



**SCOTTISHPOWER  
RENEWABLES**

# **East Anglia ONE North and East Anglia TWO Offshore Windfarms**

## **Clarification Note**

### **Sizewell Projects Cumulative Impact Assessment (Traffic and Transport)**

Applicants: East Anglia ONE North Limited and East Anglia TWO Limited

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**Applicable to East Anglia ONE North and East Anglia TWO**



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## Glossary of Acronyms

AADT	Annual Average Daily Traffic
CIA	Cumulative Impact Assessment
DCO	Development Consent Order
EIA	Environmental Impact Assessment
ES	Environmental Statement
ETG	Expert Topic Group
GEART	Guidelines for the Environmental Assessment of Road Traffic
HGV	Heavy Goods Vehicle
PEIR	Preliminary Environmental Information Report
SCC	Suffolk County Council
SZB	Sizewell B
SZC	Sizewell C



## Glossary of Terminology

Applicants	East Anglia TWO Limited / East Anglia ONE North Limited
East Anglia ONE North project	The proposed project consisting of up to 67 wind turbines, up to four offshore electrical platforms, up to one construction, operation and maintenance platform, inter-array cables, platform link cables, up to one operational meteorological mast, up to two offshore export cables, fibre optic cables, landfall infrastructure, onshore cables and ducts, onshore substation, and National Grid infrastructure.
East Anglia TWO project	The proposed project consisting of up to 75 wind turbines, up to four offshore electrical platforms, up to one construction, operation and maintenance platform, inter-array cables, platform link cables, up to one operational meteorological mast, up to two offshore export cables, fibre optic cables, landfall infrastructure, onshore cables and ducts, onshore substation, and National Grid infrastructure.



# 1 Introduction

1. This clarification note has been prepared by East Anglia TWO Limited and East Anglia ONE North Limited (the Applicants) to clarify aspects of the East Anglia TWO project and the East Anglia ONE North project (the Projects) Development Consent Order (DCO) applications (the Applications).
2. This document is applicable to both the East Anglia ONE North and East Anglia TWO DCO applications, and therefore is endorsed with the yellow and blue icon used to identify materially identical documentation in accordance with the Examining Authority's procedural decisions on document management of 23<sup>rd</sup> December 2019 (PD-004). Whilst this document has been submitted to both Examinations, if it is read for one project submission there is no need to read it for the other project submission.

## 1.1 Background to this Clarification Note

3. **Chapter 26 Traffic and Transport of the Environmental Statement** (ES) (APP-074) identified the potential for cumulative impacts with the construction of the proposed Sizewell C New Nuclear Power Station (SZC).
4. NNB Generation Company (SZC) Limited (promoters of SZC) undertook a fourth round of consultation (Stage 4) from 18<sup>th</sup> July to 27<sup>th</sup> September 2019. This included a further amendment (from Stage 3 of the SZC consultation) to the freight management strategy which it was understood would change the forecast numbers of construction traffic movements and associated mitigation of SZC. Recognising that the Stage 4 information did not contain sufficient certainty to allow a quantitative cumulative impact assessment (CIA) to be completed for the Projects, the Applications presented a qualitative assessment of the potential for cumulative impacts.
5. The qualitative assessment outlined the potential for cumulative impacts to inform discussions with stakeholders on the potential scope of a future quantitative CIA until such time as a DCO application is accepted for the SZC project. In its relevant representation to the Planning Inspectorate (RR-007), Suffolk County Council (SCC) expressed concerns that the cumulative impacts of the Projects and other future energy projects had not been adequately assessed in transport terms. In May 2020, a DCO application was submitted for SZC which included detail of the final freight management strategy and associated traffic demand. The SZC application also included a CIA with the Projects.
6. Similarly, the consented Sizewell B (SZB) Relocated Facilities project was scoped out of the CIA within **Chapter 26 Traffic and Transport of the ES** (APP-



074) as there was no overlap between its construction programme and that proposed for the Projects. However, proposed changes to the SZB Relocated Facilities project (as set out in the EDF Energy's EIA Scoping Report, June 2020) mean that the start of its construction phase is likely to be delayed and could now overlap with that of the Projects.

7. In its written questions for Deadline 1 of the Examinations (PD-018), the Examining Authority requested clarification in respect of cumulative impacts with the SZB project. It should be noted that the SZC Transport Assessment (APP-602) states that *“traffic associated with the Sizewell B Relocated Facilities [SZB RF] works are included in the Sizewell C early years scenario as these works would likely overlap”*. These flows have been included within the SZC early year flows from an examination of Appendix 7B (APP-603) – Sizewell C VISUM (Verkehr In Städten – SIMulationsmodell) model traffic input calculations.

## 1.2 Purpose of this Clarification Note

8. Following the submission of the SZC DCO application, the Applicants have updated the traffic and transport CIA of the Projects to include SZC and SZB (the Sizewell Projects). This note provides an appraisal of the transport cumulative impacts and potential requirements for further mitigation. Additionally, it provides an assessment of the potential for cumulative noise and air quality impacts in light of the traffic and transport CIA.
9. The Applicants are also aware of recently proposed changes (Planning Inspectorate reference no. EN010012) to the SZC DCO application following engagement with SCC and other stakeholders. It is understood that a SZC DCO addendum will set out proposals for SZC to increase the import of materials by rail and sea with the objective of reducing the amenity impacts of Heavy Goods Vehicle (HGV) traffic. Once the SZC addendum becomes available, the Applicants will review the materials to determine if further updates to their CIA for the Projects are necessary. It should also be noted that at this stage it is unknown whether the changes to the SZB Relocated Facilities project are likely to alter the associated traffic flow figures contained within the SZC DCO application; the SZB traffic flow figures used for this clarification note are those contained within the SZC DCO application.
10. At the time of writing, it is considered that the CIA within this clarification note represents a robust worst case scenario as cumulative traffic flows should only reduce as a result of the changes proposed to the SZC DCO application. This clarification note is structured as follows:
  - **Section 2** provides a traffic and transport CIA;



- **Section 3** provides a consideration of the potential for cumulative noise impacts associated with traffic and transport;
- **Section 4** provides a consideration of the potential for cumulative air quality impacts associated with traffic and transport; and
- **Section 5** concludes this clarification note.





## 2 Traffic and Transport Cumulative Impact Assessment

### 2.1 Scope

11. The extent of the onshore highway study area for the Projects was agreed with SCC and Highways England through the Expert Topic Group (ETG) process. The agreed onshore highway study area is illustrated in **Figure 2.1** (contained within **Appendix A**).
12. **Figure 2.1**, which is based on **Figure 26.5** of the ES (APP-310), is divided into 15 separate highway sections known as links, which are defined as sections of highway with similar characteristics and traffic flows.
13. Each highway link has been assigned a level of sensitivity according to the road characteristics and the user groups likely to be present. This is also illustrated on **Figure 2.1** (presented within **Appendix A**) and defined in **Table 2.1** below. The links and their sensitivity remain unchanged between the Applications and this clarification note.

**Table 2.1 Highway Link Sensitivity**

Sensitivity	Definition
High*	High concentrations of sensitive receptors (e.g. hospitals, schools, areas with high tourist footfall etc.) and limited separation provided by the highway environment.
Medium	A low concentration of sensitive receptors (e.g. residential dwellings, pedestrian desire lines, etc.) and limited separation from traffic provided by the highway environment.
Low	Few sensitive receptors and / or highway environment can accommodate changes in volumes of traffic.
*High sensitivity links are considered to be 'specifically sensitive areas' for the purpose of the Guidelines for the Environmental Assessment of Road Traffic (GEART) Rule 2	

14. Routes that extend outside of the onshore highway study area are routes where construction traffic has dissipated and / or include roads with negligible sensitive receptors. Routes outside of the onshore highway study area have therefore not been considered within the Applications' CIA or this clarification note.
15. **Chapter 26 Traffic and Transport of the ES** (APP-074) considered the impact of construction traffic upon receptors within the onshore highway study area for the following effects:



- Amenity;
  - Severance;
  - Road Safety; and
  - Driver Delay.
16. In order to refine the scope of the Applications' assessment for amenity and severance, reference is made to the GEART Rule 1 and 2 screening thresholds, namely:
- Rule 1 – Include any highway links where traffic flows (or HGV component) are predicted to increase by more than 30%; or
  - Rule 2 – Include any other specifically sensitive areas where traffic flows (or HGV component) are predicted to increase by more than 10%.
17. Changes in traffic flows below the GEART Rules (thresholds) are assumed to result in no discernible or negligible environmental impacts.
18. **Chapter 26 Traffic and Transport of the ES** (APP-074) noted that of the 15 links within the onshore highway study area, eight links (links 1, 5, 7, 8, 10, 13, 14 and 15) are below the GEART screening thresholds and therefore result in negligible environmental impacts. The study area for this clarification note is therefore defined by all links identified to be above the GEART screening thresholds (links 2, 3, 4, 6, 9, 11 and 12).
19. The Applications' assessment considered traffic flows associated with two construction scenarios (see **Appendix 6.4** of the ES (APP-452)):
- Scenario 1 – the Projects are built simultaneously; and
  - Scenario 2 – the Projects built sequentially.
20. In order to consider a worst case scenario, the CIA presented here uses the traffic flows associated with Scenario 1 and assigns the published traffic flows from the SZC ESs to the Applications' onshore highways study area.
21. The SZC ES considers two construction scenarios, referred to as 'early years' and 'peak'. The following CIA scenarios are therefore considered in this clarification note:



- CIA Scenario A – The Sizewell Projects (SZC early years construction and SZB<sup>1</sup>) + the Projects' Scenario 1 peak, assuming a 2023 reference year; and
- CIA Scenario B – SZC peak + Projects' Scenario 1 peak, assuming a 2028 reference year.

