The Sizewell C Project

6.14 Environmental Statement Addendum
Volume 1: Environmental Statement Addendum Chapters
Chapter 6 Sizewell Link Road

Revision: 1.0

Applicable Regulation: Regulation 5(2)(a)

PINS Reference Number: EN010012

January 2021

Planning Act 2008
Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

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6 SIZEWELL LINK ROAD

6.1 Introduction

6.1.1 This chapter of the **ES Addendum** provides an update to **Volume 6** of the **ES** (Doc Ref. 6.7) [APP-444 to APP-477]. The chapter presents the Additional Information prepared and the proposed changes to the proposed development at the Sizewell link road site since the submission of the application for development consent (May 2020), referred to hereafter as the 'Application'.

6.1.2 The Additional Information of relevance to **Volume 6** of the **ES** (Doc Ref. 6.7) [APP-444 to APP-477] includes:

- Information on construction assumptions of the proposed Sizewell link road comprising updates to the indicative areas of temporary contractor compound (refer to **section 6.2**);
- Review of Sizewell link road drainage design ('*Sizewell link road - DCO Design Validation – Drainage*' Technical Note; refer to **section 6.2**);
- Updates to noise modelling to account for refinements to the strategic traffic model (refer to the **Transport Assessment Addendum** (Doc Ref. 8.5(A) Ad) for further information);
- Refinements to the air quality modelling to account for new information published by Defra and updated traffic estimates from the strategic traffic model (refer to the **Transport Assessment Addendum** (Doc Ref. 8.5(A) Ad) for further information);
- Updated ecological baseline information following consultation with stakeholders (Doc Ref. 6.13) [AS-036];
- Development of an **Outline Landscape and Ecological Mitigation Plan** (OLEMP) for the Sizewell link road (Doc Ref. 6.3B);
- Update to the terrestrial historic environment assessment to include Yoxford Conservation Area;
- Update to the soils and agricultural assessment presented in **Volume 6, Chapter 10** of the **ES** to correct an error; and
- Corrections to **Access and Rights of Way plans**, submitted in November 2020 (as part of Doc Ref. 2.4(A) [AS-013].

6.1.3 The proposed changes of relevance to **Volume 6** of the **ES** (Doc Ref. 6.7) [APP-444 to APP-477] comprise an extension to the site boundary (and thereby an extension of the Order Limits) for additional land as well as minor changes to the public right of way proposals (part of **Change 12**). These changes are to accommodate updates to drainage design assumptions, highway works and in response to topographic survey information. **Change 12** also includes a reduction of the site boundary at specific locations where the land has been identified as no longer being required. There are also minor revisions to the Public Rights of Way (PRoW) proposals.

6.1.4 These are further described in **section 6.2**.

6.1.5 Furthermore, the revised assessment for noise and vibration and air quality has considered the update to the Heavy Goods Vehicles (HGV) movements, associated with **Change 1** (potential to increase in the frequency of freight train movements to facilitate bulk material imports by rail) and **Change 2** (an enhancement of the permanent beach landing facility and construction of a new, temporary beach landing facility) described further in **Chapter 2** of this **ES Addendum**.

6.1.6 A review of any Additional Information and the proposed changes has been undertaken by EIA specialists across all technical assessments presented in **Volume 6** of the **ES** (Doc Ref. 6.7) [APP-451 to APP-477].

6.1.7 Updates to the assessments of noise and vibration, air quality, landscape and visual, terrestrial ecology and ornithology, amenity and recreation, terrestrial historic environment, soils and agriculture, and groundwater and surface water presented in **Chapters 4 – 10** and **12** of **Volume 6** of the **ES** (Doc Ref. 6.7) [APP-451 to APP-472, APP-476 to APP-477] are considered within **sections 6.3** to **6.10** of this chapter.

6.1.8 The review concluded that these updates do not affect the technical assessment presented in **Chapter 11 Geology and Land Quality** of **Volume 6** of the **ES** (Doc Ref. 6.7) [APP-473 to APP-475].

6.2 Update to the description of development

6.2.1 This section presents details on the Additional Information and the proposed changes made to the proposed development at Sizewell link road site, since the preparation of **Chapter 2** of **Volume 6** of the **ES** (Doc Ref. 6.7) [APP-446 to APP-449]. An updated version of **Chapter 2** in tracked changes, to include these changes, is provided within **Volume 3, Appendix 6.2.A** of this **ES Addendum**.

6.2.2 Additional information relevant to the design and construction of the proposed development at Sizewell link road comprises further information on the location of two additional temporary contractor compound areas and minor corrections to the **Rights of Way and Access Plans** (submitted in November 2020 [AS-013]).

6.2.3 The proposed changes include extension to and reduction of the site boundary (and thereby a change of the Order Limits) for additional land for works on the proposed Sizewell link road as well as minor changes to the public right of way proposals.

a) Additional Information

a) i) Additional Information on the location of the additional temporary contractor compounds

6.2.4 In the Application, and as set out in **Volume 6, Chapter 2** of the **ES** which describes the proposed development, it was envisaged that three temporary contractor compound areas would be established to manage construction of the proposed development. One would likely be located adjacent to the A12, at the western end of the site, the second would likely be located on both sides of the East Suffolk Line where it would be crossed by the proposed Sizewell link road and the third would likely be located to the west side of the proposed Middleton Moor link.

6.2.5 Since the submission of the Application, further details on the construction assumptions have been developed and further information relating to the construction methodology has identified the need for two additional temporary contractor compound areas to facilitate construction, one adjacent to Pretty Road and one to the eastern end of the Sizewell link road site.

6.2.6 It is envisaged that the additional compound adjacent to Pretty Road (the indicative area is shown on **Figure 6.2.5** in **Volume 2** of this **ES Addendum**) would be approximately 60 x 75m and would include site welfare facilities, office space, and plant, but primarily be used for materials storage for the construction of the bridge in this location.

6.2.7 It is envisaged that the additional compound at the eastern end of the route (the indicative area is shown on **Figure 6.2.6** in **Volume 2** of this **ES Addendum**) would support up to 100 construction workers and contain up to 60 parking spaces. The compound would be divided into three areas (approximately 100 x 85m, 100 x 30m, and 250m by 50m) located on both sides of the proposed Sizewell link road and either side of the link to the B1122. The compound would comprise site welfare facilities, office space, and plant but would primarily be used for materials storage.

a) ii) Corrections to Access and Rights of Way Plans

6.2.8 In November 2020 corrections to the **Access and Rights of Way Plans** [AS-013] were submitted to the Examining Authority. For the Sizewell link road site, these comprised:

- Correction to line style for "Permanent Stopping up of Footpath" on Sizewell Link Road Rights of Way Plans - Sheet 20 of 27.
- Correction to the colour of "Permanent Stopping Up of Highway" and "Highway Permanently Converted to Footpath" on Sizewell Link Road Rights of Way Plans - Sheet 21 of 27.
- Correction to the line style for "Permanent Stopping up of Footpath" on Sizewell Link Road Rights of Way Plans - Sheet 22 of 27.

a) iii) Review of Sizewell link road drainage design

6.2.9 A Technical Note ('*Sizewell link road - DCO Design Validation – Drainage*', provided in **Volume 3, Appendix 6.2.B** of this **ES Addendum**) has been prepared to review the proposed drainage infrastructure required for the effective removal of runoff from the proposed Sizewell link road and its disposal, and the crossing of watercourses along the route of the Sizewell link road. The assessment has included new data for the site, including topographic and geotechnical. It has also considered emerging results from the hydraulic modelling in support of the Flood Risk Assessment.

6.2.10 The review concluded that removal of highway runoff by infiltration through reliance on swales and Infiltration Basins alone is not achievable, although there will be some take up and removal of runoff by vegetation and storage within the surface layer of soil and through the inclusion of a filter trench in the base of swales. Therefore, the approach to drainage has changed to holding water in attenuation basins and managing the release of the water to local watercourses, consistent with the hierarchy set out within the **Outline Drainage Strategy** proposed in **Volume 2, Appendix 2A** of the **ES** (refer to **section 6.2 b)**) of this chapter for further detail).

b) Proposed changes

b) i) Proposed development in the Application

6.2.11 The Sizewell link road would be constructed in the early years and be used for Sizewell C construction traffic travelling to the main development site and would also be open to the public.

6.2.12 The Sizewell link road would include new junctions with the existing highway network along the length of its route. It would run from a new three-arm roundabout with the A12, approximately 180m north of The Red House Farm and south of Yoxford, to a new junction where it would tie-in with the existing B1122 to the east. There would also be tie-ins with the B1122 at Middleton Moor via a new three-arm roundabout, and a new junction to link to the B1125 west of Theberton.

6.2.13 Along the route running from west to east, the Sizewell link road would pass over the East Suffolk Line via a single span bridge, and under a new overbridge for non-motorised users at Pretty Road.

6.2.14 Several areas for new planting and drainage infrastructure (including swales and drainage basins) are proposed along the route, and various new junctions with existing roads and property accesses are proposed north and south of the link road. Portal culverts would be provided where the route of the proposed Sizewell link road crosses watercourses, and two flood relief culverts are also proposed.

b) ii) Description of the proposed change and why this change is proposed

6.2.15 A number of changes are now proposed to be made to the site boundary (and Order Limits) of the Sizewell link road as part of **Change 12**. This is to accommodate updates to drainage design assumptions, highway design development following close engagement with Suffolk County council and in response to topographic survey information. **Change 12** also includes a reduction of the site boundary at specific locations where the land has been identified as no longer being required. There are also minor revisions to the PRoW proposals.

6.2.16 **Figure 6.2.1** of **Volume 2** of this **ES Addendum** shows the location and extent of the proposed changes to the site boundary. Where specific location references (e.g. “SLR1/1”) are given below, this relates to locations shown on these figures.

6.2.17 **Figures 6.2.2** to **6.2.8** of **Volume 2** of this **ES Addendum** provide the illustrative masterplans for the proposed Sizewell link road. These include the indicative location of additional drainage basins now proposed as well as the previously proposed drainage basins along the route where they are still proposed.

b) ii) a) Highways Changes

6.2.18 Through discussions with Suffolk County Council (SCC), SZC Co. has established that additional land may be necessary to provide increased visibility at junctions proposed along the Sizewell link road for highway safety in accordance with the design speed of 60mph. However, SZC Co. is currently undertaking vehicle speed surveys and continuing discussions with SCC which will determine the precise visibility requirements. The potential changes to the site boundary that may be necessary for highway reasons are as follows:

- Extensions of the site boundary in eleven locations to allow the removal of vegetation. This is to ensure clear forward highway visibility and is proposed in Area 1 (SLR1/1), Area 3 (SLR3/1, SLR3/3), Area 4 (SLR4/2, SLR4/3, SLR4/4), Area 5 (SLR5/1, SLR5/2, SLR5/4) and Area 6 (SLR6/2 and SLR6/3) as shown in **Figure 6.2.1** in **Volume 2** of this **ES Addendum**. SLR5/1a and SLR5/4a indicate where land which was previously required temporarily is now proposed as being permanently acquired.

- In Area 3, additional temporary land is required north of the existing farm access track at SLR3/2 (see **Figure 6.2.1** in **Volume 2** of this **ES Addendum**) to allow the design to tie in the realigned farm access track with the west arm of the Middleton Moor Link Roundabout. Additional land is also required in Area 3 to allow for the turning movement of farm vehicles from and to a realigned farm access track (SLR3/7) (see **Figure 6.2.1** in **Volume 2** of this **ES Addendum**).

- Additional land is permanently required in Area 4 (SLR4/8) (see **Figure 6.2.1** in **Volume 2** of this **ES Addendum**) to facilitate the removal of hedgerows to accommodate the realignment of the Hawthorn Road. The proposed realignment of Hawthorn Road is shown in **Figure 6.2.6** in **Volume 2** of this **ES Addendum**. Hawthorn Road is now proposed further east of the alignment shown in the Application. This revised alignment maintains access to the existing Hawthorn Cottages, improves driver visibility, avoids works to an existing culvert, and avoids needing to provide culverts under the side road (as previously proposed in the Application). The culverts therefore only need to cross once under the main alignment compared to previous two locations. The revised alignment of Hawthorn Road requires a revised alignment where Footpath E-396/020/0 is extended in this location. As shown in **Figure 6.2.6** in **Volume 2** of this **ES Addendum**, the proposed PRoW diversion would extend along the proposed route of the Sizewell link road, approximately 160m to the west, to cross the proposed route before heading east along the north side of the route to re-join Hawthorn Road (previously

it was proposed to extend to the east of the Sizewell link road to cross the proposed route before heading west along the north side of the route).

b) ii) b) Drainage changes

6.2.19 As set out in the Technical Note ('*Sizewell link road - DCO Design Validation – Drainage*' (provided in **Volume 3, Appendix 6.2.B** of this **ES Addendum**), ground investigation has been undertaken to determine local infiltration rates and validate the drainage strategy in the Application. Infiltration rates were found to be lower than anticipated, such that the removal of all highway surface water runoff by infiltration alone is not possible. Following receipt of the ground investigation results and discussions with SCC, the approach to drainage has changed to holding water in attenuation basins and managing the release of the water to local watercourses, consistent with the hierarchy set out within the **Outline Drainage Strategy** proposed in **Volume 2, Appendix 2A** of the **ES**.

