

East Anglia TWO Offshore Windfarm

Appendix 25.2

Construction Noise Impact Assessment

Preliminary Environmental Information

Volume 3

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Glossary of Acronyms

AAWT	Annual Average Weekday Traffic
ATC	Automatic Traffic Count
BNL	Basic Noise Level
BS	British Standard
CoCP	Code of Construction Practice
DfT	Department for Transport
DMRB	Design Manual for Roads and Bridges
ETG	Expert Topic Group
eVDV	Estimated Vibration Dose Value
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
ISO	International Standards Organisation

Glossary of Terminology

Applicant	East Anglia TWO Limited.
Construction consolidation sites	Compounds which will contain laydown, storage and work areas for onshore construction works. The HDD construction compound will also be referred to as a construction consolidation site.
dB(A)	Decibels measured on a sound level meter incorporating a frequency weighting (A weighting) which differentiates between sounds of different frequency (pitch) in a similar way to the human ear. Measurements in dB(A) broadly agree with people's assessment of loudness. A change of 3 dB(A) is the minimum perceptible under normal conditions, and a change of 10 dB(A) corresponds roughly to halving or doubling the loudness of a sound. The background noise level in a living room may be about 30 dB(A); normal conversation about 60 dB(A) at 1 metre; heavy road traffic about 80 dB(A) at 10 metres; the level near a pneumatic drill about 100 dB(A).
dB(Z) (or previously Lleq)	Decibels measured on a sound level meter incorporating a flat frequency weighting (Z weighting) across the frequency range.
Decibel (dB)	A unit of noise level derived from the logarithm of the ratio between the value of a quantity and a reference value. It is used to describe the level of many different quantities. For sound pressure level the reference quantity is 20 µPa, the threshold of normal hearing is 0dB, and 140dB is the threshold of pain. A change of 1dB is only perceptible under controlled conditions. Under normal conditions a change in noise level of 3dB(A) is the smallest perceptible change.
Development area	The area comprising the Proposed onshore development Area and the Offshore Development Area
East Anglia TWO project	The proposed project consisting of up to 75 wind turbines, up to four offshore electrical platforms, up to one offshore 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.
Evidence Plan Process	A voluntary consultation process with specialist stakeholders to agree the approach to the EIA and the information required to support HRA.
Horizontal directional drilling (HDD)	A method of cable installation where the cable is drilled beneath a feature without the need for trenching.
Jointing bay	Underground structures constructed at regular intervals along the onshore cable route to join sections of cable and facilitate installation of the cables into the buried ducts.
L _{A10, T}	The A weighted noise level exceeded for 10% of the specified measurement period (T). LA10 is the index generally adopted to assess traffic noise.
L _{A90, T}	The A weighted noise level exceeded for 90% of the specified measurement period (T). In BS 4142: 2014 it is used to define the 'background' noise level.
L _{Aeq, T}	The equivalent continuous sound level – the sound level of a notionally steady sound having the same energy as a fluctuating sound over a

	specified measurement period (T). LAeq, T is used to describe many types of noise and can be measured directly with an integrating sound level meter.
L _{Amax}	The maximum A-weighted sound pressure level recorded during a measurement.
Landfall	The area (from Mean Low Water Springs) where the offshore export cables would make contact with land, and connect to the onshore cables.
Mitigation areas	Areas captured within the Development Area specifically for mitigating expected or anticipated impacts.
National Grid infrastructure	A National Grid substation, connection to the existing electricity pylons and National Grid overhead line realignment works which will be consented as part of the proposed East Anglia TWO project Development Consent Order but will be National Grid owned assets.
National Grid overhead line realignment works	Works required to upgrade the existing electricity pylons and overhead lines to transport electricity from the National Grid substation to the national electricity grid
National Grid overhead line realignment works area	The proposed area for National Grid overhead line realignment works.
National Grid substation	The substation (including all of the electrical equipment within it) necessary to connect the electricity generated by the proposed East Anglia TWO project to the national electricity grid which will be owned by National Grid but is being consented as part of the proposed East Anglia TWO project Development Consent Order.
National Grid substation location	The proposed location of the National Grid substation.
Natura 2000 site	A site forming part of the network of sites made up of Special Areas of Conservation and Special Protection Areas designated respectively under the Habitats Directive and Birds Directive.
Onshore cable corridor	The corridor within which the onshore cable route will be located.
Onshore cable route	This is the construction swathe within the onshore cable corridor which would contain onshore cables as well as temporary ground required for construction which includes cable trenches, haul road and spoil storage areas.
Onshore cables	The cables which would bring electricity from landfall to the onshore substation. The onshore cable is comprised of up to six power cables and two fibre optic cables.
Proposed onshore development area	The area in which the landfall, onshore cable corridor, onshore substation, mitigation areas, temporary construction facilities (such as access roads and construction consolidation sites), and the National Grid Infrastructure will be located.
Onshore infrastructure	The combined name for all of the onshore infrastructure associated with the proposed East Anglia TWO project from landfall to the connection to the national electricity grid.

Onshore substation	The East Anglia TWO substation and all of the electrical equipment within it.
Onshore substation location	The proposed location of the onshore substation for the proposed East Anglia TWO project.
Transition bay	Underground structures at the landfall that house the joints between the offshore export cables and the onshore cables.

25.2 Construction Noise Impact Assessment

25.1 Introduction

1. This appendix details the results of the proposed East Anglia TWO project construction noise impact assessment modelling and the construction phase road traffic emissions assessment.
2. The following sections present a worst-case overview of potential noise and vibration impacts associated with construction of the proposed East Anglia TWO project onshore infrastructure and National Grid infrastructure, including embedded mitigation.
3. **Chapter 25 Noise and Vibration** details the methodology, assessment criteria and assumptions relevant to the assessment of construction phase noise impacts.
4. The construction noise impact assessment modelling and the construction phase road traffic emissions assessment has been completed for three construction scenarios which are associated with the proposed East Anglia TWO project:
 - Proposed East Anglia TWO Project Assessment (project alone);
 - Construction Scenario 1; and
 - Construction Scenario 2.
5. Further details of these construction scenarios are detailed in **section 25.7** of **Chapter 25 Noise and Vibration**.
6. The construction phase road traffic emissions assessment has been completed for a Baseline year of 2024 to 2030 versus 2024 to 2030 including the proposed East Anglia TWO project. The screening using DMRB criteria and calculation of a Basic Noise Level (BNL) for each link in the proposed East Anglia TWO project study areas are detailed.

25.2 Construction Phase Noise Modelling Approach

7. The construction phase was modelled using SoundPLAN noise modelling software. This package directly implements the calculation methods outlined in BS 5228 and other nationally and internationally recognised acoustic standards.

8. The assessment has been broken down in relation to three onshore study areas which are as below:
 - Landfall study area;
 - Onshore cable route study area; and
 - Onshore substation / National Grid infrastructure study area.
9. The three study areas are shown on **Figure 25.2** and discussed further in the baseline noise survey presented in **Appendix 25.1**.
10. **Table A25.1** breaks down the total construction period (for each of the three construction scenarios) into different construction phases upon which the assessment has been conducted against.

Table A25.1 Construction Phasing

Study Area	Construction phase	Proposed East Anglia TWO project (project alone)	Construction Scenario 1	Construction Scenario 2
Landfall location and onshore cable route (sections 1 to 4)	Month 1 to 4	✓	✓	✓
	Month 5 to 6	✓	✓	✓
	Month 7 to 11	✓	✓	✓
	Month 12 to 13	✓	✓	✓
	Month 14 to 20	✓	✓	✓
	Month 21 to 24	✓	✓	✓
Onshore substation and National Grid infrastructure	Month 1 to 4	✓	✓	✓
	Month 5 to 7	✓	✓	✓
	Month 8 to 11	✓	✓	✓
	Month 12 to 13	✓	✓	✓
	Month 14 to 17	✓	✓	✓
	Month 18 to 24	✓	✓	✓

11. BS 5228 receptor categories have been derived from the measured baseline noise levels (**Appendix 25.1**) using the 'ABC' assessment method (detailed in **section 25.4** of **Chapter 25 Noise and Vibration**).

12. Standard construction noise mitigation techniques which could be applied in order to reduce impacts by between 5dB(A) up to 10dB(A) are detailed within **section 25.6.22** of **Chapter 25 Noise and Vibration**. In line with the conservative approach taken in the assessment, a 5dB(A) reduction only was applied to represent the effect of incorporating these mitigation measures (these will be delivered through the Code of Construction Practice (CoCP)).

25.3 Construction Phase Receptors

13. A total of 35 sensitive receptor locations were agreed as part of consultation at the Expert Topic Group (ETG) meetings held for the proposed East Anglia TWO project.
14. The landfall location being considered is an area to the north of Thorpeness and south of Sizewell. The four sensitive receptors included in the noise modelling in the landfall study area are detailed in **Table A25.2** and on **Figure 25.2**.

Table A25.2 Receptor Locations – Landfall Study Area

Receptor identifier	Address (NEAREST)	X	Y	Nearest postcode
LFR1	6 North End Ave, Thorpeness, Leiston IP16 4PD, UK	647541	260181	IP16 4PD
LFR2	7 Pilgrims Way, Thorpeness, Leiston IP16 4LZ, UK	647232	260055	IP16 4LZ
LFR3	Gate Cottage, Thorpeness, Leiston IP16 4LX, UK	646514	260274	IP16 4LX
LFR4	7 Shellpit Cottages, Thorpeness, Leiston IP16 4PG, UK	646692	260894	IP16 4PG

15. The 19 onshore cable route study area sensitive receptor locations are detailed within **Table A25.3** and on **Figure 25.2**.

Table A25.3 Receptor Locations – Onshore Cable Route Study Area

Receptor identifier	Address (NEAREST)	X	Y	Nearest postcode
CRR1	The Court Yard Cottage, Sizewell, Leiston IP16 4UB, UK	647543	261202	IP16 4UB
CRR2	Caroline Cottage, Sizewell, Leiston IP16 4TY, UK	647105	261997	IP16 4TY
CRR3	Sizewell Gap, Leiston IP16, UK	647163	262434	IP16 4TT
CRR4	Sizewell Gap, Leiston IP16, UK	646246	262320	IP16 4TS
CRR5	Grimsey's Ln, Leiston IP16, UK	645472	261777	IP16 4LS
CRR6	Grimsey's Ln, Leiston IP16, UK	645359	262023	IP16 4LS

Receptor identifier	Address (NEAREST)	X	Y	Nearest postcode
CRR7	5 The Follies, Aldringham, Leiston IP16 4LU, UK	645725	261244	IP16 4LU
CRR8	Ogilvie Houses, Church Ln, Leiston IP16 4QU, UK	645330	260584	IP16 4QU
CRR9	Gypsy Ln, Leiston IP16 4GL, UK	644739	260394	IP16 4GL
CRR10	Fitches Ln, Leiston IP16 4QQ, UK	644486	260353	IP16 4QQ
CRR11	Ivywood Cottage, 17 Aldeburgh Rd, Aldringham, Leiston IP16 4QH, UK	644560	260595	IP16 4QH
CRR12	Old Blacksmiths, Thorpe Rd, Aldringham, Leiston IP16 4QX, UK	644886	260920	IP16 4QX
CRR13	37 Hawthorn Cl, Saxmundham IP17 1XW, UK	643882	260544	IP17 1XW
CRR14	Sloe Ln, Saxmundham IP17 1UU, UK	643324	260245	IP17 1UU
CRR15	4 Snape Rd, Knodishall, Saxmundham IP17 1UT, UK	643034	260588	IP17 1UT
CRR16	12 The Fitches, Knodishall, Saxmundham IP17 1UX, UK	643389	260620	IP17 1UX
CRR17	4 Snape Rd, Knodishall, Saxmundham IP17 1UT, UK	642668	260422	IP17 1UT
CRR18	Grove Rd, Saxmundham IP17 1TL, UK	642090	261299	IP17 1TL
CRR19	10 School Rd, Saxmundham IP17, UK	642557	261558	IP17 1TR

16. The 12 sensitive receptor locations within the onshore substation/national grid infrastructure study area are detailed within **Table A25.4**. Of these 12 receptors, only nine were surveyed due to access constraints. This is also detailed in **Table A25.4** and detailed on **Figure 25.2**.

Table A25.4 Receptor Locations – Onshore Substation/National Grid Infrastructure Study Area

Receptor identifier	Parish/ location	X	Y	Nearest postcode	Measurements Taken
SSR1	Grove Rd, Saxmundham IP17 1TN, UK	641720	261614	IP17 1TN	Yes
SSR2	New Haven, Friston Rd, Saxmundham IP17 1TL, UK	641841	261176	IP17 1TL	Yes
SSR3	Unnamed Road, Saxmundham IP17, UK	641231	261673	IP17 1XA	Yes
SSR4	Saxmundham Rd, Saxmundham IP17 1NJ, UK	640930	260737	IP17 1NJ	No Access granted
SSR5	Saxmundham Rd, Saxmundham IP17, UK	641157	260802	IP17 1PU	Yes
SSR6	3 Church Rd, Friston, Church Path, Saxmundham IP17 1PX, UK	641413	260559	IP17 1PX	No Access granted
SSR7	School Rd, Saxmundham IP17 1TN, UK	641808	261655	IP17 1TN	Yes
SSR8	Saxmundham Rd, Saxmundham IP17 1NH, UK	640338	260994	IP17 1NH	No Access granted
SSR9	Fristonmoor Ln, Saxmundham IP17, UK	640980	261693	IP17 1XD	Yes
SSR10	1 Friston Hall Cottages, Friston, Saxmundham IP17 1NQ, UK	639927	260384	IP17 1NQ	Yes
SSR11	77 Friston Hall Cottages, Friston, Saxmundham IP17 1NL, UK	640518	260309	IP17 1NL	Yes
SSR12	Unnamed Road, Saxmundham IP17 1NF, UK	640377	261580	IP17 1NF	Yes

25.4 Construction Noise Modelling Plant – Project Alone

17. A proposed construction phase programme detailing duration, deliveries and equipment requirements for each phase and scenario is provided in **Chapter 6 Project Description**. Noise modelling scenarios were derived from the proposed construction phase programme and are detailed below.

25.4.1 Assumptions and indicative plant list

18. Based on **Chapter 6 Project Description**, an indicative list of construction equipment has been developed and are detailed in **Table A25.5** to **Table A25.12**.

Table A25.5 Construction Plant – Landfall East Anglia TWO Project

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
Month 1 to 4	D6 Dozer	3	Point	C2.11	84.0	85
	30T Excavator	2	Point	C2.16	79.4	85
	20T Dumper	2	Point	C2.30	86.8	85
	Smooth Drum vibro road roller	2	Point	C5.20	90.8	85
	21T excavator	2	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	2	Point	C4.7	91.6	85
	Loading shovel	1	Point	C10.4	91.5	85
	Tractor & fencing kit	1	Point	C4.74	84.2	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Grader	1	Point	C6.31	92.4	85
	Telehandler	1	Point	C2.35	86.2	85
	Mobile self-contained welfare unit	1	Point	N/A SoundPLAN Library	LwA 68.2	85
	Mobile generator	1	Point	C4.76	81.0	85
	Temporary lighting	1	Point	C4.76	81.0	85
	Road surface paver & roller	1	Point	C5.30	82.2	85
	Skip Wagon Movements	3/hr over 12hr day	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
Month 5 to 13	D6 Dozer	2	Point	C2.11	84.0	85
	30T Excavator	2	Point	C2.16	79.4	85
	20T Dumper	2	Point	C2.30	86.8	85
	Smooth Drum vibrio road roller	2	Point	C5.20	90.8	85
	21T excavator	2	Point	C2.3	86.0	85

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
	5T Forward Tipping Dumper	2	Point	C4.7	91.6	85
	Loading shovel	1	Point	C10.4	91.5	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Grader	1	Point	C6.31	92.4	85
	Telehandler	1	Point	C2.35	86.2	85
	Mobile self-contained welfare unit	1	Point	N/A SoundPLAN Library	LwA 68.2	85
	Mobile generator	1	Point	C4.76	81.0	85
	Temporary lighting	1	Point	C4.76	81.0	85
	Road surface paver & roller	1	Point	C5.30	82.2	85
	Skip Wagon Movements	1/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
	HDD Drill	1	Point	N/A	LwA 105	100 (24hrs/7 days)
	Mud Pump	1	Point	N/A	LwA 93	100 (24hrs/7 days)
	Power Supply	1	Point	N/A	LwA 105	100 (24hrs/7 days)
Month 14 to 20	D6 Dozer	2	Point	C2.11	84.0	85
	30T Excavator	2	Point	C2.16	79.4	85
	20T Dumper	2	Point	C2.30	86.8	85
	Smooth Drum vibro road roller	1	Point	C5.20	90.8	85
	21T excavator	1	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	1	Point	C4.7	91.6	85
	Loading shovel	1	Point	C10.4	91.5	85
	Trench Roller	1	Point	C10.23	60.4	85

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
	Cement Mixer	1	Point	C4.18	81.6	85
	Mobile Crane	1	Point	C4.41	77.4	85
	Cable Laying Tracked Crane	1	Point	C4.50	75.5	85
	Pre-Cast Concrete Truck	1	Point	C4.20	84.9	85
	Mobile Concrete Pump	1	Point	C3.26	85.6	85
	Telehandler	1	Point	C2.35	86.2	85
	Crawler Crane	1	Point	C4.43	82.0	85
	Mobile Generator	2	Point	C4.76	81.0	85
	Temporary Lighting	2	Point	C4.76	81.0	85
	Pump	2	Point	C2.45	75.0	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Skip Wagon Movements	2/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
Month 20 to 24	D6 Dozer	2	Point	C2.11	84.0	85
	30T Excavator	2	Point	C2.16	79.4	85
	20T Dumper	2	Point	C2.30	86.8	85
	Smooth Drum vibrio road roller	1	Point	C5.20	90.8	85
	21T excavator	1	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	1	Point	C4.7	91.6	85
	Loading shovel	1	Point	C10.4	91.5	85
	Mobile Generator	2	Point	C4.76	81.0	85
	Temporary Lighting	2	Point	C4.76	81.0	85
	Tractor & fencing kit	1	Point	C4.74	84.2	85
	Tractor & trailer	1	Point	C4.75	94.0	85

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Tractor & Soil Tiller	1	Point	C4.74	84.2	85
	Crawler Crane	1	Point	C4.43	82.0	85
	Skip Wagon Movements	2/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)

Table A25.6 Construction Plant – Cable Route Section 1 and 2 East Anglia TWO Project

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
Month 1 to 4	D6 Dozer	1	Point	C2.11	84.0	85
	30T Excavator	2	Point	C2.16	79.4	85
	20T Dumper	3	Point	C2.30	86.8	85
	Smooth Drum vibro road roller	1	Point	C5.20	90.8	85
	21T excavator	1	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	1	Point	C4.7	91.6	85
	Loading shovel	1	Point	C10.4	91.5	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Grader	1	Point	C6.31	92.4	85
	Telehandler	1	Point	C2.35	86.2	85
	Mobile self-contained welfare unit	2	Point	N/A SoundPLAN Library	LwA 68.2	85
	Mobile generator	1	Point	C4.76	81.0	85

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
	Temporary lighting	1	Point	C4.76	81.0	85
	Road surface paver & roller	1	Point	C5.30	82.2	85
	Skip Wagon Movements	3/hr over 12hr day	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
Month 5 to 6	D6 Dozer	2	Point	C2.11	84.0	85
	30T Excavator	2	Point	C2.16	79.4	85
	20T Dumper	4	Point	C2.30	86.8	85
	Smooth Drum vibrio road roller	1	Point	C5.20	90.8	85
	21T excavator	2	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	2	Point	C4.7	91.6	85
	Loading shovel	2	Point	C10.4	91.5	85
	Tractor & fencing kit	1	Point	C4.74	84.2	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Grader	1	Point	C6.31	92.4	85
	Telehandler	1	Point	C2.35	86.2	85
	Mobile generator	2	Point	C4.76	81.0	85
	Temporary lighting	2	Point	C4.76	81.0	85
	Skip Wagon Movements	3/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
	HDD Drill	2	Point	N/A	LwA 105	100 (12hrs)
	Mud Pump	2	Point	N/A	LwA 93	100 (12hrs)
	Power Supply	2	Point	N/A	LwA 105	100 (12hrs)

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
Month 7 to 11	30T Excavator	2	Point	C2.16	79.4	85
	20T Dumper	4	Point	C2.30	86.8	85
	21T excavator	2	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	2	Point	C4.7	91.6	85
	Loading shovel	2	Point	C10.4	91.5	85
	Trench Roller	1	Point	C10.23	60.4	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Tractor & Cable Drum Roller	1	Point	C4.74	84.2	85
	Cable Winch	1	Point	C4.52	78.5	85
	Mobile Concrete Pump	1	Point	C3.26	85.6	85
	Telehandler	2	Point	C2.35	86.2	85
	Crawler Crane	1	Point	C4.43	82.0	85
	Mobile generator	2	Point	C4.76	81.0	85
	Temporary lighting	3	Point	C4.76	81.0	85
	Pump	2	Point	C2.45	75.0	85
	Skip Wagon Movements	2/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
	HDD Drill	2	Point	N/A	LwA 105	100 (12hrs)
	Mud Pump	2	Point	N/A	LwA 93	100 (12hrs)
	Power Supply	2	Point	N/A	LwA 105	100 (12hrs)
Month 12 to 13	30T Excavator	2	Point	C2.16	79.4	85
	20T Dumper	4	Point	C2.30	86.8	85
	21T excavator	2	Point	C2.3	86.0	85

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
	5T Forward Tipping Dumper	2	Point	C4.7	91.6	85
	Loading shovel	2	Point	C10.4	91.5	85
	Trench Roller	1	Point	C10.23	60.4	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Tractor & Cable Drum Roller	1	Point	C4.74	84.2	85
	Cement Mixer	1	Point	C4.18	81.6	85
	Mobile Crane	1	Point	C4.41	77.4	85
	Cable Winch	1	Point	C4.52	78.5	85
	Pre-Cast Concrete Truck	1	Point	C4.20	84.9	85
	Mobile Concrete Pump	1	Point	C3.26	85.6	85
	Telehandler	1	Point	C2.35	86.2	85
	Crawler Crane	1	Point	C4.43	82.0	85
	Mobile generator	2	Point	C4.76	81.0	85
	Temporary lighting	3	Point	C4.76	81.0	85
	Pump	2	Point	C2.45	75.0	85
	Skip Wagon Movements	2/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
Month 14 to 20	D6 Dozer	2	Point	C2.11	84.0	85
	30T Excavator	2	Point	C2.16	79.4	85
	20T Dumper	4	Point	C2.30	86.8	85
	Smooth Drum vibro road roller	1	Point	C5.20	90.8	85
	21T excavator	2	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	2	Point	C4.7	91.6	85
	Loading shovel	2	Point	C10.4	91.5	85

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
	Trench Roller	1	Point	C10.23	60.4	85
	Cement Mixer	1	Point	C4.18	81.6	85
	Mobile Crane	1	Point	C4.41	77.4	85
	Cable Winch	1	Point	C4.52	78.5	85
	Pre-Cast Concrete Truck	1	Point	C4.20	84.9	85
	Mobile Concrete Pump	1	Point	C3.26	85.6	85
	Telehandler	1	Point	C2.35	86.2	85
	Crawler Crane	1	Point	C4.43	82.0	85
	Mobile Generator	2	Point	C4.76	81.0	85
	Temporary Lighting	3	Point	C4.76	81.0	85
	Pump	2	Point	C2.45	75.0	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Tractor & Cable Drum Roller	1	Point	C4.74	84.2	85
	Tractor & Soil Tiller	1	Point	C4.74	84.2	85
	Skip Wagon Movements	3/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
Month 20 to 24	D6 Dozer	2	Point	C2.11	84.0	85
	30T Excavator	2	Point	C2.16	79.4	85
	20T Dumper	2	Point	C2.30	86.8	85
	Smooth Drum vibro road roller	1	Point	C5.20	90.8	85
	21T excavator	1	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	1	Point	C4.7	91.6	85
	Loading shovel	2	Point	C10.4	91.5	85
	Mobile Generator	1	Point	C4.76	81.0	85

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
	Temporary Lighting	2	Point	C4.76	81.0	85
	Tractor & fencing kit	1	Point	C4.74	84.2	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Tractor & Soil Tiller	1	Point	C4.74	84.2	85
	Skip Wagon Movements	1/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)

Table A25.7 Construction Plant – Cable Route Section 3 and 4 East Anglia TWO Project

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
Month 1 to 4	D6 Dozer	1	Point	C2.11	84.0	85
	30T Excavator	2	Point	C2.16	79.4	85
	20T Dumper	3	Point	C2.30	86.8	85
	Smooth Drum vibro road roller	1	Point	C5.20	90.8	85
	21T excavator	1	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	1	Point	C4.7	91.6	85
	Loading shovel	1	Point	C10.4	91.5	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Grader	1	Point	C6.31	92.4	85
	Telehandler	1	Point	C2.35	86.2	85

