of Way Strategy, which must accord with the Outline Public Rights of Way Strategy (REP3-024) and be approved by the relevant planning authority prior to undertaking works that would affect the PRoW, pursuant to Requirement 32 of the draft DCO (document reference 3.1). Pursuant to Article 11 of the draft DCO, temporary PRoW diversions must be provided to the standard defined in the Outline Public Rights of Way Strategy (REP3-024), to the satisfaction of the relevant highway authority, prior to the stopping up of the existing PRoW.</p>	<p>The diversion will make the footpath many times longer, unpleasant as it is bordered by industrial works, and unfit for purpose - we wil have to resort to cars.</p>
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<p>47 6.12 6.12 Images of the invertebrates in the area taken by the author. [please refer to page 19 or 24 of (REP6-139) for images]</p>	<p>Noted.</p>	<p>These are records of rare invertebrates in the order limits and not logged in the Applicant’s surveys.</p>
<p>7 Arable Fields adjoining Fitches Lane and reaching Snape Road (B1069)</p>		
<p>48 7.1 7.1 Adjoining fields are partly industrially farmed, or eligible to join national Land Stewardship schemes (DEFRA).</p>	<p>The Applicants have described the baseline of and assessed potential impacts regarding environmental stewardship schemes within Chapter 21 of the ES (APP-069). This assessment identified the land within the Order limits west of Fitches Lane is not currently subject to environmental stewardship scheme agreements.</p>	<p>MAGIC identifies a Farm Wildlife Package Area in the order limits west of Fitches Lane, with additional reference to CS Targeting Redshank.</p> <p>Hedgerows are protected anyway.</p>



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<p>49 7.2 There is a mosaic of ecologically rich areas between and bounding the arable fields, including long-established wooded areas, old hedgerows, and water bodies (including domestic ponds). This means there is high biodiversity here, connected by hedgerow. Many of these old hedgerows will be bisected by the Applicant and their long-established habitats and ecological connectivity destroyed, particularly in the earth.</p>	<p>The Applicants’ surveys have recorded three hedgerows that interact with the Projects’ Order limits in the arable fields immediately west of Fitches Lane. The Applicants have committed to crossing two of these hedgerows via a reduced working width to minimise impacts to hedgerows. Given the angle of incidence of crossing important hedgerow marked 21 on sheet 5 or 12 of the Important Hedgerows and Tree Preservation Order Plan (REP3-010) (as a result of taking the most direct line through the area of woodland west of Aldeburgh Road), the Applicants need to retain rights to remove the full length of this hedgerow that falls within the Order limits. During the detailed design and where micro-siting allows, the Applicants will aim to minimise the length of hedgerow removal required for important hedgerow 21.</p>	<p>There are 2 hedges bounding Fitches Lane, not one.</p> <p>A close study of the hedges that will be bisected is inadequate: soil, invertebrate, bird, mammal and amphibian observations are missing, as are considerations of connectivity and mosaic. Adequate protective and mitigation measures are therefore missing too.</p>
<p>52 7.5 The creatures seen in this area include Hare, Buzzard, Crow, Harrier, Jackdaw, Woodlark, Skylark, Fieldfare, Goldfinch, Swift, Swallow, Martin, Flycatcher, Pheasant, Wagtail, Owls (Tawny, Little and Barn), Kinglets, Hedgehog, Bat (Brown Long-Eared and Pipistrelle), Stoat, Fox, Vole, Mole, Rat, Mice, including the Yellow-Necked Mouse, and numerous invertebrates: Moths, Butterflies, Beetles, Worms and many Wasp species, Solitary Bees, and Bumble Bees in the banks of the old field boundaries. Amphibians (Newt, Toad and Frog) benefit from adjacent water bodies and garden ponds.</p> <p>53 7.6 The Applicants have made little provision to protect these creatures, arguing that hedgerows will be replaced or filled in. Some of these hedgerows are very old with an ancient biome, and cannot easily or rapidly be replaced.</p>	<p>As per the OLEMS (document reference 8.7) all sections of hedgerow removed will be reinstated within the first available planting season following construction and will aim to enhance baseline conditions where possible (for example, through improved species diversity).</p>	<p>Hedgerows are greater in biodiversity value than the sum of the plant species in them.</p> <p>A season without them will be very damaging to the species within them. They will have lost habitat, forage, winter stores and hibernation areas.</p> <p>It takes about 5 years for secure, rooted growth to be achieved in those fields. Another 5 years before adequate shelter belt is achieved. So the ecological cost of this plan is very high.</p>



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54 7.7 The Applicants do not acknowledge how long restoration of their habitat will take in this arid environment, nor have they made provision for prolonged and necessary support for replacement plants.

