

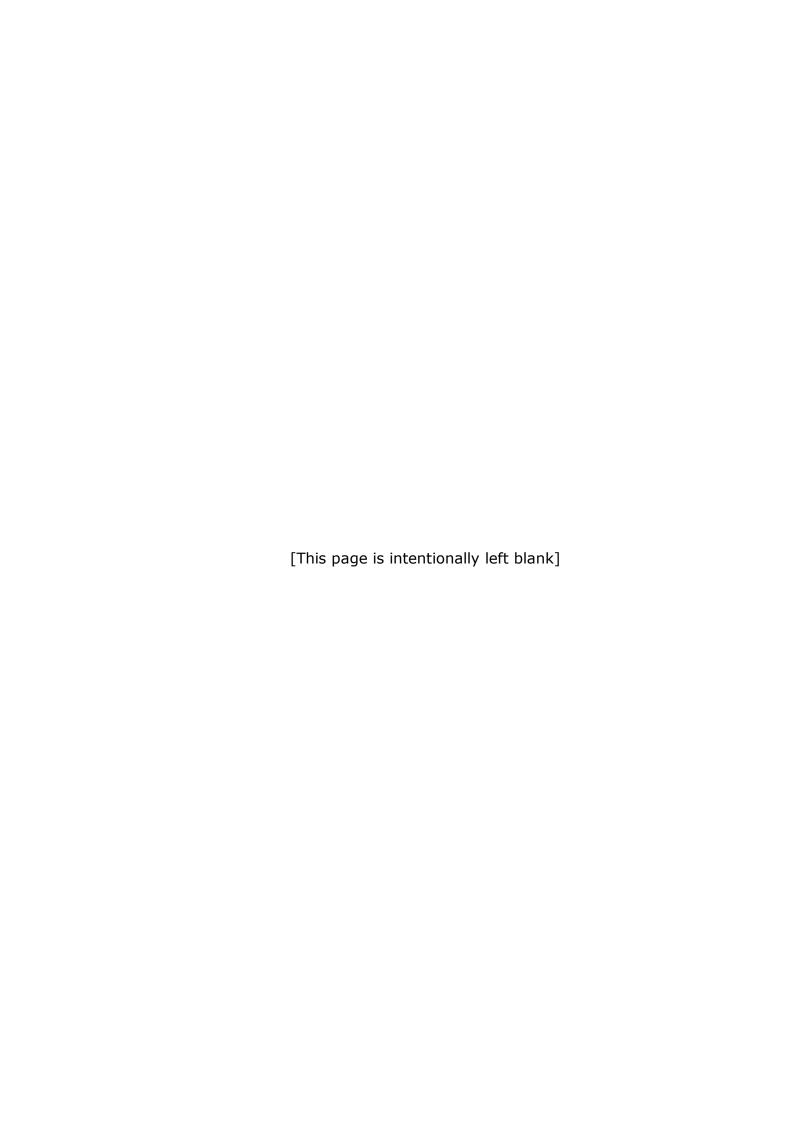
# REPORT on the IMPLICATIONS for EUROPEAN SITES

## Proposed A585 Windy Harbour to Skippool Improvement Scheme

An Examining Authority report prepared with the support of the Environmental Services Team

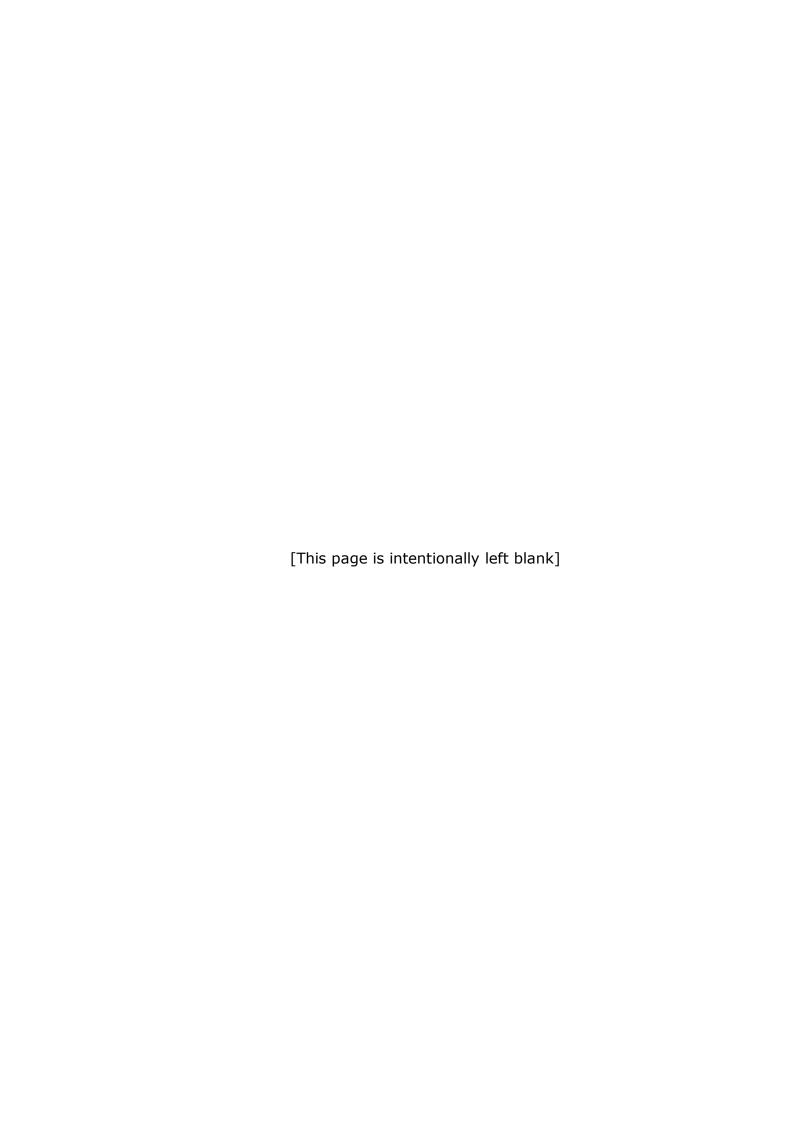
Planning Inspectorate Reference: TR010035