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
	Mobile self-contained welfare unit	2	Point	N/A SoundPLAN Library	LwA 68.2	85
	Mobile generator	1	Point	C4.76	81.0	85
	Temporary lighting	1	Point	C4.76	81.0	85
	Road surface paver & roller	1	Point	C5.30	82.2	85
	Skip Wagon Movements	2/hr over 12hr day	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
Month 5 to 6	D6 Dozer	2	Point	C2.11	84.0	85
	30T Excavator	2	Point	C2.16	79.4	85
	20T Dumper	4	Point	C2.30	86.8	85
	Smooth Drum vibrio road roller	2	Point	C5.20	90.8	85
	21T excavator	2	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	2	Point	C4.7	91.6	85
	Loading shovel	2	Point	C10.4	91.5	85
	Tractor & fencing kit	1	Point	C4.74	84.2	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Grader	1	Point	C6.31	92.4	85
	Telehandler	1	Point	C2.35	86.2	85
	Mobile generator	2	Point	C4.76	81.0	85
	Temporary lighting	2	Point	C4.76	81.0	85
	Skip Wagon Movements	2/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
Month 7 to 11	30T Excavator	2	Point	C2.16	79.4	85
	20T Dumper	4	Point	C2.30	86.8	85

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
	21T excavator	2	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	2	Point	C4.7	91.6	85
	Loading shovel	2	Point	C10.4	91.5	85
	Trench Roller	1	Point	C10.23	60.4	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Tractor & Cable Drum Roller	1	Point	C4.74	84.2	85
	Cable Winch	1	Point	C4.52	78.5	85
	Mobile Concrete Pump	1	Point	C3.26	85.6	85
	Telehandler	1	Point	C2.35	86.2	85
	Crawler Crane	1	Point	C4.43	82.0	85
	Mobile generator	2	Point	C4.76	81.0	85
	Temporary lighting	3	Point	C4.76	81.0	85
	Pump	2	Point	C2.45	75.0	85
	Skip Wagon Movements	1/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
	HDD Drill	2	Point	N/A	LwA 105	100 (12hrs)
	Mud Pump	2	Point	N/A	LwA 93	100 (12hrs)
	Power Supply	2	Point	N/A	LwA 105	100 (12hrs)
Month 12 to 13	30T Excavator	2	Point	C2.16	79.4	85
	20T Dumper	4	Point	C2.30	86.8	85
	21T excavator	2	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	2	Point	C4.7	91.6	85
	Loading shovel	2	Point	C10.4	91.5	85

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
	Trench Roller	1	Point	C10.23	60.4	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Tractor & Cable Drum Roller	1	Point	C4.74	84.2	85
	Cement Mixer	1	Point	C4.18	81.6	85
	Mobile Crane	1	Point	C4.41	77.4	85
	Cable Winch	1	Point	C4.52	78.5	85
	Pre-Cast Concrete Truck	1	Point	C4.20	84.9	85
	Mobile Concrete Pump	1	Point	C3.26	85.6	85
	Telehandler	1	Point	C2.35	86.2	85
	Crawler Crane	1	Point	C4.43	82.0	85
	Mobile generator	2	Point	C4.76	81.0	85
	Temporary lighting	3	Point	C4.76	81.0	85
	Pump	2	Point	C2.45	75.0	85
	Skip Wagon Movements	2/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
Month 14 to 20	D6 Dozer	2	Point	C2.11	84.0	85
	30T Excavator	2	Point	C2.16	79.4	85
	20T Dumper	4	Point	C2.30	86.8	85
	21T excavator	2	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	2	Point	C4.7	91.6	85
	Loading shovel	2	Point	C10.4	91.5	85
	Trench Roller	1	Point	C10.23	60.4	85
	Cement Mixer	1	Point	C4.18	81.6	85
	Mobile Crane	1	Point	C4.41	77.4	85
	Cable Winch	1	Point	C4.52	78.5	85

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
	Pre-Cast Concrete Truck	1	Point	C4.20	84.9	85
	Mobile Concrete Pump	1	Point	C3.26	85.6	85
	Telehandler	1	Point	C2.35	86.2	85
	Crawler Crane	1	Point	C4.43	82.0	85
	Mobile Generator	2	Point	C4.76	81.0	85
	Temporary Lighting	3	Point	C4.76	81.0	85
	Pump	2	Point	C2.45	75.0	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Tractor & Cable Drum Roller	1	Point	C4.74	84.2	85
	Skip Wagon Movements	2 to 3/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
Month 20 to 24	D6 Dozer	2	Point	C2.11	84.0	85
	30T Excavator	2	Point	C2.16	79.4	85
	20T Dumper	2	Point	C2.30	86.8	85
	Smooth Drum vibro road roller	1	Point	C5.20	90.8	85
	21T excavator	1	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	1	Point	C4.7	91.6	85
	Loading shovel	2	Point	C10.4	91.5	85
	Mobile Generator	1	Point	C4.76	81.0	85
	Temporary Lighting	2	Point	C4.76	81.0	85
	Tractor & fencing kit	1	Point	C4.74	84.2	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Tractor & Soil Tiller	1	Point	C4.74	84.2	85
	Crawler Crane	1	Point	C4.43	82.0	85
	Skip Wagon Movements	1/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)

Table A25.8 Construction Plant – Onshore Substation for Proposed East Anglia TWO Project

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
Month 1 to 4	D6 Dozer	2	Point	C2.11	84.0	85
	30T Excavator	2	Point	C2.16	79.4	85
	20T Dumper	2	Point	C2.30	86.8	85
	Smooth Drum vibro road roller	2	Point	C5.20	90.8	85
	21T excavator	2	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	2	Point	C4.7	91.6	85
	Loading shovel	2	Point	C10.4	91.5	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Grader	2	Point	C6.31	92.4	85
	Mobile self-contained welfare unit	1	Point	N/A SoundPLAN Library	LwA 68.2	85
	Temporary lighting	2	Point	C4.76	81.0	85
	Road surface paver & roller	1	Point	C5.30	82.2	85
	Skip Wagon Movements	3/hr over	Line	C8.21	87.2	Split evenly over 12 hour

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
		12hr day				day (7 – 19hrs)
Month 5 to 7	D6 Dozer	2	Point	C2.11	84.0	85
	30T Excavator	2	Point	C2.16	79.4	85
	20T Dumper	2	Point	C2.30	86.8	85
	Smooth Drum vibro road roller	2	Point	C5.20	90.8	85
	21T excavator	2	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	2	Point	C4.7	91.6	85
	Loading shovel	2	Point	C10.4	91.5	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Grader	2	Point	C6.31	92.4	85
	Concrete Batching Plant	1	Point	C4.22	81.7	85
	Dry Mix Silos	2	Point	C3.26	85.6	85
	Road surface paver & roller	1	Point	C5.30	82.2	85
	Pre-Cast Concrete Truck	1	Point	C4.20	84.9	85
	Mobile Concrete Pump	1	Point	C3.26	85.6	85
	Telehandler	1	Point	C2.35	86.2	85
	Mobile generator	1	Point	C4.76	81.0	85
	Pump	2	Point	C2.45	75.0	85
	Temporary lighting	2	Point	C4.76	81.0	85
	Trench Roller	1	Point	C10.23	60.4	85
	Crawler Crane	1	Point	C4.43	82.0	85
	Skip Wagon Movements	2/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
	D6 Dozer	2	Point	C2.11	84.0	85

Phase	Name	No.	Source type	BS5228 Reference	L _{Aeq} (dB) at 10m	On time correction (%)
Month 8 to 11	30T Excavator	2	Point	C2.16	79.4	85
	20T Dumper	2	Point	C2.30	86.8	85
	Smooth Drum vibrio road roller	2	Point	C5.20	90.8	85
	21T excavator	2	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	2	Point	C4.7	91.6	85
	Loading shovel	1	Point	C10.4	91.5	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Grader	2	Point	C6.31	92.4	85
	Concrete Batching Plant	1	Point	C4.22	81.7	85
	Dry Mix Silos	1	Point	C3.26	85.6	85
	Road surface paver & roller	1	Point	C5.30	82.2	85
	Pre-Cast Concrete Truck	1	Point	C4.20	84.9	85
	Mobile Concrete Pump	1	Point	C3.26	85.6	85
	Temporary lighting	2	Point	C4.76	81.0	85
	Pump	2	Point	C2.45	75.0	85
	Skip Wagon Movements	2/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
Month 12 to 13	D6 Dozer	1	Point	C2.11	84.0	85
	30T Excavator	1	Point	C2.16	79.4	85
	20T Dumper	1	Point	C2.30	86.8	85
	Smooth Drum vibro road roller	1	Point	C5.20	90.8	85
	21T excavator	1	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	1	Point	C4.7	91.6	85
	Loading shovel	1	Point	C10.4	91.5	85

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Grader	1	Point	C6.31	92.4	85
	Road surface paver & roller	1	Point	C5.30	82.2	85
	Concrete Batching Plant	1	Point	C4.22	81.7	85
	Dry Mix Silos	2	Point	C3.26	85.6	85
	Pre-Cast Concrete Truck	1	Point	C4.20	84.9	85
	Mobile Concrete Pump	1	Point	C3.26	85.6	85
	Temporary lighting	2	Point	C4.76	81.0	85
	Pump	2	Point	C2.45	75.0	85
	Skip Wagon Movements	2/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
Month 14 to 17	D6 Dozer	1	Point	C2.11	84.0	85
	30T Excavator	1	Point	C2.16	79.4	85
	20T Dumper	1	Point	C2.30	86.8	85
	Smooth Drum vibro road roller	1	Point	C5.20	90.8	85
	21T excavator	2	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	2	Point	C4.7	91.6	85
	Loading shovel	1	Point	C10.4	91.5	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Grader	1	Point	C6.31	92.4	85
	Road surface paver & roller	1	Point	C5.30	82.2	85

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
	Concrete Batching Plant	1	Point	C4.22	81.7	85
	Dry Mix Silos	2	Point	C3.26	85.6	85
	Cement Mixer	1	Point	C4.18	81.6	85
	Mobile Crane	2	Point	C4.41	77.4	85
	Static Crane	1	Point	C4.48	85.5	85
	Pre-Cast Concrete Truck	2	Point	C4.20	84.9	85
	Mobile Concrete Pump	2	Point	C3.26	85.6	85
	Telehandler	2	Point	C2.35	86.2	85
	Mobile Generator	1	Point	C4.76	81.0	85
	Temporary Lighting	2	Point	C4.76	81.0	85
	Pump	2	Point	C2.45	75.0	85
	3t Forward Tipping Dumper	1	Point	C4.9	86.5	85
	Scissor Lift	2	Point	C4.59	83.9	85
	Mobile Aerial Platform	2	Point	C4.57	80.4	85
	JCB Wheeled Excavator	2	Point	C5.34	75.5	85
	Skip Wagon Movements	3/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
Month 18 to 20	21T excavator	1	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	1	Point	C4.7	91.6	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Concrete Batching Plant	1	Point	C4.22	81.7	85
	Dry Mix Silos	2	Point	C3.26	85.6	85
	Cement Mixer	1	Point	C4.18	81.6	85
	Mobile Crane	2	Point	C4.41	77.4	85
	Mobile Crane Heavy Use	2	Point	C4.50	75.5	85
	Specialist Gantry Crane	2	Point	C4.50	75.5	85

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
	Static Crane	3	Point	C4.48	85.5	85
	Pre-Cast Concrete Truck	2	Point	C4.20	84.9	85
	Mobile Concrete Pump	2	Point	C3.26	85.6	85
	Telehandler	2	Point	C2.35	86.2	85
	Mobile Generator	2	Point	C4.76	81.0	85
	3t Forward Tipping Dumper	1	Point	C4.9	86.5	85
	Scissor Lift	2	Point	C4.59	83.9	85
	Mobile Aerial Platform	2	Point	C4.57	80.4	85
	JCB Wheeled Excavator	2	Point	C5.34	75.5	85
	Forklift	2	Point	N/A	LwA 75.0	85
	Pump	2	Point	C2.45	75.0	85
	Temporary Lighting	2	Point	C4.76	81.0	85
	Skip Wagon Movements	1/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
Month 20 to 30	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Mobile Crane	1	Point	C4.41	77.4	85
	Mobile Crane Heavy Use	1	Point	C4.50	75.5	85
	Specialist Gantry Crane	1	Point	C4.50	75.5	85
	Static Crane	1	Point	C4.48	85.5	85
	Telehandler	2	Point	C2.35	86.2	85
	Mobile Generator	2	Point	C4.76	81.0	85
	Scissor Lift	2	Point	C4.59	83.9	85
	Mobile Aerial Platform	2	Point	C4.57	80.4	85
	Forklift	2	Point	N/A	LwA 75.0	85
	Temporary Lighting	2	Point	C4.76	81.0	85

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
	Skip Wagon Movements	1/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)

25.5 Construction Noise Modelling – Project Alone

19. The SoundPLAN noise model used in this construction phase assessment incorporated noise sources located in each study area, nearby residential dwellings and other buildings, intervening ground cover and topographical information.
20. Noise levels for the construction phase were calculated using the methods and guidance in BS 5228-1:2009+A1:2014. This Standard provides methods for predicting receptor noise levels from construction works based on the number and type of construction plant and activities operating on site, with corrections to account for:
 - The “on-time” of the plant, as a percentage of the assessment period;
 - Distance from source to receptor;
 - Acoustic screening by barriers, buildings or topography; and
 - Ground type.
21. No garden fences at receptor locations have been incorporated within the model. Although BS5228:2009+A1:2014 states that, “as a working approximation, if there is a barrier or other topographic feature between the source and the receiving position, assume an approximate attenuation of 5dB when the top of the plant is just visible to the receiver over the noise barrier, and of 10dB when the noise screen completely hides the sources from the receiver”.

25.5.1 Landfall Study Area

22. **Table A25.9** presents the predicted noise level at the nearest sensitive receptors at the landfall location including embedded mitigation for the proposed East Anglia TWO project (project alone) construction phases outlined in **Table A25.1**.
23. Sensitive receptors correspond to those surveyed and detailed in **Table A25.2**.

Table A25.9 Landfall Construction Noise – Predicted Impacts for the proposed East Anglia TWO project Month 1 to 24

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
LFR1	Month 1 to 4	Daytime	A (65)	51.0	No Impact	Negligible
	Month 5 to 6	Daytime	A (65)	56.6	No Impact	Negligible
		Evening	A (55)	38.4	No Impact	Negligible
		Night	B (50)	39.3	No Impact	Negligible
	Month 7 to 11	Daytime	A (65)	56.6	No Impact	Negligible
		Evening	A (55)	38.4	No Impact	Negligible
		Night	B (50)	39.3	No Impact	Negligible
	Month 12 to 13	Daytime	A (65)	54.3	No Impact	Negligible
		Evening	A (55)	38.4	No Impact	Negligible
		Night	B (50)	39.3	No Impact	Negligible
	Month 14 to 20	Daytime	A (65)	58.0	No Impact	Negligible
	Month 21 to 24	Daytime	A (65)	58.0	No Impact	Negligible
LFR2	Month 1 to 4	Daytime	A (65)	52.3	No Impact	Negligible
	Month 5 to 6	Daytime	A (65)	51.9	No Impact	Negligible
		Evening	A (55)	38.0	No Impact	Negligible
		Night	A (45)	38.2	No Impact	Negligible
	Month 7 to 11	Daytime	A (65)	46.2	No Impact	Negligible
		Evening	A (55)	35.5	No Impact	Negligible
		Night	A (45)	35.6	No Impact	Negligible
	Month 12 to 13	Daytime	A (65)	49.7	No Impact	Negligible
		Evening	A (55)	38.0	No Impact	Negligible
		Night	A (45)	38.2	No Impact	Negligible
	Month 14 to 20	Daytime	A (65)	51.5	No Impact	Negligible
	Month 21 to 24	Daytime	A (65)	51.3	No Impact	Negligible
LFR3	Month 1 to 4	Daytime	A (65)	45.6	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
	Month 5 to 6	Daytime	A (65)	45.9	No Impact	Negligible
		Evening	A (55)	33.6	No Impact	Negligible
		Night	A (45)	33.6	No Impact	Negligible
	Month 7 to 11	Daytime	A (65)	46.2	No Impact	Negligible
		Evening	A (55)	35.5	No Impact	Negligible
		Night	A (45)	35.6	No Impact	Negligible
	Month 12 to 13	Daytime	A (65)	46.0	No Impact	Negligible
		Evening	A (55)	33.6	No Impact	Negligible
		Night	A (45)	33.6	No Impact	Negligible
	Month 14 to 20	Daytime	A (65)	62.5	No Impact	Negligible
	Month 21 to 24	Daytime	A (65)	62.5	No Impact	Negligible
LFR4	Month 1 to 4	Daytime	A (65)	47.3	No Impact	Negligible
	Month 5 to 6	Daytime	A (65)	47.8	No Impact	Negligible
		Evening	A (55)	30.9	No Impact	Negligible
		Night	A (45)	31.7	No Impact	Negligible
	Month 7 to 11	Daytime	A (65)	47.9	No Impact	Negligible
		Evening	A (55)	37.4	No Impact	Negligible
		Night	A (45)	37.9	No Impact	Negligible
	Month 12 to 13	Daytime	A (65)	48.0	No Impact	Negligible
		Evening	A (55)	30.9	No Impact	Negligible
		Night	A (45)	31.7	No Impact	Negligible
	Month 14 to 20	Daytime	A (65)	47.9	No Impact	Negligible
	Month 21 to 24	Daytime	A (65)	46.7	No Impact	Negligible

25.5.2 Onshore Cable Route Study Area

24. **Table A25.10** to **Table A25.15** presents the predicted daytime noise level at the nearest sensitive receptors along the onshore cable route including embedded

mitigation for the proposed East Anglia TWO project (project alone) construction phases outlined in **Table A25.1**.

25. Sensitive receptors correspond to those surveyed and detailed in **Table A25.3**.

Table A25.10 Cable Route Noise – Predicted Impacts for the proposed East Anglia TWO project Month 1 to 4 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 1 to 4	Daytime	A (65)	55.7	No Impact	Negligible
CCR2		Daytime	A (65)	54.7	No Impact	Negligible
CCR3		Daytime	A (65)	45.0	No Impact	Negligible
CCR4		Daytime	A (65)	46.0	No Impact	Negligible
CCR5		Daytime	A (65)	43.9	No Impact	Negligible
CCR6		Daytime	A (65)	42.5	No Impact	Negligible
CCR7		Daytime	A (65)	59.5	No Impact	Negligible
CCR8		Daytime	A (65)	50.2	No Impact	Negligible
CCR9		Daytime	A (65)	51.3	No Impact	Negligible
CCR10		Daytime	A (65)	61.9	No Impact	Negligible
CCR11		Daytime	A (65)	58.3	No Impact	Negligible
CCR12		Daytime	A (65)	49.0	No Impact	Negligible
CCR13		Daytime	A (65)	43.8	No Impact	Negligible
CCR14		Daytime	A (65)	51.4	No Impact	Negligible
CCR15		Daytime	A (65)	51.0	No Impact	Negligible
CCR16		Daytime	A (65)	50.5	No Impact	Negligible
CCR17		Daytime	A (65)	53.6	No Impact	Negligible
CCR18		Daytime	A (65)	49.8	No Impact	Negligible
CCR19		Daytime	A (65)	44.7	No Impact	Negligible

Table A25.11 Cable Route Noise – Predicted Impacts for the proposed East Anglia TWO project Month 5 to 6 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 5 to 6	Daytime	A (65)	56.2	No Impact	Negligible
CCR2		Daytime	A (65)	62.5	No Impact	Negligible
CCR3		Daytime	A (65)	48.1	No Impact	Negligible
CCR4		Daytime	A (65)	47.4	No Impact	Negligible
CCR5		Daytime	A (65)	45.0	No Impact	Negligible
CCR6		Daytime	A (65)	43.5	No Impact	Negligible
CCR7		Daytime	A (65)	63.2	No Impact	Negligible
CCR8		Daytime	A (65)	51.6	No Impact	Negligible
CCR9		Daytime	A (65)	56.5	No Impact	Negligible
CCR10		Daytime	A (65)	59.9	No Impact	Negligible
CCR11		Daytime	A (65)	59.6	No Impact	Negligible
CCR12		Daytime	A (65)	47.9	No Impact	Negligible
CCR13		Daytime	A (65)	52.7	No Impact	Negligible
CCR14		Daytime	A (65)	54.4	No Impact	Negligible
CCR15		Daytime	A (65)	54.7	No Impact	Negligible
CCR16		Daytime	A (65)	53.4	No Impact	Negligible
CCR17		Daytime	A (65)	53.0	No Impact	Negligible
CCR18		Daytime	A (65)	51.1	No Impact	Negligible
CCR19		Daytime	A (65)	45.9	No Impact	Negligible

Table A25.12 Cable Route Noise – Predicted Impacts for the proposed East Anglia TWO project Month 7 to 11 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 7 to 11	Daytime	A (65)	58.8	No Impact	Negligible
CCR2		Daytime	A (65)	60.6	No Impact	Negligible
CCR3		Daytime	A (65)	46.6	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR4		Daytime	A (65)	47.0	No Impact	Negligible
CCR5		Daytime	A (65)	45.7	No Impact	Negligible
CCR6		Daytime	A (65)	44.1	No Impact	Negligible
CCR7		Daytime	A (65)	64.2	No Impact	Negligible
CCR8		Daytime	A (65)	49.0	No Impact	Negligible
CCR9		Daytime	A (65)	53.0	No Impact	Negligible
CCR10		Daytime	A (65)	57.9	No Impact	Negligible
CCR11		Daytime	A (65)	54.6	No Impact	Negligible
CCR12		Daytime	A (65)	51.8	No Impact	Negligible
CCR13		Daytime	A (65)	46.9	No Impact	Negligible
CCR14		Daytime	A (65)	54.2	No Impact	Negligible
CCR15		Daytime	A (65)	55.7	No Impact	Negligible
CCR16		Daytime	A (65)	54.0	No Impact	Negligible
CCR17		Daytime	A (65)	52.3	No Impact	Negligible
CCR18		Daytime	A (65)	50.3	No Impact	Negligible
CCR19		Daytime	A (65)	45.4	No Impact	Negligible

Table 25.13 Cable Route Noise – Predicted Impacts for the proposed East Anglia TWO project Month 12 to 13 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 12 to 13	Daytime	A (65)	58.8	No Impact	Negligible
CCR2		Daytime	A (65)	61.3	No Impact	Negligible
CCR3		Daytime	A (65)	47.7	No Impact	Negligible
CCR4		Daytime	A (65)	47.7	No Impact	Negligible
CCR5		Daytime	A (65)	45.1	No Impact	Negligible
CCR6		Daytime	A (65)	43.7	No Impact	Negligible
CCR7		Daytime	A (65)	63.2	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR8		Daytime	A (65)	50.6	No Impact	Negligible
CCR9		Daytime	A (65)	50.3	No Impact	Negligible
CCR10		Daytime	A (65)	48.6	No Impact	Negligible
CCR11		Daytime	A (65)	47.9	No Impact	Negligible
CCR12		Daytime	A (65)	49.9	No Impact	Negligible
CCR13		Daytime	A (65)	56.9	No Impact	Negligible
CCR14		Daytime	A (65)	51.0	No Impact	Negligible
CCR15		Daytime	A (65)	49.7	No Impact	Negligible
CCR16		Daytime	A (65)	51.0	No Impact	Negligible
CCR17		Daytime	A (65)	55.7	No Impact	Negligible
CCR18		Daytime	A (65)	50.5	No Impact	Negligible
CCR19		Daytime	A (65)	46.1	No Impact	Negligible

Table A25.14 Cable Route Noise – Predicted Impacts for the proposed East Anglia TWO project Month 14 to 20 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 14 to 20	Daytime	A (65)	59.1	No Impact	Negligible
CCR2		Daytime	A (65)	61.7	No Impact	Negligible
CCR3		Daytime	A (65)	47.9	No Impact	Negligible
CCR4		Daytime	A (65)	47.8	No Impact	Negligible
CCR5		Daytime	A (65)	46.2	No Impact	Negligible
CCR6		Daytime	A (65)	44.4	No Impact	Negligible
CCR7		Daytime	A (65)	64.7	No Impact	Negligible
CCR8		Daytime	A (65)	48.6	No Impact	Negligible
CCR9		Daytime	A (65)	50.8	No Impact	Negligible
CCR10		Daytime	A (65)	49.0	No Impact	Negligible
CCR11		Daytime	A (65)	48.4	No Impact	Negligible
CCR12		Daytime	A (65)	51.0	No Impact	Negligible
CCR13		Daytime	A (65)	56.9	No Impact	Negligible
CCR14		Daytime	A (65)	51.1	No Impact	Negligible
CCR15		Daytime	A (65)	49.8	No Impact	Negligible
CCR16		Daytime	A (65)	51.0	No Impact	Negligible
CCR17		Daytime	A (65)	55.7	No Impact	Negligible
CCR18		Daytime	A (65)	51.1	No Impact	Negligible
CCR19		Daytime	A (65)	46.5	No Impact	Negligible

Table A25.15 Cable Route Noise – Predicted Impacts for the proposed East Anglia TWO project Month 21 to 24 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 21 to 24	Daytime	A (65)	55.8	No Impact	Negligible
CCR2		Daytime	A (65)	59.3	No Impact	Negligible
CCR3		Daytime	A (65)	48.2	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR4		Daytime	A (65)	46.9	No Impact	Negligible
CCR5		Daytime	A (65)	45.1	No Impact	Negligible
CCR6		Daytime	A (65)	43.3	No Impact	Negligible
CCR7		Daytime	A (65)	64.7	No Impact	Negligible
CCR8		Daytime	A (65)	46.3	No Impact	Negligible
CCR9		Daytime	A (65)	49.4	No Impact	Negligible
CCR10		Daytime	A (65)	48.0	No Impact	Negligible
CCR11		Daytime	A (65)	46.8	No Impact	Negligible
CCR12		Daytime	A (65)	47.6	No Impact	Negligible
CCR13		Daytime	A (65)	56.3	No Impact	Negligible
CCR14		Daytime	A (65)	52.6	No Impact	Negligible
CCR15		Daytime	A (65)	49.8	No Impact	Negligible
CCR16		Daytime	A (65)	53.1	No Impact	Negligible
CCR17		Daytime	A (65)	52.6	No Impact	Negligible
CCR18		Daytime	A (65)	48.3	No Impact	Negligible
CCR19		Daytime	A (65)	44.3	No Impact	Negligible

26. **Table A25.16** to **Table A25.21** presents the predicted weekend noise level at the nearest sensitive receptors along the onshore cable route including embedded mitigation for the proposed East Anglia TWO project (project alone) construction phases outlined in **Table A25.1**.

