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The Network Rail (Cambridge South Infrastructure Enhancements) Order

Proof of Evidence



NRE12.1

# Summary Proof of Evidence – Biodiversity (Mr Guy Stone)

(Inquiries Procedure (England & Wales) Rules 2004)

January 2022

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## **1** Introduction

#### **1.1 Qualifications and Experience**

- 1.1.1.1 My name is Guy Stone. I am an Associate Technical Director Ecology at Arcadis. I have been retained by Network Rail to provide specialist advice on Biodiversity matters pertaining to the Cambridge South Infrastructure Enhancements ("CSIE") Project.
- 1.1.1.2 I am a full member of the Chartered Institute of Ecology and Environmental Management and a Chartered Environmentalist. I hold an MSc in Environmental Impact Assessment and a BSc in Botany. I have 23 years' experience as an ecological consultant.

## 2 Summary of Evidence

- 2.1.1.1 Developments have the potential to result in a loss of biodiversity, either as a result of loss of habitat or impact on protected species or areas designated for nature conservation. Relevant legislation and policy has been considered when assessing the impacts of the CSIE Project on biodiversity, and is identified in Section 3 of my evidence.
- 2.1.1.2 The Chartered Institute of Ecology and Environmental Management ("CIEEM") Guidelines for ecological impact assessment in the UK and Ireland: terrestrial, freshwater, coastal and marine, 2018 (D51) were followed as core guidance for the biodiversity assessment within the Environmental Statement ("ES", NR16) assessment.
- 2.1.1.3 Natural England Biodiversity Metric 2.0 (JP029) (D52) has been applied as the tool to measure and record biodiversity value and assess losses and gains.
- 2.1.1.4 Habitat and species-specific guidance used as part of the environmental impact assessment, identified in Table 1 of my evidence, followed industry standards.
- 2.1.1.5 A comprehensive suite of biodiversity assessments and surveys have been carried out as part of the TWAO application for the CSIE Project. These include desk-based assessments, Phase 1 habitat surveys, protected species surveys (including great crested newt, bats, birds and reptiles) and multiple Biodiversity Net Gain assessments. These surveys and assessments are identified in Section 4 of my evidence.

- 2.1.1.6 The desk-based assessment identified 11 statutory designated sites and 24 non-statutory designated sites within the search area and a number of protected species constraints.
- 2.1.1.7 The findings of these surveys were presented as appendices in the ES (Appendix 8.3 8.8, NR16), and their results influenced the findings of that document. Section 5 of my evidence summarises the identified significant effects of the CSIE Project upon biodiversity, as well as effects on other receptors identified as being of concern to objectors to the project.
- 2.1.1.8 Only one receptor was identified within the ES which has the potential to be impacted on any significant level by the CSIE Project. This was the loss of woodland habitat associated with the development, which was considered to be significant at a local level due to the time required for compensatory planting to reach target condition.
- 2.1.1.9 The other receptors identified as being of concern to objectors to the project were not considered to be significantly adversely affected within the ES. These are as follows:
  - Nine Wells Local Nature Reserve (LNR)
  - Corn Bunting
  - Biodiversity Net Gain (BNG)
- 2.1.1.10 The CSIE Project is committed to achieving 10% biodiversity net gain. In order to secure 10%, a combination of the following options will be followed, with onsite habitat creation prioritised:
  - Habitat creation and enhancement onsite;
  - Offsite habitat creation at Lower Valley Farm, Fulbourn.
- 2.1.1.11 Six objections to the CSIE project made reference to biodiversity. The themes raised by those objections, and my response to them can be summarised as follows.
- 2.1.1.12 Restriction upon Astra Zeneca's ability to discharge Cambridge Biomedical Campus planning conditions. (OBJ 03, Astra Zeneca Limited).
- 2.1.1.13 Network Rail propose to amend article 35 of the proposed TWAO to include additional paragraphs which deal with the consequential impacts of the Order and ensure that the intention of the planning conditions on the Astra Zeneca scheme are delivered and maintain the cumulative effects on biodiversity as Not Significant (as per Sections 8.5.140 to 8.5.143 of the ES (NR16)), Network Rail propose include additional planting within the as part of the CSIE Project proposed landscape scheme. and to instal a living green fence on the boundary between Astra Zeneca and Network Rail.
- 2.1.1.14 Impacts upon Nine Wells Local Nature Reserve. Objections have been raised relating increased impacts on the habitats of Nine Wells LNR due to its proximity of the main construction compound (CC1). (OBJ 07 Trumpington Residents Association)
- 2.1.1.15 The LNR is served by a number of pathways, open to the general public. Disturbance from footfall, including dogwalkers, around the reserve is therefore already established and there is no indication that such disturbance will increase due to the construction of the scheme. The groundwater fed springs within the LNR arise on raised ground above (upstream) the location of the main construction compound and there are no impact pathways for surface water runoff / polluted material to enter the springs. The proposed scheme will be subject to a Code of Construction Practice (Appendix 2.4, NR16), removing any risk of potential contamination of the groundwater source.