6.2.20 This has resulted in the need for additional areas of land within the site to accommodate additional basins. As the hydraulic modelling of the whole length of the Sizewell link road progresses, SZC Co. will seek to optimise the number and size of the basins and some of the additional land may not be required. The potential changes that may be necessary for this reason are as follows:

- Extension of the site boundary to allow additional and revised drainage features to be provided following the results of ground investigation. Compared to the Application, this includes:
  - one revised basin in Area 1 (SLR1/2) and one additional basin in Area 1 (SLR1/3) (and additional permanent land take to access SLR1/3 (SLR1/6)), two additional basins in Area 2 (SLR2/3, SLR2/4) (and additional permanent land take to access basin SLR2/3 (SLR2/6 and SLR3/8)), three additional basins in Area 3 (SLR3/4, SLR3/5 and SLR3/6), four additional basins in Area 4 (SLR4/1, SLR4/5, SLR4/7 (this requires changing a strip of land from being needed temporarily to being needed permanently – SLR4/7a) and SLR4/9) (and additional permanent land to provide for an outfall from basin SLR4/9 (SLR4/6)), one additional basin in Area 5 (SLR5/5) and one additional basin in Area 6 (SLR6/1);
  - potential routes to discharge surface water flows to local watercourses (in Areas 1 (SLR1/4) and 2(SLR2/5)); and

- there may be a requirement for a pumping station and rising main on the west side of the railway bridge in Area 1. This would be needed to pump surface water over the railway bridge to the eastern side to be discharged. It would not require a further extension to the site boundary. The rising main would be located within the highway and cross the railway within the bridge structure. It would be likely to be located near to the basin at SLR1/2 and the above ground elements would be likely to comprise a kiosk approximately 1.2m long, 1.2m high with 0.4m depth.

b) ii) c) Public Right of Way Diversion Changes

6.2.21 As a result of further detailed design work and engagement with SCC, SZC Co. is proposing the following minor changes to the proposed PRoW diversions:

- Footpath E-344/014/0 - where this footpath would cross the Sizewell link road, a minor change to the PRoW diversion is proposed. The start and end points of the diversion are the same as previously proposed in the Application, but the alignment of the diversion is now proposed to be straighter and run closer along the alignment of the Sizewell link road than previously proposed. The length of the new diversion length is 121m, this is slightly longer than the diversion route previously proposed (97m). This change is as a result of gaining a greater understanding of the topography in this area and to allow for the provision of an attenuation pond. The proposed change is shown in **Figure 6.2.3** in **Volume 2** of this **ES Addendum**.

- Footpath E-344/013/0 - where this footpath would cross the Sizewell link road, a minor change to the PRoW diversion is proposed. The start and end points of the diversion are the same as previously proposed in the Application, but the diversion is extended slightly further west. This is as a result of gaining a greater understanding of the topography in this area and to ensure the PRoW follows the most optimum route in terms of useability. The length of the new diversion route is 186m, this is slightly longer than the diversion route previously proposed (96m). The proposal is shown in **Figure 6.2.3** in **Volume 2** of this **ES Addendum**.

- Footpath E-396/017/0- where this footpath crosses the Sizewell link road, the PRoW diversion in this location previously comprised a new permanent footpath. This is now proposed to be both a walking and cycling route. There are no changes proposed to the length or location of the route. The proposal is shown in **Figure 6.2.4** in **Volume 2** of this **ES Addendum**.

- Footpath E-396/020/0 – the proposed PRoW would extend along the proposed route Sizewell link road, approximately 160m to the west, to cross the proposed route before heading east along the north side of the route to re-join Hawthorn Road. This is as a result of the proposed realignment of Hawthorn Road. This proposed realignment is shown in **Figure 6.2.6** in **Volume 2** of this **ES Addendum**.

- At Moat Road – an additional walking and cycling route is now proposed on the north side of the proposed Sizewell link road. This provides users of the PRoW with a more expedient way of joining the new walking and cycling route and crossing the Sizewell link road from footpath E-515/007/0 (rather than users having to go to the B1122 junction to join the new walking and cycling route which is what was previously proposed in the Application). This is within the highways boundary and has been included at the request of Suffolk County Council. This proposal is shown in **Figure 6.2.8** in **Volume 2** of this **ES Addendum**.

6.2.22 The proposed changes to the PRoW are shown on **Access and Rights of Way plans**, updated as part of this submission and include the corrections to the plans issued in November 2020 [AS-013] summarised in **section 6.2 a)**.

b) ii) d) Changes as a result of topographical survey information

6.2.23 As a result of topographical survey information and to ensure the proposals can be constructed, additional temporary land area is required to be able to remove hedgerows to deliver a proposed field access gate in Area 1 (SLR1/5) and additional temporary land take is required to the north and south of the Sizewell link road, where it crosses the East Suffolk Line in Area 2 (SLR2/1 and SLR2/2).

6.2.24 The site boundary on the southern side of B1122 link is proposed to be adjusted eastwards where shown at SLR5/3 to align with the latest topographical survey data and to permit field access.

b) ii) e) Reductions in permanent land take

6.2.25 Following detailed design work, land has been identified as not being required for either the construction or operation (or both) of the Sizewell link road which enables SZC Co. to reduce the site boundary in these locations. The proposed changes that may be necessary for this reason include a reduction of the site boundary where it has been determined it is not required during construction or operation of the proposed development. This is proposed in Area 3 (SLR3/9), Area 4 (SLR4/10) and Area 5 (SLR5/6).

6.3 Noise and vibration

a) Introduction

6.3.1 This section provides an addendum to the noise and vibration assessment at the Sizewell link road site with reference to the following documents submitted with the Application:

- **Volume 6, Chapter 4** of the **ES** (Doc Ref. 6.7) [APP-451];
- **Volume 6, Chapter 4 Appendix 4B** of the **ES** (Doc Ref 6.7) [APP-452];
- **Volume 2, Chapter 11 Appendix 11G** of the **ES** (Doc Ref. 6.3) [APP-210]; and
- **Volume 2, Chapter 11** of the **ES** (Doc Ref 6.3) [APP-202].

6.3.2 This section presents Additional Information that has been gathered since the Application was made, and an assessment of the potential noise and vibration effects from the proposed changes, in particular the potential reduction in HGV movements as a result of the proposed potential increase in rail movements (**Change 1**) and the proposed additional temporary BLF (**Change 2**).

6.3.3 This section is supported by the following appendices provided in **Volume 3** of this **ES Addendum**:

- **Volume 3, Appendix 5.3.A** Sizewell link road – Corrections to Road Traffic Noise Level Predictions.
- **Volume 3, Appendix 5.3.B** Road Traffic Noise Levels, Updated for Changes in Strategic Traffic Model.
- **Volume 3, Appendix 5.3.C** New Road Traffic Noise Level Predictions Resulting from Update to Freight Management Strategy.

b) Relevant Additional Information

6.3.4 An assessment of noise and vibration arising from the construction and operation of Sizewell link road was submitted as part of the Application in **Volume 6, Chapter 4** of the **ES** (Doc Ref 6.7) [APP-451].

6.3.5 Revisions have been carried out to the noise predictions to take account of the following:

- two additional temporary contractor compound areas to facilitate construction, one adjacent to Pretty Road and one to the eastern end of the Sizewell link road site;
- correction of the road traffic noise calculations presented **in Volume 6, Chapter 4** of the **ES** (Doc Ref. 6.7) [APP-451].This was required to correct an error in the earlier noise prediction model; and
- a refinement to the strategic traffic flow model (refer to **Transport Assessment Addendum** (Doc Ref. 8.5(A) Ad) and subsequent updates to the road traffic noise calculations.

c) Relevant changes

6.3.6 The following design changes have also been considered within the revised assessment for noise and vibration, as relevant to the Sizewell link road site:

- A new assessment has been undertaken to consider the potential effects of noise from a pumping station that may now be required on the western side of the railway bridge in Area 1 as a result of the changes to the drainage assumptions. The amendments to the site boundary for highway works or topographic differences would not affect the noise and vibration assessment reported in **Volume 6, Chapter 4** of the **ES** (Doc Ref. 6.7) [APP-451].
- Reduced HGV movements during construction of Sizewell C with the potential changes to increase rail movements (**Change 1**) and the proposed enhancement of the permanent BLF and additional temporary BLF (**Change 2**), as described within **Chapter 2** of the **ES Addendum**.

d) Updated assessment – Additional Information

d) i) Addition of indicative temporary contractor compound areas

6.3.7 The addition of two indicative areas for temporary contractor compounds to facilitate construction has been considered: one adjacent to Pretty Road and one to the eastern end of the Sizewell link road site.

6.3.8 The additional contractors compound proposed at the eastern end of Sizewell link road would not result in any change to noise and vibration effects during its operation. However, during its construction, noise from plant used for this construction activity would result in a change to the

assessment outcomes for three nearby noise sensitive receptors. Sound levels predicted in **Volume 6, Chapter 4** of the **ES** (Doc Ref. 6.7) [APP-451] are reported in **Table 6.1**, along with revised levels which would occur during preparatory works during the construction of the additional temporary contractors' compound. The assumed noise source levels and on times are the same as those reported in **Volume 6, Chapter 4 Appendix 4B** of the **ES** (Doc Ref. 6.7) [APP-452] for the construction of the temporary contractors compounds.

Table 6.1: Predicted noise levels from construction activities during the construction of the additional temporary contractors compound - free field values

Receptor		As submitted in ES Volume 6 Chapter 4			Effect with additional construction compound		
		Representative predicted levels, $L_{Aeq, T}$, dB	Mon-Fri 07:00 to 19:00 hours and Sat 07:00 to 13:00 hours	Saturday 13:00 to 19:00 hours	Representative predicted levels, $L_{Aeq, T}$, dB	Mon-Fri 07:00 to 19:00 hours and Sat 07:00 to 13:00 hours	Saturday 13:00 to 19:00 hours
16	Doughty Wylie Crescent	39	Negligible, not significant	Negligible, not significant	59	Minor adverse, **not significant**	Moderate adverse, **significant**
17	Theberton Grange	35	Negligible, not significant	Negligible, not significant	60	Minor adverse, **not significant**	Moderate adverse, **significant**
38	South of Theberton Grange	35	Negligible, not significant	Negligible, not significant	58	Minor adverse, **not significant**	Moderate adverse, **significant**

6.3.9 The reason for the predicted increase in levels is that, during the construction of the compound areas, work would take place relatively close to these noise sensitive premises.

6.3.10 The reason for the predicted increase in adverse noise effects between 13:00 and 19:00 hours on a Saturday is not due to any difference in activities which would occur in this period, but due to the reduction in thresholds for significance which occurs outside of Monday to Friday 07:00 to 19:00 hours and Saturday 07:00 to 13:00 hours.

6.3.11 Exact working methods and plant to be used will not be determined until a contractor is appointed, and therefore precise details of noise mitigation measures cannot yet be given. Accordingly, and as set out in **Code of Construction Practice (CoCP)** (Doc Ref. 8.11(A)), it is likely that the mitigation measures could include selection of alternative plant or working methods, barrier screening and/or stand-off margins and/or alternative plant.

6.3.12 Mitigation measures listed above and in the **CoCP** (Doc Ref. 8.11(A)), and which may include screening and changing working methods and times, including limiting noisy activities on Saturday afternoons should be capable of reducing levels such that they are no longer significant.

6.3.13 The additional contractors compound proposed adjacent to Pretty Road would result in no change to assessment outcomes presented in **Volume 6, Chapter 4** of the **ES** (Doc Ref. 6.7) [APP-451] during construction or operation as it would be further away from noise sensitive receptors.

d) ii) Revised road traffic noise calculations

6.3.14 The results of the revised road traffic noise calculations are presented in detail in **Volume 3, Appendices 6.3.A** and **6.3.B** of this **ES Addendum**. These appendices cover the following:

- **Volume 3, Appendix 6.3.A**: contains the corrected predicted road traffic noise levels for the Sizewell Link Road for the same assessment years and scenarios as contained in **Volume 6 Chapter 4** of the **ES** (Doc Ref. 6.7) [APP-451], these being 2023, 2028 (typical), 2028 (busiest) and 2034. The corrected road traffic noise level predictions are presented with the predicted road traffic noise levels as reported in **Volume 6, Chapter 4** of the **ES** (Doc Ref. 6.7) [APP-451].

- **Volume 3, Appendix 6.3.B**: contains updated road traffic noise level predictions for the Sizewell Link Road for the same assessment years and scenarios as contained in **Volume 6, Chapter 4** of the **ES** (Doc Ref. 6.7) [APP-451], taking account of the changes to the strategic traffic model. These are presented with the corrected road traffic noise levels as reported in **Appendix 6.3.A**. The new values set out in the **Appendix 6.3.B** represent the road traffic noise level outcomes for the Application.

6.3.15 Within these appendices, where a change to the earlier assessment outcome occurs as a result of the revision, this is marked within the table. Where the change results in an improvement in the category of effect, these are marked in green. Where the change results in a worsening in the category of effect, these are marked in orange.

6.3.16 The locations and situations in which a change in assessment outcome is predicted are summarised in **Tables 6.2** and **6.3**.

Table 6.2: Changes to road traffic noise assessment outcomes for Sizewell Link Road resulting from corrections

Period	Receptor		Effect		Change in Significance
			As submitted in ES Volume 6 Chapter 4 (Doc Ref. 6.7) [APP-451]	Corrected values	
2028 Typical Day	5	Cross Roads	Major beneficial, significant	Moderate beneficial, significant	No Change
	9	Hill Farm	Major beneficial, significant	Moderate beneficial, significant	No Change
	35	Town Farm	Moderate adverse, significant	Minor adverse, not significant	Significant to **Not Significant**
	38	South of Theberton Grange	Major adverse, significant	Moderate adverse, significant	No Change
2028 Typical Night	1	Fir Tree Farm	Moderate adverse, significant	Minor adverse, not significant	Significant to **Not Significant**
	10	Valley Farm	Minor beneficial, not significant	Major beneficial, significant	Not Significant to **Significant**
	11	Annesons Cottage	Negligible, not significant	Moderate beneficial, significant	Not Significant to **Significant**
	16	Doughty Wylie Crescent	Major adverse, significant	Moderate adverse, not significant	No change
	18	Theberton House	Major adverse, significant	Moderate adverse, significant	No Change
	21	Coronation Cottages	Minor beneficial, not significant	Major beneficial, significant	Not Significant to **Significant**
	22	Annesons Corner	Minor beneficial, not significant	Major beneficial, significant	Not Significant to **Significant**
	24	A12 Yoxford Centre	Minor adverse, not significant	Negligible, not significant	No Change
	38	South of Theberton Grange	Moderate adverse, significant	Major adverse, significant	No Change
	42	Rose Farm	Minor adverse, not significant	Negligible, not significant	No Change

