



# The Sizewell C Project

## 6.14 Environmental Statement Addendum Volume 1: Environmental Statement Addendum Chapters Chapter 7 Yoxford Roundabout and Other Highway Improvements

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## 7 YOXFORD ROUNDABOUT AND OTHER HIGHWAY IMPROVEMENTS

### 7.1 Introduction

7.1.1 This chapter of the **ES Addendum** provides an update to **Volume 7** of the **ES** (Doc Ref. 6.8) [APP-478 to APP-508]. The chapter presents the Additional Information prepared and the proposed changes to the proposed development at the Yoxford roundabout and other highway improvements since the submission of the Application in May 2020.

7.1.2 The Additional Information of relevance to **Volume 7** of the **ES** (Doc Ref. 6.8) [APP-478 to APP-508] includes:

- Updates to noise modelling to account for updated traffic estimates from updated strategic traffic modelling (refer to the **Transport Assessment Addendum** (Doc Ref. 8.5(A) Ad) for further information);
- updates made to air quality modelling to account for new information published by Defra and updated strategic traffic modelling (refer to the **Transport Assessment Addendum** (Doc Ref. 8.5(A) Ad) for further information); and
- updated archaeological evaluation report for the Yoxford roundabout site (refer to **Volume 3, Appendix 7.5.A** of this **ES Addendum**).

7.1.3 The proposed changes of relevance to **Volume 7** of the **ES** (Doc Ref. 6.8) [APP-478 to APP-508] comprise minor reductions to the site boundary at the following locations:

- A12 and B1122 east of Yoxford (referred to as Yoxford roundabout) (part of **Change 12**);
- A12/B1119 junction at Saxmundham (part of **Change 14**); and
- A1094/B1069 south of Knodishall (part of **Change 14**).

7.1.4 These changes are detailed further in **section 7.2**.

- 7.1.5 Furthermore, the revised assessment for noise and vibration and air quality has considered the proposed changes 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**.
- 7.1.6 A review of the Additional Information and proposed changes at these sites has been undertaken by EIA specialists across all technical assessments presented in **Volume 7** of the **ES** (Doc Ref. 6.8) [APP-484 to APP-508].
- 7.1.7 Further assessment of the Additional Information and proposed changes (as relevant) is reported for noise and vibration (provided in **section 7.3**), air quality (provided in **section 7.4**) and terrestrial historic environment (provided in **section 7.5**).
- 7.1.8 The review concluded that these updates do not affect the technical assessments presented in **Volume 7** of the **ES: Chapter 6: Landscape and Visual** [APP-490 to APP-493], **Chapter 7: Terrestrial Ecology and Ornithology** [APP-494 to APP-496], **Chapter 8: Amenity and Recreation** [APP-497 and APP-498], **Chapter 10: Soils and Agriculture** [APP-502 to APP-504], **Chapter 11: Geology and Land Quality** [APP-505 and APP-506] and **Chapter 12: Groundwater and Surface Water** [APP-507 and APP-508].
- 7.2 **Update to the description of development**
- 7.2.1 This section presents details on the proposed changes made to the proposed development at the Yoxford roundabout and other highway improvement sites, since the preparation of the Application. These changes would not require an update to the description of development in **Chapter 2** of **Volume 7** of the **ES** (Doc Ref. 6.8) [APP-480 to APP-482].
- 7.2.2 The proposed changes comprise minor reductions to the site boundary at Yoxford roundabout (as part of **Change 12**), the A12/B1119 junction at Saxmundham and the A1094/B1069 south of Knodishall junctions (as part of **Change 14**). These are described further in the sections below.
- 7.2.3 The Additional Information submitted for the Yoxford roundabout site does not alter the design or construction assumptions presented in the **Volume 7, Chapter 2** of the **ES**.

a) Reductions to the site boundary at Yoxford roundabout

a) i) Proposed development in the Application

7.2.4 The provision of a new permanent roundabout at the A12 and B1122 junction east of Yoxford is proposed in the Application. The proposed Yoxford roundabout site (centred on Ordnance Survey grid reference TM398687) covers approximately 2.9 hectares (ha), and consists of existing road infrastructure and roadside vegetation, together with some grazing land. The new roundabout would be located approximately 90 metres (m) north of the existing A12 and B1122 ghost island junction in Yoxford which the new roundabout would replace.

a) ii) Description of the proposed change

7.2.5 A minor reduction to the site boundary is now proposed (0.0148 ha). The reduction is located to the west of site as shown in **Figure 7.2.1**.

a) iii) Why is this change proposed?