27. Sensitive receptors correspond to those surveyed and detailed in **Table A25.3**.

Table A25.16 Cable Route Noise – Predicted Impacts for the proposed East Anglia TWO project Month 1 to 4 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 1 to 4	Weekend Saturday	A (55)	55.7	No Impact	Negligible
CCR2			A (55)	54.7	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR3		13:00 to 19:00	A (55)	45.0	No Impact	Negligible
CCR4			A (55)	46.0	No Impact	Negligible
CCR5			A (55)	43.9	No Impact	Negligible
CCR6			A (55)	42.5	No Impact	Negligible
CCR7			A (55)	59.5	Medium Impact	Moderate
CCR8			A (55)	50.2	No Impact	Negligible
CCR9			A (55)	51.3	No Impact	Negligible
CCR10			A (55)	61.9	High Impact	Major
CCR11			A (55)	58.3	Medium Impact	Moderate
CCR12			A (55)	49.0	No Impact	Negligible
CCR13			A (55)	43.8	No Impact	Negligible
CCR14			A (55)	51.4	No Impact	Negligible
CCR15			A (55)	51.0	No Impact	Negligible
CCR16			A (55)	50.5	No Impact	Negligible
CCR17			A (55)	53.6	No Impact	Negligible
CCR18			A (55)	49.8	No Impact	Negligible
CCR19			A (55)	44.7	No Impact	Negligible

28. **Table A25.16** shows that predicted weekend period impacts (Scenario 2 Month 1 to 4) including embedded mitigation range from no impact to a high impact magnitude at a medium sensitivity receptor and therefore as a worst case of **major** adverse significance. Details of possible enhanced mitigation measures are provided in **section 25.6.1.2** of **Chapter 25 Noise and Vibration**.

Table A25.17 Cable Route Noise – Predicted Impacts for the proposed East Anglia TWO project Month 5 to 6 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 5 to 6	Weekend Saturday 13:00 to 19:00	A (55)	56.2	Negligible Impact	Minor
CCR2			A (55)	62.5	High Impact	Major
CCR3			A (55)	48.1	No Impact	Negligible
CCR4			A (55)	47.4	No Impact	Negligible
CCR5			A (55)	45.0	No Impact	Negligible
CCR6			A (55)	43.5	No Impact	Negligible
CCR7			A (55)	63.2	High Impact	Major
CCR8			A (55)	51.6	No Impact	Negligible
CCR9			A (55)	56.5	Low Impact	Minor
CCR10			A (55)	59.9	Medium Impact	Moderate
CCR11			A (55)	59.6	Medium Impact	Moderate
CCR12			A (55)	47.9	No Impact	Negligible
CCR13			A (55)	52.7	No Impact	Negligible
CCR14			A (55)	54.4	No Impact	Negligible
CCR15			A (55)	54.7	No Impact	Negligible
CCR16			A (55)	53.4	No Impact	Negligible
CCR17			A (55)	53.0	No Impact	Negligible
CCR18			A (55)	51.1	No Impact	Negligible
CCR19			A (55)	45.9	No Impact	Negligible

29. **Table A25.17** shows that predicted weekend period impacts (Scenario 2 Month 5 to 6) including embedded mitigation range from no impact to a high impact magnitude at a medium sensitivity receptor and therefore as a worst case of **major** adverse significance. Details of possible enhanced mitigation measures are provided in **section 25.6.1.2** of **Chapter 25 Noise and Vibration**.

Table A25.18 Cable Route Noise – Predicted Impacts for the proposed East Anglia TWO project Month 7 to 11 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 7 to 11	Weekend Saturday 13:00 to 19:00	A (55)	58.8	Medium Impact	Moderate
CCR2			A (55)	60.6	High Impact	Major
CCR3			A (55)	46.6	No Impact	Negligible
CCR4			A (55)	47.0	No Impact	Negligible
CCR5			A (55)	45.7	No Impact	Negligible
CCR6			A (55)	44.1	No Impact	Negligible
CCR7			A (55)	64.2	High Impact	Major
CCR8			A (55)	49.0	No Impact	Negligible
CCR9			A (55)	53.0	No Impact	Negligible
CCR10			A (55)	57.9	Low Impact	Minor
CCR11			A (55)	54.6	No Impact	Negligible
CCR12			A (55)	51.8	No Impact	Negligible
CCR13			A (55)	46.9	No Impact	Negligible
CCR14			A (55)	54.2	No Impact	Negligible
CCR15			A (55)	55.7	Negligible Impact	Minor
CCR16			A (55)	54.0	No Impact	Negligible
CCR17			A (55)	52.3	No Impact	Negligible
CCR18			A (55)	50.3	No Impact	Negligible
CCR19			A (55)	45.4	No Impact	Negligible

30. **Table A25.18** shows that predicted weekend period impacts (Scenario 2 Month 7 to 11) including embedded mitigation range from no impact to a high impact magnitude at a medium sensitivity receptor and therefore as a worst case of **major** adverse significance. Details of possible enhanced mitigation measures are provided in **section 25.6.1.2** of **Chapter 25 Noise and Vibration**.

**Table A25.19 Cable Route Noise – Predicted Impacts for the proposed East Anglia TWO project
Month 12 to 13 Weekend**

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 12 to 13	Weekend Saturday 13:00 to 19:00	A (55)	58.8	Medium Impact	Moderate
CCR2			A (55)	61.3	High Impact	Major
CCR3			A (55)	47.7	No Impact	Negligible
CCR4			A (55)	47.7	No Impact	Negligible
CCR5			A (55)	45.1	No Impact	Negligible
CCR6			A (55)	43.7	No Impact	Negligible
CCR7			A (55)	63.2	High Impact	Major
CCR8			A (55)	50.6	No Impact	Negligible
CCR9			A (55)	50.3	No Impact	Negligible
CCR10			A (55)	48.6	No Impact	Negligible
CCR11			A (55)	47.9	No Impact	Negligible
CCR12			A (55)	49.9	No Impact	Negligible
CCR13			A (55)	56.9	Low Impact	Minor
CCR14			A (55)	51.0	No Impact	Negligible
CCR15			A (55)	49.7	No Impact	Negligible
CCR16			A (55)	51.0	No Impact	Negligible
CCR17			A (55)	55.7	Negligible Impact	Minor
CCR18			A (55)	50.5	No Impact	Negligible
CCR19			A (55)	46.1	No Impact	Negligible

31. **Table A25.19** shows that predicted weekend period impacts (Scenario 2 Month 12 to 13) including embedded mitigation range from no impact to a high impact magnitude at a medium sensitivity receptor and therefore as a worst case of **major** adverse significance. Details of possible enhanced mitigation measures are provided in **section 25.6.1.2** of **Chapter 25 Noise and Vibration**.

**Table A25.20 Cable Route Noise – Predicted Impacts for the proposed East Anglia TWO project
Month 14 to 20 Weekend**

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 14 to 20	Weekend Saturday 13:00 to 19:00	A (55)	59.1	Medium Impact	Moderate
CCR2			A (55)	61.7	High Impact	Major
CCR3			A (55)	47.9	No Impact	Negligible
CCR4			A (55)	47.8	No Impact	Negligible
CCR5			A (55)	46.2	No Impact	Negligible
CCR6			A (55)	44.4	No Impact	Negligible
CCR7			A (55)	64.7	High Impact	Major
CCR8			A (55)	48.6	No Impact	Negligible
CCR9			A (55)	50.8	No Impact	Negligible
CCR10			A (55)	49.0	No Impact	Negligible
CCR11			A (55)	48.4	No Impact	Negligible
CCR12			A (55)	51.0	No Impact	Negligible
CCR13			A (55)	56.9	Low Impact	Minor
CCR14			A (55)	51.1	No Impact	Negligible
CCR15			A (55)	49.8	No Impact	Negligible
CCR16			A (55)	51.0	No Impact	Negligible
CCR17			A (55)	55.7	Negligible Impact	Minor
CCR18			A (55)	51.1	No Impact	Negligible
CCR19			A (55)	46.5	No Impact	Negligible

32. **Table A25.20** shows that predicted weekend period impacts (Scenario 2 Month 14 to 20) including embedded mitigation range from no impact to a high impact magnitude at a medium sensitivity receptor and therefore as a worst case of **major** adverse significance. Details of possible enhanced mitigation measures are provided in **section 25.6.1.2** of **Chapter 25 Noise and Vibration**.

Table A25.21 Cable Route Noise – Predicted Impacts for the proposed East Anglia TWO project Month 21 to 24 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 21 to 24	Weekend Saturday 13:00 to 19:00	A (55)	55.8	Negligible Impact	Minor
CCR2			A (55)	59.3	Medium Impact	Moderate
CCR3			A (55)	48.2	No Impact	Negligible
CCR4			A (55)	46.9	No Impact	Negligible
CCR5			A (55)	45.1	No Impact	Negligible
CCR6			A (55)	43.3	No Impact	Negligible
CCR7			A (55)	64.7	High Impact	Major
CCR8			A (55)	46.3	No Impact	Negligible
CCR9			A (55)	49.4	No Impact	Negligible
CCR10			A (55)	48.0	No Impact	Negligible
CCR11			A (55)	46.8	No Impact	Negligible
CCR12			A (55)	47.6	No Impact	Negligible
CCR13			A (55)	56.3	Low Impact	Minor
CCR14			A (55)	52.6	No Impact	Negligible
CCR15			A (55)	49.8	No Impact	Negligible
CCR16			A (55)	53.1	No Impact	Negligible
CCR17			A (55)	52.6	No Impact	Negligible
CCR18			A (55)	48.3	No Impact	Negligible
CCR19			A (55)	44.3	No Impact	Negligible

33. **Table A25.21** shows that predicted weekend period impacts (Scenario 2 Month 21 to 24) including embedded mitigation range from no impact to a high impact magnitude at a medium sensitivity receptor and therefore as a worst case of **major** adverse significance. Details of possible enhanced mitigation measures are provided in **section 25.6.1.2 of Chapter 25 Noise and Vibration**.

25.5.3 Onshore Substation / National Grid Infrastructure Study Area

34. **Table A25.22** to **Table A25.28** presents the predicted daytime noise level at the nearest sensitive receptors at the onshore substation and National Grid infrastructure including embedded mitigation for the proposed East Anglia TWO project (project alone) construction phases outlined in **Table A25.1**.

35. Sensitive receptors correspond to those surveyed and detailed in **Table A25.4**

Table A25.22 Substation Construction Noise – Predicted Impacts for the proposed East Anglia TWO project Month 1 to 4 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 1 to 4	Daytime	A (65)	49.6	No Impact	Negligible
SSR2		Daytime	A (65)	56.3	No Impact	Negligible
SSR3		Daytime	A (65)	47.1	No Impact	Negligible
SSR4		Daytime	A (65)	48.4	No Impact	Negligible
SSR5		Daytime	A (65)	52.0	No Impact	Negligible
SSR6		Daytime	A (65)	53.0	No Impact	Negligible
SSR7		Daytime	A (65)	48.5	No Impact	Negligible
SSR8		Daytime	A (65)	43.5	No Impact	Negligible
SSR9		Daytime	A (65)	45.5	No Impact	Negligible
SSR10		Daytime	A (65)	39.8	No Impact	Negligible
SSR11		Daytime	A (65)	42.8	No Impact	Negligible
SSR12		Daytime	A (65)	41.9	No Impact	Negligible

Table A25.23 Substation Construction Noise – Predicted Impacts for the proposed East Anglia TWO project Month 5 to 7 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 5 to 7	Daytime	A (65)	51.0	No Impact	Negligible
SSR2		Daytime	A (65)	54.3	No Impact	Negligible
SSR3		Daytime	A (65)	49.4	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR4		Daytime	A (65)	48.2	No Impact	Negligible
SSR5		Daytime	A (65)	51.1	No Impact	Negligible
SSR6		Daytime	A (65)	51.5	No Impact	Negligible
SSR7		Daytime	A (65)	49.5	No Impact	Negligible
SSR8		Daytime	A (65)	44.1	No Impact	Negligible
SSR9		Daytime	A (65)	47.4	No Impact	Negligible
SSR10		Daytime	A (65)	40.5	No Impact	Negligible
SSR11		Daytime	A (65)	43.4	No Impact	Negligible
SSR12		Daytime	A (65)	43.0	No Impact	Negligible

Table A25.24 Substation Construction Noise – Predicted Impacts for the proposed East Anglia TWO project Month 8 to 11 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 8 to 11	Daytime	A (65)	50.3	No Impact	Negligible
SSR2		Daytime	A (65)	53.8	No Impact	Negligible
SSR3		Daytime	A (65)	48.9	No Impact	Negligible
SSR4		Daytime	A (65)	48.9	No Impact	Negligible
SSR5		Daytime	A (65)	52.4	No Impact	Negligible
SSR6		Daytime	A (65)	53.0	No Impact	Negligible
SSR7		Daytime	A (65)	49.0	No Impact	Negligible
SSR8		Daytime	A (65)	44.1	No Impact	Negligible
SSR9		Daytime	A (65)	47.0	No Impact	Negligible
SSR10		Daytime	A (65)	40.5	No Impact	Negligible
SSR11		Daytime	A (65)	43.5	No Impact	Negligible
SSR12		Daytime	A (65)	42.9	No Impact	Negligible

Table A25.25 Substation Construction Noise – Predicted Impacts for the proposed East Anglia TWO project Month 12 to 13 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 12 to 13	Daytime	A (65)	49.7	No Impact	Negligible
SSR2		Daytime	A (65)	52.8	No Impact	Negligible
SSR3		Daytime	A (65)	48.1	No Impact	Negligible
SSR4		Daytime	A (65)	47.6	No Impact	Negligible
SSR5		Daytime	A (65)	50.7	No Impact	Negligible
SSR6		Daytime	A (65)	52.0	No Impact	Negligible
SSR7		Daytime	A (65)	48.5	No Impact	Negligible
SSR8		Daytime	A (65)	43.4	No Impact	Negligible
SSR9		Daytime	A (65)	46.2	No Impact	Negligible
SSR10		Daytime	A (65)	39.9	No Impact	Negligible
SSR11		Daytime	A (65)	42.7	No Impact	Negligible
SSR12		Daytime	A (65)	42.1	No Impact	Negligible

Table A25.26 Substation Construction Noise – Predicted Impacts for the proposed East Anglia TWO project Month 14 to 17 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 14 to 17	Daytime	A (65)	50.4	No Impact	Negligible
SSR2		Daytime	A (65)	53.5	No Impact	Negligible
SSR3		Daytime	A (65)	48.8	No Impact	Negligible
SSR4		Daytime	A (65)	48.4	No Impact	Negligible
SSR5		Daytime	A (65)	51.5	No Impact	Negligible
SSR6		Daytime	A (65)	52.3	No Impact	Negligible
SSR7		Daytime	A (65)	49.1	No Impact	Negligible
SSR8		Daytime	A (65)	44.1	No Impact	Negligible
SSR9		Daytime	A (65)	47.0	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR10		Daytime	A (65)	40.5	No Impact	Negligible
SSR11		Daytime	A (65)	43.4	No Impact	Negligible
SSR12		Daytime	A (65)	42.9	No Impact	Negligible

Table A25.27 Substation Construction Noise – Predicted Impacts for the proposed East Anglia TWO project Month 18 to 20 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 18 to 20	Daytime	A (65)	49.2	No Impact	Negligible
SSR2		Daytime	A (65)	52.3	No Impact	Negligible
SSR3		Daytime	A (65)	47.4	No Impact	Negligible
SSR4		Daytime	A (65)	47.4	No Impact	Negligible
SSR5		Daytime	A (65)	50.5	No Impact	Negligible
SSR6		Daytime	A (65)	51.9	No Impact	Negligible
SSR7		Daytime	A (65)	48.0	No Impact	Negligible
SSR8		Daytime	A (65)	42.7	No Impact	Negligible
SSR9		Daytime	A (65)	45.6	No Impact	Negligible
SSR10		Daytime	A (65)	39.6	No Impact	Negligible
SSR11		Daytime	A (65)	42.5	No Impact	Negligible
SSR12		Daytime	A (65)	41.7	No Impact	Negligible

Table A25.28 Substation Construction Noise – Predicted Impacts for the proposed East Anglia TWO project Month 21 to 24 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1		Daytime	A (65)	46.5	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR2	Month 21 to 24	Daytime	A (65)	48.8	No Impact	Negligible
SSR3		Daytime	A (65)	44.8	No Impact	Negligible
SSR4		Daytime	A (65)	45.3	No Impact	Negligible
SSR5		Daytime	A (65)	48.7	No Impact	Negligible
SSR6		Daytime	A (65)	49.7	No Impact	Negligible
SSR7		Daytime	A (65)	45.5	No Impact	Negligible
SSR8		Daytime	A (65)	40.7	No Impact	Negligible
SSR9		Daytime	A (65)	43.1	No Impact	Negligible
SSR10		Daytime	A (65)	37.8	No Impact	Negligible
SSR11		Daytime	A (65)	40.5	No Impact	Negligible
SSR12		Daytime	A (65)	39.5	No Impact	Negligible

36. **Table A25.29** to **Table A25.35** presents the predicted weekend noise level at the nearest sensitive receptors at the onshore substation and National Grid infrastructure including embedded mitigation for the proposed East Anglia TWO (project alone) construction phases outlined in **Table A25.1**.

37. Sensitive receptors correspond to those surveyed and detailed in **Table A25.4**

Table A25.29 Substation Construction Noise – Predicted Impacts for the proposed East Anglia TWO project Month 1 to 4 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 1 to 4	Weekend Saturday 13:00 to 19:00	A (55)	49.6	No Impact	Negligible
SSR2			A (55)	56.3	Low Impact	Minor
SSR3			A (55)	47.1	No Impact	Negligible
SSR4			A (55)	48.4	No Impact	Negligible
SSR5			A (55)	52.0	No Impact	Negligible
SSR6			A (55)	53.0	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR7			A (55)	48.5	No Impact	Negligible
SSR8			A (55)	43.5	No Impact	Negligible
SSR9			A (55)	45.5	No Impact	Negligible
SSR10			A (55)	39.8	No Impact	Negligible
SSR11			A (55)	42.8	No Impact	Negligible
SSR12			A (55)	41.9	No Impact	Negligible

38. **Table A25.29** shows that predicted weekend period impacts (Scenario 2 Month 1 to 4) including embedded mitigation range from no impact to a low impact magnitude at a medium sensitivity receptor and therefore as a worst case of **minor** adverse significance. Details of possible enhanced mitigation measures are provided in **section 25.6.1.2** of **Chapter 25 Noise and Vibration**.

Table A25.30 Substation Construction Noise – Predicted Impacts for the proposed East Anglia TWO project Month 5 to 7 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 5 to 7	Weekend Saturday 13:00 to 19:00	A (55)	51.0	No Impact	Negligible
SSR2			A (55)	54.3	No Impact	Negligible
SSR3			A (55)	49.4	No Impact	Negligible
SSR4			A (55)	48.2	No Impact	Negligible
SSR5			A (55)	51.1	No Impact	Negligible
SSR6			A (55)	51.5	No Impact	Negligible
SSR7			A (55)	49.5	No Impact	Negligible
SSR8			A (55)	44.1	No Impact	Negligible
SSR9			A (55)	47.4	No Impact	Negligible
SSR10			A (55)	40.5	No Impact	Negligible
SSR11			A (55)	43.4	No Impact	Negligible
SSR12			A (55)	43.0	No Impact	Negligible

Table A25.31 Substation Construction Noise – Predicted Impacts for the proposed East Anglia TWO project Month 8 to 11 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 8 to 11	Weekend Saturday 13:00 to 19:00	A (55)	50.3	No Impact	Negligible
SSR2			A (55)	53.8	No Impact	Negligible
SSR3			A (55)	48.9	No Impact	Negligible
SSR4			A (55)	48.9	No Impact	Negligible
SSR5			A (55)	52.4	No Impact	Negligible
SSR6			A (55)	53.0	No Impact	Negligible
SSR7			A (55)	49.0	No Impact	Negligible
SSR8			A (55)	44.1	No Impact	Negligible
SSR9			A (55)	47.0	No Impact	Negligible
SSR10			A (55)	40.5	No Impact	Negligible
SSR11			A (55)	43.5	No Impact	Negligible
SSR12			A (55)	42.9	No Impact	Negligible

Table A25.32 Substation Construction Noise – Predicted Impacts for the proposed East Anglia TWO project Month 12 to 13 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 12 to 13	Weekend Saturday 13:00 to 19:00	A (55)	49.7	No Impact	Negligible
SSR2			A (55)	52.8	No Impact	Negligible
SSR3			A (55)	48.1	No Impact	Negligible
SSR4			A (55)	47.6	No Impact	Negligible
SSR5			A (55)	50.7	No Impact	Negligible
SSR6			A (55)	52.0	No Impact	Negligible
SSR7			A (55)	48.5	No Impact	Negligible
SSR8			A (55)	43.4	No Impact	Negligible
SSR9			A (55)	46.2	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR10			A (55)	39.9	No Impact	Negligible
SSR11			A (55)	42.7	No Impact	Negligible
SSR12			A (55)	42.1	No Impact	Negligible

Table A25.33 Substation Construction Noise – Predicted Impacts for the proposed East Anglia TWO project Month 14 to 17 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 14 to 17	Weekend Saturday 13:00 to 19:00	A (55)	50.4	No Impact	Negligible
SSR2			A (55)	53.5	No Impact	Negligible
SSR3			A (55)	48.8	No Impact	Negligible
SSR4			A (55)	48.4	No Impact	Negligible
SSR5			A (55)	51.5	No Impact	Negligible
SSR6			A (55)	52.3	No Impact	Negligible
SSR7			A (55)	49.1	No Impact	Negligible
SSR8			A (55)	44.1	No Impact	Negligible
SSR9			A (55)	47.0	No Impact	Negligible
SSR10			A (55)	40.5	No Impact	Negligible
SSR11			A (55)	43.4	No Impact	Negligible
SSR12			A (55)	42.9	No Impact	Negligible

Table A25.34 Substation Construction Noise – Predicted Impacts for the proposed East Anglia TWO project Month 18 to 20 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1			A (55)	49.2	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR2	Month 18 to 20	Weekend Saturday 13:00 to 19:00	A (55)	52.3	No Impact	Negligible
SSR3			A (55)	47.4	No Impact	Negligible
SSR4			A (55)	47.4	No Impact	Negligible
SSR5			A (55)	50.5	No Impact	Negligible
SSR6			A (55)	51.9	No Impact	Negligible
SSR7			A (55)	48.0	No Impact	Negligible
SSR8			A (55)	42.7	No Impact	Negligible
SSR9			A (55)	45.6	No Impact	Negligible
SSR10			A (55)	39.6	No Impact	Negligible
SSR11			A (55)	42.5	No Impact	Negligible
SSR12			A (55)	41.7	No Impact	Negligible

Table A25.35 Substation Construction Noise – Predicted Impacts for the proposed East Anglia TWO project Month 21 to 24 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 21 to 24	Weekend Saturday 13:00 to 19:00	A (55)	46.5	No Impact	Negligible
SSR2			A (55)	48.8	No Impact	Negligible
SSR3			A (55)	44.8	No Impact	Negligible
SSR4			A (55)	45.3	No Impact	Negligible
SSR5			A (55)	48.7	No Impact	Negligible
SSR6			A (55)	49.7	No Impact	Negligible
SSR7			A (55)	45.5	No Impact	Negligible
SSR8			A (55)	40.7	No Impact	Negligible
SSR9			A (55)	43.1	No Impact	Negligible
SSR10			A (55)	37.8	No Impact	Negligible
SSR11			A (55)	40.5	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR12			A (55)	39.5	No Impact	Negligible

25.6 Construction Noise Modelling – Construction Scenario 1

39. Based on **Chapter 6 Project Description**, an indicative list of construction equipment under Scenario 1 has been developed and are detailed in **Table A25.36** to

40. **Table A25.39.**

Table A25.36 Construction Plant – Onshore Landfall Scenario 1

Phase	Name	No.	Source type	BS5228 Reference	L _{Aeq} (dB) at 10m	On time correction (%)
Month 1 to 4	D6 Dozer	3	Point	C2.11	84.0	85
	30T Excavator	2	Point	C2.16	79.4	85
	20T Dumper	2	Point	C2.30	86.8	85
	Smooth Drum vibro road roller	2	Point	C5.20	90.8	85
	21T excavator	2	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	2	Point	C4.7	91.6	85
	Loading shovel	1	Point	C10.4	91.5	85
	Tractor & fencing kit	1	Point	C4.74	84.2	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Grader	1	Point	C6.31	92.4	85
	Telehandler	1	Point	C2.35	86.2	85
	Mobile self-contained welfare unit	1	Point	N/A SoundPLAN Library	L _{wA} 68.2	85
	Mobile generator	1	Point	C4.76	81.0	85