The Applicants have set out a comprehensive suite of measures for the implementation and ongoing management of planting within the OLEMS (document reference 8.7), which includes provision of watering landscape planting.

Regrowing hedgerows in the immediate vicinity is slow and suffers high mortality owing to the sandy and windy conditions. See 52.7.5 C



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55 7.8 Their surveys have not returned robust data about the habitats of species likely to be impacted by the works.

55 7.9 Their conclusions that species are not there, despite the existence of their habitat, are therefore not safe.

55 7.10 Post consent is too late, and too precarious, for further surveys to be undertaken. It also fudges the cumulative effect of the destructive impact on protected and endangered species by only focussing on their existence in ready-mapped areas, until there are no obstacles to construction.

All ecological surveys in support of the Applications were undertaken by suitably qualified ecologists within the optimal surveying windows. All surveys have been undertaken in accordance with industry guidance (such as but not limited to the Handbook for Phase 1 Habitat Survey (JNCC)). Furthermore, industry accepted species-specific guidance and standards have been used when assessing habitats for their suitability to support legally protected and notable species.

Whilst suitable habitat for legally protected or notable species may be present, if evidence of their presence is not recorded then they are assumed to be absent. Despite the absence of evidence to confirm their presence, the Applicants recognise that some species are mobile and therefore if suitable habitat is present, pre-construction surveys for the relevant species will be undertaken within the optimal survey window to confirm their presence remains absent or to inform the requirement for mitigation measures and/or updated licensing requirements.

We have established that this has not been the case: that key surveys have been at times of year when key species are not identifiable.

The surveys have not met standards for best practice.

We repeat the arguments that many species not recorded by the surveys nonetheless are known to be there.



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Badgers		
<p>58 8.1 8.1 SEAS requested information on the badger setts at the substation site. Redacted reports have made it difficult to ascertain if the Applicant was aware of setts or not.</p> <p>8.2 The Applicant said there were none on the substation site. A photo of the existing sett on the site is shown below. In addition a newly located, large sett is also shown, with the photo taken shortly before 17th February.</p> <p>8.3 The Applicant said that a licence would be sought from Natural England to destroy the setts.</p>	<p>Under the Protection of Badgers Act 1992, information showing sett locations must be kept confidential to prevent persecutions. The Applicants’ confidential badger survey information has been submitted to the Planning Inspectorate, Natural England, East Suffolk Council (ESC) and Suffolk County Council (SCC) only.</p> <p>Four active badger setts have been recorded at the onshore substation and National Grid Infrastructure locations during the surveys to date. As these four outlier setts are located within areas currently proposed for landscaping, a Natural England badger mitigation licence to close these setts will be required.</p> <p>All badger mitigation works will be undertaken in accordance with an approved method statement and badger mitigation licence obtained from Natural England.</p> <p>A draft badger mitigation licence (including method statement) has been prepared and submitted to Natural England to obtain a Letter of No Impediment for badgers.</p> <p>The Applicants recognise badgers are a mobile species and therefore, given the presence of optimal habitat for these species at this location, a pre-construction survey (within the optimal survey window) will be undertaken to inform the requirement for mitigation measures and/or updated licensing requirements.</p> <p>The commitment to pre-construction surveys is specified within section 5.13.3 of the OLEMS (document reference 8.7).</p>	<p>Noted.</p> <p>We object.</p> <p>The Applicant said it would avoid badger destruction through micro-siting.</p> <p>Now they admit that they will destroy them. This is shocking.</p>