Period	Receptor		Effect		Change in Significance
			As submitted in ES Volume 6 Chapter 4 (Doc Ref. 6.7) [APP-451]	Corrected values	
	43	South of Theberton Hall Farm	Minor adverse, not significant	Negligible, not significant	No Change
2028 Busiest Day	4	Norwood House	Negligible, not significant	Minor adverse, not significant	No Change
	10	Valley Farm	Major beneficial, significant	Moderate beneficial, significant	No Change
	11	Annesons Cottage	Minor beneficial, not significant	Negligible, not significant	No Change
	22	Annesons Corner	Moderate beneficial, significant	Minor beneficial, not significant	Significant to **Not Significant**
	26	B1122 Rail crossing	Minor adverse, not significant	Negligible, not significant	No Change
	43	South of Theberton Hall Farm	Negligible, not significant	Minor adverse, not significant	No Change
2028 Busiest Night	1	Fir Tree Farm	Moderate adverse, significant	Minor adverse, not significant	Significant to **Not Significant**
	9	Hill Farm	Moderate beneficial, significant	Major beneficial, significant	No Change
	10	Valley Farm	Minor beneficial, not significant	Major beneficial, significant	Not Significant to **Significant**
	11	Annesons Cottage	Negligible, not significant	Moderate beneficial, significant	Not Significant to **Significant**
	16	Doughty Wylie Crescent	Major adverse, significant	Minor adverse, not significant	Significant to Not **Significant**
	18	Theberton House	Major adverse, significant	Moderate adverse, significant	No Change
	21	Coronation Cottages	Minor beneficial, not significant	Major beneficial, significant	Not Significant to **Significant**
	22	Annesons Corner	Minor beneficial, not significant	Major beneficial, significant	Not Significant to **Significant**
	38	South of Theberton Grange	Moderate adverse, significant	Major adverse, significant	No Change
	42	Rose Farm	Minor adverse, not significant	Negligible, not significant	No Change

Period	Receptor		Effect		Change in Significance
			As submitted in ES Volume 6 Chapter 4 (Doc Ref. 6.7) [APP-451]	Corrected values	
2034 Typical Day	11	Annesons Cottage	Moderate beneficial, significant	Minor beneficial, not significant	Significant to **Not Significant**
	15	Church Farm	Minor adverse, not significant	Moderate adverse, significant	Not Significant to **Significant**
	17	Theberton Grange	Negligible, not significant	Minor adverse, not significant	No Change
	37	Moat House	Minor adverse, not significant	Moderate adverse, significant	Not Significant to **Significant**
	9	Hill Farm	Moderate beneficial, significant	Major beneficial, significant	No Change
	10	Valley Farm	Moderate beneficial, significant	Major beneficial, significant	No Change
	11	Annesons Cottage	Minor beneficial, not significant	Moderate beneficial, significant	Not Significant to **Significant**
	12	Trust Farm	Minor adverse, not significant	Negligible, not significant	No Change
	14	Theberton Hall	Negligible, not significant	Minor adverse, not significant	No Change
	16	Doughty Wylie Crescent	Minor adverse, not significant	Negligible, not significant	No Change
	17	Theberton Grange	Moderate adverse, significant	Negligible, not significant	Significant to **Not Significant**
	21	Coronation Cottages	Moderate beneficial, significant	Major beneficial, significant	No Change
	22	Annesons Corner	Minor beneficial, not significant	Moderate beneficial, significant	Not Significant to **Significant**
	37	Moat House	Moderate adverse, significant	Minor adverse, not significant	Significant to **Not Significant**
	42	Rose Farm	Negligible, not significant	Minor beneficial, not significant	No Change

Table 6.3: Changes to road traffic noise assessment outcomes for Sizewell Link Road resulting from refinements to the strategic traffic model

Period	Receptor		Effect		Change in Significance
			Corrected values	Refinements to the traffic model – predicted levels	
2028 Typical Day	35	Town Farm	Minor adverse, not significant	Moderate adverse, significant	Not Significant to **Significant**
	38	South of Theberton Grange	Moderate adverse, significant	Major adverse, significant	No Change
2028 Typical Night	43	South of Theberton Hall Farm	Negligible, not significant	Minor Adverse, not significant	No Change
2034 Typical Night	21	Coronation Cottages	Major beneficial, significant	Moderate beneficial, significant	No Change

6.3.17 A change in effect which would result in a change from 'not significant' to '**significant**' as a result of the corrections would occur at Valley Farm, Coronation Cottages, Annesons Corner and Annesons Cottage in 2028 (all beneficial) during both typical and busiest nights. At Annesons Cottage and Annesons Corner there would be a change from 'not significant' benefit to a '**significant**' benefit as a result of the corrections and at Church Farm, and Moat House a change from a 'not significant' adverse effect to a '**significant**' adverse effect during the day in 2034.

6.3.18 Changes which result in effects changing from 'significant' to 'not significant' as a result of the corrections would occur at Fir Tree Farm (less adverse) during typical night periods in 2028 and at both Fir Tree Farm and Doughty Wylie Crescent (less adverse) during both typical and busiest night periods in 2028; at Annesons Corner (less beneficial) during busiest day in 2028; at Town Farm (less adverse) during typical day periods in 2028; and at Annesons Cottage (less beneficial), Theberton House (less adverse) and Moat House (less adverse) during the day in 2034.

6.3.19 One change in significance would occur as a result of changes to the strategic traffic model: during a typical day time period in 2028, the effect would change at Town Farm from 'not significant' to 'significant'.

6.3.20 The changes resulting from the corrections to the noise model would result in a mixture of outcomes, with some receptors having higher and others lower predicted levels. Overall, there has been a small reduction in level for many, although changes in predicted levels for some have been greater and some have resulted in larger reductions and increases in level and effect.

6.3.21 Mitigation as set out in the 'Noise Mitigation Scheme' **Volume 2, Chapter 11 Appendix 11G** of the **ES** (Doc Ref. 6.3) [APP-210] will be applied, where appropriate.

e) Updated assessment – Extensions and reductions of the Order Limits for works on the Sizewell link road, as well as minor changes to the public right of way proposals (Change 12)

6.3.22 As a result of the update to drainage assumptions, which have led to the extension of the site boundary at the Sizewell link road site (**Change 12**), it is likely that a pumping station may be required on the western side of the railway bridge in Area 1. This would be located within the area referenced as SLR 1/2 on **Figure 6.2.1** in **Volume 2** of this **ES Addendum**.

6.3.23 It is envisaged that the pump within the pumping station will be below ground level in a concrete-lined chamber and will be a submersible design, i.e. the pump will be located underwater. Access to the pump for maintenance will be provided by a metal ground level access cover in a metal frame with locking bars.

6.3.24 It is expected that the pump will generate a noise level not exceeding 80dB(A), measured at a distance of 1 metre from the pump unit centreline in semi-reverberant conditions. There will be a control kiosk above ground, which will contain no noise-generating items.

6.3.25 The noise-sensitive receptors closest to the potential pumping station are Buskie Farm, which is approximately 150 metres away, and Fir Tree Farm, which is approximately 200 metres away.

6.3.26 The noise levels of the pump likely experienced at the closest of these properties will be no higher than 16dB $L_{Aeq,T}$, where T is any time period where the pump is in operation. This is based on the separation distance of 150 metres, and the reduction of noise from the pump's below ground, sealed location.

6.3.27 A noise level of 16dB(A) will not be audible at the closest residential properties and no adverse impact is expected. There will be a negligible effect, which is **not significant**. The pump noise level will be below the LOAEL for operational mechanical services, as set out in Table 11.14 in **Volume 2 Chapter 11** of the **ES** (Doc Ref. 6.3) [APP-202].

f) Updated assessment – Reduction in HGV movements (Changes 1 and 2)

6.3.28 This section considers the potential changes in the noise effects that are expected from reduced HGV movements associated with the potential changes to increase rail movements (**Change 1**) and the proposed additional temporary BLF (**Change 2**), as described within **Chapter 2** of the **ES Addendum** and detailed in the update of the **Freight Management Strategy** (Doc Ref. 8.18). The proposed changes would lead to a reduction in the number of HGVs on the road network by up to 150 HGVs per day at the peak of construction. This equates to a reduction of up 300 daily HGV movements that would not occur as a result of the proposed changes to rail and marine capacity explained in the update to the **Freight Management Strategy** (Doc Ref 8.18).

6.3.29 The results of the revised road traffic noise calculations as a result of the proposed changes explained in the freight management strategy are presented in detail in **Volume 3, Appendix 6.3.C** of this **ES Addendum**. **Appendix 6.3.C** contains new road traffic noise level predictions for the Sizewell Link Road for the 2028 (typical), 2028 (busiest) scenarios, taking account of the reduction in HGV numbers. These new values are presented with the corrected and updated road traffic noise level predictions from **Appendix 6.3.B**, which represent the road traffic noise level outcomes for the Application.

6.3.30 The locations and situations in which a change in assessment outcome is predicted are summarised in **Table 6.4**. Where the change results in an improvement in the category of effect, these are marked in green. Where the change results in a worsening in the category of effect, these are marked in orange.

Table 6.4: Changes to road traffic noise assessment outcomes for Sizewell Link Road resulting from updates to Freight Management Strategy

Period	Receptor		Effect		Change in Significance
			Refinements to the traffic model – predicted levels	Updated Freight Management Strategy - Predicted Levels	
2028 Typical Day	33	Rookery Farm	Major adverse, significant	Moderate adverse, significant	No Change
	35	Town Farm	Moderate adverse, significant	Minor adverse, not significant	Significant to **Not Significant**
	38	South of Theberton Grange	Major adverse, significant	Moderate adverse, significant	No Change
2028 Typical Night	34	Keepers Cottage	Major adverse, significant	Moderate adverse, significant	No Change
2028 Busiest Day	2	Buskie Farm	Moderate adverse, significant	Minor adverse, not significant	Significant to **Not Significant**
	4	Norwood House	Minor adverse, not significant	Negligible, not significant	No Change
	10	Valley Farm	Moderate beneficial, significant	Major beneficial, significant	No Change
	11	Annesons Cottage	Negligible, not significant	Minor beneficial, significant	No Change
	22	Annesons Corner	Minor beneficial, not significant	Moderate beneficial, not significant	Not Significant to **Significant**
	38	South of Theberton Grange	Major adverse, significant	Moderate adverse, significant	No Change
	42	Rose Farm	Major adverse, significant	Moderate adverse, significant	No Change

6.3.31 Overall, the changes are beneficial. The significance category of the predicted effects are predicted to change at three receptors as a result of the changes explained in the updated Freight Management Strategy, where the beneficial change would become a **significant** one where previously it was a non-significant benefit, or where significant adverse effects become **not significant** adverse effects. The effect categories are also predicted to reduce at eight further receptors, although without changing the significance of those effects.

6.3.32 Although the significance of effect is not predicted to change at other receptors, all of the changes in traffic noise are either beneficial, i.e. a smaller increase in traffic noise or a greater reduction in traffic noise, or there is expected to be no change, relative to the outcomes that result from the corrected and updated values, as set out in **Appendix 6.3.B** of this **ES Addendum**.

6.3.33 There are no other changes to the noise and vibration assessment arising from changes in the road traffic noise from the Sizewell link road.

6.4 Air quality

a) Introduction

6.4.1 This section provides an addendum to the air quality assessment at the Sizewell link road site with reference to the following documents submitted with the Application:

- **Volume 6, Chapter 5** of the **ES** (Doc Ref. 6.7) [APP-454]; and
- **Volume 6, Chapter 5** of the **ES** Air Quality **Figure 5.1** (Doc Ref. 6.7 [APP-456].

6.4.2 This section presents Additional Information that has been gathered since the Application was made, and an assessment of the potential air quality effects from the proposed changes, in particular the reduction in HGV movements as a result of the potential increase in rail movements (**Change 1**) and the proposed additional temporary BLF (**Change 2**).

6.4.3 The air quality assessment presented within this section considers the air quality impacts from assessment using the Additional Information presented below, and the air quality impacts associated with the relevant proposed changes.

6.4.4 This section is supported by the following appendices in **Volume 3** of this **ES Addendum**:

- **Volume 3, Appendix 6.4.A**, which presents the modelled air quality current and future year baselines in the air quality assessment;
- **Volume 3, Appendix 6.4.B**, which presents receptors with a change in magnitude of change descriptors in the air quality assessment; and
- **Volume 3, Appendix 2.7.C**, which presents the updated transport emissions assessment using the Additional Information and the assessment of transport emissions associated with the proposed design changes.

b) Relevant Additional Information

6.4.5 Additional Information is presented in this chapter on further air quality transport emissions modelling that has been undertaken to include the following:

- Refined traffic representative estimates of the 24-hour Annual Average Daily Traffic (AADT) (refer to **Transport Assessment Addendum** for further information (Doc Ref. 8.5(A) Ad));
- Emissions Factors Toolkit (EFT) version 10.1 (Ref.1);
- Defra's projected 2018-based Background Pollutant Concentration Maps (Ref. 2); and
- NO_x to NO_2 conversion tool v8.1 (Ref. 3).

c) Relevant changes

6.4.6 Relevant changes for the assessment of effects on air quality at the Sizewell link road include the reduced HGV movements during construction of Sizewell C with the potential changes to increase rail movements (**Change 1**) and the proposed additional temporary BLF (**Change 2**), as described within **Chapter 2** of the **ES Addendum**.

6.4.7 As referenced within **section 6.2** of this chapter, the revisions to the site boundary of the Sizewell link road (part of **Change 12**) do not change the assessment of effects on air quality and, therefore, have not been considered further.

d) Updated assessment – Additional Information

6.4.8 The traffic data for the Sizewell C Project has been updated with the refinements to the strategic traffic modelling as detailed in the **Transport Assessment Addendum** (Doc Ref. 8.5(A) Ad).

6.4.9 The refined traffic flows result in a change in modelled pollutant concentrations at receptors within the study area of the Sizewell link road, from the results presented in **Volume 6, Chapter 5** of the **ES** (Doc Ref. 6.7) [APP-454]. Furthermore, Defra have since published the updated EFT version 10.1 (Ref. 1), updated background pollutant concentration maps (Ref. 2), and an updated version of the NO_X to NO_2 conversion tool v8.1 (Ref. 3). Therefore, a revised air quality assessment of traffic emissions has been undertaken with the full results presented within **Volume 3, Appendix 2.7.C** of this **ES Addendum**. A summary of these results within the study area of the Sizewell link road is included within this section.

6.4.10 The Additional Information does not change the legislation, policy and guidance, the methodology or other assessments for air quality as described in **Volume 6, Chapter 5** of the **ES** [APP-454], with the exception of the updates made to the transport emissions modelling to take into account the latest Defra EFT version 10.1 and the NO_x to NO_2 conversion tool v8.1.

d) ii) Baseline

6.4.11 This section presents a description of the updated baseline environment characteristics within the site and the surrounding area. The site and receptors in the study area are presented in **Figure 5.1** of **Volume 6** in the **ES** (Doc Ref. 6.7) [APP-456].

d) ii) a) Current baseline

6.4.12 NO_2 and particulate matter (PM_{10} and $PM_{2.5}$) 2018 background concentrations within the site are projected to be between 6.9 and 7.3µg/m^3 for NO_2, between 14.4 and 16.2µg/m^3 for PM_{10} and between 8.9 and 9.4µg/m^3 for $PM_{2.5}$, according to the recently published Defra Background Concentration Maps (Ref. 2). The backgrounds for the current baseline are broadly in line with the background values set out within **Volume 6, Chapter 5** of the **ES** (Doc Ref. 6.7) [APP-454].