Phase	Name	No.	Source type	BS5228 Reference	L _{Aeq} (dB) at 10m	On time correction (%)
	Temporary lighting	1	Point	C4.76	81.0	85
	Road surface paver & roller	1	Point	C5.30	82.2	85
	Skip Wagon Movements	3/hr over 12hr day	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
Month 5 to 13	D6 Dozer	3	Point	C2.11	84.0	85
	30T Excavator	2	Point	C2.16	79.4	85
	20T Dumper	2	Point	C2.30	86.8	85
	Smooth Drum vibrio road roller	2	Point	C5.20	90.8	85
	21T excavator	2	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	2	Point	C4.7	91.6	85
	Loading shovel	1	Point	C10.4	91.5	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Grader	1	Point	C6.31	92.4	85
	Telehandler	1	Point	C2.35	86.2	85
	Mobile self-contained welfare unit	1	Point	N/A SoundPLAN Library	L _{wA} 68.2	85
	Mobile generator	1	Point	C4.76	81.0	85
	Temporary lighting	1	Point	C4.76	81.0	85
	Road surface paver & roller	1	Point	C5.30	82.2	85
	Skip Wagon Movements	2/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
	HDD Drill	2	Point	N/A	L _{wA} 105	100 (24hrs/7 days)
	Mud Pump	2	Point	N/A	L _{wA} 93	100 (24hrs/7 days)

Phase	Name	No.	Source type	BS5228 Reference	L _{Aeq} (dB) at 10m	On time correction (%)
	Power Supply	2	Point	N/A	L _{WA} 105	100 (24hrs/7 days)
Month 14 to 20	D6 Dozer	2	Point	C2.11	84.0	85
	30T Excavator	2	Point	C2.16	79.4	85
	20T Dumper	2	Point	C2.30	86.8	85
	Smooth Drum vibro road roller	1	Point	C5.20	90.8	85
	21T excavator	1	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	1	Point	C4.7	91.6	85
	Loading shovel	1	Point	C10.4	91.5	85
	Trench Roller	1	Point	C10.23	60.4	85
	Cement Mixer	1	Point	C4.18	81.6	85
	Mobile Crane	1	Point	C4.41	77.4	85
	Cable Laying Tracked Crane	1	Point	C4.50	75.5	85
	Pre-Cast Concrete Truck	1	Point	C4.20	84.9	85
	Mobile Concrete Pump	1	Point	C3.26	85.6	85
	Telehandler	1	Point	C2.35	86.2	85
	Crawler Crane	1	Point	C4.43	82.0	85
	Mobile Generator	2	Point	C4.76	81.0	85
	Temporary Lighting	2	Point	C4.76	81.0	85
	Pump	2	Point	C2.45	75.0	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Skip Wagon Movements	2/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
	D6 Dozer	2	Point	C2.11	84.0	85

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
Month 20 to 24	30T Excavator	2	Point	C2.16	79.4	85
	20T Dumper	2	Point	C2.30	86.8	85
	Smooth Drum vibrio road roller	1	Point	C5.20	90.8	85
	21T excavator	1	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	1	Point	C4.7	91.6	85
	Loading shovel	1	Point	C10.4	91.5	85
	Mobile Generator	2	Point	C4.76	81.0	85
	Temporary Lighting	2	Point	C4.76	81.0	85
	Tractor & fencing kit	1	Point	C4.74	84.2	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Tractor & Soil Tiller	1	Point	C4.74	84.2	85
	Crawler Crane	1	Point	C4.43	82.0	85
	Skip Wagon Movements	2/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)

Table A25.37 Construction Plant – Section 1 and 2 Scenario 1

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
Month 1 to 4	D6 Dozer	1	Point	C2.11	84.0	85
	30T Excavator	3	Point	C2.16	79.4	85
	20T Dumper	3	Point	C2.30	86.8	85
	Smooth Drum vibro road roller	1	Point	C5.20	90.8	85
	21T excavator	1	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	1	Point	C4.7	91.6	85

Phase	Name	No.	Source type	BS5228 Reference	L _{Aeq} (dB) at 10m	On time correction (%)
	Loading shovel	1	Point	C10.4	91.5	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Grader	1	Point	C6.31	92.4	85
	Telehandler	1	Point	C2.35	86.2	85
	Mobile self-contained welfare unit	2	Point	N/A SoundPLAN Library	L _{wA} 68.2	85
	Mobile generator	1	Point	C4.76	81.0	85
	Temporary lighting	1	Point	C4.76	81.0	85
	Road surface paver & roller	1	Point	C5.30	82.2	85
	Skip Wagon Movements	3/hr over 12hr day	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
Month 5 to 6	D6 Dozer	2	Point	C2.11	84.0	85
	30T Excavator	4	Point	C2.16	79.4	85
	20T Dumper	5	Point	C2.30	86.8	85
	Smooth Drum vibrio road roller	2	Point	C5.20	90.8	85
	21T excavator	3	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	2	Point	C4.7	91.6	85
	Loading shovel	3	Point	C10.4	91.5	85
	Tractor & fencing kit	1	Point	C4.74	84.2	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Grader	1	Point	C6.31	92.4	85

Phase	Name	No.	Source type	BS5228 Reference	L _{Aeq} (dB) at 10m	On time correction (%)
	Telehandler	2	Point	C2.35	86.2	85
	Mobile generator	2	Point	C4.76	81.0	85
	Temporary lighting	2	Point	C4.76	81.0	85
	Skip Wagon Movements	4/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
	HDD Drill	2	Point	N/A	L _{WA} 105	100 (12hrs)
	Mud Pump	2	Point	N/A	L _{WA} 93	100 (12hrs)
	Power Supply	2	Point	N/A	L _{WA} 105	100 (12hrs)
Month 7 to 11	30T Excavator	4	Point	C2.16	79.4	85
	20T Dumper	6	Point	C2.30	86.8	85
	21T excavator	3	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	3	Point	C4.7	91.6	85
	Loading shovel	3	Point	C10.4	91.5	85
	Trench Roller	2	Point	C10.23	60.4	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Tractor & Cable Drum Roller	1	Point	C4.74	84.2	85
	Cable Winch	1	Point	C4.52	78.5	85
	Mobile Concrete Pump	1	Point	C3.26	85.6	85
	Telehandler	2	Point	C2.35	86.2	85
	Crawler Crane	1	Point	C4.43	82.0	85
	Mobile generator	2	Point	C4.76	81.0	85
	Temporary lighting	3	Point	C4.76	81.0	85
	Pump	2	Point	C2.45	75.0	85

Phase	Name	No.	Source type	BS5228 Reference	L _{Aeq} (dB) at 10m	On time correction (%)
	Skip Wagon Movements	2/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
	HDD Drill	2	Point	N/A	L _{wA} 105	100 (12hrs)
	Mud Pump	2	Point	N/A	L _{wA} 93	100 (12hrs)
	Power Supply	2	Point	N/A	L _{wA} 105	100 (12hrs)
Month 12 to 13	30T Excavator	4	Point	C2.16	79.4	85
	20T Dumper	6	Point	C2.30	86.8	85
	21T excavator	3	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	3	Point	C4.7	91.6	85
	Loading shovel	3	Point	C10.4	91.5	85
	Trench Roller	2	Point	C10.23	60.4	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Tractor & Cable Drum Roller	1	Point	C4.74	84.2	85
	Cement Mixer	1	Point	C4.18	81.6	85
	Mobile Crane	1	Point	C4.41	77.4	85
	Cable Winch	1	Point	C4.52	78.5	85
	Pre-Cast Concrete Truck	1	Point	C4.20	84.9	85
	Mobile Concrete Pump	1	Point	C3.26	85.6	85
	Telehandler	2	Point	C2.35	86.2	85
	Crawler Crane	2	Point	C4.43	82.0	85
	Mobile generator	2	Point	C4.76	81.0	85
	Temporary lighting	3	Point	C4.76	81.0	85
	Pump	2	Point	C2.45	75.0	85

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
	Skip Wagon Movements	3/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
Month 14 to 20	D6 Dozer	3	Point	C2.11	84.0	85
	30T Excavator	4	Point	C2.16	79.4	85
	20T Dumper	8	Point	C2.30	86.8	85
	Smooth Drum vibro road roller	1	Point	C5.20	90.8	85
	21T excavator	3	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	3	Point	C4.7	91.6	85
	Loading shovel	3	Point	C10.4	91.5	85
	Trench Roller	2	Point	C10.23	60.4	85
	Cement Mixer	1	Point	C4.18	81.6	85
	Mobile Crane	1	Point	C4.41	77.4	85
	Cable Winch	1	Point	C4.52	78.5	85
	Pre-Cast Concrete Truck	1	Point	C4.20	84.9	85
	Mobile Concrete Pump	1	Point	C3.26	85.6	85
	Telehandler	2	Point	C2.35	86.2	85
	Crawler Crane	2	Point	C4.43	82.0	85
	Mobile Generator	2	Point	C4.76	81.0	85
	Temporary Lighting	2	Point	C4.76	81.0	85
	Pump	2	Point	C2.45	75.0	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Tractor & Cable Drum Roller	1	Point	C4.74	84.2	85
	Tractor & Soil Tiller	1	Point	C4.74	84.2	85

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
	Skip Wagon Movements	3/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
Month 20 to 24	D6 Dozer	2	Point	C2.11	84.0	85
	30T Excavator	2	Point	C2.16	79.4	85
	20T Dumper	2	Point	C2.30	86.8	85
	Smooth Drum vibro road roller	1	Point	C5.20	90.8	85
	21T excavator	1	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	1	Point	C4.7	91.6	85
	Loading shovel	2	Point	C10.4	91.5	85
	Mobile Generator	2	Point	C4.76	81.0	85
	Temporary Lighting	2	Point	C4.76	81.0	85
	Tractor & fencing kit	1	Point	C4.74	84.2	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Tractor & Soil Tiller	1	Point	C4.74	84.2	85
	Crawler Crane	1	Point	C4.43	82.0	85
	Skip Wagon Movements	2/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)

Table A25.38 Construction Plant – Section 3 and 4 Scenario 1

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
Month 1 to 4	D6 Dozer	1	Point	C2.11	84.0	85
	30T Excavator	3	Point	C2.16	79.4	85
	20T Dumper	3	Point	C2.30	86.8	85

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
	Smooth Drum vibro road roller	1	Point	C5.20	90.8	85
	21T excavator	1	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	1	Point	C4.7	91.6	85
	Loading shovel	1	Point	C10.4	91.5	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Grader	1	Point	C6.31	92.4	85
	Telehandler	1	Point	C2.35	86.2	85
	Mobile self-contained welfare unit	2	Point	N/A SoundPLAN Library	LwA 68.2	85
	Mobile generator	1	Point	C4.76	81.0	85
	Temporary lighting	1	Point	C4.76	81.0	85
	Road surface paver & roller	1	Point	C5.30	82.2	85
Month 5 to 6	Skip Wagon Movements	3/hr over 12hr day	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
	D6 Dozer	2	Point	C2.11	84.0	85
	30T Excavator	4	Point	C2.16	79.4	85
	20T Dumper	5	Point	C2.30	86.8	85
	Smooth Drum vibrio road roller	2	Point	C5.20	90.8	85
	21T excavator	3	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	2	Point	C4.7	91.6	85
	Loading shovel	3	Point	C10.4	91.5	85
	Tractor & fencing kit	1	Point	C4.74	84.2	85
	Tractor & trailer	1	Point	C4.75	94.0	85

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Grader	1	Point	C6.31	92.4	85
	Telehandler	1	Point	C2.35	86.2	85
	Mobile generator	2	Point	C4.76	81.0	85
	Temporary lighting	2	Point	C4.76	81.0	85
	Skip Wagon Movements	2 to 3/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
Month 7 to 11	30T Excavator	4	Point	C2.16	79.4	85
	20T Dumper	6	Point	C2.30	86.8	85
	21T excavator	3	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	3	Point	C4.7	91.6	85
	Loading shovel	3	Point	C10.4	91.5	85
	Trench Roller	2	Point	C10.23	60.4	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Tractor & Cable Drum Roller	1	Point	C4.74	84.2	85
	Cable Winch	1	Point	C4.52	78.5	85
	Mobile Concrete Pump	1	Point	C3.26	85.6	85
	Telehandler	2	Point	C2.35	86.2	85
	Crawler Crane	1	Point	C4.43	82.0	85
	Mobile generator	2	Point	C4.76	81.0	85
	Temporary lighting	3	Point	C4.76	81.0	85
	Pump	2	Point	C2.45	75.0	85
	Skip Wagon Movements	2 to 3/hr	Line	C8.21	87.2	Split evenly over 12 hour

Phase	Name	No.	Source type	BS5228 Reference	L _{Aeq} (dB) at 10m	On time correction (%)
		every hour				day (7 – 19hrs)
	HDD Drill	2	Point	N/A	L _{wA} 105	100 (12hrs)
	Mud Pump	2	Point	N/A	L _{wA} 93	100 (12hrs)
	Power Supply	2	Point	N/A	L _{wA} 105	100 (12hrs)
Month 12 to 13	30T Excavator	4	Point	C2.16	79.4	85
	20T Dumper	6	Point	C2.30	86.8	85
	21T excavator	3	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	3	Point	C4.7	91.6	85
	Loading shovel	3	Point	C10.4	91.5	85
	Trench Roller	2	Point	C10.23	60.4	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Tractor & Cable Drum Roller	1	Point	C4.74	84.2	85
	Cement Mixer	1	Point	C4.18	81.6	85
	Mobile Crane	1	Point	C4.41	77.4	85
	Cable Winch	1	Point	C4.52	78.5	85
	Pre-Cast Concrete Truck	1	Point	C4.20	84.9	85
	Mobile Concrete Pump	1	Point	C3.26	85.6	85
	Telehandler	2	Point	C2.35	86.2	85
	Crawler Crane	2	Point	C4.43	82.0	85
	Mobile generator	2	Point	C4.76	81.0	85
	Temporary lighting	3	Point	C4.76	81.0	85
	Pump	2	Point	C2.45	75.0	85
	Skip Wagon Movements	2 to 3/hr	Line	C8.21	87.2	Split evenly over 12 hour

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
		every hour				day (7 – 19hrs)
Month 14 to 20	D6 Dozer	2	Point	C2.11	84.0	85
	30T Excavator	4	Point	C2.16	79.4	85
	20T Dumper	6	Point	C2.30	86.8	85
	21T excavator	3	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	3	Point	C4.7	91.6	85
	Loading shovel	3	Point	C10.4	91.5	85
	Trench Roller	2	Point	C10.23	60.4	85
	Cement Mixer	1	Point	C4.18	81.6	85
	Mobile Crane	1	Point	C4.41	77.4	85
	Cable Winch	1	Point	C4.52	78.5	85
	Pre-Cast Concrete Truck	1	Point	C4.20	84.9	85
	Mobile Concrete Pump	1	Point	C3.26	85.6	85
	Telehandler	2	Point	C2.35	86.2	85
	Crawler Crane	2	Point	C4.43	82.0	85
	Mobile Generator	2	Point	C4.76	81.0	85
	Temporary Lighting	3	Point	C4.76	81.0	85
	Pump	2	Point	C2.45	75.0	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Tractor & Cable Drum Roller	1	Point	C4.74	84.2	85
	Tractor & Soil Tiller	1	Point	C4.74	84.2	85
	Skip Wagon Movements	2 to 3/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
	D6 Dozer	2	Point	C2.11	84.0	85

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
Month 20 to 24	30T Excavator	2	Point	C2.16	79.4	85
	20T Dumper	2	Point	C2.30	86.8	85
	Smooth Drum vibro road roller	1	Point	C5.20	90.8	85
	21T excavator	1	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	1	Point	C4.7	91.6	85
	Loading shovel	2	Point	C10.4	91.5	85
	Mobile Generator	1	Point	C4.76	81.0	85
	Temporary Lighting	2	Point	C4.76	81.0	85
	Tractor & fencing kit	1	Point	C4.74	84.2	85
	Tractor & trailer	1	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	1	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	1	Point	C6.38	89.6	85
	Tractor & Soil Tiller	1	Point	C4.74	84.2	85
	Crawler Crane	1	Point	C4.43	82.0	85
	Skip Wagon Movements	2/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)

Table A25.39 Construction Plant – Onshore Substation Scenario 1

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
Month 1 to 4	D6 Dozer	4	Point	C2.11	84.0	85
	30T Excavator	4	Point	C2.16	79.4	85
	20T Dumper	4	Point	C2.30	86.8	85
	Smooth Drum vibro road roller	4	Point	C5.20	90.8	85
	21T excavator	4	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	4	Point	C4.7	91.6	85

Phase	Name	No.	Source type	BS5228 Reference	L _{Aeq} (dB) at 10m	On time correction (%)
	Loading shovel	4	Point	C10.4	91.5	85
	Tractor & trailer	2	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	2	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	2	Point	C6.38	89.6	85
	Grader	4	Point	C6.31	92.4	85
	Mobile self-contained welfare unit	2	Point	N/A SoundPLAN Library	L _{wA} 68.2	85
	Temporary lighting	1	Point	C4.76	81.0	85
	Road surface paver & roller	2	Point	C5.30	82.2	85
	Skip Wagon Movements	4/hr over 12hr day	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
Month 5 to 7	D6 Dozer	4	Point	C2.11	84.0	85
	30T Excavator	4	Point	C2.16	79.4	85
	20T Dumper	6	Point	C2.30	86.8	85
	Smooth Drum vibro road roller	4	Point	C5.20	90.8	85
	21T excavator	4	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	4	Point	C4.7	91.6	85
	Loading shovel	4	Point	C10.4	91.5	85
	Tractor & trailer	2	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	2	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	2	Point	C6.38	89.6	85
	Grader	4	Point	C6.31	92.4	85
	Concrete Batching Plant	2	Point	C4.22	81.7	85
	Dry Mix Silos	4	Point	C3.26	85.6	85
	Road surface paver & roller	2	Point	C5.30	82.2	85

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
	Pre-Cast Concrete Truck	2	Point	C4.20	84.9	85
	Mobile Concrete Pump	2	Point	C3.26	85.6	85
	Telehandler	2	Point	C2.35	86.2	85
	Mobile generator	2	Point	C4.76	81.0	85
	Pump	2	Point	C2.45	75.0	85
	Temporary lighting	4	Point	C4.76	81.0	85
	Trench Roller	2	Point	C10.23	60.4	85
	Crawler Crane	2	Point	C4.43	82.0	85
	Skip Wagon Movements	6/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
Month 8 to 11	D6 Dozer	4	Point	C2.11	84.0	85
	30T Excavator	4	Point	C2.16	79.4	85
	20T Dumper	4	Point	C2.30	86.8	85
	Smooth Drum vibrio road roller	4	Point	C5.20	90.8	85
	21T excavator	4	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	4	Point	C4.7	91.6	85
	Loading shovel	2	Point	C10.4	91.5	85
	Tractor & trailer	2	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	2	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	2	Point	C6.38	89.6	85
	Grader	4	Point	C6.31	92.4	85
	Concrete Batching Plant	2	Point	C4.22	81.7	85
	Dry Mix Silos	4	Point	C3.26	85.6	85
	Road surface paver & roller	2	Point	C5.30	82.2	85
	Pre-Cast Concrete Truck	1	Point	C4.20	84.9	85
	Mobile Concrete Pump	1	Point	C3.26	85.6	85

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
	JCB Wheeled Excavator	2	Point	C5.34	75.5	85
	Temporary lighting	3	Point	C4.76	81.0	85
	Pump	2	Point	C2.45	75.0	85
	Skip Wagon Movements	6/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
Month 12 to 13	D6 Dozer	2	Point	C2.11	84.0	85
	30T Excavator	2	Point	C2.16	79.4	85
	20T Dumper	2	Point	C2.30	86.8	85
	Smooth Drum vibro road roller	2	Point	C5.20	90.8	85
	21T excavator	2	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	2	Point	C4.7	91.6	85
	Loading shovel	2	Point	C10.4	91.5	85
	Tractor & trailer	2	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	2	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	2	Point	C6.38	89.6	85
	Grader	4	Point	C6.31	92.4	85
	Road surface paver & roller	2	Point	C5.30	82.2	85
	Concrete Batching Plant	2	Point	C4.22	81.7	85
	Dry Mix Silos	4	Point	C3.26	85.6	85
	Pre-Cast Concrete Truck	2	Point	C4.20	84.9	85
	Mobile Concrete Pump	2	Point	C3.26	85.6	85
	Temporary lighting	4	Point	C4.76	81.0	85
	Pump	2	Point	C2.45	75.0	85
	Skip Wagon Movements	5/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
	D6 Dozer	2	Point	C2.11	84.0	85

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
Month 14 to 17	30T Excavator	2	Point	C2.16	79.4	85
	20T Dumper	2	Point	C2.30	86.8	85
	Smooth Drum vibro road roller	2	Point	C5.20	90.8	85
	21T excavator	4	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	4	Point	C4.7	91.6	85
	Loading shovel	2	Point	C10.4	91.5	85
	Tractor & trailer	2	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	2	Point	C6.38	89.6	85
	Tractor & Water bowser (for dust suppression)	2	Point	C6.38	89.6	85
	Grader	4	Point	C6.31	92.4	85
	Road surface paver & roller	2	Point	C5.30	82.2	85
	Concrete Batching Plant	2	Point	C4.22	81.7	85
	Dry Mix Silos	4	Point	C3.26	85.6	85
	Cement Mixer	2	Point	C4.18	81.6	85
	Mobile Crane	4	Point	C4.41	77.4	85
	Static Crane	2	Point	C4.48	85.5	85
	Pre-Cast Concrete Truck	4	Point	C4.20	84.9	85
	Mobile Concrete Pump	4	Point	C3.26	85.6	85
	Telehandler	4	Point	C2.35	86.2	85
	Mobile Generator	2	Point	C4.76	81.0	85
	Temporary Lighting	4	Point	C4.76	81.0	85
	Pump	2	Point	C2.45	75.0	85
	3t Forward Tipping Dumper	2	Point	C4.9	86.5	85
	Scissor Lift	2	Point	C4.59	83.9	85
	Mobile Aerial Platform	2	Point	C4.57	80.4	85
	JCB Wheeled Excavator	4	Point	C5.34	75.5	85

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
	Skip Wagon Movements	6/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)
Month 18 to 20	21T excavator	4	Point	C2.3	86.0	85
	5T Forward Tipping Dumper	4	Point	C4.7	91.6	85
	Tractor & trailer	2	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	2	Point	C6.38	89.6	85
	Concrete Batching Plant	2	Point	C4.22	81.7	85
	Dry Mix Silos	4	Point	C3.26	85.6	85
	Cement Mixer	2	Point	C4.18	81.6	85
	Mobile Crane	4	Point	C4.41	77.4	85
	Mobile Crane Heavy Use	4	Point	C4.50	75.5	85
	Specialist Gantry Crane	4	Point	C4.50	75.5	85
	Static Crane	6	Point	C4.48	85.5	85
	Pre-Cast Concrete Truck	4	Point	C4.20	84.9	85
	Mobile Concrete Pump	4	Point	C3.26	85.6	85
	Telehandler	4	Point	C2.35	86.2	85
	Mobile Generator	4	Point	C4.76	81.0	85
	3t Forward Tipping Dumper	2	Point	C4.9	86.5	85
	Scissor Lift	4	Point	C4.59	83.9	85
	Mobile Aerial Platform	4	Point	C4.57	80.4	85
	JCB Wheeled Excavator	4	Point	C5.34	75.5	85
	Forklift	4	Point	N/A	LwA 75.0	85
	Pump	2	Point	C2.45	75.0	85
	Temporary Lighting	4	Point	C4.76	81.0	85
	Skip Wagon Movements	2/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)

Phase	Name	No.	Source type	BS5228 Reference	LAeq (dB) at 10m	On time correction (%)
Month 20 to 30	Tractor & trailer	2	Point	C4.75	94.0	85
	Tractor & Fuel bowser (or self-propelled)	2	Point	C6.38	89.6	85
	Mobile Crane	2	Point	C4.41	77.4	85
	Mobile Crane Heavy Use	2	Point	C4.50	75.5	85
	Specialist Gantry Crane	2	Point	C4.50	75.5	85
	Static Crane	2	Point	C4.48	85.5	85
	Telehandler	4	Point	C2.35	86.2	85
	Mobile Generator	4	Point	C4.76	81.0	85
	Scissor Lift	4	Point	C4.59	83.9	85
	Mobile Aerial Platform	4	Point	C4.57	80.4	85
	Forklift	4	Point	N/A	LwA 75.0	85
	Temporary Lighting	4	Point	C4.76	81.0	85
	Skip Wagon Movements	2/hr every hour	Line	C8.21	87.2	Split evenly over 12 hour day (7 – 19hrs)

25.6.1 Landfall Study Area

41. **Table A25.40** presents the predicted noise level at the nearest sensitive receptors at the landfall including embedded mitigation for the Scenario 1 project construction phases outlined in **Table A25.1**.