27 August 2019



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### 1 INTRODUCTION

### 1.1 Background

- 1.1.1 Highways England (the Applicant) has applied to the Secretary of State for a development consent order (DCO) under section 37 of the Planning Act 2008 (PA2008) for the proposed A585 Windy Harbour to Skippool Improvement Scheme (the application). The Secretary of State has appointed an Examining Authority (ExA) to conduct an examination of the application, to report its findings and conclusions, and to make a recommendation to the Secretary of State as to the decision to be made on the application.
- 1.1.2 The relevant Secretary of State is the competent authority for the purposes of the Habitats Directive<sup>1</sup> and the Habitats Regulations<sup>2</sup> for applications submitted under the PA2008 regime. The findings and conclusions on nature conservation issues reported by the ExA will assist the Secretary of State in performing their duties under the Habitats Regulations.
- 1.1.3 This report compiles, documents and signposts information provided within the DCO application, and the information submitted throughout the examination by both the Applicant and interested parties (IPs), up to Deadline 6 of the examination (21 August 2019) in relation to potential effects to European Sites<sup>3</sup>. It is not a standalone document and should be read in conjunction with the examination documents referred to. Where document references are presented in square brackets [] in the text of this report, that reference can be found in the Examination library published on the National Infrastructure Planning website at the following link:

 $\frac{https://infrastructure.planninginspectorate.gov.uk/document/TR010035-000308}{}$ 

1.1.4 It is issued to ensure that IPs including the statutory nature conservation body (Natural England (NE)), are consulted formally on Habitats Regulations matters. This process may be relied on by the Secretary of State for the purposes of Regulation 63(3) of the Habitats Regulations. Following consultation the responses will be considered by the ExA in making their recommendation to the Secretary of State and made available to the Secretary of State along with this report. The RIES will not be revised following consultation.

<sup>&</sup>lt;sup>1</sup> Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (as codified) (the 'Habitats Directive').

<sup>&</sup>lt;sup>2</sup> The Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations).

<sup>&</sup>lt;sup>3</sup> The term European Sites in this context includes Sites of Community Importance (SCIs), Special Areas of Conservation (SACs) and candidate SACs, Special Protection Areas (SPAs), possible SACs, potential SPAs, Ramsar sites, proposed Ramsar sites, and any sites identified as compensatory measures for adverse effects on any of the above. For a full description of the designations to which the Habitats Regulations apply, and/ or are applied as a matter of Government policy, see PINS Advice Note 10.

1.1.5 The Applicant has not identified any potential impacts on Natura 2000 sites in other EEA States<sup>4</sup> [footnote 2, REP2-027]. Only UK European sites are addressed in this report.

### 1.2 Documents used to inform this RIES

- 1.2.1 The Applicant's DCO application concluded that there is the potential for likely significant effects (LSE), either alone or in-combination with other plans or projects, on two European sites.
- 1.2.2 The Applicant provided a HRA report *entitled 'Habitats Regulations Assessment'* [APP-027], together with screening and integrity matrices [Appendix 4, APP-027] with the DCO application. This concluded that there would be no adverse effect on the integrity (AEoI) of any European site, either alone or in-combination with other plans or projects [APP-027].
- 1.2.3 During acceptance of the DCO application, it was noted that a number of references in the screening matrices needed to be updated, as set out within the section 51 advice to the Applicant [PD-004]. In effort to address this matter, the Applicant submitted a revised version of the HRA Report [AS-006, superseding APP-027] with updated screening matrices.

#### **Examination**

- 1.2.4 In response to comments made by NE in their Relevant Representation [RR-019], the Applicant provided a second revision of the HRA report at Deadline 2 [REP2-027, superseding AS-006].
- 1.2.5 For those European sites and qualifying features where the Applicant's conclusions regarding AEoI have been disputed or queried during the Examination, the Applicant's integrity matrices [Appendix 4, REP2-027] have been updated by the ExA, with the support of the Planning Inspectorate's Environmental Services Team, using relevant documents listed in the Examination Library<sup>5</sup> for the Proposed Development. The revised Stage 2 integrity matrices are included as **Annex 2** to this RIES. Since the Applicant's Stage 1 screening matrices [Appendix 4, REP2-027] have not been disputed during the Examination, they have not been revised.

### 1.3 Structure of this RIES

- 1.3.1 The remainder of this report is as follows:
  - **Section 2** identifies the European sites that have been considered within the DCO application and during the examination period, up to 21 August 2019. It provides an overview of the issues that have emerged during the examination.
  - **Section 3** identifies the European sites and qualifying features screened by the Applicant for potential LSEs, either alone or in-

<sup>&</sup>lt;sup>4</sup> European Economic Area (EEA) States.

<sup>&</sup>lt;sup>5</sup> https://infrastructure.planninginspectorate.gov.uk/document/TR010035-000308

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combination with other projects and plans. The section also identifies where IPs have disputed the Applicant's conclusions.

- **Section 4** identifies the European sites and qualifying features which have been considered in terms of adverse effects on site integrity, either alone or in-combination with other projects and plans. The section identifies where IPs have disputed the Applicant's conclusions, together with any additional European sites and qualifying features considered for adverse effects on integrity during the examination.
- **Annex 1** lists the European sites and qualifying features identified by the applicant and considered during the examination.
- **Annex 2** presents revised HRA Stage 2 matrices for the European sites and features where the Applicant's conclusions with regards to adverse effects on integrity were disputed by Interested Parties.

### 2 OVERVIEW

### 2.1 European Sites Considered

- 2.1.1 The Proposed Development is not connected with or necessary to the management for nature conservation of any of the European sites considered within the Applicant's assessment, as confirmed in Section 2, paragraph 2.2.3 of the HRA Report [REP2-027].
- 2.1.2 The European sites (and qualifying features) for which the UK is responsible, as included within the assessment of the HRA Report [REP2-027] are set out in **Annex 1** of this Report.
- 2.1.3 The location of the nearest identified European sites are shown on Figure 2 of the HRA Report [REP2-027], but this doesn't show the location of Liverpool Bay SPA or Shell Flat and Lune Deep SAC.
- 2.1.4 Following Design Manual for Roads and Bridges guidance<sup>6</sup>, the Applicant considered European sites within 2km of the route corridor (of which 2 were identified), and European sites within 30km, where bats are noted as a qualifying interest (of which none were identified). In addition, European sites within 10km were considered on a precautionary basis (of which 5 were identified).
- 2.1.5 In their relevant representation [RR-019], NE have not questioned the approach to determining relevant European sites for the purposes of the assessment.
- 2.1.6 The potential impacts considered for each European site were air quality impacts, water quality impacts, disturbance and displacement of qualifying bird species, loss of foraging and roosting habitat, and habitat fragmentation.