22. The CIA presented within this clarification note utilises the impact significance matrix adopted for the Projects' ES (APP-074) as set out in **Table 2.2** below.

**Table 2.2 Impact Significance Matrix**

		Adverse Magnitude				Beneficial Magnitude			
		High	Medium	Low	Negligible	Negligible	Low	Medium	High
Sensitivity	High	Major	Major	Moderate	Minor	Minor	Moderate	Major	Major
	Medium	Major	Moderate	Minor	Minor	Minor	Minor	Moderate	Major
	Low	Moderate	Minor	Minor	Negligible	Negligible	Minor	Minor	Moderate
	Negligible	Minor	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	Minor

23. **Appendix B** provides the CIA traffic flows which are referenced throughout this note.

## 2.2 Pedestrian Amenity

24. Pedestrian amenity is broadly defined as the relative pleasantness of a journey, and is considered to be affected by traffic flow, traffic composition and footway width and separation from traffic. The GEART suggests a tentative threshold for judging the significance of changes in pedestrian amenity would be where the total traffic flow or the HGV component is halved or doubled.
25. **Table 2.3** outlines the assessment framework used within the assessment of the Projects for determining the magnitude of effect upon pedestrian amenity.

<sup>1</sup> It is unknown whether the changes to the SZB Relocated Facilities project are likely to alter the associated traffic flow figures contained within the SZC DCO application; the SZB traffic flow figures used for this clarification note are those contained within the SZC DCO application.



**Table 2.3 Pedestrian Amenity Assessment Framework**

Effect	Magnitude of Effect			
	Negligible	Low	Medium	High
Pedestrian and cycle amenity	Change in traffic flows (or HGV component) less than 100%.		Greater than 100% increase in traffic (or HGV component) and a review based upon the quantum of vehicles, vehicle speed and pedestrian footfall.	

26. **Table 2.4** and **Table 2.5** provide an initial screening of the potential cumulative pedestrian amenity impacts for CIA Scenario A and B respectively. **Appendix B** provides the full traffic flow data for all links under consideration for all CIA scenarios.

**Table 2.4 Pedestrian Amenity CIA (CIA Scenario A)**

Link	Changes in total cumulative traffic flow greater than 100%*	Changes in cumulative HGV flow greater than 100%*	Magnitude of Effect	Receptor Sensitivity	Cumulative Impact	Significant?
2	No (10-14%)	No (86-100%)	Medium	Low – High	Minor – Major	Yes
3	No (10%)	Yes (95-101%)	Medium	Low – High	Minor – Major	Yes
4	No (52-72%)	Yes (375-387%)	High	Low – High	Moderate – Major	Yes
6	No (11-14%)	No (61-90%)	Low	Low – High	Minor – Moderate	Yes
9	No (23%)	Yes (135%)	Medium	Low	Minor	No
11	No (82-94%)	Yes (448-579%)	High	Medium	Major	Yes
12	No (37%)	Yes (795%)	High	Low	Moderate	Yes

\* Percentage banding (see Appendix B) – percentages referred to within the assessments presented within **sections 2.2.1 to 2.2.6** relate to the impacts upon sensitive receptors.



Table 2.5 Pedestrian Amenity CIA (CIA Scenario B)

Link	Changes in total cumulative traffic flow greater than 100%*	Changes in cumulative HGV flow greater than 100%*	Magnitude of Effect	Receptor Sensitivity	Cumulative Impact	Significant?
2	No (9-15%)	Yes (117-126%)	Medium	Low **	Minor	No
3	No (9%)	Yes (117%)	Medium	Low - High	Minor – Major	Yes
4	Yes (23-110%)	Yes (235-787%)	High	Low – Medium **	Moderate – Major	Yes
6	No (6-14%)	No (57%)	Low	Low – High	Minor – Moderate	Yes
9	No (30%)	Yes (131%)	Medium	Low	Minor	No
11	No (37-44%)	Yes (100-182%)	Medium	Medium	Moderate	Yes
12	No (15%)	Yes (166%)	Medium	Low	Minor	No

\* Percentage banding (see Appendix B) – percentages referred to within the assessments presented within **sections 2.2.1 to 2.2.6** relate to the impacts upon sensitive receptors.

\*\*Receptor sensitivity reduced as sensitive communities are bypassed by new links to be provided by SZC.

27. For those links with forecast significant cumulative impacts (links 2, 3, 4, 6, 11 and 12), further evaluation is provided below.

### 2.2.1 Link 2

28. Potentially significant cumulative amenity impacts during CIA Scenario A are identified to occur on link 2 (the A12 through Yoxford). No significant cumulative impacts are forecast as a result of CIA Scenario B as for this scenario the most sensitive communities along the A12 would have been bypassed by the new Sizewell Link Road bypass proposed for SZC.
29. The CIA presented here identifies that for CIA Scenario A through Yoxford, there could be an increase in HGV traffic of 86% (892 HGVs), of which 70% (622 HGVs) would be attributable to the Sizewell Projects. The Applicants consider that the increase in HGV traffic would result in an assessed low magnitude of effect on a receptor of high sensitivity resulting in the potential for a **moderate adverse cumulative impact**.
30. **Chapter 26 Traffic and Transport of the ES** (APP-074) did not identify the potential for any significant impacts as the increase in HGV traffic flow associated



with the Projects was up to 26%, which was assessed within the Applications as negligible magnitude of effect on a receptor of high sensitivity, resulting in a minor adverse impact.

31. When considering the background traffic flows along link 2 (1,033 HGVs per day), and the magnitude of effect descriptions presented in **Table 2.3**, it is evident that there is scope for HGV demand substantially in excess of the Projects' forecast peak demand of 270 two-way movements without giving rise to an increase in magnitude of effect banding and 'trigger' potential significant adverse impacts.
32. It is therefore implicit that the Projects' peak traffic demand could be contained within an early years strategy for the Sizewell Projects and would not proportionately contribute to a significant adverse cumulative impact.

### 2.2.2 Link 3

33. Potentially significant cumulative amenity impacts during CIA Scenario A and B are identified to occur on link 3.
34. The CIA identifies that:
  - For CIA Scenario A there could be an increase in HGV traffic of just over 100% (1,113 HGVs), of which 76% (843 HGVs) of this increase would be attributable to the Sizewell Projects; and
  - For CIA Scenario B there could be an increase in HGV traffic of over 100% (1,365), of which 80% (1,095 HGVs) of this increase would be attributable to SZC.
35. The Applicants consider that for both CIA Scenario A and B the increase in HGV traffic would result in an assessed medium magnitude of effects on a receptor of high sensitivity resulting in the potential for a **major adverse cumulative impact**.
36. **Chapter 26 Traffic and Transport of the ES** (APP-074) does not identify the potential for any significant impacts as the increase in HGV traffic flow associated with the Projects is up to 24%, which is assessed within the Applications as negligible on a receptor of high sensitivity, resulting in a minor adverse impact.
37. The SZC ES proposed the construction of a Two Villages bypass that would provide a bypass of the communities at Farnham and Stratford St Andrew prior to the commencement of SZC peak construction traffic (CIA Scenario B). The SZC ES also identifies that for CIA Scenario B there could be potentially significant cumulative impacts at Marlesford, a community along link 3 that would not be bypassed.
38. To address the impacts at Marlesford, the SZC ES notes that, should there be a potential for the worst case cumulative traffic flows to arise, additional mitigation



measures would need to be secured (by SZC) through the SZC transport contingency fund, which is to be secured via the SZC Section 106 Agreement.

39. It is concluded that for CIA Scenario B the sensitive communities along link 3 would either be bypassed, or mitigation measures would be provided by the SZC from the SZC transport contingency fund to ensure cumulative impacts are not significant.
40. With regards to CIA Scenario A, when considering the background traffic flows along link 3 (1,107 HGVs per day in 2023), and the magnitude of effect descriptions presented in **Table 2.3**, it is evident that there is scope for HGV demand substantially in excess of the forecast Projects' peak demand of 270 two-way movements without giving rise to an increase in magnitude of effect banding and trigger potential **significant adverse cumulative impacts**.
41. It is therefore implicit that the Projects' peak traffic demand could be contained within an early years strategy for the Sizewell Project and would not proportionately contribute to a cumulative significant adverse impact.