42. Sensitive receptors correspond to those surveyed and detailed in **Table A25.2**.

Table A25.40 Landfall Construction Noise Scenario 1 – Predicted Impacts Month 1 to 24

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
LFR1	Month 1 to 4	Daytime	A (65)	63.0	No Impact	Negligible
	Month 5 to 6	Daytime	A (65)	62.9	No Impact	Negligible
	Month 7 to 11	Daytime	A (65)	62.6	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
		Evening	A (55)	40.8	No Impact	Negligible
		Night	B (50)	41.1	No Impact	Negligible
	Month 12 to 13	Daytime	A (65)	62.6	No Impact	Negligible
		Evening	A (55)	40.4	No Impact	Negligible
		Night	B (50)	40.8	No Impact	Negligible
	Month 14 to 20	Daytime	A (65)	58.1	No Impact	Negligible
	Month 21 to 24	Daytime	A (65)	58.0	No Impact	Negligible
LFR2	Month 1 to 4	Daytime	A (65)	51.8	No Impact	Negligible
	Month 5 to 6	Daytime	A (65)	51.2	No Impact	Negligible
	Month 7 to 11	Daytime	A (65)	51.9	No Impact	Negligible
		Evening	A (55)	41.0	No Impact	Negligible
		Night	A (45)	41.2	No Impact	Negligible
	Month 12 to 13	Daytime	A (65)	51.9	No Impact	Negligible
		Evening	A (55)	40.7	No Impact	Negligible
		Night	A (45)	40.7	No Impact	Negligible
	Month 14 to 20	Daytime	A (65)	52.0	No Impact	Negligible
	Month 21 to 24	Daytime	A (65)	51.3	No Impact	Negligible
LFR3	Month 1 to 4	Daytime	A (65)	45.7	No Impact	Negligible
	Month 5 to 6	Daytime	A (65)	62.3	No Impact	Negligible
	Month 7 to 11	Daytime	A (65)	46.2	No Impact	Negligible
		Evening	A (55)	38.1	No Impact	Negligible
		Night	A (45)	38.2	No Impact	Negligible
	Month 12 to 13	Daytime	A (65)	46.2	No Impact	Negligible
		Evening	A (55)	37.2	No Impact	Negligible
		Night	A (45)	37.2	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
	Month 14 to 20	Daytime	A (65)	47.4	No Impact	Negligible
	Month 21 to 24	Daytime	A (65)	62.5	No Impact	Negligible
LFR4	Month 1 to 4	Daytime	A (65)	47.7	No Impact	Negligible
	Month 5 to 6	Daytime	A (65)	47.7	No Impact	Negligible
	Month 7 to 11	Daytime	A (65)	49.5	No Impact	Negligible
		Evening	A (55)	39.1	No Impact	Negligible
		Night	A (45)	39.6	No Impact	Negligible
	Month 12 to 13	Daytime	A (65)	49.9	No Impact	Negligible
		Evening	A (55)	36.0	No Impact	Negligible
		Night	A (45)	36.4	No Impact	Negligible
	Month 14 to 20	Daytime	A (65)	50.3	No Impact	Negligible
	Month 21 to 24	Daytime	A (65)	47.5	No Impact	Negligible

25.6.2 Onshore Cable Route Study Area

43. **Table A25.41** to **Table A25.46** presents the predicted daytime noise level at the nearest sensitive receptors along the cable route including embedded mitigation for the Scenario 1 construction phases outlined in **Table A25.1**.

44. Sensitive receptors correspond to those surveyed and detailed in **Table A25.3**.

Table A25.41 Cable Route Noise – Predicted Impacts Scenario 1 Month 1 to 4 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 1 to 4	Daytime	A (65)	55.7	No Impact	Negligible
CCR2		Daytime	A (65)	54.8	No Impact	Negligible
CCR3		Daytime	A (65)	45.1	No Impact	Negligible
CCR4		Daytime	A (65)	46.2	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR5		Daytime	A (65)	44.8	No Impact	Negligible
CCR6		Daytime	A (65)	43.0	No Impact	Negligible
CCR7		Daytime	A (65)	63.8	No Impact	Negligible
CCR8		Daytime	A (65)	49.0	No Impact	Negligible
CCR9		Daytime	A (65)	51.6	No Impact	Negligible
CCR10		Daytime	A (65)	62.1	No Impact	Negligible
CCR11		Daytime	A (65)	58.6	No Impact	Negligible
CCR12		Daytime	A (65)	48.2	No Impact	Negligible
CCR13		Daytime	A (65)	44.1	No Impact	Negligible
CCR14		Daytime	A (65)	51.5	No Impact	Negligible
CCR15		Daytime	A (65)	51.0	No Impact	Negligible
CCR16		Daytime	A (65)	50.6	No Impact	Negligible
CCR17		Daytime	A (65)	53.7	No Impact	Negligible
CCR18		Daytime	A (65)	50.9	No Impact	Negligible
CCR19		Daytime	A (65)	40.0	No Impact	Negligible

Table A25.42 Cable Route Noise – Predicted Impacts Scenario 1 Month 5 to 6 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 5 to 6	Daytime	A (65)	57.8	No Impact	Negligible
CCR2		Daytime	A (65)	62.5	No Impact	Negligible
CCR3		Daytime	A (65)	48.3	No Impact	Negligible
CCR4		Daytime	A (65)	48.7	No Impact	Negligible
CCR5		Daytime	A (65)	46.3	No Impact	Negligible
CCR6		Daytime	A (65)	44.7	No Impact	Negligible
CCR7		Daytime	A (65)	65.4	No Impact	Negligible
CCR8		Daytime	A (65)	52.3	No Impact	Negligible
CCR9		Daytime	A (65)	57.0	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR10		Daytime	A (65)	63.0	No Impact	Negligible
CCR11		Daytime	A (65)	60.8	No Impact	Negligible
CCR12		Daytime	A (65)	48.4	No Impact	Negligible
CCR13		Daytime	A (65)	52.7	No Impact	Negligible
CCR14		Daytime	A (65)	54.5	No Impact	Negligible
CCR15		Daytime	A (65)	54.7	No Impact	Negligible
CCR16		Daytime	A (65)	53.6	No Impact	Negligible
CCR17		Daytime	A (65)	53.3	No Impact	Negligible
CCR18		Daytime	A (65)	52.4	No Impact	Negligible
CCR19		Daytime	A (65)	47.1	No Impact	Negligible

Table A25.43 Cable Route Noise – Predicted Impacts Scenario 1 Month 7 to 11 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 7 to 11	Daytime	A (65)	59.4	No Impact	Negligible
CCR2		Daytime	A (65)	60.8	No Impact	Negligible
CCR3		Daytime	A (65)	47.7	No Impact	Negligible
CCR4		Daytime	A (65)	48.4	No Impact	Negligible
CCR5		Daytime	A (65)	46.3	No Impact	Negligible
CCR6		Daytime	A (65)	43.2	No Impact	Negligible
CCR7		Daytime	A (65)	59.2	No Impact	Negligible
CCR8		Daytime	A (65)	50.4	No Impact	Negligible
CCR9		Daytime	A (65)	53.2	No Impact	Negligible
CCR10		Daytime	A (65)	58.0	No Impact	Negligible
CCR11		Daytime	A (65)	54.6	No Impact	Negligible
CCR12		Daytime	A (65)	51.9	No Impact	Negligible
CCR13		Daytime	A (65)	54.5	No Impact	Negligible
CCR14		Daytime	A (65)	54.6	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR15		Daytime	A (65)	55.8	No Impact	Negligible
CCR16		Daytime	A (65)	54.5	No Impact	Negligible
CCR17		Daytime	A (65)	51.7	No Impact	Negligible
CCR18		Daytime	A (65)	51.8	No Impact	Negligible
CCR19		Daytime	A (65)	46.8	No Impact	Negligible

Table A25.44 Cable Route Noise – Predicted Impacts Scenario 1 Month 12 to 13 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 12 to 13	Daytime	A (65)	58.9	No Impact	Negligible
CCR2		Daytime	A (65)	60.6	No Impact	Negligible
CCR3		Daytime	A (65)	47.4	No Impact	Negligible
CCR4		Daytime	A (65)	48.9	No Impact	Negligible
CCR5		Daytime	A (65)	46.1	No Impact	Negligible
CCR6		Daytime	A (65)	44.7	No Impact	Negligible
CCR7		Daytime	A (65)	62.1	No Impact	Negligible
CCR8		Daytime	A (65)	51.8	No Impact	Negligible
CCR9		Daytime	A (65)	53.7	No Impact	Negligible
CCR10		Daytime	A (65)	61.1	No Impact	Negligible
CCR11		Daytime	A (65)	57.9	No Impact	Negligible
CCR12		Daytime	A (65)	50.8	No Impact	Negligible
CCR13		Daytime	A (65)	57.0	No Impact	Negligible
CCR14		Daytime	A (65)	51.3	No Impact	Negligible
CCR15		Daytime	A (65)	49.9	No Impact	Negligible
CCR16		Daytime	A (65)	51.2	No Impact	Negligible
CCR17		Daytime	A (65)	55.9	No Impact	Negligible
CCR18		Daytime	A (65)	52.3	No Impact	Negligible
CCR19		Daytime	A (65)	47.6	No Impact	Negligible

Table A25.45 Cable Route Noise – Predicted Impacts Scenario 1 Month 14 to 20 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 14 to 20	Daytime	A (65)	59.3	No Impact	Negligible
CCR2		Daytime	A (65)	61.7	No Impact	Negligible
CCR3		Daytime	A (65)	48.5	No Impact	Negligible
CCR4		Daytime	A (65)	49.5	No Impact	Negligible
CCR5		Daytime	A (65)	46.7	No Impact	Negligible
CCR6		Daytime	A (65)	45.2	No Impact	Negligible
CCR7		Daytime	A (65)	63.1	No Impact	Negligible
CCR8		Daytime	A (65)	52.3	No Impact	Negligible
CCR9		Daytime	A (65)	54.0	No Impact	Negligible
CCR10		Daytime	A (65)	61.1	No Impact	Negligible
CCR11		Daytime	A (65)	58.0	No Impact	Negligible
CCR12		Daytime	A (65)	51.7	No Impact	Negligible
CCR13		Daytime	A (65)	57.0	No Impact	Negligible
CCR14		Daytime	A (65)	51.3	No Impact	Negligible
CCR15		Daytime	A (65)	49.9	No Impact	Negligible
CCR16		Daytime	A (65)	51.2	No Impact	Negligible
CCR17		Daytime	A (65)	55.9	No Impact	Negligible
CCR18		Daytime	A (65)	52.5	No Impact	Negligible
CCR19		Daytime	A (65)	47.6	No Impact	Negligible

Table A25.46 Cable Route Noise – Predicted Impacts Scenario 1 Month 21 to 24 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 21 to 24	Daytime	A (65)	55.8	No Impact	Negligible
CCR2		Daytime	A (65)	59.2	No Impact	Negligible
CCR3		Daytime	A (65)	47.7	No Impact	Negligible
CCR4		Daytime	A (65)	44.3	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR5		Daytime	A (65)	45.0	No Impact	Negligible
CCR6		Daytime	A (65)	43.2	No Impact	Negligible
CCR7		Daytime	A (65)	64.4	No Impact	Negligible
CCR8		Daytime	A (65)	53.7	No Impact	Negligible
CCR9		Daytime	A (65)	50.0	No Impact	Negligible
CCR10		Daytime	A (65)	48.7	No Impact	Negligible
CCR11		Daytime	A (65)	47.6	No Impact	Negligible
CCR12		Daytime	A (65)	50.1	No Impact	Negligible
CCR13		Daytime	A (65)	56.3	No Impact	Negligible
CCR14		Daytime	A (65)	52.7	No Impact	Negligible
CCR15		Daytime	A (65)	49.8	No Impact	Negligible
CCR16		Daytime	A (65)	53.1	No Impact	Negligible
CCR17		Daytime	A (65)	51.6	No Impact	Negligible
CCR18		Daytime	A (65)	49.0	No Impact	Negligible
CCR19		Daytime	A (65)	44.8	No Impact	Negligible

45. **Table A25.47** to **Table A25.52** presents the predicted weekend noise level at the nearest sensitive receptors along the cable route including embedded mitigation for the Scenario 1 construction phases outlined in **Table A25.1**.

46. Sensitive receptors correspond to those surveyed and detailed in **Table A25.3**.

Table A25.47 Cable Route Noise – Predicted Impacts Scenario 1 Month 1 to 4 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 1 to 4	Weekend Saturday 13:00 to 19:00	A (55)	55.7	Negligible Impact	Minor
CCR2			A (55)	54.8	No Impact	Negligible
CCR3			A (55)	45.1	No Impact	Negligible
CCR4			A (55)	46.2	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR5			A (55)	44.8	No Impact	Negligible
CCR6			A (55)	43.0	No Impact	Negligible
CCR7			A (55)	63.8	High Impact	Major
CCR8			A (55)	49.0	No Impact	Negligible
CCR9			A (55)	51.6	No Impact	Negligible
CCR10			A (55)	62.1	High Impact	Major
CCR11			A (55)	58.6	Medium Impact	Moderate
CCR12			A (55)	48.2	No Impact	Negligible
CCR13			A (55)	44.1	No Impact	Negligible
CCR14			A (55)	51.5	No Impact	Negligible
CCR15			A (55)	51.0	No Impact	Negligible
CCR16			A (55)	50.6	No Impact	Negligible
CCR17			A (55)	53.7	No Impact	Negligible
CCR18			A (55)	50.9	No Impact	Negligible
CCR19			A (55)	40.0	No Impact	Negligible

47. **Table A25.47** shows that predicted weekend period impacts (Scenario 1 Month 1 to 4) including embedded mitigation range from no impact to a major impact magnitude at a medium sensitivity receptor and therefore as a worst case of **major** adverse significance. Details of possible enhanced mitigation measures are provided in **section 25.6.1.2** of **Chapter 25 Noise and Vibration**.

Table A25.48 Cable Route Noise – Predicted Impacts Scenario 1 Month 5 to 6 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 5 to 6	Weekend Saturday	A (55)	57.8	Low Impact	Minor
CCR2			A (55)	62.5	High Impact	Major

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR3		13:00 to 19:00	A (55)	48.3	No Impact	Negligible
CCR4			A (55)	48.7	No Impact	Negligible
CCR5			A (55)	46.3	No Impact	Negligible
CCR6			A (55)	44.7	No Impact	Negligible
CCR7			A (55)	65.4	High Impact	Major
CCR8			A (55)	52.3	No Impact	Negligible
CCR9			A (55)	57.0	Low Impact	Minor
CCR10			A (55)	63.0	High Impact	Major
CCR11			A (55)	60.8	High Impact	Major
CCR12			A (55)	48.4	No Impact	Negligible
CCR13			A (55)	52.7	No Impact	Negligible
CCR14			A (55)	54.5	No Impact	Negligible
CCR15			A (55)	54.7	No Impact	Negligible
CCR16			A (55)	53.6	No Impact	Negligible
CCR17			A (55)	53.3	No Impact	Negligible
CCR18			A (55)	52.4	No Impact	Negligible
CCR19			A (55)	47.1	No Impact	Negligible

48. **Table A25.48** shows that predicted weekend period impacts (Scenario 1 Month 5 to 6) including embedded mitigation range from no impact to a major impact magnitude at a medium sensitivity receptor and therefore as a worst case of **major** adverse significance. Details of possible enhanced mitigation measures are provided in **section 25.6.1.2** of **Chapter 25 Noise and Vibration**.

Table A25.49 Cable Route Noise – Predicted Impacts Scenario 1 Month 7 to 11 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 7 to 11	Weekend Saturday 13:00 to 19:00	A (55)	59.4	Medium Impact	Moderate
CCR2			A (55)	60.8	High Impact	Major
CCR3			A (55)	47.7	No Impact	Negligible
CCR4			A (55)	48.4	No Impact	Negligible
CCR5			A (55)	46.3	No Impact	Negligible
CCR6			A (55)	43.2	No Impact	Negligible
CCR7			A (55)	59.2	Medium Impact	Moderate
CCR8			A (55)	50.4	No Impact	Negligible
CCR9			A (55)	53.2	No Impact	Negligible
CCR10			A (55)	58.0	Medium Impact	Moderate
CCR11			A (55)	54.6	No Impact	Negligible
CCR12			A (55)	51.9	No Impact	Negligible
CCR13			A (55)	54.5	No Impact	Negligible
CCR14			A (55)	54.6	No Impact	Negligible
CCR15			A (55)	55.8	Negligible Impact	Minor
CCR16			A (55)	54.5	No Impact	Negligible
CCR17			A (55)	51.7	No Impact	Negligible
CCR18			A (55)	51.8	No Impact	Negligible
CCR19			A (55)	46.8	No Impact	Negligible

49. **Table A25.49** shows that predicted weekend period impacts (Scenario 1 Month 7 to 11) including embedded mitigation range from no impact to a major impact magnitude at a medium sensitivity receptor and therefore as a worst case of **major** adverse significance. Details of possible enhanced mitigation measures are provided in **section 25.6.1.2** of **Chapter 25 Noise and Vibration**.

Table A25.50 Cable Route Noise – Predicted Impacts Scenario 1 Month 12 to 13 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 12 to 13	Weekend Saturday 13:00 to 19:00	A (55)	58.9	Medium Impact	Moderate
CCR2			A (55)	60.6	High Impact	Major
CCR3			A (55)	47.4	No Impact	Negligible
CCR4			A (55)	48.9	No Impact	Negligible
CCR5			A (55)	46.1	No Impact	Negligible
CCR6			A (55)	44.7	No Impact	Negligible
CCR7			A (55)	62.1	High Impact	Major
CCR8			A (55)	51.8	No Impact	Negligible
CCR9			A (55)	53.7	No Impact	Negligible
CCR10			A (55)	61.1	High Impact	Major
CCR11			A (55)	57.9	Low Impact	Minor
CCR12			A (55)	50.8	No Impact	Negligible
CCR13			A (55)	57.0	Low Impact	Minor
CCR14			A (55)	51.3	No Impact	Negligible
CCR15			A (55)	49.9	No Impact	Negligible
CCR16			A (55)	51.2	No Impact	Negligible
CCR17			A (55)	55.9	Negligible Impact	Minor
CCR18			A (55)	52.3	No Impact	Negligible
CCR19			A (55)	47.6	No Impact	Negligible

50. **Table A25.50** shows that predicted weekend period impacts (Scenario 1 Month 12 to 13) including embedded mitigation range from no impact to a major impact magnitude at a medium sensitivity receptor and therefore as a worst case of **major** adverse significance. Details of possible enhanced mitigation measures are provided in **section 25.6.1.2** of **Chapter 25 Noise and Vibration**.

Table A25.51 Cable Route Noise – Predicted Impacts Scenario 1 Month 14 to 20 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 14 to 20	Weekend Saturday 13:00 to 19:00	A (55)	59.3	Medium Impact	Moderate
CCR2			A (55)	61.7	High Impact	Major
CCR3			A (55)	48.5	No Impact	Negligible
CCR4			A (55)	49.5	No Impact	Negligible
CCR5			A (55)	46.7	No Impact	Negligible
CCR6			A (55)	45.2	No Impact	Negligible
CCR7			A (55)	63.1	High Impact	Major
CCR8			A (55)	52.3	No Impact	Negligible
CCR9			A (55)	54.0	No Impact	Negligible
CCR10			A (55)	61.1	High Impact	Major
CCR11			A (55)	58.0	Medium Impact	Moderate
CCR12			A (55)	51.7	No Impact	Negligible
CCR13			A (55)	57.0	Low Impact	Minor
CCR14			A (55)	51.3	No Impact	Negligible
CCR15			A (55)	49.9	No Impact	Negligible
CCR16			A (55)	51.2	No Impact	Negligible
CCR17			A (55)	55.9	Negligible Impact	Minor
CCR18			A (55)	52.5	No Impact	Negligible
CCR19			A (55)	47.6	No Impact	Negligible

51. **Table A25.51** shows that predicted weekend period impacts (Scenario 1 Month 14 to 20) including embedded mitigation range from no impact to a major impact magnitude at a medium sensitivity receptor and therefore as a worst case of **major** adverse significance. Details of possible enhanced mitigation measures are provided in **section 25.6.1.2** of **Chapter 25 Noise and Vibration**.

Table A25.52 Cable Route Noise – Predicted Impacts Scenario 1 Month 21 to 24 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 21 to 24	Weekend Saturday 13:00 to 19:00	A (55)	55.8	Negligible Impact	Minor
CCR2			A (55)	59.2	Medium Impact	Moderate
CCR3			A (55)	47.7	No Impact	Negligible
CCR4			A (55)	44.3	No Impact	Negligible
CCR5			A (55)	45.0	No Impact	Negligible
CCR6			A (55)	43.2	No Impact	Negligible
CCR7			A (55)	64.4	High Impact	Major
CCR8			A (55)	53.7	No Impact	Negligible
CCR9			A (55)	50.0	No Impact	Negligible
CCR10			A (55)	48.7	No Impact	Negligible
CCR11			A (55)	47.6	No Impact	Negligible
CCR12			A (55)	50.1	No Impact	Negligible
CCR13			A (55)	56.3	Low Impact	Minor
CCR14			A (55)	52.7	No Impact	Negligible
CCR15			A (55)	49.8	No Impact	Negligible
CCR16			A (55)	53.1	No Impact	Negligible
CCR17			A (55)	51.6	No Impact	Negligible
CCR18			A (55)	49.0	No Impact	Negligible
CCR19			A (55)	44.8	No Impact	Negligible

52. **Table A25.52** shows that predicted weekend period impacts (Scenario 1 Month 21 to 24) including embedded mitigation range from no impact to a major impact magnitude at a medium sensitivity receptor and therefore as a worst case of **major** adverse significance. Details of possible enhanced mitigation measures are provided in **section 25.6.1.2** of **Chapter 25 Noise and Vibration**.

25.6.3 Onshore Substation / National Grid Infrastructure Study Area

53. **Table A25.53** to **Table A25.59** presents the predicted daytime noise level at the nearest sensitive receptors at the onshore substation and National Grid infrastructure including embedded mitigation for the Scenario 1 construction phases outlined in **Table A25.1**.

54. Sensitive receptors correspond to those surveyed and detailed in **Table A25.4**

Table A25.53 Substation Construction Noise – Predicted Impacts Scenario 1 Month 1 to 4 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 1 to 4	Daytime	A (65)	50.9	No Impact	Negligible
SSR2		Daytime	A (65)	55.8	No Impact	Negligible
SSR3		Daytime	A (65)	50.3	No Impact	Negligible
SSR4		Daytime	A (65)	51.8	No Impact	Negligible
SSR5		Daytime	A (65)	55.9	No Impact	Negligible
SSR6		Daytime	A (65)	53.8	No Impact	Negligible
SSR7		Daytime	A (65)	49.7	No Impact	Negligible
SSR8		Daytime	A (65)	46.6	No Impact	Negligible
SSR9		Daytime	A (65)	49.2	No Impact	Negligible
SSR10		Daytime	A (65)	42.0	No Impact	Negligible
SSR11		Daytime	A (65)	45.2	No Impact	Negligible
SSR12		Daytime	A (65)	45.4	No Impact	Negligible

Table A25.54 Substation Construction Noise – Predicted Impacts Scenario 1 Month 5 to 7 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 5 to 7	Daytime	A (65)	52.2	No Impact	Negligible
SSR2		Daytime	A (65)	55.4	No Impact	Negligible
SSR3		Daytime	A (65)	51.5	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR4		Daytime	A (65)	51.8	No Impact	Negligible
SSR5		Daytime	A (65)	55.8	No Impact	Negligible
SSR6		Daytime	A (65)	53.2	No Impact	Negligible
SSR7		Daytime	A (65)	50.9	No Impact	Negligible
SSR8		Daytime	A (65)	47.1	No Impact	Negligible
SSR9		Daytime	A (65)	49.8	No Impact	Negligible
SSR10		Daytime	A (65)	42.8	No Impact	Negligible
SSR11		Daytime	A (65)	45.9	No Impact	Negligible
SSR12		Daytime	A (65)	45.7	No Impact	Negligible

Table A25.55 Substation Construction Noise – Predicted Impacts Scenario 1 Month 8 to 11 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 8 to 11	Daytime	A (65)	51.8	No Impact	Negligible
SSR2		Daytime	A (65)	55.2	No Impact	Negligible
SSR3		Daytime	A (65)	51.0	No Impact	Negligible
SSR4		Daytime	A (65)	51.9	No Impact	Negligible
SSR5		Daytime	A (65)	56.0	No Impact	Negligible
SSR6		Daytime	A (65)	54.1	No Impact	Negligible
SSR7		Daytime	A (65)	50.5	No Impact	Negligible
SSR8		Daytime	A (65)	47.0	No Impact	Negligible
SSR9		Daytime	A (65)	49.5	No Impact	Negligible
SSR10		Daytime	A (65)	42.7	No Impact	Negligible
SSR11		Daytime	A (65)	45.9	No Impact	Negligible
SSR12		Daytime	A (65)	45.5	No Impact	Negligible

Table A25.56 Substation Construction Noise – Predicted Impacts Scenario 1 Month 12 to 13 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 12 to 13	Daytime	A (65)	51.8	No Impact	Negligible
SSR2		Daytime	A (65)	55.0	No Impact	Negligible
SSR3		Daytime	A (65)	51.0	No Impact	Negligible
SSR4		Daytime	A (65)	51.4	No Impact	Negligible
SSR5		Daytime	A (65)	55.4	No Impact	Negligible
SSR6		Daytime	A (65)	53.5	No Impact	Negligible
SSR7		Daytime	A (65)	50.6	No Impact	Negligible
SSR8		Daytime	A (65)	46.8	No Impact	Negligible
SSR9		Daytime	A (65)	49.4	No Impact	Negligible
SSR10		Daytime	A (65)	42.6	No Impact	Negligible
SSR11		Daytime	A (65)	45.6	No Impact	Negligible
SSR12		Daytime	A (65)	45.4	No Impact	Negligible

Table A25.57 Substation Construction Noise – Predicted Impacts Scenario 1 Month 14 to 17 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 14 to 17	Daytime	A (65)	51.8	No Impact	Negligible
SSR2		Daytime	A (65)	54.8	No Impact	Negligible
SSR3		Daytime	A (65)	51.3	No Impact	Negligible
SSR4		Daytime	A (65)	51.7	No Impact	Negligible
SSR5		Daytime	A (65)	55.4	No Impact	Negligible
SSR6		Daytime	A (65)	53.5	No Impact	Negligible
SSR7		Daytime	A (65)	50.6	No Impact	Negligible
SSR8		Daytime	A (65)	47.1	No Impact	Negligible
SSR9		Daytime	A (65)	49.8	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR10		Daytime	A (65)	42.8	No Impact	Negligible
SSR11		Daytime	A (65)	45.8	No Impact	Negligible
SSR12		Daytime	A (65)	45.7	No Impact	Negligible

Table A25.58 Substation Construction Noise – Predicted Impacts Scenario 1 Month 18 to 20 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 18 to 20	Daytime	A (65)	50.5	No Impact	Negligible
SSR2		Daytime	A (65)	53.5	No Impact	Negligible
SSR3		Daytime	A (65)	49.6	No Impact	Negligible
SSR4		Daytime	A (65)	50.3	No Impact	Negligible
SSR5		Daytime	A (65)	54.1	No Impact	Negligible
SSR6		Daytime	A (65)	52.9	No Impact	Negligible
SSR7		Daytime	A (65)	49.4	No Impact	Negligible
SSR8		Daytime	A (65)	45.4	No Impact	Negligible
SSR9		Daytime	A (65)	48.1	No Impact	Negligible
SSR10		Daytime	A (65)	41.6	No Impact	Negligible
SSR11		Daytime	A (65)	44.7	No Impact	Negligible
SSR12		Daytime	A (65)	44.2	No Impact	Negligible

Table A25.59 Substation Construction Noise – Predicted Impacts Scenario 1 Month 21 to 24 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1		Daytime	A (65)	47.5	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR2	Month 21 to 24	Daytime	A (65)	49.9	No Impact	Negligible
SSR3		Daytime	A (65)	46.5	No Impact	Negligible
SSR4		Daytime	A (65)	46.9	No Impact	Negligible
SSR5		Daytime	A (65)	50.5	No Impact	Negligible
SSR6		Daytime	A (65)	50.3	No Impact	Negligible
SSR7		Daytime	A (65)	46.5	No Impact	Negligible
SSR8		Daytime	A (65)	42.7	No Impact	Negligible
SSR9		Daytime	A (65)	44.9	No Impact	Negligible
SSR10		Daytime	A (65)	38.8	No Impact	Negligible
SSR11		Daytime	A (65)	41.7	No Impact	Negligible
SSR12		Daytime	A (65)	41.1	No Impact	Negligible

55. **Table A25.60** to **Table A25.66** presents the predicted noise level at the nearest sensitive receptors at the onshore substation and National Grid infrastructure including embedded mitigation for the Scenario 1 construction phases outlined in **Table A25.1**.