7.2.6 The minor reduction to the site boundary is proposed due to a mapping boundary discrepancy.

b) Reductions to the site boundary at A12/B1119 junction at Saxmundham

b) i) Proposed development in the Application

7.2.7 The A12 and B1119 junction is a ghost island staggered crossroads on the A12 situated west of Saxmundham (Ordnance Survey grid reference TM375634). The site is approximately 0.9 ha and is comprised of highway land. The Application proposes improvements of visibility splays, alteration of the B1119 at the junction with the A12, and provision of signage and road markings.

b) ii) Description of the proposed change

7.2.8 A minor reduction to the site boundary is now proposed (0.0188 Ha). The reduction is located to the north-east of Rendham Road (B1119) as shown in **Figure 7.2.2**.

b) iii) Why is this change proposed?

7.2.9 The minor reduction to the site boundary is proposed due to a mapping boundary discrepancy.

c) Reductions to the site boundary at A1094/B1069 south of Knodishall

c) i) Proposed development in the Application

7.2.10 The A1094 and B1069 junction is a single carriageway priority T-junction located approximately 2.6km south of Knodishall and 1.1km south-east of Friston (Ordnance Survey grid reference TM419592). The site area is approximately 1.5 ha and is comprised of highway land. The Application proposes the improvements of visibility splays, provision of signage and road markings and to reduce the speed limit from 60 miles per hour (mph) to 40mph.

c) ii) Description of the proposed change

7.2.11 A minor reduction to the site boundary is now proposed (0.0009 Ha). The reduction is located at land south east of the junction as shown in **Figure 7.2.3**.

c) iii) Why is this change proposed?

7.2.12 The minor reduction to the site boundary is proposed due to a mapping boundary discrepancy.

## 7.3 Noise and vibration

a) Introduction

7.3.1 This section provides an addendum to the noise and vibration assessment at the Yoxford roundabout site with reference to the following documents submitted with the Application:

- **Volume 7, Chapter 4** of the **ES** (Doc Ref. 6.8) [[APP-484](#)]; and
- **Volume 2, Chapter 11 Appendix 11G** of the **ES** (Doc Ref. 6.3) [[APP-210](#)].

7.3.2 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, with reference to the reduction in HGV movements as a result of the proposed increase in rail movements (**Change 1**) and the additional temporary BLF (**Change 2**).

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

- **Volume 3, Appendix 7.3.A** Yoxford Roundabout – Corrections to Road Traffic Noise Level Predictions;
- **Volume 3, Appendix 7.3.B** Road Traffic Noise Levels, Updated for Changes in Strategic Traffic Model; and
- **Volume 3, Appendix 7.3.C** New Road Traffic Noise Level Predictions Resulting from Update to Freight Management Strategy.

b) **Relevant Additional Information**

7.3.4 An assessment of noise and vibration arising from the construction and operation of Yoxford roundabout was included in **Volume 7, Chapter 4** of the **ES** (Doc Ref 6.8) [APP-484]. This assessment is an Addendum to that noise and vibration assessment.

7.3.5 Additional information presented in this chapter on further road traffic noise modelling that has been undertaken to include the following:

- a correction to the road traffic noise calculations presented in **Volume 7, Chapter 4** of the **ES** [APP-484]. This was required to correct an error in the earlier noise prediction model; and
- a refinement to the strategic traffic modelling (refer to **Transport Assessment Addendum** (Doc Ref. 8.5(A) Ad) for further information) and subsequent updates to the road traffic noise calculations.

c) **Relevant changes**

7.3.6 Relevant changes for the assessment of effects on noise and vibration at the Yoxford roundabout site include 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**.