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Conclusions		
<p>61 In the same week as the complete publication of Professor Dasgupta’s review of ‘Economics and the Environment’, witnessing the act of balancing this project’s destruction of nature in pursuit of profit left a bad taste in the mouth.</p>	<p>Noted</p>	
<p>62 The incomplete, cookie-cutter proposals to ‘restore’ the environment after construction, such as replacing a mature woodland with a strip of heath, or arguing that filling holes in a hedge is ecological enhancement, fall far short of the action needed to provide beneficial renewable energy.</p>	<p>The Applicants note that reinstatement and restoration of land used in construction is standard approach for any project that requires the undergrounding of cables, pipes or such other buried infrastructure. A comprehensive suite of measures for the implementation and ongoing management of planting is set out within the OLEMS (document reference 8.7) to maximise successful reinstatement and planting.</p>	<p>The Applicants have been committed to carrying out an ambitious project in an area where it does not fit without severe damage.</p>
<p>63 In Dasgupta’s model, the loss of natural capital is an example of how our institutions are unfit to manage these externalities, with Government paying people more to exploit nature than prioritise and protect it. Destruction of our local ecosystems means that we have not changed our conceptual framework adequately enough to invest in economic activities that enhance our stock of natural assets instead.</p>	<p>The Applicants note that this statement is made in relation to the current policy framework, rather than directly in relation to the Projects. The Applicants have had due regard to current policy and legislation in preparing these Applications.</p>	<p>The policy frameworks from BEIS as well as the Treasury are intended to support change, both conceptual and practical, in precisely these kinds of Projects. The role of international business in pushing through change has been celebrated. We would like to see some of that dynamism applied here (as in this Danish project: https://www.theguardian.com/environment/2021/feb/04/denmark-strikes-deal-on-25bn-artificial-wind-energy-island).</p> <p>However, the Applicant is happy to self-contradict: they invoke a different policy as justification for the haste in pushing through their windfarm projects to meet government’s aims on power generation!</p>



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64 After all, the bottom line of this windfarm project is meant to generate profit for its shareholders, which is surely why so many energy firms, like BP, with its history as fossil fuel champion, are outbidding each other for tranches of the sea bed.	No comment.	Noted
65 Instead, we need to look at cumulative effects on this environment, which will be grave. After the damage done by these two projects there will be, we know, another six. The failure to consider alternative solutions was one of the key criticisms in the Judicial Review of the Norfolk Vanguard decision.	No comment.	Noted
66 “Protecting and enhancing nature needs more than good intentions — it requires concerted, coordinated action.”	Noted. Again, the Applicants interpret this comment from SEAS applies to the strategic approach of the UK Government to infrastructure development and coordination, rather than being directly applicable to the Projects.	Actually, this comment is not from SEAS: it’s from the Prime Minister, Boris Johnson, in relation to the Dasgupta report. The role of private enterprise in driving this agenda has been emphasised. The point is to do it.
2.2 SEAS’ Post-Hearing Submission	Issue Specific Hearing 7 Habitats and Biodiversity	Woodland at the River Hundred (REP6-140)
1 1.1 1.1 The Applicant, SCC and ESC visited the woodland at the same time on 15th February	Whilst the Applicants undertook an ecological survey the Hundred River on the 15 th February 2021, this survey was independent of ESC’s and SCC’s visit.	This coincidental meeting might be explained by the snow which made outdoor activity difficult until 14th February. The council officers did not admit until after ISH 7 that they had not surveyed the woodland: their inspection was limited to the roadside or from within a meadow several hundred metres away.



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<p>2 1.2 1.2 On 17th February, they reported to the ISH Hearing that they observed no flooded patches despite the recent snow and that woodland was well-drained ('pretty dry').</p>	<p>An ecology survey report presenting the February 2021 survey finding was submitted at Deadline 6 (REP6-035). Whilst recent snow and rainfall had been experienced prior to the Applicants' visit, no evidence to support the area of woodland being considered wet woodland was noted. This justification is presented in the February 2021 survey report submitted at Deadline 6 (REP6-035).</p>	<p>We have responded.</p>
<p>4 1.3 1.3 Gillian Horrocks requested from local Council representatives where the officers had been, since their observations of this area's characteristics do not accord with ours.</p>	<p>The Applicants are unable to comment on ESC's or SCC's approach to their site visit.</p>	<p>The Applicant evoked these visits here as a support to their findings: <i>4 Applicants' Comments on NE Appendix C8 [REP7-073] – NE's Response to the Ecology Survey Results [REP6-035]</i> https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010077/EN010077-004502-ExAAS-17.D8.V1%20EA1N%20EA2%20Applicants'%20Comments%20on%20Natural%20England's%20Deadline%207%20Submissions.pdf <p>Not only did the local Council representatives not survey the area, they refused to offer a copy of their 'scoping' when asked at ISH 14, 17-3-21, 12.55PM (06.31-07.36).</p> </p>
<p>5 1.5. We await the written submission of the Applicant's ecologist to assess what records she was able to take and where.</p>	<p>An ecology survey report presenting the February 2021 survey finding was submitted at Deadline 6 (REP6-035).</p>	<p>We have responded.</p>