6.4.13 The overall predicted baseline concentrations, including nearby road traffic contributions range from 6.8 to 11.4µg/m^3 for NO_2, 14.9 to 16.8µg/m^3 for PM_{10}, and 9.1 to 9.8µg/m^3 for $PM_{2.5}$ at sensitive receptors near the site. These values are broadly in line with the baseline assessment presented within **Volume 6, Chapter 5** of the **ES** (Doc Ref. 6.7) [APP-454], albeit the updated baseline NO_2 values are slightly reduced (by up to 1.9µg/m^3), PM_{10} values are slightly increased (by up to 0.4µg/m^3) and $PM_{2.5}$ are the same or slightly lower (by up to 0.2µg/m^3), with the exception of a slight increase (0.1µg/m^3) at receptors LE4 and LE27. Further details on the modelled 2018 baseline pollutant concentrations at receptors can be found in **Volume 3, Appendix 6.4.A** and **Volume 3, Appendix 2.7.C** of the **ES Addendum**.

d) ii) b) Future Baseline

6.4.14 NO_2 and particulate matter (PM_{10} and $PM_{2.5}$) 2023 background concentrations within the site are projected to be between 5.9 and 6.1µg/m^3 for NO_2, between 13.4 and 15.2µg/m^3 for PM_{10} and between 8.1 and 8.6µg/m^3 for $PM_{2.5}$, presenting a reduction in all three pollutants from the current baseline according to recently published Defra Background Concentration Maps (Ref. 2).

6.4.15 NO_2 and particulate matter (PM_{10} and $PM_{2.5}$) 2028 background concentrations within the site are projected to be between 5.3 and 5.5µg/m^3 for NO_2, between 13.1 and 14.8µg/m^3 for PM_{10} and between 7.8 and 8.3µg/m^3 for $PM_{2.5}$, presenting a reduction in all three pollutants from the current baseline (Ref. 2).

6.4.16 NO_2 and particulate matter (PM_{10} and $PM_{2.5}$) 2030[1] background concentrations within the site are projected to be between 5.1 and 5.3µg/m^3 for NO_2, between 13,1 and 14.9µg/m^3 for PM_{10} and between 7.9 and 8.3µg/m^3 for $PM_{2.5}$, presenting a reduction in all three pollutants from the current baseline (Ref. 2).

6.4.17 The backgrounds for the future baselines are broadly in line with the background values set out within **Volume 6, Chapter 5** of the **ES** (Doc Ref. 6.7) [APP-454]

6.4.18 The future baseline pollutant concentrations at nearby sensitive receptors in 2023 range from 5.8 to 8.6µg/m^3 for NO_2, 13.9 to 15.7µg/m^3 for PM_{10}, and 8.2 to 8.9µg/m^3 for $PM_{2.5}$. The future baseline pollutant concentrations at nearby sensitive receptors in 2028 range from 5.2 to 6.9µg/m^3 for NO_2, 13.9 to 15.7µg/m^3 for PM_{10}, and 8.2 to 8.9µg/m^3 for $PM_{2.5}$. The future baseline pollutant concentrations at nearby sensitive receptors in 2034[2] range from 5.2 to 6.5µg/m^3 for NO_2, 13.6 to 15.4µg/m^3 for PM_{10}, and 8.0 to 8.7µg/m^3 for $PM_{2.5}$. The values are broadly in line with the baseline assessment presented within **Volume 6, Chapter 5** of the **ES** (Doc Ref. 6.7) [APP-454], albeit the updated baseline NO_2 values are slightly reduced (by up to 1.6µg/m^3 in 2023 and 2028, and 1.4µg/m^3 in 2034), PM_{10} values are the same or slightly increased (by up to 0.3µg/m^3 in 2023 and 2034, and 0.2µg/m^3 in 2028) and $PM_{2.5}$ are the same or slightly lower (by up to 0.4µg/m^3 in 2023, 2028 and 2034). Further details of modelled pollutant concentrations for the years 2023, 2028 and 2034 can be found in **Volume 3, Appendix 6.4.A** and **Volume 3 Appendix 2.7.C** of the **ES Addendum**.

[1] Defra backgrounds used are projected from a 2018 reference year and the furthest projected is 2030.
[2] Predicted concentrations (modelled) are predicted for the year 2034 based on traffic flows for this year.

d) ii) c) Assessment

6.4.19 Details on modelled pollutant concentrations for the year 2023 (assumed peak year of construction of the Sizewell link road), 2028 (assumed peak year of operation of the Sizewell link road during peak construction year of the main development site) and 2034 (assumed operational year of the Sizewell link road and Sizewell C power station) can be found in **Volume 3, Appendix 2.7.C** of the **ES Addendum**. The updated modelling using the Additional Information (detailed in **section 6.4 b)**) has resulted in changes to the magnitude of change descriptor and some receptors, but there is a negligible effect in respect of all receptors and the overall effect will be **not significant**, as described in **Volume 6, Chapter 5** of the **ES** (Doc Ref. 6.7) [APP-454]. With no change to the conclusion of the assessment, no further mitigation is required..

6.4.20 Receptors with a change in magnitude of change descriptors are presented in **Volume 3, Appendix 6.4.B**.

e) Updated assessment – Reduction in HGV movements (Changes 1 and 2)

6.4.21 The updated modelling of transport emissions with the reduced HGV movements associated with the proposed changes including the potential increase rail movements (**Change 1**) and the proposed additional temporary BLF (**Change 2**) is presented in **Volume 3, Appendix 2.7.C** to this **ES Addendum**.

6.4.22 The proposed changes do not affect the existing and future air quality baseline, as described in **Volume 6, Chapter 5** of the **ES** (Doc Ref. 6.7) [APP-454]. The magnitude of change in NO_2, PM_{10} and $PM_{2.5}$ concentrations during 2028 average day or busiest day would be the same as presented for the updated assessment with Additional Information above and in **Volume 3, Appendix 2.7.C** of the **ES Addendum**, with the exception of YX9 which would have a slight improvement to give a Very Low magnitude of change for 2028 busiest day. There is a negligible effect in respect of all receptors and the overall effect would be **not significant**, as described in **Volume 6, Chapter 5** of the **ES** (Doc Ref. 6.7) [APP-454]. No further mitigation is required.

6.5 Landscape and visual

a) Introduction

6.5.1 This section provides an addendum to landscape and visual assessment at the Sizewell link road site with reference to the following documents submitted with the Application:

- **Volume 6, Chapter 6** of the **ES** (Doc Ref. 6.7) [APP-457].

6.5.2 This section presents Additional Information relating temporary contractor compounds, and an assessment of the potential landscape and visual effects from the proposed changes (described in **section 6.2**).

b) Relevant Additional Information

6.5.3 Relevant Additional Information for the assessment of landscape and visual effects at the Sizewell link road site includes Additional Information on the location of two temporary contractor compounds.

c) Relevant changes

6.5.4 Relevant changes for the assessment of landscape and visual effects at the Sizewell link road site include changes to the site boundary as a result of:

- highway changes including alteration of PRoW;
- drainage changes;
- changes as a result of topographical survey information; and
- reductions in permanent land take.

d) Updated assessment – Additional Information

d) i) Addition of indicative temporary contractor compound areas

6.5.5 The provision of additional temporary contractor compounds at Pretty Road and at the eastern end of Sizewell link road would introduce additional construction activity in the vicinity of them. However, within **Volume 6, Chapter 6** of the **ES** (Doc Ref. 6.7) [APP-457], effects on landscape character within the Rolling Estate Claylands Landscape Character Type (LCT) are assessed to be large scale in the area of the proposed temporary contractor compound south east of Theberton due to the construction of the proposed Sizewell link road and the additional compound would not be sufficient to increase the extent of large scale

effects or increase the overall significance of effects. Effects on the Rolling Estate Claylands LCT during construction would remain of medium magnitude and moderate adverse on this LCT which is considered to be **not significant**.

6.5.6 Similarly, effects on the Ancient Estate Claylands LCT during construction as a result of the additional temporary contractor compound at Pretty Road would be within an area already assessed to experience large scale effects as a result of the construction of the Pretty Road bridge. Effects on the Ancient Estate Claylands LCT would remain of medium magnitude, and moderate adverse, which are considered to be **not significant**.

6.5.7 The temporary contractor compounds would also be visible within visual receptor groups 5, 7 and 8. Visual receptor group 5 includes users of public footpaths (E-396/015/0 and E-515/005/0), local residents and motorists on local roads between the B1122 (Yoxford Road/Leiston Road) to the north-east, Pretty Road to the south, Theberton Woods to the south-west and Hawthorn Road to the to the north-west. Users of rights of way and local roads within this visual receptor group are assessed within **Volume 6, Chapter 6** of the **ES** (Doc Ref. 6.7) [APP-457] to experience large scale effects in the vicinity of the proposed temporary contractor compound at Pretty Road and effects would continue to be of medium magnitude, and major-moderate adverse on this receptor group, which are considered to be **significant**. Therefore, the overall effect has not changed.

6.5.8 Visual receptor group 7 includes users of public footpaths (E-515/003/0, E-515/004/0 and E-515/007/0), local residents (including at Theberton) and motorists on local roads between Pretty Road to the to the north, the B1122 (Leiston Road) and Theberton to the east, Moat Road to the south and Theberton Woods to the west. Users of rights of way and local roads within this visual receptor group are assessed within **Volume 6, Chapter 6** of the **ES** (Doc Ref. 6.7) [APP-457] to experience large scale effects in the vicinity of the proposed temporary contractor compound south east of Theberton as a result of the construction of the Sizewell link road and associated rights of way diversions. Effects would continue to be of medium magnitude, and would result in major-moderate adverse effects on this receptor group, which are considered to be **significant**. Therefore, the overall effect has not changed.

6.5.9 Visual receptor group 8 includes users of public footpaths (E-515/012/0 and E-515/013/0), local residents and motorists on local roads between the B1122 (Yoxford Road/Leiston Road) to the east, the extent of the ZVI to the south-west and Moat Road to the to the north-west. Users of rights of way and local roads within this visual receptor group are assessed within **Volume 6, Chapter 6** of the **ES** (Doc Ref. 6.7) [APP-457] to experience large scale effects in the vicinity of the proposed temporary

contractor compound south east of Theberton where there would be direct effects from construction activity. The addition of the construction compound would not increase the extent of large scale effects, and effects would continue to be of medium-low magnitude, and would result in moderate adverse effects on this receptor group, which are considered to be **not significant**.

e) Updated assessment – Extensions and reductions of the Order Limits for works on the Sizewell link road, as well as minor changes to the public right of way proposals (Change 12)

6.5.10 The proposed changes to the site boundary (**Change 12**) as a result of highway changes including alteration of PRoW; drainage changes; and changes as a result of topographical survey information would extend the study area by a few metres around each proposed change, up to a maximum of approximately 200m to the south as a result of change SLR 1/4. Other increases in the study area would predominantly be to the north, north-east and south and largely correspond to the areas where the red line increases to accommodate visibility splays. However, this would not extend the study area into any landscape character types not already assessed within **Volume 6, Chapter 6** of the **ES** [APP-457]. There would continue to be large scale localised effects on landscape character within the following Landscape Character Types (LCTs) during construction and operation:

- Ancient Estate Claylands LCT; and
- Rolling Estate Claylands LCT.

6.5.11 For both LCTs, these would be no change to the overall assessment of effects from the minor changes to the red line boundary, including as a result of additional vegetation removal within the red line. The effects would continue to be as assessed within **Volume 6, Chapter 6** of the **ES** [APP-457], moderate adverse effects, which are considered to be **not significant**.

6.5.12 In visual terms, the proposed changes to the site boundary would result in the proposed Sizewell link road extending closer to some visual receptors. The proposed changes would extend the study area by a few metres around each proposed change. This would not result in any change to the extent of the Zone of Theoretical Visibility (ZTV) presented within **Volume 6, Chapter 6** of the **ES** [APP-457], as this is largely determined by the visibility of the proposed lighting columns.

6.5.13 There would be minor extensions to the zone of visual influence (ZVI), the actual visibility of the proposed Sizewell link road based on site observations, as a result of proposed changes SLR3/1, SLR3/2 and

SLR3/3 around the proposed Middleton Moor Link Roundabout. These proposed changes would extend beyond vegetation features such as hedgerows and woodland that previously provided containment to views in these areas. However, the proposed changes to allow for visibility splays and for the farm access track to be realigned, including vegetation removal, would be in the context of the construction and operation of the proposed roundabout. This would not lead to an overall increase in visual effects for visual receptor group 3 and effects would remain as presented within **Volume 6, Chapter 6** of the **ES** [APP-457]. During both construction and in the medium-term during operation, these effects were assessed, and will remain, major-moderate adverse, which are considered to be **significant**. As proposed planting along the route matures, effects would reduce to medium-low magnitude, as assessed in the **ES**, and would result in moderate adverse effects, which are considered to be **not significant.**

6.5.14 The effects of the other relevant aspects of the proposed changes would be as described in the following paragraphs for each visual receptor group.