#### 2.2.3 Link 4

42. Potentially significant cumulative amenity impacts during CIA Scenario A and B are identified to occur upon link 4 (the B1122).
43. For CIA Scenario A, there could be an increase in HGV traffic of up to 387% (777 HGVs), of which 77% (624 HGVs) would be attributable to the Sizewell Projects. The Applicants consider that the increase in HGV traffic would result in an assessed high magnitude of effect on receptors of low to high sensitivity resulting in potentially **moderate to major adverse cumulative impacts**.
44. **Chapter 26 Traffic and Transport of the ES** (APP-074) identifies that the Projects have potential to result in significant impacts along link 4 through the high sensitivity section at Theberton and mitigation was proposed through footway and crossing improvements. With these measures in place the residual impacts are considered to be not significant.
45. It is therefore reasoned that the pedestrian amenity mitigation for link 4 would ensure that the Projects' peak traffic demand could be contained within an early years strategy for the Sizewell Projects and would not proportionately contribute to a cumulative significant adverse impact.
46. For CIA Scenario B, the SZC assessment includes a proposal to construct a new link road from the A12. The new bypass will bypass the majority of the B1122 with the exception of a short section to the south of the village of Theberton, referred to as link 4c in the Projects' ES (APP-074).





47. Link 4c is assessed by the Projects' ES (APP-074) to be of medium sensitivity noting that the link forms part of Regional Cycle Route 42. The SZC mitigation strategy includes a commitment to an off-road cycle route along this link and thus the link sensitivity is would be reduced to low. It is therefore reasoned that cumulative impacts resulting from CIA Scenario B traffic upon link 4c would be **not significant**.

#### 2.2.4 Link 6

48. Potentially significant cumulative amenity impacts during CIA Scenario A and B are identified to occur on link 6 (the A1094 at Snape).
49. For CIA Scenario A and B, there would be no increase in HGV traffic above the levels assessed within the Projects' ES (APP-074) of up to 61%. Total traffic flows would however increase from 5% (presented in the Projects' ES) to up to 14% with the addition of the Sizewell Projects traffic.
50. The assessment of the Projects presented in the ES (APP-074) identifies the potential for significant impacts along link 6 associated with an increase in HGV traffic of up to 61% (through the high sensitivity section on the A1094) and proposes footway and crossing improvements. With these measures in place the residual impacts were assessed to be not significant.
51. The Sizewell Projects traffic would not increase the HGV traffic demand and an increase in total traffic of up to 14% would not result in significant cumulative impacts upon amenity. Any cumulative impacts upon link 6 would be **not significant**.

#### 2.2.5 Link 11

52. Potentially significant cumulative amenity impacts during CIA Scenario A and B are identified to occur on link 11 (Lovers Lane).
53. The CIA identifies that:
- For CIA Scenario A, there could be an increase in HGV traffic of up to 579% (972 HGVs), of which 84% (820 HGVs) would be attributable to the Sizewell Projects; and
  - For CIA Scenario B, there could be an increase in HGV traffic of up to 182% (321 HGVs), of which 53% (169 HGVs) would be attributable to SZC.
54. The Applicants consider that the increase in HGV traffic for both CIA Scenario A and B would result in an assessed high magnitude of effect on a receptor of medium sensitivity resulting in a potentially **major adverse cumulative impact**.





55. **Chapter 26 Traffic and Transport of the ES** (APP-074) identifies that the Projects' impact would be not significant. The Applications' assessment of Link 11 determined medium sensitivity noting that pedestrians using existing Public Rights of Way are required to walk a short distance in the road. The SZC assessment includes a commitment to a new (off-road) bridleway, cycleway and footway parallel to Lover's Lane, B1122 and Eastbridge Road to provide a route for non-motorised users while SZC is constructed. The sensitivity of this link could therefore be reduced to low.
56. It is reasoned that the addition of the SZC mitigation measures the cumulative impacts upon link 11 would be **not significant** for CIA Scenario A and Scenario B.

### 2.2.6 Link 12

57. Potentially significant cumulative amenity impacts during CIA Scenario A are identified to occur on link 12 (Sizewell Gap). The CIA identifies that there could be an increase in HGV traffic of up to 795% (692 HGVs), of which 78% (540 HGVs) would be attributable to the Sizewell Projects. The increase in HGV traffic would result in an assessed high magnitude of effect on a receptor of low sensitivity resulting in a potentially **moderate adverse cumulative impact**.
58. **Chapter 26 Traffic and Transport of the ES** (APP-074) identifies that the Projects' impact would be not significant. The assessment for SZC proposes a reduction in the speed limit to improve amenity resulting in a minor adverse residual cumulative impact. It is implicit that the Projects' peak traffic demand could be contained within a mitigation strategy for the Sizewell Projects and would not proportionately contribute to a cumulative significant adverse impact for Scenario A.
59. For Scenario B, the cumulative SZC traffic would not increase the HGV traffic demand and therefore the assessment of the Projects of **not significant** remains valid.

## 2.3 Severance

60. Severance is the perceived division that can occur within a community when it becomes separated by a major traffic artery. The term is used to describe a complex series of factors that separate people from places and other people. Severance may result from the difficulty of crossing a heavily trafficked road or a physical barrier created by the road itself. It can also relate to relatively minor traffic flows if they impede pedestrian access to essential facilities.
61. The GEART suggests that changes in total traffic flow of 30%, 60% and 90% are considered to be slight, moderate and substantial respectively. A further sift has been applied to screen out roads where traffic flows on a road are less than 8,000



Annual Average Daily Traffic (AADT) movements as the Design Manual for Roads and Bridges identifies that severance is considered unlikely to manifest roads with flows of less than 8,000 vehicles.

62. Table 2.6 outlines the assessment framework used within the assessment of the Projects to determine the magnitude of effect from severance.

**Table 2.6 Severance Assessment Framework (as presented in the Applications)**

Effect	Magnitude of Effect			
	Negligible	Low	Medium	High
Severance	Less than 8,000 vehicles AADT and/or  Changes in total traffic flows of less than 30%.	Changes in total traffic flows of 30 to 60%.	Changes in total traffic flows of 60 to 90%.	Changes in total traffic flows of over 90%.

63. **Table 2.8** provides an initial screening of the potential cumulative severance impacts for CIA Scenario A and B respectively. **Appendix B** provides the full traffic flow data for all links under consideration for all CIA scenarios.

**Table 2.7 Severance CIA (CIA Scenario A)**

Link	% Change in total cumulative traffic flow greater than 30%?	Total cumulative traffic flows greater than 8,000 vehicles AADT	Magnitude of Effect	Receptor Sensitivity	Cumulative Impact	Significant?
2	No (14%)	n/a	Negligible	Low – High	Negligible - Minor	No
3	No (10%)	n/a	Negligible	Low – High	Negligible - Minor	No
4	Yes (72%)	No (~5,000)	Negligible	Low – High	Negligible - Minor	No
6	No (14%)	n/a	Negligible	Low – High	Negligible - Minor	No
9	No (23%)	n/a	Negligible	Low	Negligible	No
11	Yes (94%)	No (~3,700)	Negligible	Medium	Minor	No
12	Yes (37%)	No (~3,900)	Negligible	Low	Negligible	No



**Table 2.8 Severance CIA (CIA Scenario B)**

Link	% Change in total cumulative traffic flow greater than 30%?	Total cumulative traffic flows greater than 8,000 vehicles AADT	Magnitude of Effect	Receptor Sensitivity	Cumulative Impact *	Significant?
2	No (15%)	n/a	Negligible	Low *	Negligible	No
3	No (10%)	n/a	Negligible	Low *	Negligible	No
4	Yes (110%)	No (~7,500)	Negligible	Low - Medium *	Negligible - Minor	No
6	No (14%)	n/a	Negligible	Low – High	Negligible – Minor	No
9	Yes (30.2%)	No (~6,300)	Negligible	Low	Negligible	No
11	Yes (44%)	No (~2,900)	Negligible	Medium	Minor	No
12	No (15%)	n/a	Negligible	Low	Negligible	No
*Receptor sensitivity reduced as sensitive communities are bypassed by new links to be provided by SZC.						

64. It can be noted from **Table 2.7** and **Table 2.8**, that no potentially significant cumulative severance impacts are identified.

## 2.4 Road Safety

65. **Chapter 26 Traffic and Transport of the ES** (APP-074) identifies four sites within the onshore highway study area with concentrations of collisions with similar patterns, or roads with collision rates that are higher or close to national averages (collision clusters are shown on **Figure 26.6** of the ES (APP-311)). These are:

- Cluster 1 – junction of the A12 and B1119;
- Cluster 3 – junction of the A12 and A1094;
- B1121; and
- A1094.