56. Sensitive receptors correspond to those surveyed and detailed in **Table A25.4**

Table A25.60 Substation Construction Noise – Predicted Impacts Scenario 1 Month 1 to 4 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 1 to 4	Weekend Saturday 13:00 to 19:00	A (55)	50.9	No Impact	Negligible
SSR2			A (55)	55.8	Negligible Impact	Minor
SSR3			A (55)	50.3	No Impact	Negligible
SSR4			A (55)	51.8	No Impact	Negligible
SSR5			A (55)	55.9	Negligible Impact	Minor

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR6			A (55)	53.8	No Impact	Negligible
SSR7			A (55)	49.7	No Impact	Negligible
SSR8			A (55)	46.6	No Impact	Negligible
SSR9			A (55)	49.2	No Impact	Negligible
SSR10			A (55)	42.0	No Impact	Negligible
SSR11			A (55)	45.2	No Impact	Negligible
SSR12			A (55)	45.4	No Impact	Negligible

57. **Table A25.60** shows that predicted weekend period impacts (Scenario 1 Month 1 to 4) including embedded mitigation range from no impact to a negligible impact magnitude at a medium sensitivity receptor and therefore as a worst case of **minor** adverse significance. Details of possible enhanced mitigation measures are provided in **section 25.6.1.2** of **Chapter 25 Noise and Vibration**.

Table A25.61 Substation Construction Noise – Predicted Impacts Scenario 1 Month 5 to 7 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 5 to 7	Weekend Saturday 13:00 to 19:00	A (55)	52.2	No Impact	Negligible
SSR2			A (55)	55.4	Negligible Impact	Minor
SSR3			A (55)	51.5	No Impact	Negligible
SSR4			A (55)	51.8	No Impact	Negligible
SSR5			A (55)	55.8	Negligible Impact	Minor
SSR6			A (55)	53.2	No Impact	Negligible
SSR7			A (55)	50.9	No Impact	Negligible
SSR8			A (55)	47.1	No Impact	Negligible
SSR9			A (55)	49.8	No Impact	Negligible
SSR10			A (55)	42.8	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR11			A (55)	45.9	No Impact	Negligible
SSR12			A (55)	45.7	No Impact	Negligible

58. **Table A25.61** shows that predicted weekend period impacts (Scenario 1 Month 5 to 6) including embedded mitigation range from no impact to a negligible impact magnitude at a medium sensitivity receptor and therefore as a worst case of **minor** adverse significance. Details of possible enhanced mitigation measures are provided in **section 25.6.1.2** of **Chapter 25 Noise and Vibration**.

Table A25.62 Substation Construction Noise – Predicted Impacts Scenario 1 Month 8 to 11 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 8 to 11	Weekend Saturday 13:00 to 19:00	A (55)	51.8	No Impact	Negligible
SSR2			A (55)	55.2	Negligible Impact	Minor
SSR3			A (55)	51.0	No Impact	Negligible
SSR4			A (55)	51.9	No Impact	Negligible
SSR5			A (55)	56.0	Low Impact	Minor
SSR6			A (55)	54.1	No Impact	Negligible
SSR7			A (55)	50.5	No Impact	Negligible
SSR8			A (55)	47.0	No Impact	Negligible
SSR9			A (55)	49.5	No Impact	Negligible
SSR10			A (55)	42.7	No Impact	Negligible
SSR11			A (55)	45.9	No Impact	Negligible
SSR12			A (55)	45.5	No Impact	Negligible

59. **Table A25.62** Table A25.61 shows that predicted weekend period impacts (Scenario 1 Month 8 to 11) including embedded mitigation range from no impact to a low impact magnitude at a medium sensitivity receptor and therefore as a worst case of **minor** adverse significance. Details of possible enhanced

mitigation measures are provided in **section 25.6.1.2** of **Chapter 25 Noise and Vibration**.

Table A25.63 Substation Construction Noise – Predicted Impacts Scenario 1 Month 12 to 13 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 12 to 13	Weekend Saturday 13:00 to 19:00	A (55)	51.8	No Impact	Negligible
SSR2			A (55)	55.0	No Impact	Negligible
SSR3			A (55)	51.0	No Impact	Negligible
SSR4			A (55)	51.4	No Impact	Negligible
SSR5			A (55)	55.4	Negligible Impact	Minor
SSR6			A (55)	53.5	No Impact	Negligible
SSR7			A (55)	50.6	No Impact	Negligible
SSR8			A (55)	46.8	No Impact	Negligible
SSR9			A (55)	49.4	No Impact	Negligible
SSR10			A (55)	42.6	No Impact	Negligible
SSR11			A (55)	45.6	No Impact	Negligible
SSR12			A (55)	45.4	No Impact	Negligible

60. **Table A25.63** shows that predicted weekend period impacts (Scenario 1 Month 12 to 13) including embedded mitigation range from no impact to a negligible impact magnitude at a medium sensitivity receptor and therefore as a worst case of **minor** adverse significance. Details of possible enhanced mitigation measures are provided in **section 25.6.1.2** of **Chapter 25 Noise and Vibration**.

Table A25.64 Substation Construction Noise – Predicted Impacts Scenario 1 Month 14 to 17 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 14 to 17	Weekend Saturday	A (55)	51.8	No Impact	Negligible
SSR2			A (55)	54.8	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR3		13:00 to 19:00	A (55)	51.3	No Impact	Negligible
SSR4			A (55)	51.7	No Impact	Negligible
SSR5			A (55)	55.4	Negligible Impact	Minor
SSR6			A (55)	53.5	No Impact	Negligible
SSR7			A (55)	50.6	No Impact	Negligible
SSR8			A (55)	47.1	No Impact	Negligible
SSR9			A (55)	49.8	No Impact	Negligible
SSR10			A (55)	42.8	No Impact	Negligible
SSR11			A (55)	45.8	No Impact	Negligible
SSR12			A (55)	45.7	No Impact	Negligible

61. **Table A25.64** shows that predicted weekend period impacts (Scenario 1 Month 14 to 17) including embedded mitigation range from no impact to a negligible impact magnitude at a medium sensitivity receptor and therefore as a worst case of **minor** adverse significance. Details of possible enhanced mitigation measures are provided in **section 25.6.1.2** of **Chapter 25 Noise and Vibration**.

Table A25.65 Substation Construction Noise – Predicted Impacts Scenario 1 Month 18 to 20 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 18 to 20	Weekend Saturday 13:00 to 19:00	A (55)	50.5	No Impact	Negligible
SSR2			A (55)	53.5	No Impact	Negligible
SSR3			A (55)	49.6	No Impact	Negligible
SSR4			A (55)	50.3	No Impact	Negligible
SSR5			A (55)	54.1	No Impact	Negligible
SSR6			A (55)	52.9	No Impact	Negligible
SSR7			A (55)	49.4	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR8			A (55)	45.4	No Impact	Negligible
SSR9			A (55)	48.1	No Impact	Negligible
SSR10			A (55)	41.6	No Impact	Negligible
SSR11			A (55)	44.7	No Impact	Negligible
SSR12			A (55)	44.2	No Impact	Negligible

Table A25.66 Substation Construction Noise – Predicted Impacts Scenario 1 Month 21 to 24 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 21 to 24	Weekend Saturday 13:00 to 19:00	A (55)	47.5	No Impact	Negligible
SSR2			A (55)	49.9	No Impact	Negligible
SSR3			A (55)	46.5	No Impact	Negligible
SSR4			A (55)	46.9	No Impact	Negligible
SSR5			A (55)	50.5	No Impact	Negligible
SSR6			A (55)	50.3	No Impact	Negligible
SSR7			A (55)	46.5	No Impact	Negligible
SSR8			A (55)	42.7	No Impact	Negligible
SSR9			A (55)	44.9	No Impact	Negligible
SSR10			A (55)	38.8	No Impact	Negligible
SSR11			A (55)	41.7	No Impact	Negligible
SSR12			A (55)	41.1	No Impact	Negligible

25.7 Construction Noise Modelling – Construction Scenario 2

25.7.1 Landfall Study Area

62. Scenario 2 represents the worst case scenario in the eventuality that the proposed East Anglia TWO project and proposed East Anglia ONE North project are built with a construction gap of four years. From a temporal view point this is the worst-case scenario.

63. The construction phase plant as detailed in **Table A25.5** to **Table A25.8** are applicable under Scenario 2.
64. **Table A25.67** presents the predicted noise level at the nearest sensitive receptors at the landfall including embedded mitigation for the Scenario 2 proposed East Anglia ONE North project construction phases outlined in **Table A25.1**.
65. Sensitive receptors correspond to those surveyed and detailed in **Table A25.2**.

**Table A25.67 Landfall Construction Noise Scenario 2 (proposed East Anglia ONE North project)
– Predicted Impacts Month 1 to 24**

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
LFR1	Month 1 to 4	Daytime	A (65)	46.8	No Impact	Negligible
	Month 5 to 6	Daytime	A (65)	46.7	No Impact	Negligible
		Evening	A (55)	34.7	No Impact	Negligible
		Night	B (50)	35.1	No Impact	Negligible
	Month 7 to 11	Daytime	A (65)	46.9	No Impact	Negligible
		Evening	A (55)	35.8	No Impact	Negligible
		Night	B (50)	36.3	No Impact	Negligible
	Month 12 to 13	Daytime	A (65)	46.9	No Impact	Negligible
		Evening	A (55)	34.7	No Impact	Negligible
		Night	B (50)	35.1	No Impact	Negligible
	Month 14 to 20	Daytime	A (65)	47.0	No Impact	Negligible
	Month 21 to 24	Daytime	A (65)	47.7	No Impact	Negligible
LFR2	Month 1 to 4	Daytime	A (65)	43.8	No Impact	Negligible
	Month 5 to 6	Daytime	A (65)	44.3	No Impact	Negligible
		Evening	A (55)	35.0	No Impact	Negligible
		Night	A (45)	35.0	No Impact	Negligible
	Month 7 to 11	Daytime	A (65)	44.5	No Impact	Negligible
		Evening	A (55)	36.4	No Impact	Negligible
		Night	A (45)	36.4	No Impact	Negligible
	Month 12 to 13	Daytime	A (65)	44.6	No Impact	Negligible
		Evening	A (55)	35.0	No Impact	Negligible
		Night	A (45)	35.0	No Impact	Negligible
	Month 14 to 20	Daytime	A (65)	45.1	No Impact	Negligible
	Month 21 to 24	Daytime	A (65)	44.1	No Impact	Negligible
LFR3	Month 1 to 4	Daytime	A (65)	42.5	No Impact	Negligible
	Month 5 to 6	Daytime	A (65)	43.4	No Impact	Negligible
		Evening	A (55)	32.2	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
		Night	A (45)	32.3	No Impact	Negligible
	Month 7 to 11	Daytime	A (65)	43.8	No Impact	Negligible
		Evening	A (55)	34.7	No Impact	Negligible
		Night	A (45)	34.9	No Impact	Negligible
	Month 12 to 13	Daytime	A (65)	43.7	No Impact	Negligible
		Evening	A (55)	32.2	No Impact	Negligible
		Night	A (45)	32.2	No Impact	Negligible
	Month 14 to 20	Daytime	A (65)	44.1	No Impact	Negligible
	Month 21 to 24	Daytime	A (65)	43.0	No Impact	Negligible
LFR4	Month 1 to 4	Daytime	A (65)	45.2	No Impact	Negligible
	Month 5 to 6	Daytime	A (65)	46.1	No Impact	Negligible
		Evening	A (55)	31.7	No Impact	Negligible
		Night	A (45)	31.7	No Impact	Negligible
	Month 7 to 11	Daytime	A (65)	46.1	No Impact	Negligible
		Evening	A (55)	37.6	No Impact	Negligible
		Night	A (45)	37.9	No Impact	Negligible
	Month 12 to 13	Daytime	A (65)	46.3	No Impact	Negligible
		Evening	A (55)	31.7	No Impact	Negligible
		Night	A (45)	31.7	No Impact	Negligible
	Month 14 to 20	Daytime	A (65)	47.1	No Impact	Negligible
	Month 21 to 24	Daytime	A (65)	45.2	No Impact	Negligible

25.7.2 Onshore Cable Route Study Area

66. **Table A25.68** to **Table A25.73** presents the predicted daytime noise level at the nearest sensitive receptors along the cable route including embedded mitigation for the Scenario 2 proposed East Anglia ONE North project construction phases outlined in **Table A25.1**.

67. Sensitive receptors correspond to those surveyed and detailed in **Table A25.3**.

Table A25.68 Cable Route Noise – Predicted Impacts Scenario 2 (proposed East Anglia ONE North project) Month 1 to 4 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 1 to 4	Daytime	A (65)	56.5	No Impact	Negligible
CCR2		Daytime	A (65)	54.7	No Impact	Negligible
CCR3		Daytime	A (65)	44.6	No Impact	Negligible
CCR4		Daytime	A (65)	45.9	No Impact	Negligible
CCR5		Daytime	A (65)	43.8	No Impact	Negligible
CCR6		Daytime	A (65)	42.3	No Impact	Negligible
CCR7		Daytime	A (65)	59.5	No Impact	Negligible
CCR8		Daytime	A (65)	50.2	No Impact	Negligible
CCR9		Daytime	A (65)	51.3	No Impact	Negligible
CCR10		Daytime	A (65)	61.9	No Impact	Negligible
CCR11		Daytime	A (65)	58.3	No Impact	Negligible
CCR12		Daytime	A (65)	48.9	No Impact	Negligible
CCR13		Daytime	A (65)	43.8	No Impact	Negligible
CCR14		Daytime	A (65)	51.4	No Impact	Negligible
CCR15		Daytime	A (65)	51.0	No Impact	Negligible
CCR16		Daytime	A (65)	50.5	No Impact	Negligible
CCR17		Daytime	A (65)	53.6	No Impact	Negligible
CCR18		Daytime	A (65)	48.0	No Impact	Negligible
CCR19		Daytime	A (65)	44.0	No Impact	Negligible

Table A25.69 Cable Route Noise – Predicted Impacts Scenario 2 (proposed East Anglia ONE North project) Month 5 to 6 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 5 to 6	Daytime	A (65)	57.1	No Impact	Negligible
CCR2		Daytime	A (65)	62.5	No Impact	Negligible
CCR3		Daytime	A (65)	48.0	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR4		Daytime	A (65)	47.3	No Impact	Negligible
CCR5		Daytime	A (65)	44.8	No Impact	Negligible
CCR6		Daytime	A (65)	43.4	No Impact	Negligible
CCR7		Daytime	A (65)	63.2	No Impact	Negligible
CCR8		Daytime	A (65)	51.6	No Impact	Negligible
CCR9		Daytime	A (65)	56.5	No Impact	Negligible
CCR10		Daytime	A (65)	59.9	No Impact	Negligible
CCR11		Daytime	A (65)	59.6	No Impact	Negligible
CCR12		Daytime	A (65)	47.8	No Impact	Negligible
CCR13		Daytime	A (65)	52.7	No Impact	Negligible
CCR14		Daytime	A (65)	54.4	No Impact	Negligible
CCR15		Daytime	A (65)	54.7	No Impact	Negligible
CCR16		Daytime	A (65)	53.5	No Impact	Negligible
CCR17		Daytime	A (65)	53.0	No Impact	Negligible
CCR18		Daytime	A (65)	49.6	No Impact	Negligible
CCR19		Daytime	A (65)	45.3	No Impact	Negligible

Table A25.70 Cable Route Noise – Predicted Impacts Scenario 2 (proposed East Anglia ONE North project) Month 7 to 11 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 7 to 11	Daytime	A (65)	59.3	No Impact	Negligible
CCR2		Daytime	A (65)	60.6	No Impact	Negligible
CCR3		Daytime	A (65)	46.3	No Impact	Negligible
CCR4		Daytime	A (65)	46.9	No Impact	Negligible
CCR5		Daytime	A (65)	45.6	No Impact	Negligible
CCR6		Daytime	A (65)	44.0	No Impact	Negligible
CCR7		Daytime	A (65)	64.2	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR8		Daytime	A (65)	48.9	No Impact	Negligible
CCR9		Daytime	A (65)	53.0	No Impact	Negligible
CCR10		Daytime	A (65)	57.9	No Impact	Negligible
CCR11		Daytime	A (65)	54.6	No Impact	Negligible
CCR12		Daytime	A (65)	51.8	No Impact	Negligible
CCR13		Daytime	A (65)	46.9	No Impact	Negligible
CCR14		Daytime	A (65)	54.2	No Impact	Negligible
CCR15		Daytime	A (65)	55.7	No Impact	Negligible
CCR16		Daytime	A (65)	54.0	No Impact	Negligible
CCR17		Daytime	A (65)	52.3	No Impact	Negligible
CCR18		Daytime	A (65)	48.8	No Impact	Negligible
CCR19		Daytime	A (65)	44.8	No Impact	Negligible

Table A25.71 Cable Route Noise – Predicted Impacts Scenario 2 (proposed East Anglia ONE North project) Month 12 to 13 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 12 to 13	Daytime	A (65)	59.2	No Impact	Negligible
CCR2		Daytime	A (65)	61.3	No Impact	Negligible
CCR3		Daytime	A (65)	47.5	No Impact	Negligible
CCR4		Daytime	A (65)	47.7	No Impact	Negligible
CCR5		Daytime	A (65)	45.0	No Impact	Negligible
CCR6		Daytime	A (65)	43.6	No Impact	Negligible
CCR7		Daytime	A (65)	63.2	No Impact	Negligible
CCR8		Daytime	A (65)	50.5	No Impact	Negligible
CCR9		Daytime	A (65)	50.3	No Impact	Negligible
CCR10		Daytime	A (65)	48.6	No Impact	Negligible
CCR11		Daytime	A (65)	47.8	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR12		Daytime	A (65)	49.9	No Impact	Negligible
CCR13		Daytime	A (65)	56.9	No Impact	Negligible
CCR14		Daytime	A (65)	51.0	No Impact	Negligible
CCR15		Daytime	A (65)	49.7	No Impact	Negligible
CCR16		Daytime	A (65)	51.0	No Impact	Negligible
CCR17		Daytime	A (65)	55.7	No Impact	Negligible
CCR18		Daytime	A (65)	50.5	No Impact	Negligible
CCR19		Daytime	A (65)	46.1	No Impact	Negligible

Table A25.72 Cable Route Noise – Predicted Impacts Scenario 2 (proposed East Anglia ONE North project) Month 14 to 20 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 14 to 20	Daytime	A (65)	59.7	No Impact	Negligible
CCR2		Daytime	A (65)	61.7	No Impact	Negligible
CCR3		Daytime	A (65)	48.1	No Impact	Negligible
CCR4		Daytime	A (65)	48.7	No Impact	Negligible
CCR5		Daytime	A (65)	45.3	No Impact	Negligible
CCR6		Daytime	A (65)	43.9	No Impact	Negligible
CCR7		Daytime	A (65)	63.0	No Impact	Negligible
CCR8		Daytime	A (65)	48.4	No Impact	Negligible
CCR9		Daytime	A (65)	50.7	No Impact	Negligible
CCR10		Daytime	A (65)	48.9	No Impact	Negligible
CCR11		Daytime	A (65)	48.3	No Impact	Negligible
CCR12		Daytime	A (65)	51.0	No Impact	Negligible
CCR13		Daytime	A (65)	56.9	No Impact	Negligible
CCR14		Daytime	A (65)	51.0	No Impact	Negligible
CCR15		Daytime	A (65)	49.7	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR16		Daytime	A (65)	51.0	No Impact	Negligible
CCR17		Daytime	A (65)	55.7	No Impact	Negligible
CCR18		Daytime	A (65)	49.8	No Impact	Negligible
CCR19		Daytime	A (65)	46.0	No Impact	Negligible

Table A25.73 Cable Route Noise – Predicted Impacts Scenario 2 (proposed East Anglia ONE North project) Month 21 to 24 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 21 to 24	Daytime	A (65)	56.4	No Impact	Negligible
CCR2		Daytime	A (65)	59.3	No Impact	Negligible
CCR3		Daytime	A (65)	48.0	No Impact	Negligible
CCR4		Daytime	A (65)	47.2	No Impact	Negligible
CCR5		Daytime	A (65)	44.9	No Impact	Negligible
CCR6		Daytime	A (65)	43.1	No Impact	Negligible
CCR7		Daytime	A (65)	64.7	No Impact	Negligible
CCR8		Daytime	A (65)	46.2	No Impact	Negligible
CCR9		Daytime	A (65)	49.4	No Impact	Negligible
CCR10		Daytime	A (65)	48.0	No Impact	Negligible
CCR11		Daytime	A (65)	46.7	No Impact	Negligible
CCR12		Daytime	A (65)	47.6	No Impact	Negligible
CCR13		Daytime	A (65)	56.3	No Impact	Negligible
CCR14		Daytime	A (65)	52.6	No Impact	Negligible
CCR15		Daytime	A (65)	49.7	No Impact	Negligible
CCR16		Daytime	A (65)	53.1	No Impact	Negligible
CCR17		Daytime	A (65)	52.6	No Impact	Negligible
CCR18		Daytime	A (65)	47.7	No Impact	Negligible
CCR19		Daytime	A (65)	44.1	No Impact	Negligible

68. **Table A25.80** to **Table A25.79** presents the predicted weekend noise level at the nearest sensitive receptors along the cable route including embedded mitigation for the Scenario 2 proposed East Anglia ONE North project construction phases outlined in **Table A25.1**.

69. Sensitive receptors correspond to those surveyed and detailed in **Table A25.3**.

Table A25.74 Cable Route Noise – Predicted Impacts Scenario 2 (proposed East Anglia ONE North project) Month 1 to 4 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 1 to 4	Weekend Saturday 13:00 to 19:00	A (55)	56.5	Low Impact	Minor
CCR2			A (55)	54.7	No Impact	Negligible
CCR3			A (55)	44.6	No Impact	Negligible
CCR4			A (55)	45.9	No Impact	Negligible
CCR5			A (55)	43.8	No Impact	Negligible
CCR6			A (55)	42.3	No Impact	Negligible
CCR7			A (55)	59.5	Medium Impact	Moderate
CCR8			A (55)	50.2	No Impact	Negligible
CCR9			A (55)	51.3	No Impact	Negligible
CCR10			A (55)	61.9	High Impact	Major
CCR11			A (55)	58.3	Medium Impact	Moderate
CCR12			A (55)	48.9	No Impact	Negligible
CCR13			A (55)	43.8	No Impact	Negligible
CCR14			A (55)	51.4	No Impact	Negligible
CCR15			A (55)	51.0	No Impact	Negligible
CCR16			A (55)	50.5	No Impact	Negligible
CCR17			A (55)	53.6	No Impact	Negligible
CCR18			A (55)	48.0	No Impact	Negligible
CCR19			A (55)	44.0	No Impact	Negligible

70. **Table A25.74** shows that predicted weekend period impacts (Scenario 2 proposed East Anglia ONE North project Month 1 to 4) including embedded mitigation range from no impact to a high impact magnitude at a medium sensitivity receptor and therefore as a worst case of **major** adverse significance. Details of possible enhanced mitigation measures are provided in **section 25.6.1.2** of **Chapter 25 Noise and Vibration**.