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<p>6 1.6 The Applicant repeated that they applied industry standard analysis by chartered ecologists and that the riparian woodland was not wet.</p>	<p>All ecological surveys in support of the Applications were undertaken by suitably qualified ecologists within the optimal surveying windows. All surveys have been undertaken in accordance with industry guidance (such as but not limited to the Handbook for Phase 1 Habitat Survey (JNCC)). Furthermore, industry accepted species-specific guidance and standards have been used when assessing habitats for their suitability to support legally protected and notable species.</p>	<p>In this case there was snow on the ground and none of the vegetation of the woodland was visible so correct conditions were not met for an accurate formal survey.</p>
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7 1.7 1.7 SEAS pointed out that the observations and knowledge of well- informed local persons provide substantial and valuable insight to the local ecology, and that the Applicant’s scanty analysis prior to this stage had left the protected riparian woodland without protection.

Again, the Applicants would note that all ecological surveys in support of the Applications were undertaken by suitably qualified ecologists within the optimal surveying windows. All surveys have been undertaken in accordance with industry guidance (such as but not limited to the Handbook for Phase 1 Habitat Survey (JNCC)).

This survey was not within the optimal window and could not identify characteristics required in JNCC / NVC ‘Field Guide to Woodland’.

Previous surveys also fail to meet this important criterion.



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2 Riparian water levels		
<p>8 2.1 The water levels are controlled downstream by a sluice system. Water is drained very quickly when required as the bitterns and rare brackish species managed by RSPB can easily be disturbed by excess or too little river water.</p>	<p>The Applicants assume that this narrative relates to the classification of the woodland in the vicinity of the proposed Hundred River crossing.</p> <p>The Applicants would note that their classification of the woodland at the Hundred River is based on the species present rather than moisture levels in the ground (in line with the Joint Nature Conservation Committee's (JNCC) Handbook for Phase 1 Habitat Survey (2016)).</p> <p>The species found during surveys in both 2018 and 2021 did not comprise those associated with wet woodland. A full survey report was submitted at Deadline 6 (REP6-035).</p>	<p>The Applicant's assumption is correct: the submission is clearly titled 'woodland at the River Hundred', and SEAS was explaining why the water levels were able to drop so suddenly since our photographic records in January 2021 and the visit by the ExA shortly after.</p> <p>The Applicant could not survey for species present since their latest survey took place in winter, contrary to JNCC and NVC guidelines.</p> <p>Applicant's P1 2018 survey was not in spring, for according to the Applicant's photos the river was still in winter spate and nothing was in leaf. We often have prolonged winter conditions on the East Coast; this may account for the date recorded as April.</p> <p>The Applicant also conflates the broadleaf woodland by the B1122 with the riparian woodland.</p> <p>The reports are therefore unsafe.</p>



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9 2.2 The water levels were reduced rapidly on 18-19 January 2021 after torrential rain. Images of the 2 prior flooding were presented by SEAS in our last submission: these wet pools disappeared within 24 hours once the sluice was opened.

However, is the ground now wet or dry?

The applicant has not responded.

SEAS was explaining why the river’s flooded state, witnessed by us and the ExA, was drained so quickly that by the time Royal Haskoning’s ecologist got there she saw no pooling.

The relationship of the river with RSPB North Warren is important to note.

The lowering of the river water levels does not mean the soil environment is now dry: ditches, catches, underground springs and water table all play a part in maintaining a wet environment.