7.3.7 The minor revisions to the site boundary, as detailed within **section 7.2** of this chapter, to the Yoxford roundabout site do not change the assessment of noise and vibration effects and, therefore, have not been considered further.



d) Updated assessment - Additional Information

7.3.8 The results of the revised road traffic noise calculations are presented in detail in **Volume 3, Appendices 7.3.A and 7.3.B** of this **ES Addendum**. These appendices cover the following:

- **Volume 3, Appendix 7.3.A:** contains the corrected predicted road traffic noise levels for the Yoxford Roundabout for the same assessment years and scenarios as contained in **Volume 7, Chapter 4** of the **ES** (Doc Ref 6.8) [APP-484], 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 7 Chapter 4** of the **ES** (Doc Ref 6.8) [APP-484].
- **Volume 3, Appendix 7.3.B:** contains updated road traffic noise level predictions for Yoxford Roundabout for the same assessment years and scenarios as contained in **Volume 7 Chapter 4** of the **ES** (Doc Ref. 6.8) [APP-484], taking account of the refinements to the strategic traffic model. These are presented with the corrected road traffic noise levels as reported in **Appendix 7.3.A**. The new values set out in the **Appendix 7.3.B** represent the road traffic noise level outcomes for the Sizewell C Project.

7.3.9 The locations and situations in which a change in assessment outcome is predicted are summarised in **Tables 7.1 and 7.2**. 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 7.1: Changes to road traffic noise assessment outcomes for Yoxford Roundabout resulting from corrections**

| Period             | Receptor |               | Effect                                 |                                | Change in Significance                |
|--------------------|----------|---------------|--|--------------------------------|---------------------------------------|
|                    |          |               | As submitted in ES Volume 7, Chapter 4 | Corrected values               |                                       |
| 2028 Typical Day   | 23       | Meadowbarn    | Minor adverse, not significant         | Negligible, not significant    | No Change                             |
| 2028 Typical Night | 14       | The Old Barn  | Minor adverse, not significant         | Moderate adverse, significant  | Not Significant to <b>Significant</b> |
|                    | 19       | Pinns Cottage | Negligible, not significant            | Minor adverse, not significant | No Change                             |
| 2028 Busiest Day   | 23       | Meadowbarn    | Minor adverse, not significant         | Negligible, not significant    | No Change                             |

| Period             | Receptor |              | Effect                                 |                               | Change in Significance                |
|--------------------|----------|--------------|--|-------------------------------|---------------------------------------|
|                    |          |              | As submitted in ES Volume 7, Chapter 4 | Corrected values              |                                       |
| 2028 Busiest Night | 14       | The Old Barn | Minor adverse, not significant         | Moderate adverse, significant | Not Significant to <b>Significant</b> |

7.3.10 A change in adverse effect which would result in a change from ‘not significant’ to ‘**significant**’ as a result of the corrections would occur at The Old Barn during 2028 both typical and busiest night.

7.3.11 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.

**Table 7.2: Changes to road traffic noise assessment outcomes for Yoxford Roundabout resulting from updates to the strategic traffic model**

| Period             | Receptor |               | Effect                         |  | Change in Significance |
|--------------------|----------|---------------|--------------------------------|--|------------------------|
|                    |          |               | Corrected values               | Refined traffic modelling – predicted levels |                        |
| 2028 Busiest Night | 19       | Pinns Cottage | Minor adverse, not significant | Negligible, not significant                  | No Change              |

7.3.12 There are no changes to the significance of effects resulting from the revisions to the strategic traffic model compared to the corrected road traffic noise calculations.

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

7.3.13 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).