- 2.1.1.16 **Proposed Electricity Sub-Station and Rail Systems Enclosure and impact on brown hare**. (OBJ 07 Trumpington Residents Association) Objections have been raised regarding the location of the proposed electricity sub-station and rail systems enclosure and the use of this area by brown hare. Network Rail are unable to relocate the electricity sub-station and rail systems enclosure/ compound. Habitat creation surrounding the electricity sub-station and rail systems enclosure and within the adjacent exchange land as part of the project will continue to provide foraging and cover for brown hare.
- 2.1.1.17 Light pollution from the path in Hobson's Park (OBJ 07 Trumpington Residents Association). Objections have been raised about the additional light pollution caused by the shared cycle/pedestrian path in Hobson's Park. A lighting strategy will be designed and implemented which will seek to ensure that upwards or intrusive light spillage, impact to local residential amenity, landscape character and biodiversity will be minimised. This is covered in more detail in John Pearson's Proof (NRE9.2).
- 2.1.1.18 Loss of trees in Hobson's Park (OBJ 07 Trumpington's Residents Association). Objections have been raised about the number of trees being lost in Hobson's Park, as well as the loss of a specific number of trees planted by Fawcett School nine years ago. The works compound in Hobson's Park has been substantially reduced in scale, reducing its impact. Only a proportion of the trees planted by Fawcett School are proposed to be removed, relocation of trees to be removed is proposed within the site wide mitigation measures. As well as compensatory planting, ongoing redesign is being undertaken to reduce the number of trees required to be removed due to construction, which will form part of the agreed planning conditions and will be subject to an Arboricultural Impact Assessment and Arboricultural Method Statement to ensure the implementation of mitigation.
- 2.1.1.19 **Impact on Biodiversity within Cambridge Biomedical Campus**. (OBJ 09 Medical Research Council) Objections have been raised regarding the removal of an established green area.
- 2.1.1.20 The biodiversity value of the application area has been established through the statutory processes required to support TWAO. An EIA has been undertaken following industry standards. Further detailed mitigation based on that outlined in the Environmental Statement will be conditioned and provided as the proposed scheme progresses through the next stages. Pre-construction surveys for protected species will be undertaken following the Code of Construction Practice Part A (Appendix 2.4, NR16).
- 2.1.1.21 Impact on Hobson's Park due to location of Construction Compound. (OBJ 20 Dave Jackson and OBJ 07 Trumpington Residents Association) Objections have been raised to the size of the works compound on the western side of the track and subsequent impacts on biodiversity.
- 2.1.1.22 The works compound in Hobson's Park has been substantially reduced in scale, reducing their impact. The habitats within Hobson's Park have been relatively recently established, within the past 10 years. It will be possible to re-instate any that are removed for temporary works to the same quality within the same timescale. Furthermore, offsite habitat creation will be delivered and therefore adding to the biodiversity of the region.
- 2.1.1.23 **Impacts on breeding Corn Bunting and Skylark**. (OBJ 23 Cambridge City Council) It has been questioned if due weighting has been given to the potential impact on the breeding population of corn bunting.
- 2.1.1.24 Regarding concern on population size, the 2017 and 2018 Cambridgeshire Bird Reports note that corn bunting is significantly under recorded in Cambridgeshire, therefore the territories within the site will be below 20%, 6.6% and 7.6% proportions (as estimated from the 2017, 2018 and 2019

Cambridgeshire Bird Reports data) of the total corn bunting territories present in the county.