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3 Riparian Soil		
<p>11 3.1 3.1 The soil in this area is largely acidic sand. Seasonal flooding provides an overlay of fertile silt in this woodland, and the trees in the woodland offer leaf mulch, but sandy soil always offers a friable appearance, even when wet. Image 1 shows a small hole dug to a garden trowel’s depth about 10m from the river bank. A simple meter reading for soil moisture content records a waterlogged character, yet the sandy soil is crumbly.</p> <p>12 3.2 The sandy topsoil offers no barrier for water from the river to spread evenly within it.</p> <p>13 3.3 The soil is soft: boots sink into the ground even 40 metres from the water’s edge.</p> <p>14 3.4.1 Gillian Horrocks has grazed large animals in this area for over 20 years. At 16 metres above sea level, three days without rain in summer means widespread desiccation of pasture.</p>	<p>The Applicants assume that this narrative relates to the classification of the woodland in the vicinity of the proposed Hundred River crossing. The Applicants would note that their classification of the woodland at the Hundred River is based on the species present rather than moisture levels in the ground (in line with the Joint Nature Conservation Committee’s (JNCC) Handbook for Phase 1 Habitat Survey (2016)). The species found during surveys in both 2018 and 2021 did not comprise those associated with wet woodland. A full survey report was submitted at Deadline 6 (REP6-035).</p>	<p>No assumption necessary: our document is clearly entitled ‘Woodland at the River Hundred’.</p> <p>The riparian woodland was not adequately surveyed in 2018. The Phase 1 map actually omits the riparian woodland and makes no recommendation for Phase 2 surveys to ensure that potential impacts on a Priority Habitat can be accurately predicated and mitigated.</p> <p>The survey in 2021 was not completed in the optimal window and was not in accordance with NVC guidance. Botanical species were not identified that might have validated the classification.</p> <p>An assessment of soil, drainage and underground water sources as well as the river’s overtopping events could have clarified matters.</p>



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15 3.4.2 In contrast, grazing meadows on sand but close to the river provide pasture all year round, without significant degradation of the sward in wet periods as would occur on heavier soils.

16 3.5 On 20-2-2021, a simple water meter was applied to the soil at bank side, 25 metres away from the bank and 40 metres away. There had been no rain for 6 days. Its readings were 'Waterlogged' in all three cases. At the area by the road, and by Gypsy Lane, where the Ecologists stood, the meter described the soil as 'Wet' and in one area 'Normal'.

17 3.6 The altitude by the B1122, taken from Google Earth, and where we know the ecologists stood, is 11 metres. The altitude by the river, taken from Google Earth, is 9 metres. The 2m difference in altitude, which is reflected in a notable bank, obviously affects the water distribution to the higher areas by the B1122.

The applicant has not responded.

Not only do the river’s drains distribute water to the meadows and woodland, there are many small underground springs in the valley (2) which have not been investigated in this Application.

The ESC and SCC Ecologists did not visit the riparian woodland but stood by the B1122 and by Gypsy Lane and the ESC Ecologist walked across the meadow on the east where he could see the woodland from several hundred metres away. Both stated they would not call their visit a survey.

Yet we still get flooding of the B1122 in this area.



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18 3.7 Images 2,3,4, dated 30-11 2019: test trenches dug by the Applicant [please refer to page 3 of 6 of (REP6-140) for images

19 3.7.1 The trenches dug by the Applicant in this area as Archeological tests in November 2019 show the depth of the sandy layer (Image 2), and, importantly, the rapid flooding within short, winter daylight hours, of the investigative trenches (Image 3, 4). The river was not in spate; we had overnight frosts and no rain.

20 3.7.2 We suggest that the Applicant’s trenches provide ample evidence that the soil remains wet, and water close to the surface, in these riparian areas, on both sides of the river. The soil also remains wet, not far below the surface, at some distance from the river because water is able to travel without great impediment through sand, and the height above sea level remains as low, or lower than, 9m on both sides of the river.

This is the driest area of Britain - and there had been no rain when the trenches were dug.

The wet ground explains the grazing marsh suitable for Red Poll cattle.

It also shows the characteristics of the riparian environment.