6.5.15 *Group 1 – Users of public footpaths (E-344/013/0, E-344/014/0, E-584/016/A and E-584/019/0), local residents and motorists on local roads between the boundary of Rookery Park to the north, the East Suffolk Line to the east, Town Farm Lane to the south and the A12 to the west.* The additional attenuation basin at SLR1/3 would result in increased visibility of construction for users of the adjacent footpath E-344/014/0 and of the basin itself during operation. In addition, the potential routes to discharge surface water flows to local watercourses at SLR1/4 and SLR2/5, with associated loss of small areas of vegetation, would also be visible within this visual receptor group during construction, potentially from footpaths E-344/013/0 and E-584/016/A. For the proposed attenuation basin, planting will be included to minimise visual impacts over time, as shown on **Figure 6.2.3** in **Volume 2** of this **ES Addendum**. For the surface water discharge routes, the surrounding area would be reinstated following construction. All of these changes would be seen in the context of the construction and operation of other elements of Sizewell link road and as such there is no change to the assessment of effects presented within **Volume 6, Chapter 6** of the **ES** [APP-457]. During both construction and in the medium-term during operation, these effects were assessed, and will remain, major-moderate to moderate adverse, which are considered to be **significant**. As proposed planting along the route matures, effects would reduce to medium-low magnitude, as assessed in the **ES**, and would result in moderate adverse effects, which are considered to be **not significant.**

6.5.16 *Group 2 - Users of public footpaths (E-344/012/0 and E-344/015/0) and local residents south of Town Farm Lane for one field (between The Red House Farm and Town Farm) and west of the A12 for one field (between Kelsale Lodge and Long Wood).* None of the proposed changes would increase visibility of the proposed development during construction or operation within this visual receptor group. As such there is no change to the assessment of effects presented within **Volume 6, Chapter 6** of the **ES** [APP-457]. During construction, these effects were assessed, and will remain, slight adverse, which are considered to be **not significant**. During operation, effects will continue to be moderate adverse effects, which are considered to be **not significant**. As proposed planting along the route matures, effects would reduce to low magnitude, as assessed in the **ES**, and would result in slight adverse effects, which are considered to be **not significant.**

6.5.17 *Group 3 - Users of public footpaths (E-396/014/0 and E-584/016/0), local residents (including at Middleton Moor), users of open access land/registered common land at Middleton Moor and motorists on local roads between the B1122 (Yoxford Road/Middleton Road) to the north, Fordley Road to the east, vegetation around Fordley Hall to the south and the East Suffolk line to the west.* Within the vicinity of this visual receptor group, other than the changes referred to in relation to extension of the ZVI, none of the proposed changes are likely to be more visible during construction and operation than those assessed in **Volume 6, Chapter 6** of the **ES** [APP-457]. During both construction and in the medium-term during operation, these effects were assessed, and will remain, major-moderate adverse, which are considered to be **significant**. As proposed planting along the route matures, effects would reduce to medium-low magnitude, as assessed in the **ES**, and would result in moderate adverse effects, which are considered to be **not significant.**

6.5.18 *Group 4 - Users of public footpaths (E-396/017/0, E-396/018/0, E-396/019/0, E-396/020/0 and E-396/023/0), local residents and motorists on local roads between the B1122 (Yoxford Road) to the north, Hawthorn Road to the east, vegetation around Parkway Farm to the south and Fordley Road to the to the west.* The additional attenuation basins at SLR3/9 and SLR3/6 would result in increased visibility of construction for users of the nearby or adjacent footpath E-396/017/0 and of the basins themselves during operation. Planting would be included to minimise visual impacts over time, as shown on **Figure 6.2.6** in **Volume 2** of this **ES Addendum**. In addition, the alterations to the proposed Hawthorn Road junction would slightly alter the location of the proposed junction and the route of the right of way diversion, but these would remain in the general vicinity of the locations identified in the **ES**. All of these changes, including where small amounts of additional vegetation loss are required, would be seen in the context of the construction and operation of other

elements of Sizewell link road and as such there is no change to the assessment of effects presented within **Volume 6, Chapter 6** of the **ES** [APP-457]. During both construction and in the medium-term during operation, these effects were assessed, and will remain, major-moderate adverse, which are considered to be **significant**. As proposed planting along the route matures, effects would reduce to medium-low magnitude, as assessed in the **ES**, and would result in moderate adverse effects, which are considered to be **not significant.**

6.5.19 *Group 5 - Users of public footpaths (E-396/015/0 and E-515/005/0), local residents and motorists on local roads between the B1122 (Yoxford Road/Leiston Road) to the north-east, Pretty Road to the south, Theberton Woods to the south-west and Hawthorn Road to the to the north-west.* The additional attenuation basins at SLR4/1 and SLR4/7 would bring the proposed development closer to individual properties at Trust Farm and Annesons Corner respectively. Planting would be included to minimise visual impacts over time, as shown on **Figure 6.2.6** in **Volume 2** of this **ES Addendum**. In addition, the additional attenuation basins proposed to either side of footpath E-396/015/0 near Theberton Hall would reduce the area available for woodland planting. As shown on **Figure 6.2.7** in **Volume 2** of this **ES Addendum**, it would still be possible to implement woodland planting around the basins. In addition, the alterations to the proposed Hawthorn Road junction would slightly alter the location of the proposed junction and the route of the right of way diversion, but these would remain in the general vicinity of the locations identified in the **ES**. All of these changes, including where small amounts of additional vegetation loss are required, would be seen in the context of the construction and operation of other elements of Sizewell link road and as such there is no change to the assessment of effects presented within **Volume 6, Chapter 6** of the **ES** [APP-457]. During both construction and operation, these effects were assessed, and will remain, major-moderate adverse, which are considered to be **significant**.

6.5.20 *Group 6 - Users of public footpaths (E-396/006/0, E-396/016/0, E-515/006/0 and E-515/016/0), local residents and motorists on local roads between the extent of the ZVI to the north-east and the B1122 (Yoxford Road/Leiston Road) to the south-west.* None of the proposed changes would increase visibility of the proposed development during construction or operation within this visual receptor group. As such there is no change to the assessment of effects presented within **Volume 6, Chapter 6** of the **ES** [APP-457]. During both construction and operation, these effects were assessed, and will remain, moderate adverse, which are considered to be **not significant**. As proposed planting along the route matures, effects would reduce to medium-low magnitude, as assessed in the **ES**, and would result in moderate adverse effects, which are considered to be **not significant.**

6.5.21 *Group 7 - Users of public footpaths (E-515/003/0, E-515/004/0 and E-515/007/0), local residents (including at Theberton) and motorists on local roads between Pretty Road to the to the north, the B1122 (Leiston Road) and Theberton to the east, Moat Road to the south and Theberton Woods to the west.* The additional attenuation basins at SLR6/1 and within the existing site boundary but on the opposite side of side of footpath E-515/007/0 would bring the proposed development either side of the footpath for a greater stretch and also closer to the village of Theberton. Planting will be included to minimise visual impacts over time, as shown on **Figure 6.2.7** in **Volume 2** of this **ES Addendum**. All of these changes, including where small amounts of additional vegetation loss are required, would be seen in the context of the construction and operation of other elements of Sizewell link road and as such there is no change to the assessment of effects presented within **Volume 6, Chapter 6** of the **ES** [APP-457]. During both construction and in the medium-term during operation, these effects were assessed, and will remain, major-moderate adverse, which are considered to be **significant**. As proposed planting along the route matures, effects would reduce to medium-low magnitude, as assessed in the **ES**, and would result in moderate adverse effects, which are considered to be **not significant.**

6.5.22 *Group 8 - Users of public footpaths (E-515/012/0 and E-515/013/0), local residents and motorists on local roads between the B1122 (Yoxford Road/Leiston Road) to the east, the extent of the ZVI to the south-west and Moat Road to the to the north-west.* The extension of the Application site boundary at SLR6/2 to accommodate visibility splays would require the removal of vegetation. As shown on **Figure 6.2.8** in **Volume 2** of this **ES Addendum**, replacement vegetation would be provided outside the visibility splay. All of the changes within the vicinity of this visual receptor group would be seen in the context of the construction and operation of other elements of Sizewell link road and as such there is no change to the assessment of effects presented within **Volume 6, Chapter 6** of the **ES** [APP-457]. During both construction and in the medium-term during operation, these effects were assessed, and will remain, moderate adverse, which are considered to be **not significant**. As proposed planting along the route matures, effects would reduce to medium-low magnitude, as assessed in the **ES**, and would result in slight adverse effects, which are considered to be **not significant.**

6.5.23 The proposed changes would continue to be experienced as a very brief part of a longer journey along both the A12 and the East Suffolk line. There is no change to the assessment of effects on these routes as presented within **Volume 6, Chapter 6** of the **ES** [APP-457], either during construction or operation.

6.5.24 The proposed changes to the site boundary do not reduce the separation between the site and the Suffolk Coast and Heaths AONB. As such, there is no change to the assessment of effects on the AONB presented within **Volume 6, Chapter 6** of the **ES** [APP-457], either during construction or operation.

6.6 Terrestrial ecology and ornithology

a) Introduction

6.6.1 This section provides an addendum to the terrestrial ecology and ornithology assessment at the Sizewell link road site with reference to the following documents submitted with the Application:

- **Volume 6, Chapter 7** of the **ES** (Doc Ref. 6.7) [APP-461]; and
- **Volume 6, Appendix 7A** of the **ES** (Doc Ref. 6.7) [APP-462].

6.6.2 This section presents Additional Information that has been gathered since the Application was made and the proposed changes described within **section 6.2** of this chapter.

b) Relevant Additional Information

6.6.3 Relevant Additional Information for the assessment of effects on terrestrial ecology and ornithology at the Sizewell link road site includes the 2020 Ecology Surveys Report – Sizewell Link Road (submitted December 2020 [**AS-036**]).

6.6.4 An extended Phase 1 habitat survey and protected species survey and desk study was undertaken of the majority of land associated with the proposed Sizewell Link Road (hereafter referred to as the 'Sizewell link road site') in 2019, the results of which were presented in **Volume 6, Chapter 7** and **Appendix 7A** of the **ES** (Doc Ref. 6.7) [APP-461 and APP-462 respectively]. In 2020 an extended Phase 1 habitat and protected species survey was undertaken of land surrounding the B1122 at Theberton, that had not been surveyed during 2019 due to access restrictions.

6.6.5 An **OLEMP** for the Sizewell link road site has also been submitted and is provided in **Book 8** (refer to Doc Ref. 8.3B). The **OLEMP** sets out the objectives and general principles for the establishment and longer-term management of the landscape, and ecological mitigation proposals identified for the area within the Sizewell link road site, as set out in **Volume 6, Chapter 7** of the **ES** (Doc Ref. 6.7) [APP-461], following construction of Sizewell link road.

c) Relevant changes

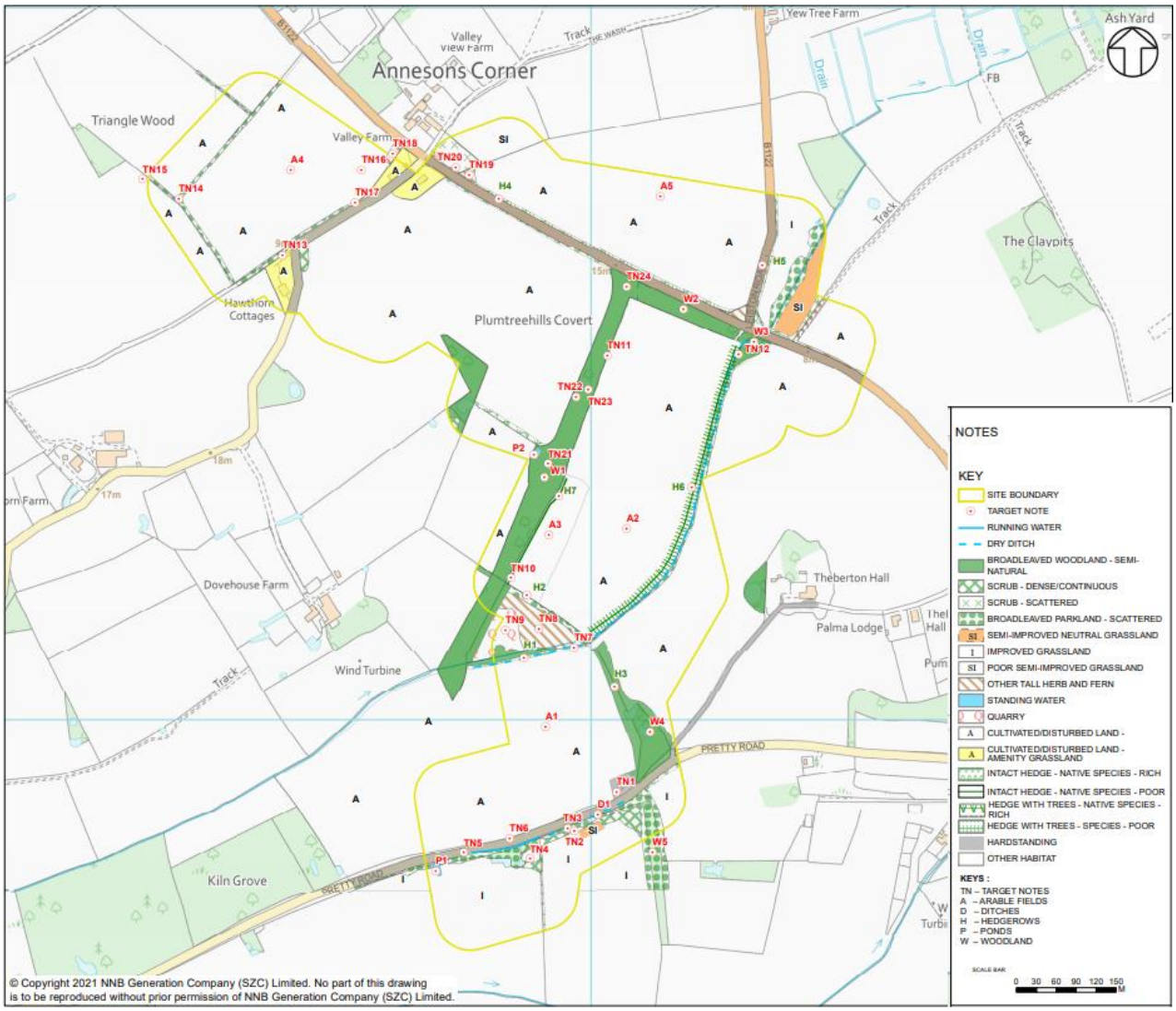
6.6.6 In addition to the further survey information available for the south eastern extent of the Sizewell link road site, a number of design changes are proposed for the Sizewell link road following the submission of the application for development consent. These are described in detail in **section 6.2.** The assessment has considered the effects of these proposed changes for terrestrial ecology and ornithology in **section 6.6 d)**).

d) Updated assessment – Additional Information

6.6.7 In 2020 an extended Phase 1 habitat and protected species survey was undertaken of land surrounding the B1122 at Theberton. The location of the survey area is presented in Plate 1.