Table A25.75 Cable Route Noise – Predicted Impacts Scenario 2 (proposed East Anglia ONE North project) Month 5 to 6 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 5 to 6	Weekend Saturday 13:00 to 19:00	A (55)	57.1	Low Impact	Minor
CCR2			A (55)	62.5	High Impact	Major
CCR3			A (55)	48.0	No Impact	Negligible
CCR4			A (55)	47.3	No Impact	Negligible
CCR5			A (55)	44.8	No Impact	Negligible
CCR6			A (55)	43.4	No Impact	Negligible
CCR7			A (55)	63.2	High Impact	Major
CCR8			A (55)	51.6	No Impact	Negligible
CCR9			A (55)	56.5	Low Impact	Minor
CCR10			A (55)	59.9	Medium Impact	Moderate
CCR11			A (55)	59.6	Medium Impact	Moderate
CCR12			A (55)	47.8	No Impact	Negligible
CCR13			A (55)	52.7	No Impact	Negligible
CCR14			A (55)	54.4	No Impact	Negligible
CCR15			A (55)	54.7	No Impact	Negligible
CCR16			A (55)	53.5	No Impact	Negligible
CCR17			A (55)	53.0	No Impact	Negligible
CCR18			A (55)	49.6	No Impact	Negligible
CCR19			A (55)	45.3	No Impact	Negligible

71. **Table A25.75** shows that predicted weekend period impacts (Scenario 2 proposed East Anglia ONE North project Month 5 to 6) including embedded mitigation range from no impact to a high impact magnitude at a medium sensitivity receptor and therefore as a worst case of **major** adverse significance. Details of possible enhanced mitigation measures are provided in **section 25.6.1.2** of **Chapter 25 Noise and Vibration**.

Table A25.76 Cable Route Noise – Predicted Impacts Scenario 2 (proposed East Anglia ONE North project) Month 7 to 11 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 7 to 11	Weekend Saturday 13:00 to 19:00	A (55)	59.3	Medium Impact	Moderate
CCR2			A (55)	60.6	High Impact	Major
CCR3			A (55)	46.3	No Impact	Negligible
CCR4			A (55)	46.9	No Impact	Negligible
CCR5			A (55)	45.6	No Impact	Negligible
CCR6			A (55)	44.0	No Impact	Negligible
CCR7			A (55)	64.2	High Impact	Major
CCR8			A (55)	48.9	No Impact	Negligible
CCR9			A (55)	53.0	No Impact	Negligible
CCR10			A (55)	57.9	Low Impact	Minor
CCR11			A (55)	54.6	No Impact	Negligible
CCR12			A (55)	51.8	No Impact	Negligible
CCR13			A (55)	46.9	No Impact	Negligible
CCR14			A (55)	54.2	No Impact	Negligible
CCR15			A (55)	55.7	Negligible Impact	Minor
CCR16			A (55)	54.0	No Impact	Negligible
CCR17			A (55)	52.3	No Impact	Negligible
CCR18			A (55)	48.8	No Impact	Negligible
CCR19			A (55)	44.8	No Impact	Negligible

72. **Table A25.76** shows that predicted weekend period impacts (Scenario 2 proposed East Anglia ONE North project Month 7 to 11) including embedded mitigation range from no impact to a high impact magnitude at a medium sensitivity receptor and therefore as a worst case of **major** adverse significance. Details of possible enhanced mitigation measures are provided in **section 25.6.1.2** of **Chapter 25 Noise and Vibration**.

Table A25.77 Cable Route Noise – Predicted Impacts Scenario 2 (proposed East Anglia ONE North project) Month 12 to 13 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 12 to 13	Weekend Saturday 13:00 to 19:00	A (55)	59.2	Medium Impact	Moderate
CCR2			A (55)	61.3	High Impact	Major
CCR3			A (55)	47.5	No Impact	Negligible
CCR4			A (55)	47.7	No Impact	Negligible
CCR5			A (55)	45.0	No Impact	Negligible
CCR6			A (55)	43.6	No Impact	Negligible
CCR7			A (55)	63.2	High Impact	Major
CCR8			A (55)	50.5	No Impact	Negligible
CCR9			A (55)	50.3	No Impact	Negligible
CCR10			A (55)	48.6	No Impact	Negligible
CCR11			A (55)	47.8	No Impact	Negligible
CCR12			A (55)	49.9	No Impact	Negligible
CCR13			A (55)	56.9	Low Impact	Minor
CCR14			A (55)	51.0	No Impact	Negligible
CCR15			A (55)	49.7	No Impact	Negligible
CCR16			A (55)	51.0	No Impact	Negligible
CCR17			A (55)	55.7	Negligible Impact	Minor
CCR18			A (55)	50.5	No Impact	Negligible
CCR19			A (55)	46.1	No Impact	Negligible

73. **Table A25.77** shows that predicted weekend period impacts (Scenario 2 proposed East Anglia ONE North project Month 12 to 13) including embedded mitigation range from no impact to a high impact magnitude at a medium sensitivity receptor and therefore as a worst case of **major** adverse significance. Details of possible enhanced mitigation measures are provided in **section 25.6.1.2** of **Chapter 25 Noise and Vibration**.

Table A25.78 Cable Route Noise – Predicted Impacts Scenario 2 (proposed East Anglia ONE North project) Month 14 to 20 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 14 to 20	Weekend Saturday 13:00 to 19:00	A (55)	59.7	Medium Impact	Moderate
CCR2			A (55)	61.7	High Impact	Major
CCR3			A (55)	48.1	No Impact	Negligible
CCR4			A (55)	48.7	No Impact	Negligible
CCR5			A (55)	45.3	No Impact	Negligible
CCR6			A (55)	43.9	No Impact	Negligible
CCR7			A (55)	63.0	High Impact	Major
CCR8			A (55)	48.4	No Impact	Negligible
CCR9			A (55)	50.7	No Impact	Negligible
CCR10			A (55)	48.9	No Impact	Negligible
CCR11			A (55)	48.3	No Impact	Negligible
CCR12			A (55)	51.0	No Impact	Negligible
CCR13			A (55)	56.9	Low Impact	Minor
CCR14			A (55)	51.0	No Impact	Negligible
CCR15			A (55)	49.7	No Impact	Negligible
CCR1			A (55)	51.0	No Impact	Negligible
CCR17			A (55)	55.7	Negligible Impact	Minor
CCR18			A (55)	49.8	No Impact	Negligible
CCR19			A (55)	46.0	No Impact	Negligible

74. **Table A25.78** shows that predicted weekend period impacts (Scenario 2 proposed East Anglia ONE North project Month 14 to 20) including embedded mitigation range from no impact to a high impact magnitude at a medium sensitivity receptor and therefore as a worst case of **major** adverse significance. Details of possible enhanced mitigation measures are provided in **section 25.6.1.2 of Chapter 25 Noise and Vibration**.

Table A25.79 Cable Route Noise – Predicted Impacts Scenario 2 (proposed East Anglia ONE North project) Month 21 to 24 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level dBA	Impact Magnitude	Impact Significance
CCR1	Month 21 to 24	Weekend Saturday 13:00 to 19:00	A (55)	56.4	Low Impact	Minor
CCR2			A (55)	59.3	Medium Impact	Moderate
CCR3			A (55)	48.0	No Impact	Negligible
CCR4			A (55)	47.2	No Impact	Negligible
CCR5			A (55)	44.9	No Impact	Negligible
CCR6			A (55)	43.1	No Impact	Negligible
CCR7			A (55)	64.7	High Impact	Major
CCR8			A (55)	46.2	No Impact	Negligible
CCR9			A (55)	49.4	No Impact	Negligible
CCR10			A (55)	48.0	No Impact	Negligible
CCR11			A (55)	46.7	No Impact	Negligible
CCR12			A (55)	47.6	No Impact	Negligible
CCR13			A (55)	56.3	Low Impact	Minor
CCR14			A (55)	52.6	No Impact	Negligible
CCR15			A (55)	49.7	No Impact	Negligible
CCR16			A (55)	53.1	No Impact	Negligible
CCR17			A (55)	52.6	No Impact	Negligible
CCR18			A (55)	47.7	No Impact	Negligible
CCR19			A (55)	44.1	No Impact	Negligible

75. **Table A25.79** shows that predicted weekend period impacts (Scenario 2 proposed East Anglia ONE North project Month 21 to 24) including embedded

mitigation range from no impact to a high impact magnitude at a medium sensitivity receptor and therefore as a worst case of **major** adverse significance. Details of possible enhanced mitigation measures are provided in **section 25.6.1.2** of **Chapter 25 Noise and Vibration**.

25.7.3 Onshore Substation / National Grid Infrastructure Study Area

76. **Table A25.80** to **Table A25.86** presents the predicted daytime noise level at the nearest sensitive receptors at the onshore substation and National Grid infrastructure study area including embedded mitigation for the Scenario 2 proposed East Anglia ONE North project construction phases outlined in **Table A25.1**.

77. Sensitive receptors correspond to those surveyed and detailed in **Table A25.4**

Table A25.80 Substation Construction Noise – Predicted Impacts Scenario 2 (proposed East Anglia ONE North project) Month 1 to 4 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 1 to 4	Daytime	A (65)	47.2	No Impact	Negligible
SSR2		Daytime	A (65)	53.1	No Impact	Negligible
SSR3		Daytime	A (65)	45.8	No Impact	Negligible
SSR4		Daytime	A (65)	50.3	No Impact	Negligible
SSR5		Daytime	A (65)	55.6	No Impact	Negligible
SSR6		Daytime	A (65)	53.3	No Impact	Negligible
SSR7		Daytime	A (65)	46.6	No Impact	Negligible
SSR8		Daytime	A (65)	44.3	No Impact	Negligible
SSR9		Daytime	A (65)	44.9	No Impact	Negligible
SSR10		Daytime	A (65)	40.2	No Impact	Negligible
SSR11		Daytime	A (65)	43.6	No Impact	Negligible
SSR12		Daytime	A (65)	42.2	No Impact	Negligible

Table A25.81 Substation Construction Noise – Predicted Impacts Scenario 2 (proposed East Anglia ONE North project) Month 5 to 7 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 5 to 7	Daytime	A (65)	48.3	No Impact	Negligible
SSR2		Daytime	A (65)	51.6	No Impact	Negligible
SSR3		Daytime	A (65)	48.8	No Impact	Negligible
SSR4		Daytime	A (65)	50.1	No Impact	Negligible
SSR5		Daytime	A (65)	54.2	No Impact	Negligible
SSR6		Daytime	A (65)	52.0	No Impact	Negligible
SSR7		Daytime	A (65)	47.5	No Impact	Negligible
SSR8		Daytime	A (65)	44.9	No Impact	Negligible
SSR9		Daytime	A (65)	47.6	No Impact	Negligible
SSR10		Daytime	A (65)	40.9	No Impact	Negligible
SSR11		Daytime	A (65)	44.1	No Impact	Negligible
SSR12		Daytime	A (65)	43.7	No Impact	Negligible

Table A25.82 Substation Construction Noise – Predicted Impacts Scenario 2 (proposed East Anglia ONE North project) Month 8 to 11 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 8 to 11	Daytime	A (65)	47.8	No Impact	Negligible
SSR2		Daytime	A (65)	51.1	No Impact	Negligible
SSR3		Daytime	A (65)	48.3	No Impact	Negligible
SSR4		Daytime	A (65)	50.5	No Impact	Negligible
SSR5		Daytime	A (65)	54.9	No Impact	Negligible
SSR6		Daytime	A (65)	53.3	No Impact	Negligible
SSR7		Daytime	A (65)	47.0	No Impact	Negligible
SSR8		Daytime	A (65)	44.8	No Impact	Negligible
SSR9		Daytime	A (65)	47.2	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR10		Daytime	A (65)	40.9	No Impact	Negligible
SSR11		Daytime	A (65)	44.1	No Impact	Negligible
SSR12		Daytime	A (65)	43.5	No Impact	Negligible

Table A25.83 Substation Construction Noise – Predicted Impacts Scenario 2 (proposed East Anglia ONE North project) Month 12 to 13 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 12 to 13	Daytime	A (65)	49.7	No Impact	Negligible
SSR2		Daytime	A (65)	52.8	No Impact	Negligible
SSR3		Daytime	A (65)	48.1	No Impact	Negligible
SSR4		Daytime	A (65)	47.6	No Impact	Negligible
SSR5		Daytime	A (65)	50.7	No Impact	Negligible
SSR6		Daytime	A (65)	52.0	No Impact	Negligible
SSR7		Daytime	A (65)	48.5	No Impact	Negligible
SSR8		Daytime	A (65)	43.4	No Impact	Negligible
SSR9		Daytime	A (65)	46.2	No Impact	Negligible
SSR10		Daytime	A (65)	39.9	No Impact	Negligible
SSR11		Daytime	A (65)	42.7	No Impact	Negligible
SSR12		Daytime	A (65)	42.1	No Impact	Negligible

Table A25.84 Substation Construction Noise – Predicted Impacts Scenario 2 (proposed East Anglia ONE North project) Month 14 to 17 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1		Daytime	A (65)	48.0	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR2	Month 14 to 17	Daytime	A (65)	51.2	No Impact	Negligible
SSR3		Daytime	A (65)	48.5	No Impact	Negligible
SSR4		Daytime	A (65)	50.3	No Impact	Negligible
SSR5		Daytime	A (65)	54.4	No Impact	Negligible
SSR6		Daytime	A (65)	52.6	No Impact	Negligible
SSR7		Daytime	A (65)	47.3	No Impact	Negligible
SSR8		Daytime	A (65)	45.0	No Impact	Negligible
SSR9		Daytime	A (65)	47.4	No Impact	Negligible
SSR10		Daytime	A (65)	40.9	No Impact	Negligible
SSR11		Daytime	A (65)	44.0	No Impact	Negligible
SSR12		Daytime	A (65)	43.6	No Impact	Negligible

Table A25.85 Substation Construction Noise – Predicted Impacts Scenario 2 (proposed East Anglia ONE North project) Month 18 to 20 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 18 to 20	Daytime	A (65)	46.9	No Impact	Negligible
SSR2		Daytime	A (65)	50.5	No Impact	Negligible
SSR3		Daytime	A (65)	46.9	No Impact	Negligible
SSR4		Daytime	A (65)	49.0	No Impact	Negligible
SSR5		Daytime	A (65)	53.2	No Impact	Negligible
SSR6		Daytime	A (65)	52.2	No Impact	Negligible
SSR7		Daytime	A (65)	46.4	No Impact	Negligible
SSR8		Daytime	A (65)	43.4	No Impact	Negligible
SSR9		Daytime	A (65)	45.8	No Impact	Negligible
SSR10		Daytime	A (65)	40.0	No Impact	Negligible
SSR11		Daytime	A (65)	43.0	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR12		Daytime	A (65)	42.2	No Impact	Negligible

Table A25.86 Substation Construction Noise – Predicted Impacts Scenario 2 (proposed East Anglia ONE North project) Month 21 to 24 Daytime

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 21 to 24	Daytime	A (65)	44.9	No Impact	Negligible
SSR2		Daytime	A (65)	48.8	No Impact	Negligible
SSR3		Daytime	A (65)	44.6	No Impact	Negligible
SSR4		Daytime	A (65)	46.2	No Impact	Negligible
SSR5		Daytime	A (65)	49.8	No Impact	Negligible
SSR6		Daytime	A (65)	49.8	No Impact	Negligible
SSR7		Daytime	A (65)	44.4	No Impact	Negligible
SSR8		Daytime	A (65)	41.2	No Impact	Negligible
SSR9		Daytime	A (65)	43.4	No Impact	Negligible
SSR10		Daytime	A (65)	38.0	No Impact	Negligible
SSR11		Daytime	A (65)	40.8	No Impact	Negligible
SSR12		Daytime	A (65)	39.9	No Impact	Negligible

78. **Table A25.80** to **Table A25.93** presents the predicted daytime noise level at the nearest sensitive receptors at the onshore substation and National Grid infrastructure study area including embedded mitigation for the Scenario 2 proposed East Anglia ONE North project construction phases outlined in **Table A25.1**.

79. Sensitive receptors correspond to those surveyed and detailed in **Table A25.4**

Table A25.87 Substation Construction Noise – Predicted Impacts Scenario 2 (proposed East Anglia ONE North project) Month 1 to 4 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 1 to 4	Weekend Saturday 13:00 to 19:00	A (55)	47.2	No Impact	Negligible
SSR2			A (55)	53.1	No Impact	Negligible
SSR3			A (55)	45.8	No Impact	Negligible
SSR4			A (55)	50.3	No Impact	Negligible
SSR5			A (55)	55.6	Negligible Impact	Minor
SSR6			A (55)	53.3	No Impact	Negligible
SSR7			A (55)	46.6	No Impact	Negligible
SSR8			A (55)	44.3	No Impact	Negligible
SSR9			A (55)	44.9	No Impact	Negligible
SSR10			A (55)	40.2	No Impact	Negligible
SSR11			A (55)	43.6	No Impact	Negligible
SSR12			A (55)	42.2	No Impact	Negligible

80. **Table A25.87** shows that predicted weekend period impacts (Scenario 2 proposed East Anglia ONE North project Month 1 to 4) including embedded mitigation range from no impact to a negligible impact magnitude at a medium sensitivity receptor and therefore as a worst case of **minor** adverse significance. Details of possible enhanced mitigation measures are provided in **section 25.6.1.2** of **Chapter 25 Noise and Vibration**.

Table A25.88 Substation Construction Noise – Predicted Impacts Scenario 2 (proposed East Anglia ONE North project) Month 5 to 7 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 5 to 7	Weekend Saturday 13:00 to 19:00	A (55)	48.3	No Impact	Negligible
SSR2			A (55)	51.6	No Impact	Negligible
SSR3			A (55)	48.8	No Impact	Negligible
SSR4			A (55)	50.1	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR5			A (55)	54.2	No Impact	Negligible
SSR6			A (55)	52.0	No Impact	Negligible
SSR7			A (55)	47.5	No Impact	Negligible
SSR8			A (55)	44.9	No Impact	Negligible
SSR9			A (55)	47.6	No Impact	Negligible
SSR10			A (55)	40.9	No Impact	Negligible
SSR11			A (55)	44.1	No Impact	Negligible
SSR12			A (55)	43.7	No Impact	Negligible

Table A25.89 Substation Construction Noise – Predicted Impacts Scenario 2 (proposed East Anglia ONE North project) Month 8 to 11 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 8 to 11	Weekend Saturday 13:00 to 19:00	A (55)	47.8	No Impact	Negligible
SSR2			A (55)	51.1	No Impact	Negligible
SSR3			A (55)	48.3	No Impact	Negligible
SSR4			A (55)	50.5	No Impact	Negligible
SSR5			A (55)	54.9	No Impact	Negligible
SSR6			A (55)	53.3	No Impact	Negligible
SSR7			A (55)	47.0	No Impact	Negligible
SSR8			A (55)	44.8	No Impact	Negligible
SSR9			A (55)	47.2	No Impact	Negligible
SSR10			A (55)	40.9	No Impact	Negligible
SSR11			A (55)	44.1	No Impact	Negligible
SSR12			A (55)	43.5	No Impact	Negligible

Table A25.90 Substation Construction Noise – Predicted Impacts Scenario 2 (proposed East Anglia ONE North project) Month 12 to 13 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 12 to 13	Weekend Saturday 13:00 to 19:00	A (55)	49.7	No Impact	Negligible
SSR2			A (55)	52.8	No Impact	Negligible
SSR3			A (55)	48.1	No Impact	Negligible
SSR4			A (55)	47.6	No Impact	Negligible
SSR5			A (55)	50.7	No Impact	Negligible
SSR6			A (55)	52.0	No Impact	Negligible
SSR7			A (55)	48.5	No Impact	Negligible
SSR8			A (55)	43.4	No Impact	Negligible
SSR9			A (55)	46.2	No Impact	Negligible
SSR10			A (55)	39.9	No Impact	Negligible
SSR11			A (55)	42.7	No Impact	Negligible
SSR12			A (55)	42.1	No Impact	Negligible

Table A25.91 Substation Construction Noise – Predicted Impacts Scenario 2 (proposed East Anglia ONE North project) Month 14 to 17 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 14 to 17	Weekend Saturday 13:00 to 19:00	A (55)	48.0	No Impact	Negligible
SSR2			A (55)	51.2	No Impact	Negligible
SSR3			A (55)	48.5	No Impact	Negligible
SSR4			A (55)	50.3	No Impact	Negligible
SSR5			A (55)	54.4	No Impact	Negligible
SSR6			A (55)	52.6	No Impact	Negligible
SSR7			A (55)	47.3	No Impact	Negligible
SSR8			A (55)	45.0	No Impact	Negligible
SSR9			A (55)	47.4	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR10			A (55)	40.9	No Impact	Negligible
SSR11			A (55)	44.0	No Impact	Negligible
SSR12			A (55)	43.6	No Impact	Negligible

Table A25.92 Substation Construction Noise – Predicted Impacts Scenario 2 (proposed East Anglia ONE North project) Month 18 to 20 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1	Month 18 to 20	Weekend Saturday 13:00 to 19:00	A (55)	46.9	No Impact	Negligible
SSR2			A (55)	50.5	No Impact	Negligible
SSR3			A (55)	46.9	No Impact	Negligible
SSR4			A (55)	49.0	No Impact	Negligible
SSR5			A (55)	53.2	No Impact	Negligible
SSR6			A (55)	52.2	No Impact	Negligible
SSR7			A (55)	46.4	No Impact	Negligible
SSR8			A (55)	43.4	No Impact	Negligible
SSR9			A (55)	45.8	No Impact	Negligible
SSR10			A (55)	40.0	No Impact	Negligible
SSR11			A (55)	43.0	No Impact	Negligible
SSR12			A (55)	42.2	No Impact	Negligible

Table A25.93 Substation Construction Noise – Predicted Impacts Scenario 2 (proposed East Anglia ONE North project) Month 21 to 24 Weekend

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR1			A (55)	44.9	No Impact	Negligible

Receptor Identifier	Construction Period	BS5228 Reference Period	BS5228 Derived Threshold Category dBA	Predicted Receptor Noise level Range dBA	Impact Magnitude	Impact Significance
SSR2	Month 21 to 24	Weekend Saturday 13:00 to 19:00	A (55)	48.8	No Impact	Negligible
SSR3			A (55)	44.6	No Impact	Negligible
SSR4			A (55)	46.2	No Impact	Negligible
SSR5			A (55)	49.8	No Impact	Negligible
SSR6			A (55)	49.8	No Impact	Negligible
SSR7			A (55)	44.4	No Impact	Negligible
SSR8			A (55)	41.2	No Impact	Negligible
SSR9			A (55)	43.4	No Impact	Negligible
SSR10			A (55)	38.0	No Impact	Negligible
SSR11			A (55)	40.8	No Impact	Negligible
SSR12			A (55)	39.9	No Impact	Negligible

25.8 Construction Phase Road Traffic Emissions Scenarios

81. Details of the road links assessed for proposed East Anglia TWO project (project alone) and Scenario 2 are provided in this section.
82. The construction phase road traffic emissions assessment has been completed for a Baseline year of 2024 to 2030 versus 2024 to 2030 including the proposed East Anglia development scenarios. The screening using DMRB criteria and the calculation of a Basic Noise Level (BNL) for each link in the proposed East Anglia TWO project study areas are detailed.

25.9 Increased Noise on Residential Receptors from Off-Site Construction Traffic Noise

83. **Table A25.94** shows the calculated change in traffic flow on the road links identified by the transport assessment as carrying construction traffic (see **Chapter 26 Traffic and Transport**) for the year 2024 based on the 18hr Annual Average Weekday Traffic (AAWT) flows.