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4 Wet Woodland		
<p>21 4.1 SEAS offered many photos and arguments in our last submission that this is a wet riparian woodland. We do not feel that enough evidence has been produced to contradict this view.</p> <p>22 4.2 In their verbal submission (17-2-2021), the County ecologists described the meadow on the east bank as a grazing marsh, and also mentioned that the west bank with the woodland was lower, therefore more susceptible to flooding, than the east side.</p>	<p>Wet woodland typically occurs on poorly drained or seasonally wet soils. It can be found on floodplains, as successional habitat on fens, mires and bogs, along streams and hill-side flushes and in peaty hollows. It occurs on a range of soil types, including nutrient-rich mineral soils and acid, nutrient-poor organic soils. Predominant tree species usually include alder, birch and willow, but ash, oak, and beech can be present on the drier riparian areas.</p>	<p>This riparian woodland is on seasonally flooded and wet soil irrigated by high underground water sources on the floodplain of the River Hundred.</p> <p>Alder, willow, poplar with nettle and cleaver are abundantly present - these are characteristic of a wet environment.</p>
<p>23 4.3 We underline that they characterised the east bank as marsh and the west bank as vulnerable to flooding. Both banks provide, therefore, wet environments. In addition, on both sides of the river drains or catches carry water into and out of the woodland and meadow, ensuring the continued 4 irrigation of the area.</p>	<p>Semi-natural broadleaved woodland is characterised by trees that are typically deciduous with broad and varied leaf shapes. The pattern of losing and gaining leaves allows for the woodland floor and understorey to be as varied as the canopy.</p>	<p>Broadleaved woodland is a priority environment, wet or not.</p>



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<p>24 4.5 4.5 These catches are well vegetated and sheltered, and suitable for all intermediate stages of dragonfly and damselfly life. The Hairy Dragonfly is annually observed in this location by local residents.</p>	<p>Regarding the woodland to the east and west of the Hundred River, the key ground fauna species recorded during the 2018 / 2019 extended Phase 1 habitat survey include bramble, bracken and gorse. The tree species recorded include oak, silver birch, hawthorn, holly, creeping willow and horse chestnut. Whilst some of the species recorded can be associated with wet woodlands, when assigning the classification of semi-natural broadleaved woodland this has been determined using a site wide understanding of the species recorded during the surveys, in combination with industry guidance of assigning habitats (i.e. a classification of semi-natural broadleaved woodland was considered the most appropriate).</p>	<p>No comment on the invertebrate habitat?</p> <p>The Phase 1 survey did not examine the riparian woodland so these findings do not apply.</p> <p>These records may be where the Applicant’s confusion stems from. The older woodland, which appears on old maps, and contains trees over a century old, runs alongside the B1122. But it is different in character from the riparian woodland and the two should not have been conflated at Phase 1. Gorse, chestnut and holly exist are characteristic of the west side of the B1122, not in the riparian woodland.</p> <p>The riparian woodland is younger (and the site appears on old OS maps as marsh). The characteristic species of the riparian woodland are alder, poplar, willow, nettle, cleaver and some invasion by Himalayan Balsam which has spread downstream into the SSSI - something to note when considering LSEs. This again suggests the broadleaved woodland has the characteristics of a W6 wet woodland</p>
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	<p>The February 2021 survey verified that the woodland within the Order limits west of the Hundred River does not comprise of species associated with wet woodland. Upper canopy species were recorded to comprise scattered oak, cypress, beech, silver birch, hazel and sycamore throughout, alongside alder, goat willow and bay willow recorded along the banks of the Hundred River. There is a limited middle canopy present, with key species comprising primarily of hazel and blackthorn. Ground vegetation species include daffodil, snow drop, broad leaf dock, cleavers, nettle, teasel, ground ivy, bramble, ferns and a small patch of reed canary grass. Yorkshire fog, forget-me-not and horsetail are also prevalent, and pin cushion moss and delicate fern moss was also recorded as being present.</p>	<p>The older woodland closer to the B1122, which appears on old maps, is different in character from the riparian woodland and the two should not have been conflated at Phase 1 or indeed now.</p> <p>We find no gorse in the riparian woodland; these species exist on the west side of the B1122.</p> <p>The older broadleaf specimens described are in the oldest part of the woodland alongside the B1122.</p> <p>The actual wet conditions and fallen logs support self-propagating alder, poplar and willow saplings and thickets, sedge, mosses, ivys, lichens and fungi, and many species that rely on these wet environments like ragged robin, iris and horsetail. They struggle elsewhere: ‘The dry climate of the Suffolk Coast does not provide ideal conditions for mosses and ferns’ (RSPB). The woodland is self-regenerating and contains sapling thicket, middle and mature canopy with many fallen logs.</p>
<p>25 4.6 4.6 Wet woodland can be patchy. Wet woodland is also variable and need not be characterised by surface pooling all year round, or at all.</p>		<p>An analysis of the woodland should have included the whole site and not just the order limits as wet woodland is vulnerable to disturbance</p>