### 2.2 HRA Matters Considered During the Examination

- 2.2.1 The ExA raised one question relating to the HRA in their written questions [Question 1.3.1, PD-007], as the issue included within the section 51 advice [PD-004] was only partly resolved by the Applicant's first revision of the HRA Report [AS-006]. The screening and integrity matrices accompanying the second revision of the HRA Report [REP2-027] rectified
- 2.2.2 The Applicant's comments on relevant representations [REP1-004] acknowledged the concerns the erroneous references.
- 2.2.3 NE made a number of comments in relation to the HRA Report in sections 5.1–5.6 of their relevant representation [RR-019]. Their comments included specific concerns in relation to:
  - · Lack of detail on mitigation measures for water quality and run-off,
  - The level of mitigation required for night time construction,

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<sup>&</sup>lt;sup>6</sup> DMRB, Volume 11, Section 4, Part 1, HD 44/09

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- Lack of clarity in the assessment of noise and vibration disturbance for bird species, and
- Lack of consideration of the impact of the Proposed Development on waterbird assemblage.
- 2.2.4 of NE and explained that amendments and further detail would be added to a second revision of the HRA Report, which was submitted at Deadline 2.
- 2.2.5 NE's Deadline 2 written representation [REP2-071] confirmed that their concerns regarding HRA matters raised in their relevant representation [RR-019] had largely been addressed by the Applicant's revised HRA Report [REP2-027].
- 2.2.6 In their draft SoCG with the Applicant [REP2-055], the Marine Management Organisation (MMO) state that they agree with the methodologies, assessments and conclusion of the HRA Report, but that they defer to the opinion of NE in relation to the Habitats Regulations.

### 3 STAGE 1: LIKELY SIGNIFICANT EFFECTS

### 3.0 The Applicant's Assessment

- 3.0.1 The Applicant has described how they have determined what would constitute a 'significant effect' within section 3.5 of their HRA report [REP2-027]. The HRA report refers to European Commission (EC) guidance on habitats assessment (EC Guidance documents: 'Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC' (2018) and 'Assessment of plans and projects significantly affecting Natura 2000 sites' (2001)).
- 3.0.2 The Applicant's conclusions on LSE from the Proposed Development alone are presented in Section 6.4 of the HRA report [REP2-027].
- 3.0.3 The Applicant has addressed potential in-combination effects within sections 6.10, 6.11, and 7.5 of their HRA report [REP2-027]. The following plans and projects have been included in the Applicant's in-combination assessment (as identified in Table 13 of the HRA Report):
  - 16/01043/OULMAJ Outline application for the erection of up to 130 dwellings with means of access off Holts Lane (layout, landscaping, scale and appearance reserved), following demolition of existing buildings (re-submission of 16/00233/OULMAJ). Land Off Holts Lane Poulton-le-Fylde Lancashire.
  - 17/00050/REMMAJ Reserved matters application for the erection of 160 dwellings with associated works. Land on The East Side of Lambs Road Thornton Cleveleys Lancashire.
  - 13/00200/OULMAJ Outline application for mixed use development consisting of Class B1 (office) floorspace, Class C3 (residential) and a local centre consisting of a supermarket, Class A1/A2/A3/A4 and A5 uses together with vehicular and pedestrian access, open space and landscaping. Land at Norcross Lane Thornton Cleveleys Lancashire FY5 3TZ.
  - 17/00951/OUTMAJ Outline application for the erection of up to 66 dwellings with access applied for off Lambs Road (all other matters reserved). Land on the East Side of Lambs Road Thornton Cleveleys Lancashire.
  - 16/00742/OUTMAJ Outline application for the erection of up to 108
    no. dwellings (Use Class C3) with all matters reserved except for
    access, which will be off Brockholes Crescent following demolition of
    numbers 61 and 63 Brockholes Crescent. Land Off Brockholes
    Crescent Poulton-le-Fylde Lancashire.
  - Policy SA 1/8 (within Wyre Local Plan) Blackpool Road, Poulton-le-Fylde.

- The Fleetwood Thornton Area Action Plan establishes a clear vision and planning framework for development of Fleetwood and Thornton over the next 15-20 years and is a very important consideration in any decision on planning applications in the area. It includes areas identified for residential, industry and community facilities.
- 3.0.4 The scope of the in-combination assessment has been agreed with NE, as evidenced in the draft SoCG [REP2-048]. NE's agreement with the methodology adopted for the screening assessment is also recorded in the SoCG [REP2-048].

## 3.1 Summary of HRA Screening Outcomes During the Examination

- 3.1.1 The Applicant's screening assessment [REP2-027] concluded that the Proposed Development would have no LSE, either alone or in-combination with other projects or plans, on the qualifying features of the five European sites listed below:
  - Morecambe Bay SAC;
  - Ribble and Alt Estuaries SPA;
  - Ribble and Alt Estuaries Ramsar site;
  - Liverpool Bay SPA; and
  - Shell Flat and Lune Deep SAC.
- 3.1.2 NE has agreed [RR-019, REP2-048] that the Proposed Development would have no LSE on these five sites. As a result of the screening assessment, the Applicant concluded that there is potential for LSE, either alone or incombination with other projects or plans, on the qualifying features of the following two European sites:
  - Morecambe Bay and Duddon Estuary SPA; and
  - Morecambe Bay Ramsar site.
- 3.1.3 For both of these European sites, the Applicant has identified LSE in relation to:
  - disturbance and displacement (Pink-footed goose; Curlew; Lapwing; Little egret; Overwintering waterbird assemblage),
  - habitat loss (Pink-footed goose; Curlew; Lapwing; Little egret; Overwintering waterbird assemblage), and
  - water quality (Overwintering waterbird assemblage).
- 3.1.4 NE has agreed [RR-019, REP2-048] that adverse effects on integrity of the Morecambe Bay and Duddon Estuary SPA and Ramsar site should be considered. These sites are discussed further in Section 4 of this RIES.
- 3.1.5 The Examination (to date) has generally focused on whether there is sufficient information to rule out an AEoI of the Morecambe Bay and

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Duddon Estuary SPA; the Applicant's conclusions on with regard to other European sites and the finding of LSE were not disputed by any IPs during the examination [REP2-048] [REP2-055]. As such, the Applicant's screening matrices presented in [REP2-027] have not been revised by the ExA.

# 4 STAGE 2: ADVERSE EFFECTS ON INTEGRITY

### 4.1 Conservation Objectives

- 4.1.1 The conservation objectives for the Morecambe Bay and Duddon Estuary SPA were provided by the Applicant within Appendix 2 of the HRA Report [REP2-027]. Paragraph 7.2.3 of the HRA Report explains that whilst there are no stand-alone conservation objectives for the Morecambe Bay Ramsar site, the Applicant considers that the conservation objectives set out for the SPA designation would be relevant to the Ramsar site designated features.
- 4.1.2 The ExA notes that NE published an updated version of the conservation objectives documents for the Morecambe Bay and Duddon Estuary SPA (dated February 2019), subsequent to that cited in the Applicant's HRA Report [APP-027] (dated September 2017). The ExA understands that the updated conservation objective documents reflect the consolidation of the Habitats Regulations in 2017 and do not materially change the conservation objectives of the European sites.