6.6.8 The area surveyed comprised 51.7ha of land and surveys included a Habitat Suitability Index (HSI) assessments on waterbodies for great crested newts as well as bat tree assessments This survey identified several habitats present within and adjacent to the site boundary including broadleaved semi-natural woodland, arable fields, hedgerows, grassland, scattered trees, scrub, ruderal vegetation, a quarry, waterbodies and areas of hard standing. A large dense patch of the non-native invasive species Japanese Knotweed (*Fallopia japonica*) was recorded within the site boundary.

Plate 6.1: Sizewell Link Road 2020 Additional Survey Area



6.6.9 The area surveyed is known to support a diverse range of invertebrate species, a range of bird species including barn owl (*Tyto alba*), lapwing (*Vanellus vanellus*) and blackcap (*Sylvia atricapilla*) and a range of mammal species. The area surveyed has potential to support amphibians, reptiles, breeding and wintering birds, roosting bats and badgers and other mammal species.

6.6.10 The Important Ecological Features (IEFs) taken through to detailed assessment in the **ES** included great crested newts (*Triturus cristatus*), breeding birds and bats. The habitat types of ponds, hedgerows and lowland mixed deciduous woodland, were also identified as IEFs and scoped in.

6.6.11 The following species were scoped out of the original ES assessment based upon the targeted survey findings or the valuation level being considered to be lower than Local level but were still considered as part of the 2020 survey works for the south eastern extent of the site where conditions had not been previously assessed. These species (which have been scoped out of the assessment to date) include, other amphibians, reptiles, badger (*Meles meles*), water vole (*Arvicola amphibius*), otter (*Lutra lutra*), brown hare (*Lepus europaeus*), hedgehog (*Erinaceus europaeus*), water shrew (*Neomys fodiens*) and harvest mouse (*Micromys minutus*). In addition, designated sites arable habitats and invertebrate assemblages were also scoped out.

6.6.12 Whilst the habitats and species recorded were similar to those in adjacent parts of the Sizewell link road corridor in previous surveys, a large dense patch of the non-native invasive species Japanese Knotweed (*Fallopia japonica*) was recorded within this survey area. This habitat had not been recorded along the previously surveyed sections of the corridor and is only considered to be present at the far eastern extent.

6.6.13 The quarry habitat identified was not considered to be of nature conservation value or a level of importance resulting in the habitat type being scoped into this assessment as an IEF. In addition, whilst Japanese knotweed has not previously been recorded within the scheme corridor, this invasive species does not represent an IEF but will be recognised as a constraint where working. Tertiary mitigation measures, as set out in the **CoCP** (refer to Doc Ref 8.11 (A)), would be implemented to avoid the potential spread of non-native species during construction, and any invasive species will be removed and disposed of as required in accordance with relevant legislation and Defra and Environment Agency best practice guidance.

6.6.14 Whilst the south eastern extent of the Sizewell Link Road corridor had not previously been subject to detailed surveys, the 2020 survey findings confirm that the IEFs considered as part of the original assessment are also relevant and applicable to this section of the scheme corridor. The 2020 surveys did not detect any new species or habitats which might require a new IEF to be proposed.

6.6.15 It is considered overall that the Additional Information presents no material change to the assessment presented within **Volume 6, Chapter 7** of the **ES** [APP-461].

e) Updated assessment – Extensions and reductions of the Order Limits for works on the Sizewell link road, as well as minor changes to the public right of way proposals (Change 12)

6.6.16 The design changes proposed at the Sizewell link road site have been reviewed against the baseline survey information as presented within the **Volume 6, Chapter 7, Appendix 7A** of the **ES** [APP-461] submitted with the application for development consent, updated by the 2020 survey data summarised above submitted in December 2020 [AS-036].

6.6.17 The proposed changes would result in the loss of short additional lengths of hedgerow and additional areas of arable fields (approximately 6ha).

6.6.18 Approximately 0.17ha of additional woodland would be permanently lost as a result of the proposed changes comprising 0.025ha of woodland at Bobbett's Wood (Change SLR2/5) as well as 0.1ha at Change SLR3/3, 0.003ha at Change SLR5/3 and 0.041ha at Change SLR5/4. The **ES** reported a total of 0.41ha which would be permanently lost and the proposed changes increase this to approximately 0.58ha.

6.6.19 The increase in land take present no material change to the assessment presented within **Volume 6 Chapter 7** of the **ES**, as set out in **section 6.6 c)** above, due to the small amount of additional woodland lost and the low ecological value of other additional habitats, such as arable fields.

The 2020 survey identified the invasive species Japanese Knotweed, which was not considered within **Volume 6, Appendix 7A** of the **ES** [APP-462]. Whilst this has not been previously recorded, it presents no material change to the assessment presented within **Volume 6, Chapter 7** of the **ES**, as set out in **section 6.6 c)** above, and would be managed through measures set out in the **CoCP**, to avoid the potential spread of non-native species during construction.

6.6.20 Overall it is considered that although there will be some relatively minor changes to the site boundary, taking account of the mitigation identified in the **Volume 6, Chapter 7**of the **ES** including the extensive planting of replacement woodland (a total of 13.1ha of woodland planting) as well as hedgerow habitats to compensate for habitat loss, and measures presented in the **CoCP**, the overall magnitude of impact and significance of effects would be the same as reported in the **ES** and would be unchanged by the proposed design changes.

6.7 Amenity and recreation

a) Introduction

6.7.1 This section provides an addendum to the amenity and recreation assessment at the Sizewell link road site with reference to the following documents submitted with the Application:

- **Volume 6, Chapter 8** of the **ES** (Doc Ref. 6.7) [APP-464]; and
- **Volume 6, Appendix 8A** of the **ES** (Doc Ref. 6.7) [APP–465].

6.7.2 This section presents Additional Information that has been gathered since the Application was made and is summarised below. The assessment also considers the potential effects on amenity and recreation as a result of the proposed changes described in **section 6.2**.

b) Relevant Additional Information

6.7.3 Relevant Additional Information for the assessment of amenity and recreation effects at the Sizewell link road site include:

- Additional Information on the location of two temporary contractor compound areas;
- minor corrections to access and rights of way plans submitted in November 2020 [AS-013];
- changes to road traffic noise predictions which were updated to include:
  - corrections to the road traffic noise calculations presented in **Volume 6, Chapter 4** of the **ES** (Doc Ref 6.7) [APP-451]; and
  - refinements to the strategic traffic model (refer to **Transport Assessment Addendum** (Doc Ref. 8.5(A) Ad) for further information) and associated air quality and noise modelling.
- refinements to the air quality modelling which was updated to account for new information published by Defra and updated traffic estimates from the strategic traffic model.

c) Relevant changes

6.7.4 Relevant proposed changes for the assessment of effects on amenity and recreation, for the Sizewell link road include:

- changes to the site boundary as a result of:

- highway changes (including amendments to PRoW);
- drainage changes;
- changes as a result of topographical survey information; and
- reductions in permanent land take.

- changes to HGV numbers as described within **Chapter 2** of this **ES Addendum**, and **Transport Assessment Addendum** (Doc Ref. 8.5(A) Ad) as a result of the potential changes to increase rail movements (**Change 1**) and the proposed additional temporary BLF (**Change 2**).

d) Updated assessment – Additional Information

d) i) Corrections to Access and Rights of Way Plans

6.7.5 **Access and Rights of Way plans** were submitted with the Application (Doc Ref. 2.4) [APP-013]. The corrections to the **Access and Rights of Way plans** submitted in November 2020 [AS-013] are considered to be minor comprising of formatting changes and thus do not change the assessment presented within **Volume 6, Chapter 8** of the **ES** [APP- 464].

d) ii) Addition of indicative temporary contractor compound area

6.7.6 The additional temporary compounds adjacent to Pretty Road and at the eastern end of Sizewell link road would lie within the area of the following PRoW grouped together and assessed at paragraphs 8.6.37 to 8.6.44 of **Volume 6, Chapter 8** of the ES [APP- 464]: Footpaths E-396/015/0, E-515/003/0, E-515/004/0, E-515/005/0 and E-515/007/0. Impacts on this group of footpaths were assessed as moderate adverse (**significant**) during construction at paragraph 8.6.44 of **Volume 6, Chapter 8** of the **ES** [APP- 464] due to temporary and permanent diversions, increases in traffic on the B1122 during the early years of construction, and changes to views and noise resulting from the construction activities.

6.7.7 The additional compound adjacent to Pretty Road would not directly affect any PRoW, but it is likely to be visible and audible from PRoW in close proximity to it including footpaths E-396/015/0/0, E-515/005/0 and potentially E-515/003/0. However, the changes would be relatively minor within the context of other construction activity affecting users of PRoW. The addition of this compound does not change the assessment during construction presented within **Volume 6, Chapter 8** of the **ES** [APP- 464]. The temporary construction compound would not be present during the operational phase and, as such, there would be no change to the assessment during operation presented within **Volume 6, Chapter 8** of the **ES** [APP- 464].

6.7.8 The additional temporary compound at the eastern end of Sizewell link road would not directly affect any PRoW, but is likely to be visible and audible from PRoW in close proximity to it including footpath E-515/007/0 to the west. However, the changes would be relatively minor within the context of other construction activity affecting users of PRoW. The addition of this compound does not change the assessment during construction presented within **Volume 6, Chapter 8** of the **ES** [APP- 464]. The temporary construction compound would not be present during the operational phase and, as such, there would be no change to the assessment during operation presented within **Volume 6, Chapter 8** of the **ES** [APP- 464].

d) iii) Revised traffic, noise and air quality modelling

6.7.9 **Volume 2, Chapter 10 Transport** of the **ES** (Doc Ref. 6.3) [APP-198] assessed a worst case of the Sizewell C busiest day for the peak of construction phase. The assessment of impacts on recreational receptors in **Volume 6, Chapter 8** of the **ES** [APP-464] is also based on the busiest day (i.e. worst case) traffic volumes. The **Transport Assessment Addendum** (Doc Ref. 8.5(A) Ad) has introduced an additional assessment scenario for the peak of construction phase – a typical day (with lower traffic levels than the busiest day). The new assessment for the typical day presented in the **Transport Assessment Addendum** (Doc Ref. 8.5(A) Ad) is not considered in this assessment on recreational receptors, and the assessment below presents the 'worst case' effects during the busiest day.

6.7.10 The locations of transport 'links' referred to below are shown on **Figure 10.3** of **Volume 2, Chapter 10** of the **ES** (Doc Ref. 6.3) [APP-198].

6.7.11 The **Transport Assessment Addendum** (Doc Ref. 8.5(A) Ad) confirms that the changes to the strategic traffic modelling do not change the effects on severance, pedestrian delay, amenity or fear and intimidation at the Sizewell link road during the construction or operational phases of the main development site. The exception is link 13b (B1122 east of Yoxford) which would be bypassed by Sizewell link road. Effects on amenity during the peak of construction (busiest day) at link 13b would reduce from moderate adverse assessed in **Volume 2, Chapter 10** of the **ES** (Doc Ref. 6.3) [APP-198] to minor adverse. Although this would provide improvements to the amenity of recreational users of the B1122 this would not change the assessment of effects on recreational receptors presented within **Volume 6, Chapter 8** of the **ES** (Doc Ref. 6.7) [APP- 464].

6.7.12 The changes to the strategic traffic modelling do not change the results of the sound tranquillity assessment presented in **Volume 6, Appendix 8A** of the **ES** (Doc Ref. 6.7) [APP – 465].

6.7.13 As identified in **section 6.3** of this chapter road traffic noise calculations presented in in **Volume 6, Chapter 4** of the **ES** (Doc Ref 6.7) [APP-451] have been corrected. The changes presented in **section 6.3** of this chapter do not change the assessment of effects presented within **Volume 6, Chapter 8** of the **ES** [APP- 464], or the tranquillity assessment presented in **Volume 6, Chapter 8, Appendix 8A** of the **ES** [APP-465]. The error found in the main road traffic noise calculations was not repeated in the tranquillity assessment; therefore no changes to the assessment are required.

6.7.14 **Section 6.4 Air quality** of this chapter identifies that the updated air quality modelling of the changes to the strategic traffic modelling do not change the overall effect of **not significant**, as described in **Volume 6, Chapter 5** of the **ES** (Doc Ref. 6.7) [APP-464]. Changes to air quality do not change the assessment of effects on recreational receptors presented within **Volume 6, Chapter 8** of the **ES** (Doc Ref. 6.7) [APP- 464].

6.7.15 The changes to the strategic traffic modelling do not therefore change the assessment of effects on recreational receptors presented within **Volume 6, Chapter 8** of the **ES** (Doc Ref. 6.7) [APP- 464].

e) Updated Assessment – Extensions and reductions of the Order Limits for works on the Sizewell link road, as well as minor changes to the public right of way proposals (Change 12)

6.7.16 Changes to the site boundary as a result of highway changes, drainage changes, as a result of topographical survey information and reductions in permanent land take would be very minor in the context of the construction and operation of other elements of Sizewell link road and as such there is no change to the assessment of effects presented within **Volume 6, Chapter 8** of the **ES** [APP- 464].

6.7.17 **Access and Rights of Way plans** were submitted with the Application (Doc Ref. 2.4) [APP-013], updated by corrections submitted in November 2020 Doc Ref. 2.4 (A)) [AS-013]. The majority of changes to the revised **Access and Rights of Way plans** as a result of the changes to highways brought forward as part of **Change 12** and shown in Doc Ref. 2.4(B) are considered to be minor and do not change the assessment presented within **Volume 6, Chapter 8** of the **ES** [APP- 464].

6.7.18 However, two changes are considered to be substantial and are discussed below.

6.7.19 The first is the proposed realignment of Hawthorn Road which leads to a change to the proposed new PRoW route which would be created once the Sizewell link road is operational. Instead of running east from the ends of stopped up Hawthorn Road to cross the link road at grade, it would run west to cross the link road at grade. This would increase the length of the new PRoW by approximately 60m compared to the length of the diversion proposed in the Application. This proposed PRoW lies within the following PRoW grouped together and assessed at paragraphs 8.6.106 to 8.6.117 of **Volume 6, Chapter 8** of the **ES** [APP- 464]: Footpaths E-396/017/0, E-396/020/0 and E-396/023/0. Impacts on this group of footpaths were assessed as moderate adverse (**significant**) during operation at paragraph 8.6.117 of **Volume 6, Chapter 8** of the **ES** [APP- 464] due to PRoW diversions, disturbance due to traffic movements where PRoW cross Sizewell link road at grade, and changes to views, noise and tranquillity. The proposed realignments of Hawthorn Road and the route of the new PRoW would be relatively minor within the context of the effects already assessed within the Application. This change does not change the assessment presented within **Volume 6, Chapter 8** of the **ES** [APP- 464].