- 2.1.1.25 Further analysis of the field data has broadly confirmed the estimated number of territories quoted in the Environmental Statement.
- 2.1.1.26 The objection has highlighted that the Environmental Statement data shows corn buntings to be concentrated along the rail track. Correspondence with the surveyor has revealed corn buntings were recorded singing from the overhead wires along the rail corridor. This does not necessarily indicate that breeding territories are located immediately adjacent to the rail corridor.
- 2.1.1.27 The potential permanent displacement of corn buntings due to disturbance has been highlighted by the objection. In response to this, the highest number of corn bunting territories were recorded in the recently created habitats of Hobson's Park, therefore, corn buntings have successfully colonised newly created habitats within a short period of time despite extensive construction taking place immediately to the west (Trumpington) and the east (the Astra Zeneca development).
- 2.1.1.28 Cambridgeshire City Council have commented that corn bunting song posts and arable weed marginal habitat will not be available during construction. It is likely that increased noise and vehicle movement along and bordering the rail corridor will disturb corn buntings using the rail fence as a singing perch during the breeding season. Construction noise has been modelled and the construction programme will be carefully planned to avoid the noisiest activities from March to September (inclusive). Adverse noise levels would be controlled by the implementation of a noise management and monitoring regime as described in Chapter 5 of the ES. Ongoing monitoring to locate corn bunting and skylark territories and to monitor their behaviour during construction will be undertaken weekly during construction to allow for specific measures to reduce disturbance to this species in sensitive locations. Song perches will be provided within the exchange land area south of Addenbrooke's Road and in the vicinity of the main Construction Compound (CC1).
- 2.1.1.29 I do not accept the claim that there will be a loss of weedy marginal habitat during construction. Ground disturbance from vehicle movement, establishment of compounds and clearance for the scheme will more likely cause an increase in weedy habitats in the short term.
- 2.1.1.30 Concerns have also been raised relating to increased recreational disturbance to corn bunting and skylark nesting within Hobson's Park due to a reduced area being available for purposes such as dog walking. Permanent signage will be put up to keep dogs on leads from March to September and to keep out of the longer grass areas that are suitable for ground nesting birds. Where monitoring reveals nests during construction, buffer zones will be established and temporary fencing put in place to exclude people and dogs. The potential for policing the area to ensure dogs are kept on leads and out of nesting areas will be discussed with Cambridge City Council; further measures such as the issue of fines will be considered. Solid temporary fencing will be extended along the rail corridor through the arable land to reduce noise and visual disturbance to birds.
- 2.1.1.31 Compliance with CLP Policy and NPPF. (OBJ 23 Cambridge City Council) Objections have stated the proposal scheme has not currently demonstrated compliance with Cambridge Local Plan (CLP) 2018 policies 69 and 70 (D6), and National Planning Policy Framework (NPPF) 2021 paragraph 174 (D21). CLP policy 69 relates to the protection of sites of biodiversity and geodiversity importance.
- 2.1.1.32 As stated in the Environmental Statement, residual effects on designated sites are considered Not Significant at any level for both construction and operational phases. A 5m wide clear span bridge will be constructed over Hobson's Brook (Mid and South) CiWS resulting in some habitat loss to bankside vegetation. The Code of Construction Practice Part B will detail how protected sites and habitats will be protected, this is explained in the Code of Construction Practice Part A (Appendix

2.4, NR16). Vegetation loss will be temporary and enhancement measures for biodiversity are proposed within the CiWS. Network Rail have already committed to the management of retained and new habitats to good condition, based on Natural England's The Mosaic Approach: Managing Habitats for Species (2013) (Appendix B).