### 4.2 The Integrity Test

### No Adverse Effects on Site Integrity

- 4.2.1 The Applicant considered the potential for AEoI from the Proposed Development alone within Section 7 of the HRA Report [REP2-027]. Section 7.5 of the HRA Report considered the potential for AEoI incombination with the plans and projects considered in the in-combination assessment set out in Table 13 [REP2-027].
- 4.2.2 The Applicant concluded that the Proposed Development would not have an AEoI on any of the European sites and qualifying features considered in the HRA Report [REP2-027].
- 4.2.3 Matters relating to the identification of AEoI of European sites and qualifying features which were discussed during the Examination are detailed below. Where conclusions around AEoI have been disputed by IPs during the Examination, the Applicant's Stage 2 integrity matrices [Appendix 4, REP2-027] have been updated for the relevant sites and features (see **Annex 2** of this report).

#### **Noise disturbance and Bird Mitigation Strategy**

4.2.4 Chapter 7 of the HRA Report [REP2-27] presents the assessment of noise disturbance to birds (paragraphs 7.4.2-7.4.34). The methodology is agreed with NE in their SoCG [REP2-048], including agreement on a distance of 300m for considering potential disturbance/displacement associated with the Proposed Development.

- 4.2.5 There is one issue relating to the assessment of noise disturbance where agreement with NE remains outstanding, in relation to a bird mitigation area proposed by the Applicant as mitigation for noise impacts during the construction period (as described in Table 20 of the HRA Report [REP2-027]). It is proposed that the bird mitigation area is subject to a 'Bird Mitigation Strategy', which the Applicant states is required to avoid an AEoI of the Morecambe Bay and Duddon Estuary SPA and Morecambe Bay Ramsar site [REP2-027]. The proposed Bird Mitigation Strategy was included as Appendix B to the draft Outline Construction Environmental Management Plan (OCEMP) submitted with the DCO application [APP-082].
- 4.2.6 NE's concerns (as set out in their Written Representation [REP2-071]) related to the Applicant obtaining the shooting rights around the bird mitigation area for the duration of the construction period [REP2-071].
- 4.2.7 NE stated [REP2-071] that the Bird Mitigation Strategy (as provided with the DCO application [APP-082]) should be amended to clarify that, in order for the mitigation site to be effective, all the shooting rights from the surrounding fields and the foreshore will be removed for the duration of the construction works to ensure that there is no AEoI of the Morecambe Bay & Duddon Estuary SPA and Morecambe Bay Ramsar site.
- 4.2.8 NE noted that they were yet to see the final version of the Bird Mitigation Strategy [REP2-071]. Therefore, NE stated that it was not yet satisfied that it can be excluded beyond reasonable scientific doubt that the Proposed Development would not have an AEoI of Morecambe Bay & Duddon Estuary SPA and Morecambe Bay Ramsar site [paragraph 2.3.2, REP2-071].
- 4.2.9 A draft SoCG with NE was submitted at Deadline 2 [REP2-048], which confirmed that all matters are agreed, apart from the detail of the Bird Mitigation Strategy and the conclusion of no AEoI of the Morecambe Bay and Duddon Estuary SPA / Morecambe Bay Ramsar site, as outlined above. The SoCG stated that the Applicant is currently in consultation with the Duchy of Lancaster to suspend the Fylde Wildfowlers sporting rights (shooting rights) over the land north of the bird mitigation area, which covers the River Wyre, during construction. Subject to the shooting rights being finalised, NE has agreed to this matter in principle, but needs to see and agree the final version of the Bird Mitigation Strategy before this can be fully resolved [REP2-048].
- 4.2.10 The Applicant's Deadline 3 representation [REP3-011] noted NE's outstanding comments on noise disturbance, and stated that an updated Bird Mitigation Strategy would be provided following further discussions with the Duchy of Lancaster and the landowner/tenant.
- 4.2.11 A revised version of the Bird Mitigation Strategy was subsequently included as Appendix B to the second revision of the OCEMP [REP4-008]. In relation to shooting rights, the revised Bird Mitigation Strategy [REP4-008] states that no shooting would be permitted on land owned by the Applicant during the construction phase, including the mitigation area, and

- land surrounding the mitigation area. The revised Bird Mitigation Strategy does not make a reference to shooting rights on the foreshore.
- 4.2.12 At Deadline 5, NE's representation [REP5-027] states that they had reviewed the second revision of the OCEMP and Bird Mitigation Strategy [REP4-008] and that previous comments made by NE had not been actioned by the Applicant. NE confirmed that they would make additional comments on the updated version of OCEMP and Bird Mitigation Strategy.
- 4.2.13 An updated version of the Bird Mitigation Strategy was included as Appendix B to the third revision of the OCEMP at Deadline 6 [REP6-014], which confirms further details of the management of the bird mitigation area. NE's response to the third revision [REP6-022], includes concerns that the mitigation measures are not adequately secured, and that the DCO should include a specific requirement implementation of mitigation, monitoring and adaptive management measures contained in the approved CEMP.
- 4.2.14 To date, the Applicant's conclusions in relation to effects on integrity of the Morecambe Bay and Duddon Estuary SPA and Morecambe Bay Ramsar site have not been disputed by any IPs other than NE.

# ANNEX 1: EUROPEAN SITES IDENTIFIED BY THE APPLICANT AND CONSIDERED DURING THE EXAMINATION

| <b>European Site</b>      | Qualifying features   |  |  |  |  |  |  |  |
|---------------------------|---|--|--|--|--|--|--|--|
| Morecambe Bay             | Little tern (breeding)  |  |  |  |  |  |  |  |
| and Duddon<br>Estuary SPA | Sandwich tern (breeding)  |  |  |  |  |  |  |  |
| Listuary 5174             | Common tern (breeding)  |  |  |  |  |  |  |  |
|                           | Whooper swan (wintering)  |  |  |  |  |  |  |  |
|                           | Little egret (wintering)  |  |  |  |  |  |  |  |
|                           | Golden plover (wintering)   |  |  |  |  |  |  |  |
|                           | Bar-tailed godwit (wintering)   |  |  |  |  |  |  |  |
|                           | Ruff (wintering)  |  |  |  |  |  |  |  |
|                           | Mediterranean gull (wintering)  |  |  |  |  |  |  |  |
|                           | Lesser black-backed gull (breeding)   |  |  |  |  |  |  |  |
|                           | Herring gull (breeding)   |  |  |  |  |  |  |  |
|                           | Pink-footed goose (wintering)   |  |  |  |  |  |  |  |
|                           | Shelduck (wintering)  |  |  |  |  |  |  |  |
|                           | Pintail (wintering)   |  |  |  |  |  |  |  |
|                           | Oystercatcher (wintering)   |  |  |  |  |  |  |  |
|                           | Grey plover (wintering)   |  |  |  |  |  |  |  |
|                           | Ringed plover (wintering)   |  |  |  |  |  |  |  |
|                           | Curlew(wintering)   |  |  |  |  |  |  |  |
|                           | Black-tailed godwit (wintering)   |  |  |  |  |  |  |  |
|                           | Turnstone (wintering)   |  |  |  |  |  |  |  |
|                           | Knot (wintering)  |  |  |  |  |  |  |  |
|                           | Sanderling (wintering)  |  |  |  |  |  |  |  |
|                           | Dunlin (wintering)  |  |  |  |  |  |  |  |
|                           | Redshank (wintering)  |  |  |  |  |  |  |  |
|                           | Lesser black-backed gull (wintering)  |  |  |  |  |  |  |  |
|                           | Internationally important waterbird assemblage of over 20,000 individuals (wintering) |  |  |  |  |  |  |  |