66. The remaining sections of the onshore highway study area are assumed to result in no discernible or negligible road safety impacts and are therefore not assessed further.



67. The following sub-sections provide an analysis of the potential cumulative impacts at these four locations.

#### **2.4.1 Cluster 1**

68. Cluster 1 is located at the junction of the A12 and B1119 Rendham Road and demonstrates a pattern of collisions involving vehicles right turning from Rendham Road on to the A12.
69. The SZC application commits to improvements to this junction in the early years to mitigate the road safety impacts of SZC construction traffic.
70. The Projects Scenario 1 traffic would increase flows through this junction by up to 3% above the current baseline. None of the Projects' traffic is forecast to turn through this junction. It is therefore considered that the impacts of the Projects' traffic would have a negligible contribution to cumulative impacts.

#### **2.4.2 Cluster 3**

71. Cluster 3 is located at the junction of the A12 and A1094 (Friday Street) and demonstrates a pattern of collisions between vehicles turning between the A12 and A1094.
72. The SZC assessment proposes to replace the existing junction with a roundabout and outlines that this solution would enhance safety at this intersection. The SZC application confirms that it would be intended that the roundabout would be delivered offline meaning that the existing Friday Street junction would be largely unaffected during construction.
73. It is considered that the provision of a roundabout would provide a modern standard compliant solution at this location and would therefore be appropriate to mitigate the CIA Scenario A (once the roundabout is complete and open) and CIA Scenario B traffic impacts.
74. With regards to potential for cumulative impacts during the six month period (that SZC advise that the roundabout will take to be constructed) when the roundabout is being constructed, the SZC assessment notes that prior to opening of the roundabout there may be a slight increase in risk of personal injury collisions involving right turns during the early years. No temporary mitigation is proposed within the SZC assessment for the period prior to the opening of the roundabout.
75. The ES for the Projects (APP-074) identifies the requirement for mitigation at this junction and proposes improvements that include a temporary reduction in the speed limit, improvements to signing and use of rumble strips.
76. It is therefore reasoned that the Applications' mitigation measures would ensure that the Projects' peak traffic demand could be contained within an early years



strategy for the Sizewell Projects and would not contribute to a cumulative significant adverse impact.

#### 2.4.3 B1121

77. The CIA of the Projects identified that collisions along the B1121 (link 7) are higher than the national average.
78. The SZC assessment does not identify the requirement for any traffic to route along link 7 and therefore it is considered that there would be no cumulative road safety impacts upon the B1121.

#### 2.4.4 A1094

79. The assessment of the Projects identified that the number of collisions along the A1094 is just below the national average for comparable roads. The link was therefore considered to be of low sensitivity.
80. The Applications' assessment identifies that there would be a negligible increase in total traffic via the A1094 (link 6) of up to 5% with an assessed minor adverse impact. When reviewing the forecast cumulative traffic flows it can be identified that changes in total traffic flows would be up to 14% (for both CIA Scenario A and B) which would increase the magnitude to medium but still be retained within the bounds of a **minor adverse cumulative impact**.

### 2.5 Driver Delay

81. The Applications presented an assessment of the impacts of increases in construction traffic upon junction and link capacity (known as driver delay).
82. It was agreed with SCC that the Projects' assessment should consider the impacts upon three junctions (junctions 1 to 3). SCC also requested that the Projects' CIA be extended to include the impact upon a further eight junctions (junctions 6 to 13) and one link (the A12 between the B1079 and B1438). These junctions and link are shown on **Figure 2.1** (presented within **Appendix A**) and form the basis for the CIA presented here.
83. Junctions 4 and 5 are located on the Strategic Road Network and consultation with Highways England has confirmed that no detailed assessment of the potential driver delay impacts upon these junctions would be required. These junctions are also shown on **Figure 2.1** (presented within **Appendix A**).

#### 2.5.1 Junction 1

84. Junction 1 is located at the intersection of the A12 and A1094 (Friday Street).
85. The SZC assessment proposes to replace the existing junction with a roundabout and includes for detailed modelling of the proposed roundabout. This modelling identifies that the roundabout has been designed to accommodate future traffic



growth (including SZB) and the Projects' peak construction traffic. The design will be subject to SCC technical approval which will include capacity to accommodate traffic growth. No significant cumulative impacts are therefore envisaged upon opening of the roundabout.

86. With regards to the potential for cumulative impacts during the six month period when the roundabout is being constructed (as advised within the SZC ES), the SZC assessment does not include consideration of this scenario, and no temporary mitigation is proposed.
87. The ES for the Projects (APP-074) identifies the requirement for mitigation at this junction and proposes measures including:
- Scheduling of construction activities to smooth peak traffic demand;
  - Increasing the employee to vehicle ratio through the use of minibus pickup or crew vans; or
  - Increasing the employee to vehicle ratio through incentive measures.
88. It is therefore reasoned that the Applicants' mitigation strategy would ensure that the Projects' peak traffic demand could be contained within an early years strategy for the Sizewell Projects and would not contribute to a cumulative significant adverse impact.

### 2.5.2 Junction 2

89. Junction 2 is located at the intersection of the A12 and B1122 in Yoxford.
90. The SZC assessment proposes to replace the existing junction with a roundabout and includes detailed modelling of the proposed roundabout. The SZC assessment notes that the roundabout will be provided for peak construction, with the junction continuing to operate as a priority junction during the early years.
91. With the roundabout provided, the SZC assessment demonstrates that for peak construction including the Projects' traffic (CIA Scenario B) the new junction would operate with spare capacity in 2028. Therefore, no significant cumulative impacts are envisaged during CIA Scenario B.
92. The SZC assessment contains modelling of the existing junction during the early years which indicates that with future traffic growth (including SZB) and the Projects' peak construction traffic (CIA Scenario A), the existing junction would operate with capacity. Therefore, any cumulative impacts during CIA Scenario A during roundabout construction would be **not significant**.



### 2.5.3 Junction 3

93. Junction 3 is located at the intersection of the A1094 and B1069 Snape Road. The assessment of the Projects identified a residual minor adverse impact following additional mitigation.
94. The SZC assessment identifies potentially significant impacts upon delay and notes that with future traffic growth (including SZB) the junction operates within capacity for SZC alone but over capacity with the addition of the Projects' traffic demand. The SZC assessment does not however take account of the commitments made by Applicants in the Projects' ES (APP-074), including:
- Scheduling of construction activities to smooth peak traffic demand;
  - Increasing the employee to vehicle ratio through the use of minibus pickup or crew vans; or
  - Increasing the employee to vehicle ratio through incentive measures
95. The SZC assessment proposes mitigation to improve visibility and reduce the speed limit through the junction contributing to an improvement in capacity.
96. It is assessed that the Projects and SZC have committed to mitigation measures which will collectively ensure cumulative impacts are **not significant**.

### 2.5.4 Junctions 6 to 13

97. During the preparation of the ES (APP-074) for the Projects, no suitable qualitative (junction turning count) data was available for the SZC traffic demand. The CIA presented within the Projects' ES (APP-074) therefore assessed the impact of the Projects' traffic alone upon the additional junctions and quantified that there would be a negligible contribution to cumulative impacts (effectively screening out further assessment).
98. The SZC ES has assessed the cumulative impacts upon these junctions for Scenario A and Scenario B with the addition of the Projects' traffic (presented within the Projects Preliminary Environmental Information Report (PEIR)) and SZC (within the baseline) and conclude that mitigation is not required. Therefore, as traffic the Projects' traffic flows are lower in the ES (APP-074) than in the PEIR, it is implicit that any cumulative impact relating to the refined traffic demand (as set out in the ES (APP-074)) would be **not significant**.

## 2.6 Summary

99. **Table 2.9** provides a summary of the potential for traffic and transport cumulative impacts.





**Table 2.9 Summary of Potential Traffic and Transport Cumulative Impacts**

CIA Scenario	Potential Impact	Receptor	Value Sensitivity	Initial Magnitude	Initial cumulative impact significance	Significant cumulative impacts (Yes / No)	Notes
CIA Scenario A	Amenity	Link 2	Low – High	Low	Minor - Moderate	Yes	It is concluded that the Projects' peak traffic demand could be contained within an early year's strategy for the Sizewell Projects and would not proportionately contribute to a significant adverse cumulative impact
		Link 3	Low – High	Medium	Minor – Major	Yes	
		Link 4	Low – High	High	Moderate – Major	Yes	It is concluded that the Projects mitigation for link 4 would ensure that the Projects' peak traffic demand could be contained within an early year's strategy for the Sizewell Projects and would not proportionately contribute to a





CIA Scenario	Potential Impact	Receptor	Value Sensitivity	Initial Magnitude	Initial cumulative impact significance	Significant cumulative impacts (Yes / No)	Notes
							cumulative significant adverse impact.
		Link 6	Low – High	Low	Minor – Moderate	Yes	The cumulative traffic from the Sizewell Projects would not increase the HGV traffic demand and increases in total traffic would not be significant.
		Link 9	Low	Medium	Minor	No	n/a
		Link 11	Medium	High	Major	Yes	The sensitivity of the link can be reduced to low following the introduction of mitigation measures (by SZC), resulting in no significant cumulative impacts.