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<p>26 4.7 Flooding by overtopping in this particular woodland is seasonal and can be short-lived as it is also managed by sluicing</p>	<p>The topography of the woodland is relatively flat adjacent to the river which has low gradient banks; this alludes to some waterlogging should the river overtop during high water events.</p>	<p>The soil remains wet all year round and many species that grow there are characteristic of a wet environment.</p>
<p>27 4.8 Not all wet woodland has pooling or is constantly underwater: it can follow this pattern of seasonal overspill.</p>		
<p>28 4.9 In addition, the high level of groundwater ensures adequate wetness all year round. The choice and management of trees planted over a century ago (in our previous submissions we gauged the age of the mature trees as over 160 years, and recorded a row of coppiced alder) reflects expert and ancient methods of flood management.</p>		
<p>29 4.10 The wet conditions and fallen logs support self-propagating alder, poplar and willow saplings, the sedge, mosses, ivys, lichens and fungi, and many species that rely on these wet environments like ragged robin, iris and orchid. They struggle elsewhere: ‘The dry climate of the Suffolk Coast does not provide ideal conditions for mosses and ferns’</p>		
<p>30 4.11 Wet woodland is sensitive to disturbance. Images 2,3,4 show that the underground water here rapidly responds to disturbances. Trenching will be deleterious to wide areas sharing the same water source and equilibrated levels of underground water.</p>		



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<p>31 4.12 Therefore, the proposed area of the trench corridor observed by the ecologists cannot be considered as an element that is discrete from the rest of the woodland. It will, in fact, disrupt a protected, rare environment even at some distance from the trenching point.</p>		
<p>32 4.13 This riparian environment reflects the description of wet woodland in the ‘UK Biodiversity Action Plan, 2011’</p>		
<p>SUMMARY</p>		
<p>33 5.1 While historically the river bank was planted with thirsty trees like alder that also offer structure and protection to the fragile soil of the riverbank, these and other thirsty species like poplar and willow effortlessly propagate themselves here, even at a significant distance from the riverbank.</p>	<p>See comments at ID1 to ID32.</p>	<p>See comments 21 4.1 to 26.4.6</p>
<p>34 5.2 The woodland therefore regulates the quantity and force of water that impacts the riverbank, thereby protecting downstream properties from flooding.</p>		



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35 5.3 These thirsty species have been shown to regulate and improve water quality by absorbing agricultural run-off, which is important to the integrity and health of the SSSI and RSPB North Warren.		
36 5.4 The woodland is self-sustaining in its wilded state.		
37 5.5 The woodland offers the ideal mix of areas of open ground, scrub thicket, sapling, and closed canopy, beneficial to the river, its wildlife, and sensitive areas downstream.		
38 5.6 Its orientation provides valuable shade to cool the river water to the benefit of the life within it, and supporting the SSSI and RSPB reserve which depend on it, close by. Cooling through increasing the creation of riparian woodland wherever possible is encouraged by the Forestry Commission to counter climate change.		
6. The economics of ecology		
39 6.1 The British Government recently published ‘The Dasgupta Review’, which criticises the global economy that is based on eroding natural assets for what is routinely celebrated as ‘economic growth’.	Noted.	