| European Site | Qualifying features  |  |  |  |  |  |  |  |
|---------------|--|--|--|--|--|--|--|--|
|               | Internationally important seabird population of over 20,000 individuals (wintering)  |  |  |  |  |  |  |  |
| Morecambe Bay | Ringed plover (Ramsar criterion 4 – Passage)   |  |  |  |  |  |  |  |
| Ramsar site   | Species with peak counts in winter: 223,709 waterfow (5 year peak mean 1998/99- 2002/2003) (Ramsar criterion 5 – Assemblage) |  |  |  |  |  |  |  |
|               | Sandwich tern (Ramsar criterion 6 – Species regula supported during the breeding season)                                     |  |  |  |  |  |  |  |
|               | Lesser black-backed gull (Ramsar criterion 6 – Species regularly supported during the breeding season)                       |  |  |  |  |  |  |  |
|               | Herring gull (Ramsar criterion 6 – Species regularly supported during the breeding season)                                   |  |  |  |  |  |  |  |
|               | Great cormorant (Ramsar criterion 6 – Species with a peak Spring/Autumn)   |  |  |  |  |  |  |  |
|               | Shelduck (Ramsar criterion 6 – Species with a peak Spring/Autumn)  |  |  |  |  |  |  |  |
|               | Pintail (Ramsar criterion 6 – Species with a peak Spring/Autumn)   |  |  |  |  |  |  |  |
|               | Eider (Ramsar criterion 6 – Species with a peak Spring/Autumn)   |  |  |  |  |  |  |  |
|               | Oystercatcher (Ramsar criterion 6 – Species with a peak Spring/Autumn)   |  |  |  |  |  |  |  |
|               | Ringed plover (Ramsar criterion 6 – Species with a peak Spring/Autumn)   |  |  |  |  |  |  |  |
|               | Sanderling (Ramsar criterion 6 – Species with a peak Spring/Autumn)  |  |  |  |  |  |  |  |
|               | Curlew (Ramsar criterion 6 – Species with a peak Spring/Autumn)  |  |  |  |  |  |  |  |
|               | Redshank (Ramsar criterion 6 – Species with a peak Spring/Autumn)  |  |  |  |  |  |  |  |
|               | Turnstone (Ramsar criterion 6 – Species with a peak Spring/Autumn)   |  |  |  |  |  |  |  |
|               | Lesser black-backed gull (Ramsar criterion 6 – Species with a peak Spring/Autumn)  |  |  |  |  |  |  |  |
|               | Great crested grebe (Ramsar criterion 6 – Species with peak counts in winter)  |  |  |  |  |  |  |  |
|               | Pink-footed goose (Ramsar criterion 6 – Species with peak counts in winter)  |  |  |  |  |  |  |  |

| Wigeon (Ramsar criterion 6 – Species with peak counts in winter)  Goldeneye (Ramsar criterion 6 – Species with peak counts in winter)  Red-breasted merganser (Ramsar criterion 6 – Species with peak counts in winter)  Golden plover (Ramsar criterion 6 – Species with peak counts in winter)  Lapwing (Ramsar criterion 6 – Species with peak counts in winter)  Knott (Ramsar criterion 6 – Species with peak counts in winter)  Dunlin (Ramsar criterion 6 – Species with peak counts in winter)  Bar-tailed godwit (Ramsar criterion 6 – Species with peak counts in winter)  Morecambe Bay SAC  Annex I habitats that are a primary reason for selection of this site  1130 Estuaries  1140 Mudflats and sandflats not covered by seawater at low tide  1160 Large shallow inlets and bays  1220 Perennial vegetation of stony banks  1310 Salicornia and other annuals colonizing mud and |
|--|
| counts in winter)  Red-breasted merganser (Ramsar criterion 6 – Species with peak counts in winter)  Golden plover (Ramsar criterion 6 – Species with peak counts in winter)  Lapwing (Ramsar criterion 6 – Species with peak counts in winter)  Knott (Ramsar criterion 6 – Species with peak counts in winter)  Dunlin (Ramsar criterion 6 – Species with peak counts in winter)  Bar-tailed godwit (Ramsar criterion 6 – Species with peak counts in winter)  Morecambe Bay SAC  Annex I habitats that are a primary reason for selection of this site  1130 Estuaries  1140 Mudflats and sandflats not covered by seawater at low tide  1160 Large shallow inlets and bays  1220 Perennial vegetation of stony banks  1310 Salicornia and other annuals colonizing mud and   |
| with peak counts in winter)  Golden plover (Ramsar criterion 6 – Species with peak counts in winter)  Lapwing (Ramsar criterion 6 – Species with peak counts in winter)  Knott (Ramsar criterion 6 – Species with peak counts in winter)  Dunlin (Ramsar criterion 6 – Species with peak counts in winter)  Bar-tailed godwit (Ramsar criterion 6 – Species with peak counts in winter)  Morecambe Bay SAC  Annex I habitats that are a primary reason for selection of this site  1130 Estuaries  1140 Mudflats and sandflats not covered by seawater at low tide  1160 Large shallow inlets and bays  1220 Perennial vegetation of stony banks  1310 Salicornia and other annuals colonizing mud and   |
| counts in winter)  Lapwing (Ramsar criterion 6 – Species with peak counts in winter)  Knott (Ramsar criterion 6 – Species with peak counts in winter)  Dunlin (Ramsar criterion 6 – Species with peak counts in winter)  Bar-tailed godwit (Ramsar criterion 6 – Species with peak counts in winter)  Morecambe Bay SAC  Annex I habitats that are a primary reason for selection of this site  1130 Estuaries  1140 Mudflats and sandflats not covered by seawater at low tide  1160 Large shallow inlets and bays  1220 Perennial vegetation of stony banks  1310 Salicornia and other annuals colonizing mud and  |
| counts in winter)  Knott (Ramsar criterion 6 – Species with peak counts in winter)  Dunlin (Ramsar criterion 6 – Species with peak counts in winter)  Bar-tailed godwit (Ramsar criterion 6 – Species with peak counts in winter)  Morecambe Bay SAC  Annex I habitats that are a primary reason for selection of this site  1130 Estuaries  1140 Mudflats and sandflats not covered by seawater at low tide  1160 Large shallow inlets and bays  1220 Perennial vegetation of stony banks  1310 Salicornia and other annuals colonizing mud and   |
| in winter)  Dunlin (Ramsar criterion 6 – Species with peak counts in winter)  Bar-tailed godwit (Ramsar criterion 6 – Species with peak counts in winter)  Morecambe Bay SAC  Annex I habitats that are a primary reason for selection of this site  1130 Estuaries  1140 Mudflats and sandflats not covered by seawater at low tide  1160 Large shallow inlets and bays  1220 Perennial vegetation of stony banks  1310 Salicornia and other annuals colonizing mud and   |
| in winter)  Bar-tailed godwit (Ramsar criterion 6 – Species with peak counts in winter)  Morecambe Bay SAC  Annex I habitats that are a primary reason for selection of this site 1130 Estuaries  1140 Mudflats and sandflats not covered by seawater at low tide  1160 Large shallow inlets and bays 1220 Perennial vegetation of stony banks 1310 Salicornia and other annuals colonizing mud and  |
| Morecambe Bay SAC  Annex I habitats that are a primary reason for selection of this site 1130 Estuaries  1140 Mudflats and sandflats not covered by seawater at low tide 1160 Large shallow inlets and bays 1220 Perennial vegetation of stony banks 1310 Salicornia and other annuals colonizing mud and  |
| SAC  selection of this site  1130 Estuaries  1140 Mudflats and sandflats not covered by seawater at low tide  1160 Large shallow inlets and bays  1220 Perennial vegetation of stony banks  1310 Salicornia and other annuals colonizing mud and   |
| 1130 Estuaries  1140 Mudflats and sandflats not covered by seawater at low tide  1160 Large shallow inlets and bays  1220 Perennial vegetation of stony banks  1310 Salicornia and other annuals colonizing mud and  |
| at low tide  1160 Large shallow inlets and bays  1220 Perennial vegetation of stony banks  1310 Salicornia and other annuals colonizing mud and  |
| 1220 Perennial vegetation of stony banks 1310 Salicornia and other annuals colonizing mud and  |
| 1310 Salicornia and other annuals colonizing mud and   |
| _  |
| sand   |
| 1330 Atlantic salt meadows (Glauco- Puccinellietalia maritimae)  |
| 2120 "Shifting dunes along the shoreline with Ammophila arenaria (""white dunes"")"  |
| 2130 "Fixed coastal dunes with herbaceous vegetation (""grey dunes"")"   |
| 2190 Humid dune slacks   |
| Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site 1110 Sandbanks which are slightly covered by sea water all the time  |
| 1150 Coastal lagoons   |