CIA Scenario	Potential Impact	Receptor	Value Sensitivity	Initial Magnitude	Initial cumulative impact significance	Significant cumulative impacts (Yes / No)	Notes
		Link 12	Low	High	Moderate	Yes	It is considered that the mitigation measures proposed by SZC would also be appropriate to accommodate the Projects' traffic.
CIA Scenario B	Amenity	Link 2	Low – High	Medium	Minor	No	n/a
		Link 3	Low – High	Medium	Minor – Major	Yes	It is considered that the sensitive communities would either be bypassed, or mitigation measures would be provided by the SZC from the SZC transport contingency fund to ensure cumulative impacts are not significant.
		Link 4	Low – High	High	Moderate – Major	Yes	It is considered that the mitigation measures proposed



CIA Scenario	Potential Impact	Receptor	Value Sensitivity	Initial Magnitude	Initial cumulative impact significance	Significant cumulative impacts (Yes / No)	Notes
							by SZC would also be appropriate to accommodate the Projects traffic.
		Link 6	Low – High	Low	Minor – Moderate	Yes	The cumulative SZC traffic would not increase the HGV traffic demand and increases in total traffic would not be significant.
		Link 9	Low	Medium	Minor	No	n/a
		Link 11	Medium	Medium	Moderate	Yes	The sensitivity of the link can be reduced to low following the introduction of mitigation measures (by SZC), resulting in no significant cumulative impacts.
		Link 12	Low	Medium	Minor	No	n/a



CIA Scenario	Potential Impact	Receptor	Value Sensitivity	Initial Magnitude	Initial cumulative impact significance	Significant cumulative impacts (Yes / No)	Notes
CIA Scenario A	Severance	Link 2	Low – High	Negligible	Negligible - Minor	No	n/a
		Link 3	Low – High	Negligible	Negligible - Minor	No	n/a
		Link 4	Low – High	Negligible	Negligible - Minor	No	n/a
		Link 6	Low – High	Negligible	Negligible - Minor	No	n/a
		Link 9	Low	Negligible	Negligible	No	n/a
		Link 11	Medium	Negligible	Minor	No	n/a
		Link 12	Low	Negligible	Negligible	No	n/a
CIA Scenario B	Severance	Link 2	Low – High	Negligible	Negligible	No	n/a
		Link 3	Low – High	Negligible	Negligible	No	n/a
		Link 4	Low – Medium	Negligible	Negligible - Minor	No	n/a
		Link 6	Low – High	Negligible	Negligible – Minor	No	n/a
		Link 9	Low	Low	Minor	No	n/a
		Link 11	Medium	Negligible	Minor	No	n/a
		Link 12	Low	Negligible	Negligible	No	n/a
CIA Scenario A and B	Highway Safety	Cluster 1	SZC includes a commitment to mitigation measures at this location and the Projects increases in traffic through the junction would not be significant				



CIA Scenario	Potential Impact	Receptor	Value Sensitivity	Initial Magnitude	Initial cumulative impact significance	Significant cumulative impacts (Yes / No)	Notes
		Cluster 3	A new roundabout is proposed by SZC that once implemented would be considered to result in an improved road safety baseline. Prior to the opening of the roundabout it is concluded that the Projects mitigation strategy would ensure that the Projects' peak traffic demand could be contained within the early years strategy for the Sizewell Projects and would not contribute to a cumulative significant adverse impact.				
		B1121	No SZB or SZC traffic is proposed to travel via link 7.				
		A1094	Low	Medium	Minor	No	n/a
CIA Scenario A and B	Driver Delay	Junction 1	It is reasoned that the Applicants' mitigation strategy would ensure that the Projects' peak traffic demand could be contained within an early year's strategy for the Sizewell Projects and would not contribute to a cumulative significant adverse impact.				
		Junction 2	A new roundabout is proposed by SZC that once implemented would provide capacity for the Sizewell Projects and the Projects traffic. Prior to the opening of the roundabout modelling undertaken by SZC highlights that the existing junction could accommodate the Projects and the Sizewell Projects traffic.				
		Junction 3	Both SZC and the Projects have committed to mitigation measures at this junction which will cohesively ensure cumulative impacts are not significant.				
		Junction 4 & 5	Highways England have confirmed no detailed assessment of the Projects potential driver delay impacts upon these junctions would be required.				
		Junctions 6 – 13	The Projects' ES (APP-074) demonstrates that the Projects traffic would result in a negligible contribution to cumulative impacts.				



## 3 Cumulative Noise Impacts

100. Using the traffic flow data presented in **Appendix B**, the Applicants have undertaken a high-level quantitative noise CIA for Scenario A and Scenario B as presented in **section 2.1**. The detailed assessment result are presented in **Appendix C**, while the approach to assessment and an assessment summary are presented in the following sections.

### 3.1 Methodology

101. A calculation to determine the basic noise level has been undertaken using calculation methodology set out in Calculation of Road Traffic Noise (Department for Transport, 1988). This has then been corrected for speed and the percentage of HGV movement, and a comparison of each scenario has been made against the baselines traffic flows (2023 and 2028).

#### 3.1.1 Assessment Criteria

102. **Table 3.1** sets out the criteria used for determining magnitude of construction traffic noise effects in Environmental Impact Assessment (EIA) terms. These criteria are taken from Table 3.17 of LA111 Noise and Vibration (Rev 2) (Highways England *et al.*, 2020).

**Table 3.1 Determining Magnitude of Effect**

Magnitude of Effect	Increase in baseline noise level of closest public road used for construction traffic (dB)
Major	Greater than or equal to 5.0
Moderate	Greater than or equal to 3.0 and less than 5.0
Minor	Greater than or equal to 1.0 and less than 3.0
Negligible	Less than 1.0

103. The highway link sensitivities set out in **Table 2.1** of this clarification note correspond with the receptor sensitivities set out in Table 25.21 of the ES (APP-073). So where defined in the traffic flow data, this is considered to be reasonable in its representation of noise sensitive receptors. These two tables are compared in **Table 3.2**.



**Table 3.2 Comparison of the Traffic and Transport and Noise Definitions of Receptor Sensitivity**

Sensitivity	Highway Link Sensitivity Definition	Noise Sensitive Receptor Definition
High*	High concentrations of sensitive receptors (e.g. hospitals, schools, areas with high tourist footfall etc.) and limited separation provided by the highway environment.	<p>Receptor has very limited tolerance of effect.</p> <p>Noise receptors have been categorised as high sensitivity where noise may be detrimental to vulnerable receptors. Such receptors include certain hospital wards (e.g. operating theatres or high dependency units) or care homes at night.</p>
Medium	A low concentration of sensitive receptors (e.g. residential dwellings, pedestrian desire lines, etc.) and limited separation from traffic provided by the highway environment.	<p>Receptor has limited tolerance of effect</p> <p>Noise receptors have been categorised as medium sensitivity where noise may cause disturbance and a level of protection is required but a level of tolerance is expected.</p> <p>Such subgroups include residential accommodation, private gardens, hospital wards, care homes, schools, universities, research facilities, national parks, (during the day); and temporary holiday accommodation at all times.</p>
Low	Few sensitive receptors and / or highway environment can accommodate changes in volumes of traffic.	<p>Receptor has some tolerance of effect.</p> <p>Noise receptors have been categorised as low sensitivity where noise may cause short duration effects in a recreational setting although particularly high noise levels may cause a moderate effect.</p> <p>Such subgroups include offices, shops, outdoor amenity areas, long distance footpaths, doctor's surgeries, sports facilities and places of worship.</p>

104. **Table 3.3** provides the framework for determining impact significance (as included in Table 25.22 in **Chapter 25 Noise and Vibration of the ES** (APP-073)).



**Table 3.3 Impact Significance Matrix**

Sensitivity	Magnitude				
	Major	Moderate	Minor	Negligible	No Impact
High	Major	Major	Moderate	Minor	Minor
Medium	Major	Moderate	Minor	Minor	Negligible
Low	Moderate	Minor	Minor	Negligible	Negligible
Negligible	Minor	Negligible	Negligible	Negligible	Negligible

105. As stated in paragraph 135 of **section 25.4.3.6** in **Chapter 25 Noise and Vibration of the ES** (APP-073), moderate and major impacts are considered to be significant in EIA terms.

### 3.1.2 Assumptions and Limitations

106. The following assumptions and limitations should be noted:

- Where a road will be bypassed or is a bypass as a result of the SZC project a comparison was not made due to the potential exaggeration (both adverse and beneficial) of noise impacts. This only affects Scenario B – for a total of 6 links.