- 2.1.1.33 CLP policy 70 relates to the protection of priority species and habitats. The Environmental Statement states that residual effects on species are considered Not Significant at any level for both construction and operational phases and further detail has been provided in this proof regarding corn bunting and skylark. Significant residual effects on woodland are expected at a Local level. Extensive tree and woodland planting is planned. In the long term with the maturing of planted woodland, a slight beneficial effect will be realised.
- 2.1.1.34 NPPF 2021 paragraph 174 relates to ensuring planning policies and decisions contribute and enhance the natural and local environment. This will be achieved by the proposed scheme. As stated in the ES (NR16), residual effects on designated sites are considered Not Significant at any level for both construction and operational phases. A combination of onsite and offsite habitat creation measures will ensure that a minimum of 10% Biodiversity Net Gain will be achieved in relation to the scheme.
- 2.1.1.35 **Impacts from Haul Route and Main Compound.** (OBJ 23 Cambridge City Council) Objections have been raised regarding the length of time it will take for biodiversity value to be regained following temporary land use, with significant impacts on nesting birds, the grassland plant composition and a loss of established tree cover.
- 2.1.1.36 This is true for the loss of mature trees and acknowledged as such in the Environmental Statement (NR16). With regards to the habitats within Hobson's Park, these have been created within the past 10 years and therefore could be re-established within a similar timescale.
- 2.1.1.37 As stated in the Environmental Statement, residual effects on nesting birds are considered Not Significant at any level for both construction and operational phases due to the mitigating measures in place. Further measures will be implemented with regards to corn bunting and skylark.
- 2.1.1.38 **Biodiversity Net Gain**. (OBJ 23 Cambridge City Council) Requests have been made for the scheme to aspire to achieving 20% biodiversity net gain in line with local strategies and to improve created habitats' resilience to failure.
- 2.1.1.39 The targets set in local strategies are aspirational and do not form part of the adopted development plan. Network Rail's position is that the 10% BNG target is consistent with the requirements of the Environment Act 2021. As a result Network Rail do not believe that an increased BNG target is warranted and given the development plan only seeks to enhance biodiversity, the commitment to a 10% increase in line with the Environment Act 2021 is sufficient.
- 2.1.1.40 The risk of habitats failing to establish will be dealt with through the management of retained and new habitats to a good condition, based on Natural England's The Mosaic Approach: Managing Habitats for Species (2013) (Appendix B).
- 2.1.1.41 Further objections have been made relating to the lack of detail provided as to how the biodiversity net gain target will be achieved. Further detail has been provided to the relevant local authority since the objections were received. The priority has been to achieve biodiversity net gain on site and all land within the site boundary has been considered for its suitability for either habitat creation or habitat enhancement. It is not possible to achieve biodiversity net gain within the site boundary through applying the Natural England biodiversity metric.

2.1.1.42 Appropriate mitigation will be achieved and the BNG target of 10% will be reached through a combination of onsite and offsite mitigation. Network Rail have entered into negotiations with Cambridgeshire County Council to ensure the offsite mitigation is delivered at Lower Valley Farm, Fulford. The layout of the offsite mitigation will be provided at the detailed design stage of the project and managed through a binding agreement.

## **3 Conclusions**

- 3.1.1.1 The CSIE Project has been subject to an Environmental Impact Assessment which has included an assessment of impacts on biodiversity. This concluded that there was one Local Negative Significant residual effect on woodland which in the long term would be Slight Beneficial with the maturing of tree planting. Effects on other biodiversity receptors were considered Not Significant.
- 3.1.1.2 A biodiversity net gain assessment has been undertaken using the Natural England biodiversity metric 2.0. This has shown that with a combination of onsite and offsite mitigation a biodiversity net gain of 10% can be achieved.
- 3.1.1.3 Objections have been raised in relation to the following subjects:
  - a) Restricted ability to discharge Cambridge Biomedical Campus planning conditions.
  - b) Nine Wells Local Nature Reserve
  - c) Proposed Electricity Sub-Station and Rail Systems Enclosure
  - d) Light pollution within Hobson's Park
  - e) Loss of Trees within Hobson's Park
  - f) Impact on Biodiversity within Cambridge Biomedical Campus
  - g) Impact on Hobson's Park due to location of Construction Compound
  - h) Impacts on breeding Corn Bunting and Skylark
  - i) Compliance with CLP Policy and NPPF
  - j) Impacts from Haul Route and Main Compound
  - k) Biodiversity Net Gain
- 3.1.1.4 Further clarity has been provided in response to these objections. Clarification has been given in relation to how biodiversity net gain will be achieved. Monitoring and mitigation have been proposed in relation to breeding corn bunting and skylark. Impacts on the biodiversity interests of Nine Wells LNR, the proposed Electricity Sub-Station and Rail Systems Enclosure, Cambridge Biomedical Campus and Hobson's Park have been put into context and where necessary further clarification on measures to protect and mitigate for biodiversity have been included.
- 3.1.1.5 Only one temporarily significant residual effect was predicted at a local level on woodlands due to the time to target condition required for compensatory planting. The ES adequately covers potential effects relating to biodiversity using appropriately qualified ecologists, industry standard, survey and assessment guidance and adheres to local and national legislation and policy requirements.



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