- 7.3.14 The benefit of these changes is likely to be most noticeable on the roads that are anticipated to carry most of SZC Co.'s traffic.
- 7.3.15 The results of the revised road traffic noise calculations are presented in detail in **Volume 3, Appendix 7.3.C** of this **ES Addendum**. **Appendix 7.3.C** contains new road traffic noise level predictions for the Yoxford roundabout for the 2028 (typical), 2028 (busiest) scenarios, taking account of the reduction in HGV numbers that result from the updated **Freight Management Strategy** (Doc Ref 8.18). These new values are compared against those corrected and updated road traffic noise level predictions from **Volume 3, Appendix 7.3.B** of this **ES Addendum**.
- 7.3.16 Although the effect categories are not predicted to change at any of the receptors considered, 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 7.3.B** of this **ES Addendum**. The proposed change in rail and marine capacity is not predicted to lead to any adverse effects relative to the previously-assessed outcomes.
- 7.3.17 There are no other changes to the noise and vibration assessment arising from the changes to road traffic flows on the Yoxford roundabout.
- 7.4 **Air quality**
- a) **Introduction**
- 7.4.1 This section provides an addendum to the air quality assessment at the Yoxford roundabout site with reference to the following documents submitted with the Application:
- **Volume 7, Chapter 5** of the **ES** (Doc Ref. 6.8) [[APP-487](#)]; and
  - **Volume 7, Chapter 5** of the **ES** Air Quality **Figure 5.1** (Doc Ref. 6.8) [[APP-489](#)].
- 7.4.2 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 potential increase in rail movements during construction of Sizewell C and also the reduction in HGV movements as a result of the proposed increase in rail movements (**Change 1**) and the additional temporary BLF (**Change 2**).

- 7.4.3 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 design changes.
- 7.4.4 This section is supported by the following appendices provided in **Volume 3** of this **ES Addendum**:
- **Volume 3, Appendix 7.4.A**, which presents the modelled air quality current and future year baselines in the air quality assessment;
  - **Volume 3, Appendix 7.4.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
- 7.4.5 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 of 24-hour AADT (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<sub>x</sub> to NO<sub>2</sub> conversion tool v8.1 (Ref. 3).
- c) Relevant changes
- 7.4.6 Relevant changes for the assessment of effects on air quality at the Yoxford roundabout site include the reduced HGV movements during construction of Sizewell C with the potential to increase rail movements (**Change 1**) and the proposed additional temporary BLF (**Change 2**), as described within **Chapter 2** of the **ES Addendum**.
- 7.4.7 The minor revisions to the site boundary (**Change 14**), as referenced within **section 7.2** of this chapter do not change the assessment of effects on air quality and, therefore, have not been considered further.



d) Updated Assessment – Additional Information

- 7.4.8 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).
- 7.4.9 The refined traffic flows result in a change in modelled pollutant concentrations at receptors within the study area of the Yoxford roundabout site, from the results presented in **Volume 7, Chapter 5** of the **ES** (Doc Ref. 6.8) [APP-487]. 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<sub>x</sub> to NO<sub>2</sub> 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 Yoxford roundabout site is included within this section.
- 7.4.10 The Additional Information does not change the legislation, policy and guidance, the methodology or other assessments for air quality as described in **Volume 7, Chapter 5** of the **ES** (Doc Ref. 6.8) [APP-487], 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<sub>x</sub> to NO<sub>2</sub> conversion tool v8.1.

d) i) Baseline

- 7.4.11 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 7** in the **ES** (Doc Ref. 6.8) [APP-487].

d) i) a) Current baseline

- 7.4.12 NO<sub>2</sub> and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) 2018 background concentrations within the site are projected to be between 7.2 and 7.7µg/m<sup>3</sup> for NO<sub>2</sub>, between 14.8 and 14.9µg/m<sup>3</sup> for PM<sub>10</sub> and between 9.0 and 9.2µg/m<sup>3</sup> for PM<sub>2.5</sub> (Ref. 2). The backgrounds for the current baseline are broadly in line with the background values set out within **Volume 7, Chapter 5** of the **ES** (Doc Ref. 6.8) [APP-487].
- 7.4.13 The overall predicted baseline concentrations, including nearby road traffic contributions, range from 8.7 to 17.2µg/m<sup>3</sup> for NO<sub>2</sub>, 15.1 to 16.2µg/m<sup>3</sup> for PM<sub>10</sub>, 9.2 to 10.0µg/m<sup>3</sup> for PM<sub>2.5</sub> at sensitive receptors near the site. These values are broadly in line with the baseline assessment presented within **Volume 7, Chapter 5** of the **ES** (Doc Ref. 6.8) [APP-487], albeit the updated baseline NO<sub>2</sub> values are slightly reduced (by up

to  $2.0\mu\text{g}/\text{m}^3$ ),  $\text{PM}_{10}$  values are slightly increased (by up to  $0.6\mu\text{g}/\text{m}^3$ ) and  $\text{PM}_{2.5}$  are the same or slight reduced (by up to  $0.6\mu\text{g}/\text{m}^3$ ). Further details on the modelled 2018 baseline pollutant concentrations at receptors can be found **Volume 3, Appendix 7.4.A** and in **Volume 3, Appendix 2.7.C** of the **ES Addendum**.