## 3.2 Assessment

107. **Table 1** in **Appendix C** presents the predicted rise in traffic noise at each link as a result of the Projects alone, the Sizewell Projects, SZC alone and cumulative Scenarios A and B, along with the magnitude of effects and the level of the resultant impacts. **Table 3.4** summarises the number of effects at each magnitude level expected at each link.

**Table 3.4 Magnitude of Effect Summary**

Magnitude of Effect	The Projects Alone Peak (2028)	The Sizewell Projects (2023)	SZC Alone (2028)	Cumulative Scenario A	Cumulative Scenario B
Major	0	0	1	2	1
Moderate	0	9	2	8	3
Minor	11	12	12	16	17
Negligible	22	13	13	8	7





108. Using the matrix presented in **Table 3.3** above, **Table 3.5** summarises the impacts at each link. As stated previously, only moderate or major impacts are considered to be significant in EIA terms.

**Table 3.5 Summary of Impacts**

Impact	The Projects Alone Peak (2028)	The Sizewell Projects (2023)	SZC Alone (2028)	Cumulative Scenario A	Cumulative Scenario B
Major	0	0	1	0	1
Moderate	0	4	2	4	2
Minor	24	24	16	27	20
Negligible	10	6	9	3	5

109. **Table 3.5** indicates that Scenario A and Scenario B would result in an increased number of minor adverse impacts. However, the addition of the Projects would not change the number of major and moderate adverse impacts that would occur with the Sizewell Projects and SZC alone.



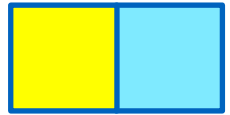
## 4 Cumulative Air Quality Impacts

110. The air quality CIA presented in the SZC ES (Appendix 12B) utilises the traffic flows contained within the Transport Assessment (Doc Ref. 8.5) and therefore includes the Projects' traffic flows in the baseline, as well as the traffic flows associated with SZB within the 'early years' scenario. It should be noted that regarding the Projects, the SZC ES used the traffic flows contained within the PEIR, which are higher than those contained within Applications.
111. The SZC CIA did not quantify the change in pollutant (nitrogen dioxide (NO<sub>2</sub>) and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>)) concentrations that would result from the cumulative projects. However, the total predicted pollutant concentrations of the cumulative projects together are presented. The Applicants note that these are all sufficiently below the relevant national air quality objectives and significant impacts are therefore unlikely.



## 5 Conclusion

112. This clarification note has considered the potential for cumulative traffic and transport impacts between the Projects and the Sizewell Projects.
113. Due to the nature of constructing a nuclear power station, the traffic flows for the Sizewell Projects are considerably higher than those of the Projects. Utilising the Applications' assessment framework, this large difference in traffic flows results in potentially significant cumulative impacts which are without exception triggered by the traffic demand from the Sizewell Projects.
114. Noting that the Applications have assessed the Projects' impacts as either not significant, or mitigated to residual not significant, it is reasoned that the Projects' traffic demand would not contribute to significant cumulative impacts with the Sizewell Projects. It is also noted that recently proposed changes (Planning Inspectorate reference no. EN010012) to the SZC DCO application could mean that SZC's HGV numbers could reduce as more materials are imported by rail and sea.
115. Regarding cumulative noise impacts, a high level quantitative assessment indicates that both CIA Scenario A and CIA Scenario B are likely to result in significant impacts at a small number of links. These impacts would predominantly result from increased traffic flows generated by construction of the Sizewell Projects.
116. Regarding air quality, no significant cumulative impacts are predicted to result from increased traffic flows as none of the relevant national air quality objectives would be breached.



## 6 References

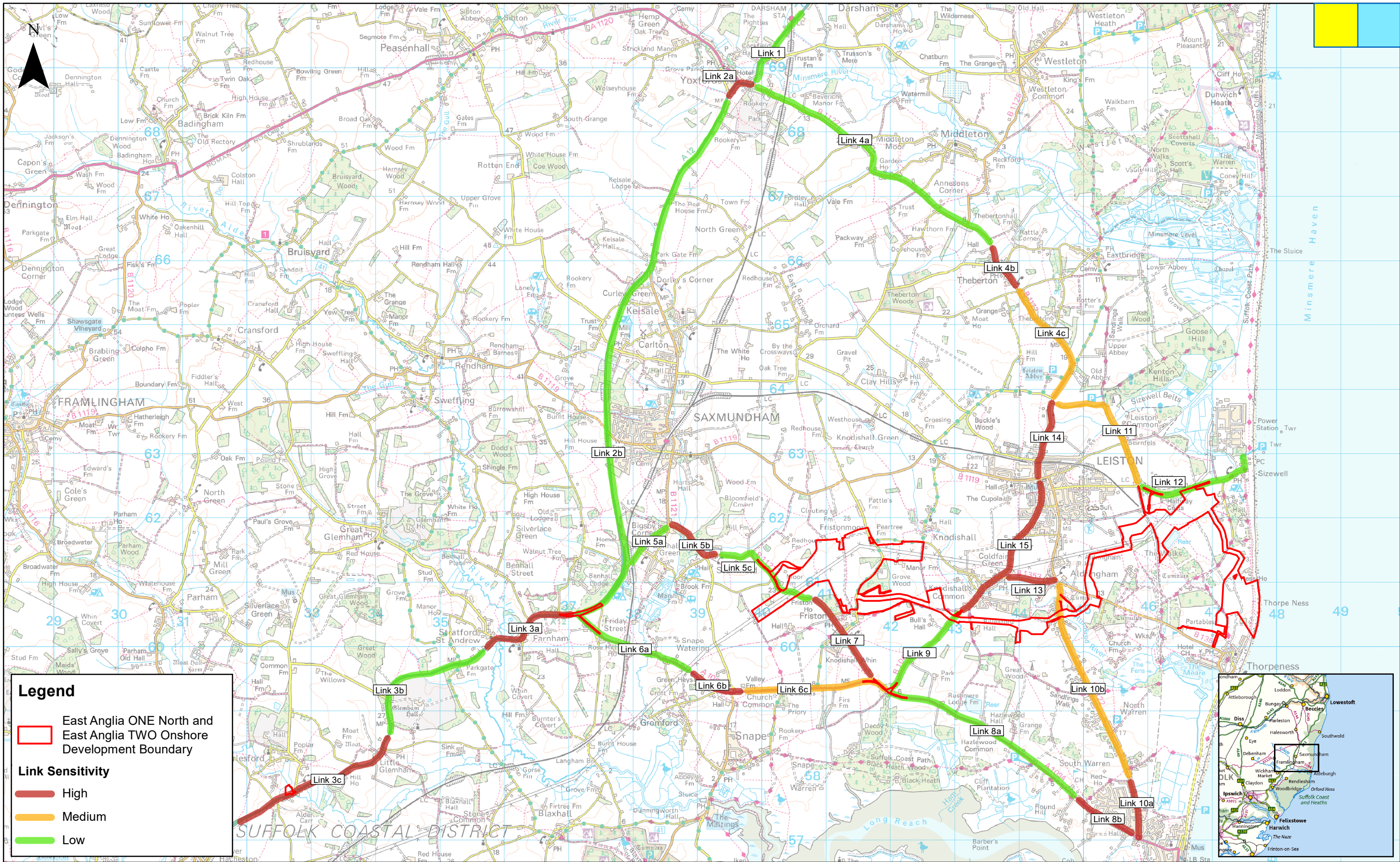
Department for Transport (1988). Calculation of Road Traffic Noise.


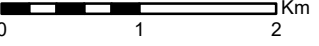
Highways England *et al.* (2020). Design Manual for Roads and Bridges: LA 111 – Noise and vibration.