| European Site  | Qualifying features   |  |  |  |  |  |  |  |  |
|----------------|---|--|--|--|--|--|--|--|--|
|                | 1170 Reefs  |  |  |  |  |  |  |  |  |
|                | 2110 Embryonic shifting dunes   |  |  |  |  |  |  |  |  |
|                | 2150 Atlantic decalcified fixed dunes (Calluno-Ulicetea)                              |  |  |  |  |  |  |  |  |
|                | 2170 Dunes with Salix repens ssp. argentea (Salicion arenariae)                       |  |  |  |  |  |  |  |  |
|                | Annex II species that are a primary reason for selection of this site                 |  |  |  |  |  |  |  |  |
|                | 1166 Great crested newt Triturus cristatus  |  |  |  |  |  |  |  |  |
| Ribble and Alt | Common tern (breeding)  |  |  |  |  |  |  |  |  |
| Estuaries SPA  | Ruff (breeding)   |  |  |  |  |  |  |  |  |
|                | Bar-tailed godwit (wintering)   |  |  |  |  |  |  |  |  |
|                | Berwick's swan (wintering)  |  |  |  |  |  |  |  |  |
|                | Golden plover (wintering)   |  |  |  |  |  |  |  |  |
|                | Whooper swan (wintering)  |  |  |  |  |  |  |  |  |
|                | Lesser black-backed gull (breeding)   |  |  |  |  |  |  |  |  |
|                | Ringed plover (passage)   |  |  |  |  |  |  |  |  |
|                | Sanderling (passage)  |  |  |  |  |  |  |  |  |
|                | Black-tailed godwit (wintering)   |  |  |  |  |  |  |  |  |
|                | Dunlin (wintering)  |  |  |  |  |  |  |  |  |
|                | Grey plover (wintering)   |  |  |  |  |  |  |  |  |
|                | Knot (wintering)  |  |  |  |  |  |  |  |  |
|                | Oystercatcher (wintering)   |  |  |  |  |  |  |  |  |
|                | Pink-footed goose (wintering)   |  |  |  |  |  |  |  |  |
|                | Pintail (wintering)   |  |  |  |  |  |  |  |  |
|                | Redshank (wintering)  |  |  |  |  |  |  |  |  |
|                | Sanderling (wintering)  |  |  |  |  |  |  |  |  |
|                | Shelduck (wintering)  |  |  |  |  |  |  |  |  |
|                | Teal (wintering)  |  |  |  |  |  |  |  |  |
|                | Wigeon (wintering)  |  |  |  |  |  |  |  |  |
|                | Regularly supporting at least 20,000 seabirds during the breeding season (assemblage) |  |  |  |  |  |  |  |  |