d) i) b) Future Baseline

- 7.4.14**  $\text{NO}_2$  and particulate matter ( $\text{PM}_{10}$  and  $\text{PM}_{2.5}$ ) 2023 background concentrations within the site are projected to be between  $6.1$  and  $6.4\mu\text{g}/\text{m}^3$  for  $\text{NO}_2$ , between  $13.8$  and  $13.9\mu\text{g}/\text{m}^3$  for  $\text{PM}_{10}$  and between  $8.2$  and  $8.3\mu\text{g}/\text{m}^3$  for  $\text{PM}_{2.5}$ , a reduction in all three pollutants from the current baseline (Ref. 2).
- 7.4.15**  $\text{NO}_2$  and particulate matter ( $\text{PM}_{10}$  and  $\text{PM}_{2.5}$ ) 2028 background concentrations within the site are projected to be between  $5.4$  and  $5.7\mu\text{g}/\text{m}^3$  for  $\text{NO}_2$ , between  $13.4$  and  $13.5\mu\text{g}/\text{m}^3$  for  $\text{PM}_{10}$  and between  $7.9$  and  $8.0\mu\text{g}/\text{m}^3$  for  $\text{PM}_{2.5}$ , a reduction in all three pollutants from the current baseline (Ref. 2).
- 7.4.16**  $\text{NO}_2$  and particulate matter ( $\text{PM}_{10}$  and  $\text{PM}_{2.5}$ ) 2030<sup>1</sup> background concentrations within the site are projected to be between  $5.3$  and  $5.5\mu\text{g}/\text{m}^3$  for  $\text{NO}_2$ , between  $13.4$  and  $13.5\mu\text{g}/\text{m}^3$  for  $\text{PM}_{10}$  and between  $7.9$  and  $8.1\mu\text{g}/\text{m}^3$  for  $\text{PM}_{2.5}$ , a reduction in all three pollutants from the current baseline (Ref. 2). The backgrounds for the future baselines are broadly in line with the background values set out within **Volume 7, Chapter 5** of the **ES** (Doc Ref. 6.8) [APP-487].
- 7.4.17** The future baseline pollutant concentrations at nearby sensitive receptors in 2023 range from  $7.0$  to  $12.2\mu\text{g}/\text{m}^3$  for  $\text{NO}_2$ ,  $14.1$  to  $15.0\mu\text{g}/\text{m}^3$  for  $\text{PM}_{10}$ , and  $8.4$  to  $9.1\mu\text{g}/\text{m}^3$  for  $\text{PM}_{2.5}$ . The future baseline pollutant concentrations at nearby sensitive receptors in 2028 range from  $5.9$  to  $9.1\mu\text{g}/\text{m}^3$  for  $\text{NO}_2$ ,  $13.8$  to  $14.7\mu\text{g}/\text{m}^3$  for  $\text{PM}_{10}$ , and  $8.1$  to  $8.8\mu\text{g}/\text{m}^3$  for  $\text{PM}_{2.5}$ . The future baseline pollutant concentrations at nearby sensitive receptors in 2034<sup>2</sup> range from  $6.0$  to  $8.5\mu\text{g}/\text{m}^3$  for  $\text{NO}_2$ ,  $13.8$  to  $14.9\mu\text{g}/\text{m}^3$  for  $\text{PM}_{10}$ , and  $8.1$  to  $8.8\mu\text{g}/\text{m}^3$  for  $\text{PM}_{2.5}$ . These values are broadly in line with the baseline assessment presented within **Volume 7, Chapter 5** of the **ES** (Doc Ref. 6.8) [APP-487], albeit the updated baseline  $\text{NO}_2$  values are slightly reduced (by up to  $2.0\mu\text{g}/\text{m}^3$ ),  $\text{PM}_{10}$  values are slightly increased (by up to  $0.4\mu\text{g}/\text{m}^3$  in 2023 and 2028, and by up to  $0.5\mu\text{g}/\text{m}^3$  in 2034) and  $\text{PM}_{2.5}$  are the same or slight reduced (by up to  $0.7\mu\text{g}/\text{m}^3$  in 2023, and by up to  $0.8\mu\text{g}/\text{m}^3$  in 2028 and 2034). Further details of modelled pollutant concentrations for the years 2023, 2028 and 2034 can be found in

<sup>1</sup> Defra backgrounds used are projected from a 2018 reference year and the furthest projected is 2030.