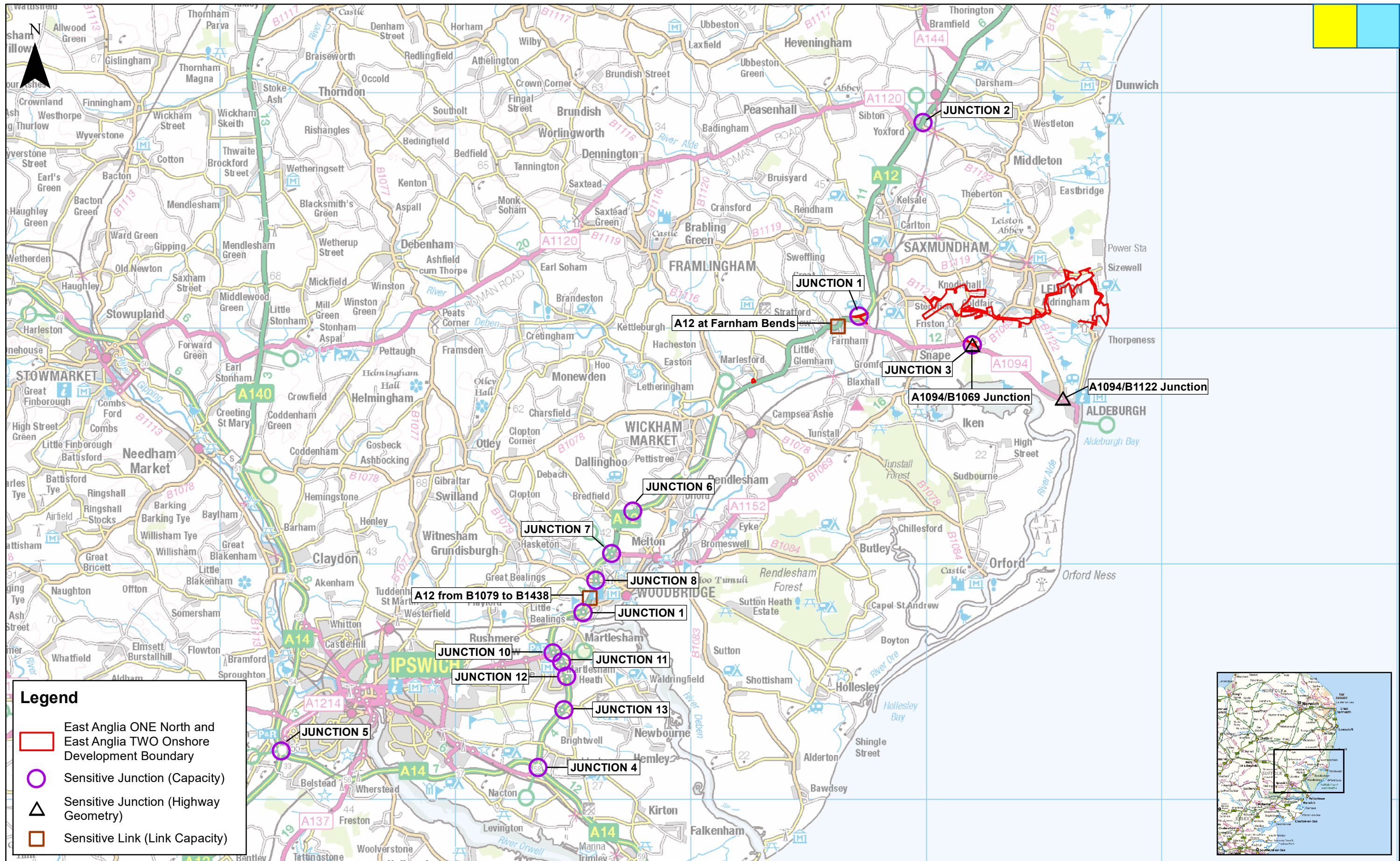
## Appendix A: Figures






					1:55,000 Scale @ A3				<b>East Anglia ONE North and East Anglia TWO</b> <b>Study Area and Link Sensitivity</b>		<b>Drg No</b>	EA1N-EA2-DEV-DRG-IBR-001150	
2	11/11/2020	AB	Second Issue.	Prepared:	AB	<small>Source: © Crown copyright and database rights 2020, Ordnance Survey 0100031673. This map has been produced to the latest known information at the time of issue, and has been produced for your information only. Please consult with the SPR Onshore GIS team to ensure the content is still current before using the information contained on this map. To the fullest extent permitted by law, we accept no responsibility or liability (whether in contract, tort (including negligence) or otherwise in respect of any errors or omissions in the information contained in the map and shall not be liable for any loss, damage or expense caused by such errors or omissions.</small>					<b>Rev</b>	2	Coordinate System: BNG Datum: OSGB36
1	02/10/2020	FC	First Issue.	Checked:	FM						<b>Date</b>	11/11/20	
<b>Rev</b>	<b>Date</b>	<b>By</b>	<b>Comment</b>	<b>Approved:</b>	<b>PP</b>						<b>Figure</b>	2.1	





				1:150,000 Scale @ A3		0 2.5 5 Km		East Anglia ONE North and East Anglia TWO Sensitive Driver Delay Locations		Drg No	EA1N-EA2-DEV-DRG-IBR-001151	
2	11/11/2020	AB	Second Issue.	Prepared:	AB	<small>This map has been produced to the latest known information at the time of issue, and has been produced for your information only. Please consult with the SPR Onshore GIS team to ensure the content is still current before using the information contained on this map. To the fullest extent permitted by law, we accept no responsibility or liability (whether in contract, tort (including negligence) or otherwise in respect of any errors or omissions in the information contained in the map and shall not be liable for any loss, damage or expense caused by such errors or omissions.</small>				Rev	2	Coordinate System: BNG Datum: OSGB36
1	02/10/2020	FC	First Issue.	Checked:	FM					Date	11/11/20	
Rev	Date	By	Comment	Approved:	PP					Figure	2.2	



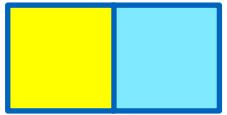
## Appendix B: Summary of CIA Traffic Flows



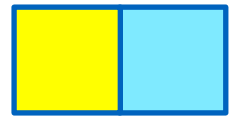
Link		Link description		Link sensitivity	AADT * Baseflows 2023 (the Projects)		AADT * Baseflows 2028 (the Projects)		the Projects peak flows		SZC early years flows		SZC peak flows		CIA Scenario A (% increase)		CIA Scenario B (% increase)	
SZC link designation	the Projects link designation	SZC link description	the Projects link description	the Projects	All vehicles	HGVs	All vehicles	HGVs	All vehicles	HGVs	All vehicles	HGVs	All vehicles	HGVs	All vehicles	HGVs	All vehicles	HGVs
13c	2	A12 (middle)	A12 between the B1122 and A1094	Low to High	12,111	1,033	12,821	1,087	357	270	1,295	621	-22	-17	14%	86%		
13e	2	A12 (s)	A12 between the B1122 and A1094	Low to High	12,111	1,033	12,821	1,087	357	270	1,005	622	-637	-17	11%	86%		
21b	2	A12 (north of SLR)	A12 (north of B1119)	Low to High	12,111	1,033	12,821	1,087	357	270	1,121	760	1,024	1,097	12%	100%	11%	126%
21c	2	A12 (middle)	A12 (north of B1119)	Low to High	12,111	1,033	12,821	1,087	357	270	1,154	764	936	1,097	12%	100%	10%	126%
21e	2	A12 (south of B1119)	A12 (north of B1119)	Low to High	12,111	1,033	12,821	1,087	357	270	824	759	782	1,094	10%	100%	9%	126%
58	2	A12 (north of SLR)	A12 between the B1122 and A1094	Low to High	12,111	1,033	12,821	1,087	357	270	1,002	622	-504	-17	11%	86%		
59	2	A12 (south of SLR)	A12 between the B1122 and A1094	Low to High	12,111	1,033	12,821	1,087	357	270	1,203	762	1,553	1,095	13%	100%	15%	126%
78	2	A12 (north of B1121)	A12 between the B1122 and A1094	Low to High	12,111	1,033	12,821	1,087	357	270	872	759	747	1,094	10%	100%	9%	126%
22a	3	A12 (N)	A12 south of the A1094	Low to High	18,485	1,107	19,568	1,164	452	270	1,320	786	1,400	1,092	10%	95%	9%	117%
22c	3	A12 (S) (Farnham)	A12 south of the A1094	Low to High	18,485	1,107	19,568	1,164	452	270	1,481	843	-20,986	-859	10%	101%		
23	3	A12 Farnham Bend	A12 south of the A1094	Low to High	18,485	1,107	19,568	1,164	452	270	1,476	843	-21,531	-908	10%	101%		
24	3	A12 Stratford St Andrew (Low Road)	A12 south of the A1094	Low to High	18,485	1,107	19,568	1,164	452	270	1,475	846	-20,582	-867	10%	101%		
4c	4	B1122 (N)	B1122 from the A12 to Leiston	Low to High	2,772	201	2,934	211	335	153	1,656	600	3,673	241	72%	375%		
10	4	B1122 through Theberton	B1122 from the A12 to Leiston	Low to High	2,772	201	2,934	211	335	153	1,616	600	-5,631	-218	70%	375%		
13b	4	B1122	B1122 from the A12 to Leiston	Low to High	2,772	201	2,934	211	335	153	1,660	624	334	343	72%	387%	23%	235%
64	4	B1122 north of SZC access	B1122 from the A12 to Leiston	Low to High	2,772	201	2,934	211	335	153	1,616	600	2,898	1,510	70%	375%	110%	787%
66	4	B1122 west of B1125	B1122 from the A12 to Leiston	Low to High	2,772	201	2,934	211	335	153	1,100	600	-3,471	-169	52%	375%		
74	4	B1122 (Middleton Moor)	B1122 from the A12 to Leiston	Low to High	2,772	201	2,934	211	335	153	1,096	600	-3,914	-173	52%	375%		
9a	6	A1094 (W)	A1094 from the A12 to the B1121 / B1069	Low to High	8,082	420	8,556	442	425	256	446	0	161	-2	11%	61%	7%	57%
9c	6	A1094 (E )	A1094 from the A12 to the B1121 / B1069	Low to High	8,082	420	8,556	442	425	256	437	0	768	-6	11%	61%	14%	57%
22b	6	A1094	A1094 from the A12 to the B1121 / B1069	Low to High	8,082	420	8,556	442	425	256	721	120	119	-4	14%	90%	6%	57%
39a	6	A1094 (west of B1069)	A1094 from the A12 to the B1121 / B1069	Low to High	8,082	420	8,556	442	425	256	454	0	773	-6	11%	61%	14%	57%
39b	9	B1069 (north of A1094)	B1069 from the A1094 to south of Knodishall / Coldfair Green	Low	4,846	196	5,130	206	663	265	442	0	884	6	23%	135%	30%	131%
3	11	Lover's Lane (LEEIE)	Lover's Lane	Medium	1,993	168	2,110	177	341	152	1,357	820	594	169	85%	579%	44%	182%
4b	11	Lover's Lane	Lover's Lane	Medium	1,993	168	2,110	177	341	152	1,303	600	447	25	82%	448%	37%	100%
75	11	Lovers Lane	Lover's Lane	Medium	1,993	168	2,110	177	341	152	1,523	820	587	165	94%	579%	44%	179%
1	12	Sizewell Gap	Sizewell Gap	Low	2,844	87	3,011	92	341	152	712	540	108	0	37%	795%	15%	166%