6.7.20 The second is at Moat Road where an additional walking and cycling route is now proposed on the north side of the proposed Sizewell link road during the operational phase. This provides users of the PRoW with a more direct way of joining the new walking and cycling route and crossing the Sizewell link road from footpath E-515/007/0 to George Road (rather than users having to go to the B1122 junction to join the new walking and cycling route which is what was previously proposed in the Application). Paragraph 8.6.19 (fourth bullet) of **Volume 6, Chapter 8** of the **ES** [APP-464] describes that walkers would have had to travel an additional 510m compared to the existing route from footpath E-515/007/0 to George Road under the Application. This would now reduce to approximately an additional 320m under the proposed change. However, users would still have to walk further than the existing route and cross Sizewell link road at grade, and would still be affected by the presence of the new road and associated traffic, and changes to views, noise and tranquillity. This diversion forms part of the group of footpaths assessed under the heading Footpaths E-396/015/0, E-515/003/0, E-515/004/0, E-515/005/0 and E-515/007/0 at paragraphs 8.6.118 to 8.6.128 of **Volume 6, Chapter 8** of the **ES** [APP- 464]. Impacts on this group of footpaths were assessed as moderate adverse (**significant**) during operation at paragraph 8.6.128 of **Volume 6, Chapter 8** of the **ES** [APP- 464]. The proposed improvement would be relatively minor within the context of the effects already assessed within the Application, and this change does not change the assessment presented within **Volume 6, Chapter 8** of the **ES** [APP- 464].

6.7.21 In conclusion, changes described above do not change the assessment presented within **Volume 6, Chapter 8** of the **ES** [APP- 464].

f) Updated Assessment – Reduction in HGV movements (Changes 1 and 2)

6.7.22 The **Transport Assessment Addendum** (Doc Ref. 8.5(A) Ad) assesses changes that would result from a reduction in HGV movements as a result of the proposed changes to rail and marine capacity, as explained in the update to the **Freight Management Strategy** (Doc Ref. 8.18). The **Transport Assessment Addendum** states that the benefit of these changes is likely to be most noticeable on the HGV routes during peak construction (i.e. A12 and Sizewell link road), and provides an assessment of changes in effect during the peak construction phase only.

6.7.23 The **Transport Assessment Addendum** (Doc Ref. 8.5(A) Ad) identifies that there would be no changes in effects on severance, amenity, pedestrian delay or fear and intimidation during the peak construction typical day and busiest day at the Sizewell link road, when comparing the assessments based on the Refined DCO flows (resulting from the refinements to the strategic traffic model) and the reduced HGV flows resulting from Changes 1 and 2. The only exception to this is at link 13b (B1122 east of Yoxford) where effects on amenity reduce from moderate adverse to minor adverse.

6.7.24 Whilst changes resulting from a reduction in HGV numbers as a result of the changes explained in the updated **Freight Management Strategy** would bring benefits to recreational receptors, through reduced opportunities for interaction with traffic and reduced noise, changes to HGV numbers do not change the assessment presented within **Volume 6, Chapter 8** of the **ES** [APP- 464].

6.8 Terrestrial historic environment

a) Introduction

6.8.1 This section provides an addendum to the terrestrial historic environment assessment at the Sizewell link road site with reference to the following documents submitted with the Application:

- **Volume 6, Chapter 9** of the **ES** (Doc Ref. 6.7) [APP-467].

6.8.2 This section presents an assessment of the Additional Information and the potential terrestrial historic effects from the proposed changes (described in **section 6.2**).

b) Relevant Additional Information

6.8.3 Relevant Additional Information for terrestrial historic environment at the Sizewell link road site comprises the inclusion of Yoxford Conservation Area within the assessment of effects.

6.8.4 The Yoxford Conservation Area was originally scoped out of assessment for the Sizewell link road. However, the adoption of the extension to the conservation area in February 2020 by East Suffolk Council has brought part of the conservation area, covering Rookery Park, into the 750m study area of the Sizewell link road. An assessment of effects to Yoxford Conservation Area through impacts to Rookery Park is therefore included here.

6.8.5 Further details have also been provided on the location of additional temporary contractor compounds, as set out in **section 6.2**.

c) Relevant changes

6.8.6 The design changes to the proposed Sizewell link road of relevance to the terrestrial historic environment assessment comprise the requirement for additional land for changes to the drainage design assumptions, changes to highway works and changes made in response to topographic survey information.

6.8.7 The proposed design changes are described in detail in **section 6.2.**

d) Updated assessment – Additional Information

d) i) Baseline

6.8.8 The Additional Information would change the baseline for the terrestrial historic environment as described in **Volume 6, Chapter 9** of the **ES** (Doc Ref. 6.7) [APP-467].

6.8.9 Yoxford Conservation Area is of high heritage significance (shown on **Figure 6.8.1** provided in **Volume 2** of this **ES Addendum**). Its heritage significance derives from historical and architectural interest, comprising the historic village core of Yoxford with important survivals of 18th-19th century elements including landscaped gardens, historic shopfronts, street furniture and places of worship as well as the three designed parks around the village: Rookery Park, Grove Park, and Cockfield Hall.

6.8.10 The Yoxford Conservation Area Appraisal divides Yoxford Conservation Area into three character areas, and identifies Grove Park, Cockfield Hall and Rookery Park as the ‘extension areas’. The easternmost of the three character areas (character area 1, Brook Street and the eastern end of High Street) is fringed on the east by three significant open spaces:

undesignated parks and gardens associated with Cockfield Hall, the Rookery and Satis House. The character of this area is dispersed and with a leafy nature to the built environment, juxtaposed with the denser central village areas of character areas 2 and 3. Important views from character area 1 are out into Rookery Park and its surrounding countryside. Rookery Park also forms an important part of the view as Yoxford is approached from the east.

6.8.11 Rookery Park surrounds The Rookery, an early 19th century house built on the site of an earlier property. The park in its current form is likely to be post-medieval, although a medieval park formerly did exist on this site from at least the 15th century. Rookery Park is locally listed as a heritage asset, but neither the park nor the house are designated. The park is broadly rectangular: in its centre lies The Rookery; on its northern edge is Rookery Cottages (LB 1200791), a former 17th century grade II listed farmhouse; and just beyond the southern limit of the park lies a second farmhouse, the late 16th or early 17th century and grade II listed Rookery Farmhouse. Formal gardens, orchards, and denser mature trees surround the Rookery and Rookery Cottages. Wood pasture extends across the rest of the park. In the 21st century a large lake was created to the north-west of The Rookery. Pins Wood, lies on the north-western edge of the park and limits some visibility of Yoxford from within the Park.

6.8.12 Rookery Park contributes to the heritage significance of Yoxford Conservation Area through its architectural, archaeological, historic, and aesthetic interest. Architectural interest is drawn from providing a view in which to experience the architectural detail of The Rookery. The aforementioned planting around Rookery Cottages confines architectural interest to its gardens and the B1122. As an earlier medieval park and site of successive grand houses, Rookery Park has archaeological interest from potential buried remains. Historic interest is drawn from the legibility of a medieval and post-medieval landscape and its relationship to the historic growth of Yoxford. The wooded and open pasture, the lake, and the visually impressive Rookery all provide aesthetic interest.

6.8.13 Views of the park form an important part of the approach to Yoxford, along the B1122, Middleton Road, and also form part of the wider setting of character area 1 within the village. From within the park, views out into the surrounding rural landscape contribute to historic and aesthetic interest. Important views are from The Rookery's principal elevations south to Bobbett's Wood and north to Middleton Road and the agricultural land beyond. Travelling through the park from the main entrance, a further important view is of The Rookery foregrounded with the park and Bobbett's Wood beyond.

6.8.14 There is no change to the baseline as a result of the additional information on the additional temporary contractor compounds.

d) ii) Environmental Design and Mitigation

6.8.15 No further mitigation measures are proposed as a result of the Additional Information above those stated in **Volume 6, Chapter 9** of the **ES** (Doc Ref. 6.7) [APP-467].

d) iii) Assessment of Effects

d) iii) a) Construction

6.8.16 The proposed development lies to the south and south-east of Rookery Park and no direct effects will occur. With no direct impacts within Rookery Park, there will be no impact to archaeological interest and there will be no change to the designed character of the Rookery Park.

6.8.17 Change to setting is generally considered to be an operational phase effect. However, in this case, the construction works may be of sufficient duration and present a sufficient increase in magnitude of impact over that occurring during the operation of the proposed development that these effects need to be considered separately.

6.8.18 The location of the asset to the north of the proposed development means that views towards Yoxford, Rookery Cottage, and Middleton Road will be unaffected. The view of The Rookery on approach through the Rookery Park will also be unaffected. Similarly, the approach to Yoxford along Middleton Road will be unaffected.

6.8.19 Views from the southern part of Rookery Park and from the southern elevation of The Rookery, towards Rookery Farmhouse and Bobbett's Wood may include construction of the proposed development. However, in these views, any construction works would be seen beyond and partially screened by the farmhouse and wood and the intervening agricultural landscape.

6.8.20 Whilst construction noise may be perceptible from this part of the asset, audibility would be very low and would vary at certain times of day or at certain times within the construction programme and would not alter the understanding of the asset or ability to appreciate its historical function.

6.8.21 Whilst there would be change to the setting, any limited visibility of the construction works from this part of the park and, therefore, the conservation area will not prevent appreciation of the surrounding agricultural landscape and its contribution to historic and aesthetic interest. The magnitude of change is considered to be very low, resulting in a minor adverse effect which would be **not significant**.

6.8.22 The additional information on the location of the additional temporary contractor compounds would not result in new or different significant direct effects on heritage assets compared to the assessment presented within **Volume 6, Chapter 9** of the **ES** (Doc Ref. 6.7) [APP-467]. .There remains the potential for disturbance to buried archaeological remains. The site specific Written Scheme of Investigation when written will take into account any additional areas of disturbance within the site boundary to ensure any disturbance can be appropriately mitigated.

6.8.23 The overall residual effect following the implementation of an agreed scheme of archaeological investigation would be of the same magnitude as presented in **Volume 6, Chapter 9** of the **ES** (Doc Ref. 6.7) [APP-467] and would be of a low magnitude, resulting in a minor adverse effect, which would be **not significant**.

d) iii) b) Operation

6.8.24 The operation of the proposed development to the south of the conservation area would introduce new visible and perceptual elements to its setting including vehicle movements. However, as noted above, the proposed development would be seen beyond and partially screened by the Rookery Farmhouse and Bobbett's Wood and the intervening agricultural landscape.

6.8.25 Following the completion of the main development site construction phase, traffic movements along the route of the proposed Sizewell link road would reduce, and with the existing screening, traffic movements on the proposed road would be difficult to perceive.

6.8.26 Whilst there would be change to the setting, any limited visibility of the proposed development from this part of Rookery Park (and therefore the conservation area) will not prevent appreciation of the surrounding agricultural landscape and its contribution to historic and aesthetic interest. The magnitude of change is considered to be very low, resulting in a minor adverse effect which would be **not significant**.

d) iv) Additional mitigation and residual effects

6.8.27 No additional mitigation measures are required above the measures reported in **Volume 6, Chapter 9** of the **ES** [APP- 467].

6.8.28 The magnitude of change to Yoxford Conservation Area as a result of the proposed development is considered to be very low, resulting in a minor adverse residual effect which would be **not significant**.

e) Updated assessment – Extensions and reductions of the Order Limits for works on the Sizewell link road, as well as minor changes to the public right of way proposals (Change 12)

6.8.29 There are no changes to the baseline in **Volume 6, Chapter 9** of the **ES** (Doc Ref. 6.7) [APP – 467] as a result of proposed **Change 12**.

6.8.30 While there may be small additional areas of ground disturbance, these are immediately adjacent to land considered within **Volume 6, Chapter 9** of the **ES** [APP- 467]. The proposed changes are not anticipated to result in new or different significant effects compared to the original scheme.

6.8.31 There remains the potential for disturbance to buried archaeological remains. The site specific Written Scheme of Investigation will take into account any additional areas of disturbance within the site boundary to ensure any disturbance can be appropriately mitigated.

6.8.32 The overall residual effect following the implementation of an agreed scheme of archaeological investigation would be of the same magnitude as presented in **Volume 6, Chapter 9** of the **ES** [APP- 467]. and would be of a low magnitude, resulting in a minor adverse effect, which would be **not significant**.

6.9 Soils and agriculture

a) Introduction

6.9.1 This section provides an addendum to the soils and agricultural assessment at the Sizewell link road site with reference to the following documents submitted with the Application:

- **Volume 6, Chapter 10** of the **ES** (Doc Ref. 6.7) [APP-470]; and
- **Volume 6, Chapter 10, Figures 10.1 – 10.5** of the **ES** (Doc Ref. 6.7) [APP-472].

6.9.2 This section presents an assessment of the potential effects on soils and agriculture from the proposed changes (described in **section 6.2**).

b) Relevant additional information

6.9.3 In **Volume 6, Chapter 10** of the **ES** [APP-470] there is an error in **Table 10.9** where the total area of the Church Farm landholding (26.05ha) has been transposed as the percentage of the landholding required during construction. The actual percentage should be 19.08%. The magnitude of impact is therefore stated incorrectly in **Table 10.9,** but as the receptor is of high sensitivity the overall outcome shown in the **ES** is correct.

6.9.4 In addition, **Volume 6, Chapter 10** of the **ES** [APP-470] incorrectly states that the land at Old Abbey Farm is not under an agri-environment scheme. It has subsequently been confirmed that this land is under Countryside Stewardship; however, the assessment outcome as presented in **Volume 6, Chapter 10** of the **ES** [APP-470] remains correct as the landholding is identified as of high sensitivity to change due to other factors (irrigated agriculture).

c) Relevant changes

6.9.5 Relevant changes for the assessment for soils and agriculture at the Sizewell Link Road include changes to the site boundary (**Change 12**) as a result of:

- changes to drainage design assumptions;
- highway works; and
- in response to topographic survey information.

6.9.6 These design changes all involve changes to land areas required either temporarily or permanently and so are assessed together in the updated assessment presented.