<sup>2</sup> Predicted concentrations (modelled) are predicted for the year 2034 based on traffic flows for this year.

**Volume 3, Appendix 7.4.A and Volume 3, Appendix 2.7C of the ES Addendum.**

d) ii) **Assessment**

7.4.18 Details on modelled pollutant concentrations for the year 2023 (assumed peak year of construction of Yoxford roundabout) and 2028 (assumed peak year of operation of Yoxford roundabout) can be found in **Volume 3, Appendix 2.7.C** of the **ES Addendum**. The updated modelling using the Additional Information (detailed in **Section 7.4 b**) has resulted in changes to the magnitude of change descriptor at some receptors. There is no change to the effect descriptor at any receptors in the study area. The updated modelling does not change the overall effect of **not significant**, as described in **Volume 7, Chapter 5** of the ES [APP-487]. No further mitigation is required.

7.4.19 Receptors with a change in magnitude of change descriptors are presented in **Volume 3, Appendix 7.4.B**.

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

7.4.20 The updated modelling of transport emissions with the reduced HGV movements associated with the potential to 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**.

7.4.21 The proposed changes do not affect the existing and future air quality baseline, as described in **Volume 7, Chapter 5** of the ES [APP-487]. The magnitude of change in NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> concentrations during 2028 average day or busiest day would remain imperceptible across all modelled receptors, resulting in a negligible effect which is **not significant**, as described in **Volume 7, Chapter 5** of the ES [APP-487]. No further mitigation is required.

## 7.5 Terrestrial Historic Environment

a) **Introduction**

7.5.1 This section provides an addendum to the terrestrial historic environment assessment at the Yoxford roundabout site with reference to the following documents submitted with the Application:

- **Volume 7, Chapter 9** of the **ES** (Doc Ref. 6.8) [[APP-499](#)]; and
- **Volume 7, Appendices 9A to 9D** (Doc Ref. 6.8) [[APP-500](#)].

- 7.5.2 This section presents Additional Information that has been gathered since the Application was made and is summarised in sections below. The minor revisions to the site boundaries described in **section 7.2** do not change the assessment of effects on terrestrial historic environment and, therefore, have not been considered further.
- 7.5.3 This section is supported by the following appendix provided in **Volume 3** of this **ES Addendum**:
- **Volume 3, Appendix 7.5.A**, which presents an updated archaeological evaluation report for the Yoxford roundabout site.
- b) Relevant Additional Information
- 7.5.4 Relevant Additional Information for the assessment of effects on terrestrial historic environment at the Yoxford roundabout comprises the Yoxford Roundabout Archaeological Evaluation Report (refer to **Volume 3, Appendix 7.5.A** of this ES Addendum).
- c) Revised assessment
- 7.5.5 The Archaeological Evaluation Report for Yoxford roundabout (refer to **Volume 3, Appendix 7.5.A** of this ES Addendum) provides more detail on the findings of the evaluation trenching investigations at the site, and supersedes the interim fieldwork summary **Volume 7, Appendix 9D** of the **ES** (Doc Ref 6.8) [APP-500].
- 7.5.6 The Archaeological Evaluation Report did not identify any new constraints beyond those reported in the interim fieldwork summary **Volume 7, Appendix 9D** of the **ES** (Doc Ref 6.8) [APP-500].
- 7.5.7 As such, no changes to the assessment presented within **Volume 7, Chapter 9** of the **ES** (Doc Ref 6.8) [APP-500] are required.



## 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<sub>x</sub> to NO<sub>2</sub> Calculator version 8.1. Available at: <https://laqm.defra.gov.uk/review-and-assessment/tools/background-maps.html#NOxNO2calc>. (Accessed October 2020).