Key  
\*  


No cumulative increase due to introduction of bypasses  
AADT = Annual Average Daily Traffic Flows by Sizewell C (The AADT is the traffic measured in both directions)



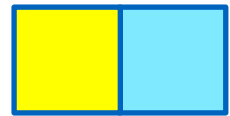
## Appendix C: Prediction of Construction Traffic Noise Impacts



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**Table 1 Prediction of Construction Traffic Noise Impacts**

Link	Link Sensitivity	The Projects Alone Peak (2028)			The Sizewell Projects (2023)			SZC Alone (2028)			Scenario A			Scenario B		
		Diff (dB)	Magnitude	Impact	Diff (dB)	Magnitude	Impact	Diff (dB)	Magnitude	Impact	Diff (dB)	Magnitude	Impact	Diff (dB)	Magnitude	Impact
1	Low	0.51	Negligible	Negligible	0.44	Negligible	Negligible	0.77	Negligible	Negligible	0.93	Negligible	Negligible	1.21	Minor	Minor
1	Medium	0.46	Negligible	Minor	0.33	Negligible	Minor	0.68	Negligible	Minor	0.77	Negligible	Minor	1.07	Minor	Minor
2	Low	0.54	Negligible	Negligible	1.27	Minor	Minor	-0.04	Negligible	Negligible	1.70	Minor	Minor	0.50	Negligible	Negligible
2	Medium	0.54	Negligible	Minor	1.23	Minor	Minor	-0.15	Negligible	Minor	1.66	Minor	Minor	0.40	Negligible	Minor
2	Medium	0.40	Negligible	Minor	1.11	Minor	Minor	1.35	Minor	Minor	1.43	Minor	Minor	1.64	Minor	Minor
2	Medium	0.40	Negligible	Minor	1.12	Minor	Minor	1.33	Minor	Minor	1.44	Minor	Minor	1.63	Minor	Minor
2	Medium	0.40	Negligible	Minor	1.05	Minor	Minor	1.31	Minor	Minor	1.38	Minor	Minor	1.60	Minor	Minor
2	Low	0.40	Negligible	Negligible	0.94	Negligible	Negligible	-0.14	Negligible	Negligible	1.28	Minor	Minor	0.27	Negligible	Negligible
2	Low	0.40	Negligible	Negligible	1.12	Minor	Minor	1.44	Minor	Minor	1.45	Minor	Minor	1.73	Minor	Minor
2	Medium	0.40	Negligible	Minor	0.21	Negligible	Minor	1.30	Minor	Minor	0.61	Negligible	Minor	1.60	Minor	Minor
3	Low	0.37	Negligible	Negligible	1.05	Minor	Minor	1.29	Minor	Minor	1.37	Minor	Minor	1.57	Minor	Minor
3	Medium	0.33	Negligible	Minor	1.02	Minor	Minor	-	-		1.30	Minor	Minor	-	-	
3	Medium	0.43	Negligible	Minor	1.28	Minor	Minor	-	-		1.62	Minor	Minor	-	-	
3	Medium	0.33	Negligible	Minor	1.03	Minor	Minor	-	-		1.30	Minor	Minor	-	-	
4	Medium	1.25	Minor	Minor	3.91	Moderate	Moderate	3.45	Moderate	Moderate	4.49	Moderate	Moderate	4.06	Moderate	Moderate



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Link	Link Sensitivity	The Projects Alone Peak (2028)			The Sizewell Projects (2023)			SZC Alone (2028)			Scenario A			Scenario B		
		Diff (dB)	Magnitude	Impact	Diff (dB)	Magnitude	Impact	Diff (dB)	Magnitude	Impact	Diff (dB)	Magnitude	Impact	Diff (dB)	Magnitude	Impact
4	Medium	1.15	Minor	Minor	3.68	Moderate	Moderate	-	-		4.24	Moderate	Moderate	-	-	
4	Low	1.38	Minor	Minor	4.09	Moderate	Minor	2.46	Minor	Minor	4.72	Moderate	Minor	3.30	Moderate	Minor
4	Medium	1.15	Minor	Minor	3.68	Moderate	Moderate	5.91	Major	Major	4.24	Moderate	Moderate	6.23	Major	Major
4	Medium	1.38	Minor	Minor	3.98	Moderate	Moderate	-	-		4.62	Moderate	Moderate	-	-	
4	Medium	1.38	Minor	Minor	0.88	Negligible	Minor	-	-		2.10	Minor	Minor	-	-	
5	Low	0.18	Negligible	Negligible	1.18	Minor	Minor	1.48	Minor	Minor	1.33	Minor	Minor	1.61	Minor	Minor
6	Low	0.92	Negligible	Negligible	0.15	Negligible	Negligible	0.05	Negligible	Negligible	1.09	Minor	Minor	0.95	Negligible	Negligible
6	Medium	0.92	Negligible	Minor	0.15	Negligible	Minor	0.23	Negligible	Minor	1.08	Minor	Minor	1.10	Minor	Minor
6	Low	0.80	Negligible	Negligible	0.59	Negligible	Negligible	0.03	Negligible	Negligible	1.33	Minor	Minor	0.83	Negligible	Negligible
6	Low	0.80	Negligible	Negligible	0.17	Negligible	Negligible	0.26	Negligible	Negligible	0.98	Negligible	Negligible	1.01	Minor	Minor
8	Low	0.09	Negligible	Negligible	-0.08	Negligible	Negligible	0.09	Negligible	Negligible	0.02	Negligible	Negligible	0.18	Negligible	Negligible
9	Low	1.24	Minor	Minor	2.71	Minor	Minor	0.60	Negligible	Negligible	3.45	Moderate	Minor	1.69	Minor	Minor
10	Medium	0.16	Negligible	Minor	0.09	Negligible	Minor	0.59	Negligible	Minor	0.25	Negligible	Minor	0.73	Negligible	Minor
11	Low	1.38	Minor	Minor	4.80	Moderate	Minor	1.72	Minor	Minor	5.34	Major	Minor	2.70	Minor	Minor
11	Low	1.38	Minor	Minor	4.06	Moderate	Minor	1.80	Minor	Minor	4.68	Moderate	Minor	2.75	Minor	Minor
11	Low	1.38	Minor	Minor	4.80	Moderate	Minor	1.69	Minor	Minor	5.33	Major	Minor	2.67	Minor	Minor



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Link	Link Sensitivity	The Projects Alone Peak (2028)			The Sizewell Projects (2023)			SZC Alone (2028)			Scenario A			Scenario B		
		Diff (dB)	Magnitude	Impact	Diff (dB)	Magnitude	Impact	Diff (dB)	Magnitude	Impact	Diff (dB)	Magnitude	Impact	Diff (dB)	Magnitude	Impact
12	Low	1.22	Minor	Minor	3.16	Moderate	Minor	0.13	Negligible	Negligible	3.82	Moderate	Minor	1.32	Minor	Minor
14	Medium	0.16	Negligible	Minor	0.39	Negligible	Minor	3.18	Moderate	Moderate	0.55	Negligible	Minor	3.26	Moderate	Moderate
15	Medium	0.10	Negligible	Minor	0.27	Negligible	Minor	1.51	Minor	Minor	0.37	Negligible	Minor	1.59	Minor	Minor