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<p>6.2 Here is an example of the review’s demand for a radical shift in our economic world view. Decarbonising our energy systems is a necessary part of balancing demand and supply. But we must not concern ourselves only with the symptoms of environmental damage and not the cause. For instance, in this (simplified) example, we might see woodland destroyed to build an electrical substation. GDP will record an increase in produced capital, but does not show the depreciation of ‘natural capital’ that absorbs carbon, prevents soil erosion, creates habitat for much-needed pollinators and other invertebrates, and provides direct benefits to society – from purified air and water to improved mental health – that reduce burdens on health services and social fabric. These losses carry severe economic costs.</p>		
<p>5 Conclusions</p>		
<p>41 5.1 We do not believe that enough evidence has been offered to show that this is not a wet woodland. Simple water content tests show that the area is wet.</p>	<p>Again, the Applicants would note that their classification of the woodland at the Hundred River is based on the species present rather than moisture levels in the ground (in line with the Joint Nature Conservation Committee’s (JNCC) Handbook for Phase 1 Habitat Survey (2016)). The species found during surveys in both 2018 and 2021 did not comprise those associated with wet woodland. A full survey report was submitted at Deadline 6 (REP6-035).</p>	<p>Again, SEAS notes that according to the Joint Nature Conservation Committee’s (JNCC) NVC Field guide to Woodland, this area is most likely to be W6, Alder and nettle wet woodland (6) and until we reach summer, a formal survey cannot be completed.</p>



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<p>42 5.2 However, wet or not, this riparian area, at last, has been acknowledged. It is also ecologically important and protected.</p>	<p>As stated at Issue Specific Hearing 7, this area has always been acknowledged by the Applicants and is considered within the Applications (e.g. Chapter 22 of the ES (APP-070) and recorded during the Extended Phase 1 Habitat Survey (APP-503 to APP-504)).</p>	<p>The point is that, wet or not, protected, priority woodland was missed off the P1 survey and suitable mitigation has not been planned for it.</p>
<p>43 5.3 No mitigation has been proposed for this protected environment.</p>	<p>The Applicants have prepared an Outline Watercourse Crossing Method Statement (document reference), which sets out relevant mitigation measures which must be carried forward to the final Watercourse Crossing Method Statement prepared post consent in consultation with the Environment Agency and Natural England for approval by the relevant planning authority prior to the commencement of the onshore works (pursuant to Requirement 22 of the draft DCO (document reference 3.1)).</p>	<p>The woodland will be felled and there is no other riparian environment to site a replacement.</p>
<p>44 5.4 The applicant does not have enough land to replace all the woodland scheduled for destruction.</p>	<p>Please refer to the Applicants’ comments at ID13 in the table within section 2.1.</p>	<p>With the Applicant’s inadequate surveys, the examining authority cannot be confident that the mitigation measures evoked can be relied upon to deliver the mitigation required. That has important consequences for the impact on statutorily protected areas as well as those not yet taken into account (like the wetlands and the lapwing conservation area in 1C)</p>
<p>45 5.5 The applicant certainly has no sites available to replace riparian woodland.</p>	<p>Please refer to the Applicants’ comments at ID13 in the table within section 2.1.</p>	<p>Please see above</p>
<p>46 5.6 The River Hundred and its woodland have hardly been considered as receptors and will effectively be sacrificed as plans stand.</p>	<p>Please refer to the Applicants’ comments at ID15 in the table within section 2.1.</p>	<p>Please see above</p>



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47 5.7 The Applicant states there is no alternative to this route. In that case, the project should not continue.	Please refer to the Applicants’ comments at ID15 in the table within section 2.1.	Please see above
References		

- (1) Brigadier D Reid, ‘Otter, coypu and Freshwater mussels at Aldringham’, *Suffolk Natural History*, Vol 16 Part 5
- (2) Rob Macklin, RSPB Land restoration in East Anglia, *Suffolk Naturalists Society*, 2016
- (3) Fahrig, L. (1997). ‘Relative Effects of Habitat Loss and Fragmentation on Population Extinction’. *The Journal of Wildlife Management*, 61(3), 603-610. doi:10.2307/3802168
- (4) Rob Macklin, op. cit, page 1
- (5) Buglife, *Reedbeds*, <https://www.buglife.org.uk/resources/habitat-management/reedbeds/>
- (6) JNCC, *National Vegetation Classification, FieldGuide to Woodland*, JNCC, 2001, 2016