6.9.7 All other additional proposed changes, such as changes to PRoW, described within **section 6.2** of this chapter do not change the assessment of effects for soils and agriculture and, therefore, have not been considered further.

d) Updated assessment – Extensions and reductions of the Order Limits for works on the Sizewell link road, as well as minor changes to the public right of way proposals (Change 12)

d) i) Baseline

6.9.8 The changes to the site boundary would change the baseline for soils and agriculture as described in **Volume 6, Chapter 10** of the **ES** [APP-470].

6.9.9 Following the submission of the ES, the baseline information has been updated as detailed below:

- the extent of land falling into the best and most versatile (BMV) land grades (ALC grades 1, 2 and 3a), based on mapping presented in **Volume 6, Chapter 10** of the **ES** [APP-470]; and
- agricultural land take across each affected landholding.

6.9.10 The methodology used for the desk-based review is as detailed in **Volume 6, Chapter 10** of the **ES** [APP-470].

6.9.11 The desk-based information presented in **Volume 6, Chapter 10** of the **ES** [APP-470] extends beyond the site boundary and is deemed sufficient to cover the proposed changes

6.9.12 All the figures previously presented have been reproduced to show the site boundary as amended by the proposed changes. The reproduced figures are as follows and provided in **Volume 2** of this **ES Addendum**:

- Figure 6.9.1: Sizewell link road Soilscape mapping;
- Figure 6.9.2: Sizewell link road provisional ALC mapping;
- Figure 6.9.3: Sizewell link road detailed ALC mapping;
- Figure 6.9.4: Sizewell link road agri-environment schemes; and
- Figure 6.9.5: Sizewell link road forestry and woodland schemes.

6.9.13 Due to a previous reduction in the extent of the site boundary some detailed ALC mapping is available beyond the current extent of the site boundary. The areas where data is absent have been mapped as un-surveyed.

6.9.14 Areas of land affected in relation to ALC grade and landholding have been remeasured.

6.9.15 Other than the extent of ALC grades or landholding units affected, the baseline as presented in **Volume 6, Chapter 10** of the **ES** [APP-470] does not change.

d) i) b) Agricultural land

6.9.16 In relation to ALC grades, the design changes result in an increase (7.8%) in the total area of agricultural land required at the start of the construction phase. These changes are shown in **Table 6.5** below (areas have been rounded to 1 decimal point).

Table 6.5: Comparison of areas of agricultural land required by ALC Grade

ALC Grade	DCO Assessment		Updated Assessment	
	Total Area (ha)	%	Total Area (ha)	%
1	0	0	0	0
2	10.1	10.00	10.4	9.55

ALC Grade	DCO Assessment		Updated Assessment	
	Total Area (ha)	%	Total Area (ha)	%
3a	40.5	40.10	40.9	37.56
3b	27.7	27.43	28.4	26.08
4	0	0	0	0
5	0	0	0	0
Non-agricultural	8.2	8.12	8.2	7.53
Not surveyed	14.5	14.35	21.0	19.28
Total	**101.0**	**100**	**108.9**	**100.00**

d) i) c) Agricultural landholdings

6.9.17 In relation to agricultural businesses, the design changes affect the extent of land take from 12 of the 13 landholdings associated with the Sizewell link road.

6.9.18 These changes do not alter the sensitivity of each landholding as detailed in in **Volume 6, Chapter 10** of the **ES** (Doc Ref. 6.7) [APP-470] and no new receptors are introduced.

6.9.19 There is no change to the future baseline as presented in **Volume 6, Chapter 10** of the **ES** (Doc Ref. 6.7) [APP-470].

d) ii) Environmental Design and Mitigation

6.9.20 No further mitigation measures are proposed as a result of the proposed changes, above those stated in **Volume 6, Chapter 10** of the **ES** (Doc Ref. 6.7) [APP-470].

d) iii) Assessment of Effects

d) iii) a) Construction

d) iii) a) a) *Agricultural land*

6.9.21 During construction there is an increase (7.8%) in the total area of agricultural land required and an increase (9.8%) in the area of agricultural land required permanently as shown in **Table 6.6** below.

Table 6.6: Comparison of areas of agricultural land required by ALC Grade

ALC Grade	DCO Assessment			Updated Assessment		
	Total Area (ha)	Area required permanently (ha)	Area required temporarily (ha)	Total Area (ha)	Area required permanently (ha)	Area required temporarily (ha)
1	0	0	0	0	0	0
2	10.1	9.6	0.5	10.4	10.1	0.3
3a	40.5	32.4	8.1	40.9	33.2	7.7
3b	27.7	21.3	6.4	28.4	22.7	5.7
4	0	0	0	0	0	0
5	0	0	0	0	0	0
Non-agricultural	8.2	7.9	0.3	8.2	7.9	0.3
Not surveyed	14.5	13.2	1.3	21.0	18.8	2.2
Total	**101.0**	**84.4**	**16.6**	**108.9**	**92.7**	**16.2**

6.9.22 There is also an increase (1.8%) in the extent of BMV land required at the start of construction. Once land required temporarily has been returned to agriculture by the end of the construction phase, there is an increase (4.3%) in the extent of BMV land required permanently.

6.9.23 This will not change the level of significance of the effects on BMV land reported in the **ES**, which were assessed as major adverse (both for total and permanent BMV land take) which is significant.

d) iii) a) b) *Agricultural landholdings*

6.9.24 The design changes result in an increase (7.8%) in the extent of land required from agricultural businesses at the start of construction, with an increase (10.1%) in the land required permanently from agricultural landholdings. A comparison of the extent of agricultural landholdings affected by proposed **Change 12** is provided in **Table 6.7**.

Table 6.7: Comparison of the extent of agricultural landholdings affected

Holding Name	DCO Assessment			Updated Assessment		
	Total Area of Holding required (ha)	Area of holding required permanently (ha)	Area of holding to be returned to agricultural use (ha)	Total Area of Holding required (ha)	Area of holding required permanently (ha)	Area of holding to be returned to agricultural use (ha)
Kelsale Manor.	11.96	7.90	4.06	13.1	9.31	3.79
Rookery Farm.	9.10	5.33	3.77	10.08	5.83	4.25
Fordley Hall Farm.	16.01	12.57	3.44	16.84	14.01	2.83
Beveriche Manor Farm.	0.82	0.44	0.38	0.90	0.50	0.4
Old Abbey Farm.	14.33	13.05	1.28	16.08	14.85	1.23
Trust Farm.	8.16	7.81	0.35	8.74	8.44	0.30
Hawthorn Farm.	5.47	5.04	0.43	5.94	5.57	0.37
Dove House Farm.	5.42	4.74	0.68	5.85	5.25	0.60
Theberton Hall Farm.	14.11	12.83	1.28	15.03	13.60	1.43
Yew Tree Farm	0.22	0.22	0	0.29	0.29	0
Church Farm.	4.97	4.37	0.6	5.16	4.62	0.54
Moat Farm.	4.95	4.78	0.17	5.06	4.88	0.18
Theberton House Estate.	0.74	0.67	0.07	No change		

6.9.25 For all landholdings there is a small increase in the extent of temporary land required during the construction phase and the extent of land required permanently.

6.9.26 Overall, the extent of land required from agricultural landholdings during the construction phase has increased by 7.54ha (7.8%). The area required permanently has increased by 8.07ha (10.1%) as a result of the proposed changes.

6.9.27 In **Volume 6, Chapter 10** it was reported that, overall, 13 holdings would be permanently affected by construction and operation of the proposed Sizewell link road, of which four would experience major or moderate adverse effects, which would be considered **significant**. This is principally as a result of the proportion of land to be taken out of production during the construction phase. In addition, it was reported that one farm holding (Dove House Farm) would experience a temporary moderate adverse

(**significant**) effect during construction which would reduce to minor adverse (**not significant**) once land is restored at the end of construction.

6.9.28 The proposed changes would not change the significance of effects on agricultural landholdings reported in the **ES**, either as individual landholdings or for the entire scheme. In addition, there are no change in severance effects results from the design changes.

d) iii) b) Operation

6.9.29 There are no new or different operational effects to soils and agriculture as a result of the proposed design changes, in comparison with **Volume 6, Chapter 10** of the **ES** [APP-470].

d) iv) Additional mitigation and residual effects

6.9.30 No additional mitigation measures are required above the measures reported in **Volume 6, Chapter 10** of the **ES** [APP-470].

6.9.31 There are no changes to the residual effects identified in **Volume 6, Chapter 10** of the **ES** [APP-470]**.**

6.10 Groundwater and surface water

a) Introduction

6.10.1 This section provides an addendum to the groundwater and surface water assessment at the Sizewell link road site with reference to the following documents submitted with the Application:

- **Volume 6, Chapter 12** of the **ES** (Doc Ref. 6.7) [APP-476]

6.10.2 This section presents an assessment of the Additional Information and potential effects on groundwater and surface water from the proposed changes (described in **section 6.2**).

b) Relevant Additional Information

6.10.3 Relevant additional information for the assessment of effects on groundwater and surface water along Sizewell Link Road includes the a Technical Note '*Sizewell Link Road - DCO Design Validation – Drainage*' (provided in **Volume 3, Appendix 6.2.B** of this **ES Addendum**) prepared to validate the drainage design proposed in **Volume 2, Appendix 2A** of the **ES** [APP-181].

c) Relevant changes

6.10.4 Relevant changes for the assessment of groundwater and surface water at the Sizewell Link Road include changes to the site boundary (**Change 12**) as a result of:

- Drainage changes:
  - the enlargement of basins originally proposed as infiltration basins;
  - the repurposing of basins as attenuation basins for storage of highway surface water runoff, and removal by natural processes, including uptake by vegetation, evaporation and limited infiltration; and
  - possible managed releases of surface water runoff to local watercourses.
- Highway changes including revised design of the Hawthorn Road realignment, and associated changes to the drainage arrangements at Hawthorn Road

6.10.5 In addition, further assessment as presented in the Water Framework Directive (WFD) Compliance Assessment Addendum (Doc Ref. 8.14 Ad) is of relevance to the groundwater and surface water assessment.

d) Updated assessment – Additional Information

6.10.6 The updates for the drainage design validation, summarised above, did not identify any material changes for groundwater and surface water receptors relative to those considered within **Volume 6, Chapter 12** of the **ES** [APP-476]. As such, there are no changes to the assessment presented within **Volume 6, Chapter 12** of the **ES** [APP-476].

e) Updated assessment – Extensions and reductions of the Order Limits for works on the Sizewell link road, as well as minor changes to the public right of way proposals (Change 12)

e) i) Baseline

6.10.7 Recent site investigation undertaken at the Sizewell link road site has provided site-specific infiltration rate data along the proposed Sizewell Link Road route (refer to Technical Note *'Sizewell Link Road - DCO Design Validation – Drainage*' provided in **Volume 3 Appendix 6.2.B**). Infiltration rates were found to be insufficient to transmit to ground the anticipated volumes of highway surface water runoff discharging to

proposed infiltration basins. This suggests that the infiltration rates are low within superficial deposits at the site.

e) ii) Environmental design and mitigation

6.10.8 The proposed design changes to the drainage design, outlined in **section 6.2** represent alterations to primary mitigation during the operational phase. The changes to the proposed drainage design will enable the Sizewell link road to cater for highway surface water runoff following a 100-year flood event.

6.10.9 No further changes to mitigation measures are proposed as a result of the proposed design changes, above those stated in **Volume 6, Chapter 12** of the **ES** [APP-476].

e) iii) Assessment of effects

e) iii) a) Construction

6.10.10 The Additional Information and proposed design changes do not present any material considerations for groundwater and surface water receptors relative to those considered within **Volume 6, Chapter 12** of the **ES** [APP-476], which were considered to be **not significant**. As such, there are no changes to the assessment presented within **Volume 6, Chapter 12** of the **ES** [APP-476].

e) iii) b) Operation

6.10.11 The original design was based on assumed infiltration rates that would be sufficient to allow highway runoff to be diverted to infiltration basins and discharged to the underlying Crag, Head Deposits or Lowestoft Formation groundwater at certain locations. The recent ground investigation found that infiltration rates would be insufficient to transmit anticipated volumes to ground in this way. The low infiltration rates determined during the recent ground investigation also suggest that there is currently limited surface water inflow to the superficial deposits. With limited infiltration, the majority of runoff is currently via the surface water network.

6.10.12 By replicating observed conditions, the balance of potential effects changes. The naturally low infiltration rates means that there is no mechanism for the proposed from infiltration basins to attenuation basins to have a significant effect on the underlying groundwater receptors. A negligible (**not significant**) effect is predicted relative to the assessment presented in **Volume 6, Chapter 12** of the **ES** [APP-476].

6.10.13 The proposed drainage design changes reflect the findings of the ground investigation. Highway runoff will be diverted to attenuation basins (where

infiltration basins had previously been proposed) and will be discharged to surface water receptors at greenfield runoff rates, replicating the existing situation.

6.10.14 The change means that surface water drainage will be retained within the surface water environment, with discharge rates controlled to minimise changes in the flow regime. A negligible (**not significant**) effect is predicted relative to the assessment presented in **Volume 6, Chapter 12** of the **ES** [APP-476].

6.10.15 The updates to the WFD Compliance Assessment as presented in the addendum did not identify any material considerations for groundwater and surface water receptors relative to those considered within **Volume 6, Chapter 12** of the **ES** [APP-476].

e) iv) Additional mitigation and residual effects

6.10.16 The changes outlined in this section represent alterations to primary mitigation during the operational phase. They will enable the site to cater for highway surface water runoff following a 100-year flood event plus allowance for climate change, as described in the Technical Note ('*Sizewell link road - DCO Design Validation – Drainage*', provided in **Volume 3, Appendix 6.2.B** of this **ES Addendum**). No further changes to mitigation are required.

6.10.17 There are no changes to the residual effects identified in **Volume 6, Chapter 12** of the **ES** [APP-476], as a result of the changes introduced.

REFERENCES

1. Department for Environment Food and Rural Affairs. (2020). Emissions Factors Toolkit (EFT) version 10.1. Available at: https://laqm.defra.gov.uk/review-and-assessment/tools/emissions-factors-toolkit.html. (Accessed November 2020).

2. Department for Environment Food and Rural Affairs. (2020). Background Pollutant Concentration Maps. Available at: https://uk-air.defra.gov.uk/data/laqm-background-home. (Accessed October 2020).

3. Department for Environment Food and Rural Affairs. (2020). NO_x to NO_2 Calculator version 8.1. Available at: https://laqm.defra.gov.uk/review-and-assessment/tools/background-maps.html#NOxNO2calc. (Accessed October 2020).