| <b>European Site</b>     | Qualifying features   |  |  |  |  |  |  |  |
|--------------------------|---|--|--|--|--|--|--|--|
|                          | Regularly supporting at least 20,000 waterfowl during the winter (assemblage)                         |  |  |  |  |  |  |  |
| Ribble and Alt           | Natterjack toad (Ramsar criterion 2)  |  |  |  |  |  |  |  |
| Estuaries<br>Ramsar site | Assemblage of international importance during the winter (222,038 birds) (Ramsar criterion 5)         |  |  |  |  |  |  |  |
|                          | Lesser black-backed gull (Ramsar criterion 6 – Specie regularly supported during the breeding season) |  |  |  |  |  |  |  |
|                          | Ringed plover (Ramsar criterion 6 – Species with peak counts in Spring/Autumn)                        |  |  |  |  |  |  |  |
|                          | Grey plover (Ramsar criterion 6 – Species with peak counts in Spring/Autumn)                          |  |  |  |  |  |  |  |
|                          | Knot (Ramsar criterion 6 – Species with peak counts in Spring/Autumn)                                 |  |  |  |  |  |  |  |
|                          | Sanderling (Ramsar criterion 6 – Species with peak counts in Spring/Autumn)                           |  |  |  |  |  |  |  |
|                          | Dunlin (Ramsar criterion 6 – Species with peak counts in Spring/Autumn)                               |  |  |  |  |  |  |  |
|                          | Black-tailed godwit (Ramsar criterion 6 – Species with peak counts in Spring/Autumn)                  |  |  |  |  |  |  |  |
|                          | Redshank (Ramsar criterion 6 – Species with peak counts in Spring/Autumn)                             |  |  |  |  |  |  |  |
|                          | Lesser black-backed gull (Ramsar criterion 6 – Species with peak counts in Spring/Autumn)             |  |  |  |  |  |  |  |
|                          | Berwick's swan (Ramsar criterion 6 – Species with peak counts in Winter)                              |  |  |  |  |  |  |  |
|                          | Whooper swan (Ramsar criterion 6 – Species with peak counts in Winter)                                |  |  |  |  |  |  |  |
|                          | Pink-footed goose (Ramsar criterion 6 – Species with peak counts in Winter)                           |  |  |  |  |  |  |  |
|                          | Shelduck (Ramsar criterion 6 – Species with peak counts in Winter)                                    |  |  |  |  |  |  |  |
|                          | Wigeon (Ramsar criterion 6 – Species with peak counts in Winter)                                      |  |  |  |  |  |  |  |
|                          | Teal (Ramsar criterion 6 – Species with peak counts in Winter)  |  |  |  |  |  |  |  |
|                          | Pintail (Ramsar criterion 6 – Species with peak counts in Winter)                                     |  |  |  |  |  |  |  |

| <b>European Site</b>            | Qualifying features   |  |  |  |  |  |  |  |
|---------------------------------|---|--|--|--|--|--|--|--|
|                                 | Oystercatcher (Ramsar criterion 6 – Species with peak counts in Winter)     |  |  |  |  |  |  |  |
|                                 | Bar-tailed godwit (Ramsar criterion 6 – Species with peak counts in Winter) |  |  |  |  |  |  |  |
| Liverpool Bay                   | Red-throated diver (wintering)  |  |  |  |  |  |  |  |
| SPA                             | Little gull (wintering)   |  |  |  |  |  |  |  |
|                                 | Common scoter (wintering)   |  |  |  |  |  |  |  |
|                                 | Little tern (breeding)  |  |  |  |  |  |  |  |
|                                 | Common tern (breeding)  |  |  |  |  |  |  |  |
|                                 | Internationally important waterfowl assemblage                              |  |  |  |  |  |  |  |
| Shell Flat and<br>Lune Deep SAC | Annex I habitats that are a primary reason for selection of this site       |  |  |  |  |  |  |  |
|                                 | 1110 Sandbanks which are slightly covered by sea water all the time         |  |  |  |  |  |  |  |
|                                 | 1170 Reefs  |  |  |  |  |  |  |  |

# ANNEX 2: STAGE 2 MATRICES: ADVERSE EFFECT ON INTEGRITY

### Stage 2 Matrices: Adverse Effect on Integrity

This annex of the RIES identifies the European sites and features for which the Applicant's conclusions with regards to adverse effects on integrity were disputed by Interested Parties. Therefore revised integrity matrices have been produced by the Planning Inspectorate.

### **Key to Matrices:**

- ✓ Adverse effect on integrity (AEoI) cannot be excluded
- × No AEoI
- ? Applicant and Interested Parties do not agree that and AEOI can be excluded
- C construction
- O operation
- D decommissioning

Information supporting the conclusions is detailed in footnotes for each table with reference to relevant supporting documentation.

Where an impact is not considered relevant for a feature of a European Site the cell in the matrix is formatted as follows:

n/a

### **HRA Integrity Matrix 1: Morecambe Bay and Duddon Estuary SPA**

Site Code: UK9020326

Distance to project: 0.3 km

| European site   | Likely Effects of NSIP       |     |     |                                       |     |     |                         |     |     |                        |     |     |
|---|------------------------------|-----|-----|---------------------------------------|-----|-----|-------------------------|-----|-----|------------------------|-----|-----|
| feature(s)  | Disturbance/<br>displacement |     |     | Loss of foraging/<br>roosting habitat |     |     | Change in water quality |     |     | In-combination Effects |     |     |
|   | С                            | 0   | D   | С                                     | 0   | D   | С                       | 0   | D   | С                      | 0   | D   |
| Article 4.2 - Wintering   |                              |     |     |                                       |     |     |                         |     |     |                        |     |     |
| Pink-footed goose   | ? a                          | × C | n/a | ? d                                   | × f | n/a | n/a                     | n/a | n/a | × h                    | × h | n/a |
| Curlew  | ? a                          | × C | n/a | ? d                                   | × f | n/a | n/a                     | n/a | n/a | × h                    | × h | n/a |
| Internationally important waterbird assemblage of over 20,000 individuals | ? b                          | × C | n/a | n/a                                   | n/a | n/a | × g                     | × g | n/a | × h                    | × h | n/a |
| Article 4.1 – Wintering   |                              |     |     |                                       |     |     |                         |     |     |                        |     |     |
| Little egret  | ? b                          | × C | n/a | ? e                                   | × f | n/a | n/a                     | n/a | n/a | × h                    | × h | n/a |

### **Notes**

**a.** The potential short-term disturbance/displacement effect from the construction works is unlikely to be detrimental to the fulfilment of the conservation objectives for the SPA/Ramsar site in relation to pink-footed geese and curlew;

however, such effects cannot be ruled out, therefore the Applicant proposes mitigation measures to provide an alternative foraging/ roosting area for these birds for the duration of the construction work in order to ensure no adverse effect on integrity of the European site during the construction phase (HRA Report, Section 7.4 and 7.6 [REP2-027]). NE have raised concerns in relation to how the proposed mitigation measures will be secured and have therefore suggested a new requirement to be included within the DCO [REP6-022].

- b. The potential short-term disturbance/displacement effect from the construction works would not have any adverse effects on the integrity of the SPA population of little egret, or the overwintering waterbird assemblage. No specific mitigation for little egret or the overwintering waterbird assemblage is proposed. However, the mitigation measures put in place for curlew and lapwing (including the provision of scrapes), would provide suitable alternative foraging habitat for other species, should they wish to use it during the construction phase (HRA Report, Section 7.4 and 7.6 [REP2-027]). NE have raised concerns in relation to how the proposed mitigation measures will be secured and have therefore suggested a new requirement to be included within the DCO [REP6-022].
- c. The potential long-term disturbance/displacement effect from the completed Scheme would not have any adverse effects the integrity of the SPA populations of pink-footed geese, curlew, little egret and the overwintering waterbird assemblage. Measures in place to reduce noise and visual disturbance/displacement from the completed Scheme. Results of the traffic forecasting and noise assessments show a decrease in noise levels within the River Wyre (where the majority of SPA bird species have been recorded). Therefore, no mitigation is required for potential displacement/ disturbance to pink-footed geese, curlew, little egret and the overwintering waterbird assemblage during the operational phase. [The Scheme could potentially have some net beneficial effects through the decrease in noise levels within the River Wyre which falls within the SPA] (HRA Report, Section 7.7 [REP2-027]).
- d. The habitat loss associated with the construction phase of the Scheme (5ha) would not significantly reduce the available foraging/roosting habitat for pink-footed geese and curlew associated with the SPA. Specific mitigation for loss of habitat is therefore not proposed. However, the mitigation measures put in place for disturbance/displacement during the construction phase of the Scheme, would provide suitable alternative foraging habitat for pink-footed geese and curlew should they wish to use it during the construction phase (HRA Report, Section 7.4 and 7.6 [REP2-027]). NE have

- raised concerns in relation to how the proposed mitigation measures will be secured and have therefore suggested a new requirement to be included within the DCO [REP6-022].
- e. The majority of the permanent wetland features (such as Main Dyke) observed to be used by little egret during the bird surveys would not be directly affected by the Scheme. Although, a number of field ditches would be affected due to the requirement to culvert ditches that pass under the Scheme, only very small sections would be effectively lost during the construction period. No specific mitigation for little egret is proposed. However, the mitigation measures put in place for curlew and lapwing (including the provision of scrapes), would provide suitable alternative foraging habitat for this species, should they wish to use it during the construction phase (HRA Report, Section 7.4 and 7.6 [REP2-027]).
- f. The habitat loss associated with the operational phase of the Scheme would not significantly reduce the available foraging/roosting habitat for pink-footed geese, curlew and little egret associated with the SPA. Specific mitigation for loss of habitat is therefore not proposed (HRA Report, Section 7.7 [REP2-027]).
- **g.** Whilst the embedded mitigation measures to protect water quality across the construction site would be sufficient to avoid adverse impacts on Morecambe Bay and Duddon Estuary SPA, additional mitigation measures will be required to protect water quality during the construction phase, particularly at the new bridge crossing of the Main Dyke which flows directly into the River Wyre (HRA Report, Section 7.4 [REP2-027]).
- **h.** Potential effects of the Scheme have been identified as temporary during construction; any in-combination effects would, therefore, not be significant in the long term (HRA Report, Section 6.10, 6.11 and 7.5 [REP2-027]).

### **HRA Integrity Matrix 2: Morecambe Bay Ramsar site**

Site Code: UK11045

Distance to project: 0.3 km

| European site  | Likely Effects of NSIP       |     |     |                                       |     |     |                         |     |     |                        |     |     |
|--|------------------------------|-----|-----|---------------------------------------|-----|-----|-------------------------|-----|-----|------------------------|-----|-----|
| feature(s)   | Disturbance/<br>displacement |     |     | Loss of foraging/<br>roosting habitat |     |     | Change in water quality |     |     | In-combination Effects |     |     |
|  | С                            | 0   | D   | С                                     | 0   | D   | С                       | 0   | D   | С                      | 0   | D   |
| Ramsar criterion 6 - Species with a peak counts in winter                                  |                              |     |     |                                       |     |     |                         |     |     |                        |     |     |
| Pink-footed goose  | ? a                          | × b | n/a | ? c                                   | × d | n/a | n/a                     | n/a | n/a | × f                    | × f | n/a |
| Lapwing  | ? a                          | × b | n/a | ? c                                   | × d | n/a | n/a                     | n/a | n/a | × f                    | × f | n/a |
| Ramsar criterion 5 – Assemblage  |                              |     |     |                                       |     |     |                         |     |     |                        |     |     |
| Species with peak counts in winter: 223,709 waterfowl (5 year peak mean 1998/99-2002/2003) | n/a                          | × b | n/a | n/a                                   | n/a | n/a | ×е                      | × e | n/a | ×f                     | ×f  | n/a |

### **Notes**

a. The potential short-term disturbance/displacement effect from the construction works is unlikely to be detrimental to the fulfilment of the conservation objectives for the SPA/Ramsar site in relation to pink-footed geese and lapwing; however, such effects cannot be ruled out. The Applicant has therefore proposed mitigation measures to provide an

alternative foraging/ roosting area for these birds for the duration of the construction work in order to ensure no adverse effect on integrity of the European site during the construction phase (HRA Report, Section 7.4 and 7.6 [REP2-027]). NE have raised concerns in relation to how the proposed mitigation measures will be secured and have therefore suggested a new requirement to be included within the DCO [REP6-022].

- b. The potential long-term disturbance/displacement effect from the completed Scheme would not have any adverse effects the integrity of the SPA populations of pink-footed geese, lapwing and the overwintering waterbird assemblage. Measures in place to reduce noise and visual disturbance/displacement from the completed Scheme. Results of the traffic forecasting and noise assessments show a decrease in noise levels within the River Wyre (where the majority of SPA bird species have been recorded). Therefore, no mitigation is required for potential displacement/disturbance to pink-footed geese, curlew and little egret during the operational phase. [The Scheme could potentially have some net beneficial effects through the decrease in noise levels within the River Wyre which falls within the SPA] (HRA Report, Section 7.7 [REP2-027]).
- c. The habitat loss associated with the construction phase of the Scheme (5ha) would not significantly reduce the available foraging/roosting habitat for pink-footed geese and lapwing associated with the Ramsar site. Specific mitigation for loss of habitat is therefore not proposed. However, the mitigation measures put in place for disturbance/displacement during the construction phase of the Scheme, would provide suitable alternative foraging habitat for pink-footed geese and lapwing should they wish to use it during the construction phase (HRA Report, Section 7.4 and 7.6 [REP2-027]). NE have raised concerns in relation to how the proposed mitigation measures will be secured and have therefore suggested a new requirement to be included within the DCO [REP6-022].
- **d.** The habitat loss associated with the operational phase of the Scheme would not significantly reduce the available foraging/roosting habitat for pink-footed geese and lapwing associated with the Ramsar site. Specific mitigation for loss of habitat is therefore not proposed (HRA Report, Section 7.7 [REP2-027]).
- **e.** Whilst the embedded mitigation measures to protect water quality across the construction site would be sufficient to avoid adverse impacts on Morecambe Bay Ramsar site, additional mitigation measures will be required to protect water

quality during the construction phase at the new bridge crossing of the Main Dyke which flows directly into the River Wyre (HRA Report, Section 7.4 and 7.6 [REP2-027]).

**f.** Potential effects of the Scheme have been identified as temporary during construction; any in-combination effects would, therefore, not be significant in the long term (HRA Report, Section 6.10, 6.11 and 7.5 [REP2-027]).