Table A25.94 Construction Road Traffic Flows – 2024 the proposed East Anglia TWO project

Link ID	Description	2024 flows	Baseline AAWT	2024 Development	Baseline + Development	Overall (%)	Change
		Total Vehicles	Total HGVs	Total Vehicles	Total HGVs	Total Vehicles	Total HGVs
1	A12 north of the B1122	13,976	1,290	14,363	1,544	2.8	19.7
2	A12 between the B1122 and A1094	11,876	1,159	12,229	1,413	3.0	21.9
3	A12 south of the A1094	18,934	1,126	19,329	1,380	2.1	22.5
4	B1122 from the A12 to Lover's Lane	3,029	256	3,299	381	8.9	48.8
5	B1121 from the A12 to Friston	1,332	61	1,433	61	7.6	0.0
6	A1094 from the A12 to the B1121/B1069	8,191	517	8,550	761	4.4	47.3
7	B1122 from Friston to the A1094	1,340	70	1,383	70	3.2	0.0
8	A1094 from the B1121/B1069 to Aldeburgh	5,900	264	6,005	309	1.8	17.0
9	B1069 from the A1094 to Coldfair Green	4,364	201	4,829	414	10.6	106.4
10	B1122 from Aldeburgh to the B1353	3,646	181	3,750	226	2.9	24.9
11	B1353 from the B1122 to Thorpeness	2,265	90	2,346	128	3.6	42.2
12	Lover's Lane / Sizewell Gap	3,322	116	3,621	241	9.0	108.1
13	Aldringham Lane	2,712	118	2,750	118	1.4	0.0
14	B1069 from Lovers Lane to B1119	3,029	256	3,190	256	5.3	0.0
15	B1069 from Coldfair Green to B1119	4,364	201	4,524	201	3.7	0.0

84. Road links likely to experience an increase in traffic flows greater than 25% were assessed further by undertaking calculations of base noise level (BNL)

Table A25.95 Calculated BNL – 2024 Baseline vs. 2024 Baseline and the proposed East Anglia TWO project Traffic

Link ID	Description	Speed (mph)	2024 Baseline BNL, dBA L10,18hr	2024 Baseline and the proposed East Anglia TWO project BNL, dBA, L10,18hr	Overall Change dBA	Impact Magnitude
1	A12 north of the B1122	30.0	70.5	70.9	0.4	Negligible
		40.0	71.7	72.2	0.5	Negligible
2	A12 between the B1122 and A1094	30.0	69.9	70.4	0.5	Negligible
		50.0	72.5	72.9	0.4	Negligible
		60.0	73.8	74.2	0.4	Negligible
3	A12 south of the A1094	30.0	71.0	71.4	0.4	Negligible
		50.0	73.8	74.1	0.3	Negligible
4	B1122 from the A12 to Lover's Lane	30.0	63.6	64.7	1.1	Minor
		40.0	64.9	65.9	1.0	Negligible
		60.0	67.7	68.5	0.8	Negligible
5	B1121 from the A12 to Friston	30.0	59.0	59.2	0.2	Negligible
		40.0	60.5	60.7	0.2	Negligible
		60.0	63.5	63.7	0.2	Negligible
6	A1094 from the A12 to the B1121/B1069	30.0	67.4	68.3	0.9	Negligible
		40.0	68.8	69.5	0.7	Negligible
7	B1122 from Friston to the A1094	30.0	59.2	59.3	0.1	No change
		60.0	63.6	63.7	0.1	Negligible
8	A1094 from the B1121/B1069 to Aldeburgh	30.0	65.5	65.7	0.2	Negligible
		60.0	69.9	70.1	0.2	Negligible
9	B1069 from the A1094 to Coldfair Green	30.0	64.2	65.7	1.5	Minor
		40.0	65.7	67.0	1.3	Minor
10	B1122 from Aldeburgh to the B1353	30.0	63.5	63.9	0.4	Negligible
		40.0	65.0	65.3	0.3	Negligible
		60.0	67.9	68.2	0.3	Negligible
11	B1353 from the B1122 to Thorpeness	30.0	61.2	61.8	0.6	Negligible
		60.0	65.7	66.1	0.4	Negligible

Link ID	Description	Speed (mph)	2024 Baseline BNL, dBA, L10,18hr	2024 Baseline and the proposed East Anglia TWO project BNL, dBA, L10,18hr	Overall Change dBA	Impact Magnitude
12	Lover's Lane / Sizewell Gap	60.0	67.2	68.2	1.0	Negligible
13	Aldringham Lane	30.0	62.1	62.1	0.0	No change
		40.0	63.5	63.6	0.1	Negligible
14	B1069 from Lovers Lane to B1119	30.0	63.6	63.8	0.2	Negligible
15	B1069 from Coldfair Green to B1119	30.0	64.2	64.3	0.1	Negligible
		40.0	65.7	65.8	0.1	Negligible

85. **Table A25.95** shows that predicted impacts are at worst of a minor adverse impact magnitude at a medium sensitivity receptor resulting in a **minor adverse** significance.

86. **Table A25.96** shows the calculated change in traffic flow on the road links identified by the transport assessment as carrying construction traffic (see **Chapter 26 Traffic and Transport**) for the year 2026. This is based on the 18hr-AAWT and is the latest proposed start date for the proposed East Anglia TWO project.

Table A25.96 Construction Road Traffic Flows – 2026 the proposed East Anglia TWO project

Link ID	Description	2026 Baseline flows AAWT		2026 Baseline and the proposed East Anglia TWO project		Overall Change (%)	
		Total Vehicles	Total HGVs	Total Vehicles	Total HGVs	Total Vehicles	Total HGVs
1	A12 north of the B1122	14,326	1,320	14,713	1,574	2.7	19.2
2	A12 between the B1122 and A1094	12,174	1,187	12,526	1,441	2.9	21.4
3	A12 south of the A1094	19,195	1,153	19,589	1,407	2.1	22.0
4	B1122 from the A12 to Lover's Lane	3,103	262	3,372	387	8.7	47.7
5	B1121 from the A12 to Friston	1,364	62	1,465	62	7.4	0.0
6	A1094 from the A12 to the B1121/B1069	8,396	529	8,755	774	4.3	46.2

Link ID	Description	2026 flows	Baseline AAWT	2026 Baseline and the proposed East Anglia project		Overall (%)	Change
		Total Vehicles	Total HGVs	Total Vehicles	Total HGVs	Total Vehicles	Total HGVs
7	B1122 from Friston to the A1094	1,373	71	1,415	71	3.1	0.0
8	A1094 from the B1121/B1069 to Aldeburgh	6,048	271	6,153	316	1.7	16.6
9	B1069 from the A1094 to Coldfair Green	4,433	205	4,897	419	10.5	104.0
10	B1122 from Aldeburgh to the B1353	3,734	185	3,839	230	2.8	24.3
11	B1353 from the B1122 to Thorpeness	2,321	92	2,401	130	3.5	41.2
12	Lover's Lane / Sizewell Gap	3,403	118	3,702	243	8.8	105.6
13	Aldringham Lane	2,778	121	2,816	121	1.4	0.0
14	B1069 from Lovers Lane to B1119	3,103	262	3,264	262	5.2	0.0
15	B1069 from Coldfair Green to B1119	4,433	205	4,593	205	3.6	0.0

87. Road links likely to experience an increase in traffic flows greater than 25% were assessed further.

Table A25.97 Calculated BNL – 2026 Baseline vs. 2026 Baseline and the proposed East Anglia TWO project Traffic

Link ID	Description	Speed (mph)	2026 Baseline BNL, dBA, L10,18hr	2026 Baseline and the proposed East Anglia project BNL, dBA, L10,18hr	Overall Change dBA	Impact Magnitude
1	A12 north of the B1122	30.0	70.6	71.0	0.4	Negligible
		40.0	71.8	72.2	0.4	Negligible
2	A12 between the B1122 and A1094	30.0	70.0	70.5	0.5	Negligible
		50.0	72.6	73.0	0.4	Negligible
		60.0	73.9	74.3	0.4	Negligible
3	A12 south of the A1094	30.0	71.0	71.4	0.4	Negligible
		50.0	73.9	74.2	0.3	Negligible

Link ID	Description	Speed (mph)	2026 Baseline BNL, dBA L10,18hr	2026 Baseline and the proposed East Anglia project BNL, dBA, L10,18hr	Overall Change dBA	Impact Magnitude
4	B1122 from the A12 to Lover's Lane	30.0	63.8	64.8	1.0	Minor
		40.0	65.1	66.0	0.9	Negligible
		60.0	67.8	68.6	0.8	Negligible
5	B1121 from the A12 to Friston	30.0	59.1	59.3	0.2	Negligible
		40.0	60.6	60.8	0.2	Negligible
		60.0	63.6	63.8	0.2	Negligible
6	A1094 from the A12 to the B1121/B1069	30.0	67.5	68.3	0.8	Negligible
		40.0	68.9	69.6	0.7	Negligible
7	B1122 from Friston to the A1094	30.0	59.4	59.4	0.0	No change
		60.0	63.7	63.8	0.1	Negligible
8	A1094 from the B1121/B1069 to Aldeburgh	30.0	65.6	65.8	0.2	Negligible
		60.0	70.0	70.2	0.2	Negligible
9	B1069 from the A1094 to Coldfair Green	30.0	64.3	65.8	1.5	Minor
		40.0	65.7	67.1	1.4	Minor
10	B1122 from Aldeburgh to the B1353	30.0	63.6	64.0	0.4	Negligible
		40.0	65.1	65.4	0.3	Negligible
		60.0	68.0	68.3	0.3	Negligible
11	B1353 from the B1122 to Thorpeness	30.0	61.3	61.8	0.5	Negligible
		60.0	65.8	66.2	0.4	Negligible
12	Lover's Lane / Sizewell Gap	60.0	67.3	68.3	1.0	Negligible
13	Aldringham Lane	30.0	62.2	62.2	0.0	No change
		40.0	63.6	63.7	0.0	No change
14	B1069 from Lovers Lane to B1119	30.0	63.8	63.9	0.1	Negligible
15	B1069 from Coldfair Green to B1119	30.0	64.3	64.4	0.1	Negligible
		40.0	65.7	65.9	0.2	Negligible

88. **Table A25.97** shows that predicted impacts are at worst of a minor adverse impact magnitude at a medium sensitivity receptor resulting in a minor adverse significance.
89. **Table A25.98** shows the calculated change in traffic flow on the road links identified by the transport assessment as carrying construction traffic (**see Chapter 26 Traffic and Transport**) for the year 2028. This is based on the 18hr-AAWT and is the latest proposed start date for the proposed East Anglia TWO project.

Table A25.98 Construction Road Traffic Flows – 2028 Baseline and the proposed Scenario 2 Traffic

Link ID	Description	2028 Baseline flows AAWT		2028 Baseline and the proposed East Anglia TWO project		Overall Change (%)	
		Total Vehicles	Total HGVs	Total Vehicles	Total HGVs	Total Vehicles	Total HGVs
1	A12 north of the B1122	14,542	1,354	14,929	1,608	2.7	18.8
2	A12 between the B1122 and A1094	12,359	1,217	12,711	1,471	2.8	20.9
3	A12 south of the A1094	19,696	1,182	20,090	1,436	2.0	21.5
4	B1122 from the A12 to Lover's Lane	3,149	269	3,419	394	8.6	46.5
5	B1121 from the A12 to Friston	1,384	64	1,485	64	7.3	0.0
6	A1094 from the A12 to the B1121/B1069	8,520	543	8,880	787	4.2	45.1
7	B1122 from Friston to the A1094	1,393	73	1,435	73	3.0	0.0
8	A1094 from the B1121/B1069 to Aldeburgh	6,137	278	6,242	323	1.7	16.2
9	B1069 from the A1094 to Coldfair Green	4,535	211	5,000	424	10.2	101.4
10	B1122 from Aldeburgh to the B1353	3,788	190	3,893	235	2.8	23.7
11	B1353 from the B1122 to Thorpeness	2,354	95	2,435	133	3.4	40.2
12	Lover's Lane / Sizewell Gap	3,451	121	3,751	246	8.7	103.0

Link ID	Description	2028 Baseline flows AAWT		2028 Baseline and the proposed East Anglia TWO project		Overall Change (%)	
		Total Vehicles	Total HGVs	Total Vehicles	Total HGVs	Total Vehicles	Total HGVs
13	Aldringham Lane	2,818	124	2,856	124	1.3	0.0
14	B1069 from Lovers Lane to B1119	3,149	269	3,310	269	5.1	0.0
15	B1069 from Coldfair Green to B1119	4,535	211	4,695	211	3.5	0.0

90. Road links likely to experience an increase in traffic flows greater than 25% were assessed further by undertaking calculations of BNL (**Table A25.99**, 2028 Baseline versus a 2028 Baseline plus Scenario 2 Development Traffic).

Table A25.99 Calculated BNL – 2028 Baseline vs. 2028 Baseline + Scenario 2 Development Traffic

Link ID	Description	Speed (mph)	2028 Baseline BNL, dBA, L _{10,18hr}	2028 Baseline + Scenario 2 Development BNL, dBA, L _{10,18hr}	Overall Change dBA	Impact Magnitude
1	A12 north of the B1122	30.0	70.7	71.1	0.4	Negligible
		40.0	71.9	72.3	0.4	Negligible
2	A12 between the B1122 and A1094	30.0	70.1	70.6	0.5	Negligible
		50.0	72.7	73.1	0.4	Negligible
		60.0	74.0	74.4	0.4	Negligible
3	A12 south of the A1094	30.0	71.1	71.5	0.4	Negligible
		50.0	74.0	74.3	0.3	Negligible
4	B1122 from the A12 to Lover's Lane	30.0	63.8	64.9	1.1	Minor
		40.0	65.1	66.1	1.0	Negligible
		60.0	67.9	68.7	0.8	Negligible
5	B1121 from the A12 to Friston	30.0	59.2	59.4	0.2	Negligible
		40.0	60.7	60.9	0.2	Negligible
		60.0	63.6	63.9	0.3	Negligible
6	A1094 from the A12 to the B1121/B1069	30.0	67.6	68.4	0.8	Negligible
		40.0	69.0	69.7	0.7	Negligible
7		30.0	59.4	59.5	0.1	No change

Link ID	Description	Speed (mph)	2028 Baseline BNL, dBA, L _{10,18hr}	2028 Baseline + Scenario 2 Development BNL, dBA, L _{10,18hr}	Overall Change dBA	Impact Magnitude
	B1122 from Friston to the A1094	60.0	63.8	63.9	0.1	Negligible
8	A1094 from the B1121/B1069 to Aldeburgh	30.0	65.7	65.9	0.2	Negligible
		60.0	70.1	70.3	0.2	Negligible
9	B1069 from the A1094 to Coldfair Green	30.0	64.4	65.8	1.4	Minor
		40.0	65.8	67.1	1.3	Minor
10	B1122 from Aldeburgh to the B1353	30.0	63.7	64.1	0.4	Negligible
		40.0	65.2	65.5	0.3	Negligible
		60.0	68.1	68.4	0.3	Negligible
11	B1353 from the B1122 to Thorpeness	30.0	61.3	61.9	0.6	Negligible
		60.0	65.8	66.2	0.4	Negligible
12	Lover's Lane / Sizewell Gap	60.0	67.4	68.3	0.9	Negligible
13	Aldringham Lane	30.0	62.2	62.3	0.1	No change
		40.0	63.7	63.8	0.1	No change
14	B1069 from Lovers Lane to B1119	30.0	63.8	64.0	0.2	Negligible
15	B1069 from Coldfair Green to B1119	30.0	64.4	64.5	0.1	Negligible
		40.0	65.8	66.0	0.2	Negligible

91. **Table A25.99** shows that predicted impacts are at worst of a minor adverse magnitude at a medium sensitivity receptor and therefore of **minor adverse** significance.
92. **Table A25.100** shows the calculated change in traffic flow on the road links identified by the transport assessment as carrying construction traffic (see **Chapter 26 Traffic and Transport**) for the year 2030 under Scenario 2.

Table A25.100 Construction Road Traffic Flows – 2030 Scenario 2

Link ID	Description	2030 Baseline flows AAWT		2030 Baseline + Scenario 2		Overall Change (%)	
		Total Vehicles	Total HGVs	Total Vehicles	Total HGVs	Total Vehicles	Total HGVs
1	A12 north of the B1122	14,761	1,389	15,148	1,643	2.6	18.3
2	A12 between the B1122 and A1094	12,545	1,248	12,897	1,502	2.8	20.4
3	A12 south of the A1094	19,983	1,213	20,378	1,467	2.0	20.9
4	B1122 from the A12 to Lover's Lane	3,195	276	3,465	401	8.4	45.3
5	B1121 from the A12 to Friston	1,404	65	1,505	65	7.2	0.0
6	A1094 from the A12 to the B1121/B1069	8,645	557	9,004	801	4.2	43.9
7	B1122 from Friston to the A1094	1,413	75	1,455	75	3.0	0.0
8	A1094 from the B1121/B1069 to Aldeburgh	6,225	285	6,330	330	1.7	15.8
9	B1069 from the A1094 to Coldfair Green	4,600	216	5,064	429	10.1	98.9
10	B1122 from Aldeburgh to the B1353	3,843	195	3,948	240	2.7	23.1
11	B1353 from the B1122 to Thorpeness	2,387	97	2,468	135	3.4	39.2
12	Lover's Lane / Sizewell Gap	3,500	124	3,800	249	8.6	100.4
13	Aldringham Lane	2,858	127	2,896	127	1.3	0.0
14	B1069 from Lovers Lane to B1119	3,195	276	3,356	276	5.0	0.0
15	B1069 from Coldfair Green to B1119	4,600	216	4,760	216	3.5	0.0

93. Road links likely to experience an increase in traffic flows greater than 25% were assessed further by undertaking calculations of BNL (**Table A25.101**, the 2030 Baseline versus a 2030 Baseline plus Scenario 2).

Table A25.101 Calculated BNL – 2030 Baseline vs. 2030 Baseline + Scenario 2 Traffic

Link ID	Description	Speed (mph)	2030 Baseline BNL, dBA, L _{10,18hr}	2030 Baseline + Development Scenario 2 proposed East Anglia ONE North project BNL, dBA, L _{10,18hr}	Overall Change dBA	Impact Magnitude
1	A12 north of the B1122	30.0	70.7	71.2	0.5	Negligible
		40.0	72.0	72.4	0.4	Negligible
2	A12 between the B1122 and A1094	30.0	70.2	70.6	0.4	Negligible
		50.0	72.8	73.2	0.4	Negligible
		60.0	74.1	74.5	0.4	Negligible
3	A12 south of the A1094	30.0	71.2	71.6	0.4	Negligible
		50.0	74.1	74.4	0.3	Negligible
4	B1122 from the A12 to Lover's Lane	30.0	63.9	64.9	1.0	Negligible
		40.0	65.2	66.1	0.9	Negligible
		60.0	67.9	68.7	0.8	Negligible
5	B1121 from the A12 to Friston	30.0	59.3	59.5	0.2	Negligible
		40.0	60.8	61.0	0.2	Negligible
		60.0	63.7	64.0	0.3	Negligible
6	A1094 from the A12 to the B1121/B1069	30.0	67.7	68.5	0.8	Negligible
		40.0	69.1	69.8	0.7	Negligible
7	B1122 from Friston to the A1094	30.0	59.5	59.6	0.1	No change
		60.0	63.9	64.0	0.1	Negligible
8	A1094 from the B1121/B1069 to Aldeburgh	30.0	65.7	66.0	0.3	Negligible
		60.0	70.2	70.4	0.2	Negligible
9	B1069 from the A1094 to Coldfair Green	30.0	64.5	65.9	1.4	Minor
		40.0	65.9	67.2	1.3	Minor
10	B1122 from Aldeburgh to the B1353	30.0	63.8	64.2	0.4	Negligible
		40.0	65.2	65.6	0.4	Negligible
		60.0	68.2	68.4	0.2	Negligible
11		30.0	61.4	62.0	0.6	Negligible

Link ID	Description	Speed (mph)	2030 Baseline BNL, dBA, L _{10,18hr}	2030 Baseline + Development Scenario 2 proposed East Anglia ONE North project BNL, dBA, L _{10,18hr}	Overall Change dBA	Impact Magnitude
	B1353 from the B1122 to Thorpeness	60.0	65.9	66.3	0.4	Negligible
12	Lover's Lane / Sizewell Gap	60.0	67.5	68.4	0.9	Negligible
13	Aldringham Lane	30.0	62.3	62.4	0.0	No change
		40.0	63.8	63.8	0.0	No change
14	B1069 from Lovers Lane to B1119	30.0	63.9	64.0	0.1	Negligible
15	B1069 from Coldfair Green to B1119	30.0	64.5	64.6	0.1	Negligible
		40.0	65.9	66.0	0.1	Negligible

94. **Table A25.101** shows that predicted impacts are at worst of a minor adverse magnitude at a medium sensitivity receptor and therefore of **minor adverse** significance.

25.10 Construction Phase Road Traffic Emissions Scenario 1

95. Details of the road links assessed for proposed East Anglia TWO and proposed East Anglia ONE North projects under Scenario 1 are provided in this section.
96. **Table A25.102** shows the calculated change in traffic flow on the road links identified by the transport assessment as carrying construction traffic (see **Chapter 26 Traffic and Transport**) for the year 2024 under Scenario 1.

Table A25.102 Construction Road Traffic Flows – 2024 Scenario 1

Link ID	Description	2024 Baseline flows AAWT		2024 Baseline + Scenario 1		Overall Change (%)	
		Total Vehicles	Total HGVs	Total Vehicles	Total HGVs	Total Vehicles	Total HGVs
1	A12 north of the B1122	13,976	1,290	14,453	1,612	3.4	25.0
2	A12 between the B1122 and A1094	11,876	1,159	12,280	1,482	3.4	27.8
3	A12 south of the A1094	18,934	1,126	19,420	1,449	2.6	28.6

Link ID	Description	2024 Baseline flows AAWT		2024 Baseline + Scenario 1		Overall Change (%)	
		Total Vehicles	Total HGVs	Total Vehicles	Total HGVs	Total Vehicles	Total HGVs
4	B1122 from the A12 to Lover's Lane	3,029	256	3,366	408	11.1	59.4
5	B1121 from the A12 to Friston	1,332	61	1,403	61	5.3	0.0
6	A1094 from the A12 to the B1121/B1069	8,191	517	8,644	820	5.5	58.7
7	B1122 from Friston to the A1094	1,340	70	1,382	70	3.1	0.0
8	A1094 from the B1121/B1069 to Aldeburgh	5,900	264	6,025	319	2.1	20.6
9	B1069 from the A1094 to Coldfair Green	4,364	201	4,966	469	13.8	133.7
10	B1122 from Aldeburgh to the B1353	3,646	181	3,770	235	3.4	30.2
11	B1353 from the B1122 to Thorpeness	2,265	90	2,353	135	3.9	49.9
12	Lover's Lane / Sizewell Gap	3,322	116	3,680	268	10.8	131.5
13	Aldringham Lane	2,712	118	2,750	118	1.4	0.0
14	B1069 from Lovers Lane to B1119	3,029	256	3,230	256	6.6	0.0
15	B1069 from Coldfair Green to B1119	4,364	201	4,560	201	4.5	0.0

97. Road links likely to experience an increase in traffic flows greater than 25% were assessed further by undertaking calculations of BNL (**Table A25.103**, under the 2024 Baseline versus a 2024 Baseline plus Scenario 1)

Table A25.103 Calculated BNL – 2024 Baseline vs. 2024 Baseline + Scenario 1 Traffic

Link ID	Description	Speed (mph)	2024 Baseline BNL, dBA L _{10,18hr}	2024 Baseline + Development Scenario 1 BNL, dBA, L _{10,18hr}	Overall Change dBA	Impact Magnitude
1	A12 north of the B1122	30.0	70.5	71.0	0.5	Negligible
		40.0	71.7	72.3	0.6	Negligible

Link ID	Description	Speed (mph)	2024 Baseline BNL, dBA L _{10,18hr}	2024 Baseline + Development Scenario 1 BNL, dBA, L _{10,18hr}	Overall Change dBA	Impact Magnitude
2	A12 between the B1122 and A1094	30.0	69.9	70.5	0.6	Negligible
		50.0	72.5	73.0	0.5	Negligible
		60.0	73.8	74.3	0.5	Negligible
3	A12 south of the A1094	30.0	71.0	71.5	0.5	Negligible
		50.0	73.8	74.2	0.4	Negligible
4	B1122 from the A12 to Lover's Lane	30.0	63.6	64.9	1.3	Minor
		40.0	64.9	66.1	1.2	Minor
		60.0	67.7	68.7	1.0	Negligible
5	B1121 from the A12 to Friston	30.0	59.0	59.2	0.2	Negligible
		40.0	60.5	60.7	0.2	Negligible
		60.0	63.5	63.6	0.1	Negligible
6	A1094 from the A12 to the B1121/B1069	30.0	67.4	68.4	1.0	Minor
		40.0	68.8	69.7	0.9	Negligible
7	B1122 from Friston to the A1094	30.0	59.2	59.3	0.1	No change
		60.0	63.6	63.7	0.1	Negligible
8	A1094 from the B1121/B1069 to Aldeburgh	30.0	65.5	65.8	0.3	Negligible
		60.0	69.9	70.2	0.3	Negligible
9	B1069 from the A1094 to Coldfair Green	30.0	64.2	66.0	1.8	Minor
		40.0	65.7	67.3	1.6	Minor
10	B1122 from Aldeburgh to the B1353	30.0	63.5	64.0	0.5	Negligible
		40.0	65.0	65.4	0.4	Negligible
		60.0	67.9	68.3	0.4	Negligible
11	B1353 from the B1122 to Thorpeness	30.0	61.2	61.8	0.6	Negligible
		60.0	65.7	66.1	0.4	Negligible
12	Lover's Lane / Sizewell Gap	60.0	67.2	68.3	1.1	Minor
13	Aldringham Lane	30.0	62.1	62.1	0.0	No change
		40.0	63.5	63.6	0.1	Negligible

Link ID	Description	Speed (mph)	2024 Baseline BNL, dBA L _{10,18hr}	2024 Baseline + Development Scenario 1 BNL, dBA, L _{10,18hr}	Overall Change dBA	Impact Magnitude
14	B1069 from Lovers Lane to B1119	30.0	63.6	63.8	0.2	Negligible
15	B1069 from Coldfair Green to B1119	30.0	64.2	64.3	0.1	Negligible
		40.0	65.7	65.8	0.1	Negligible

98. **Table A25.103** shows that predicted impacts are at worst a minor adverse magnitude and therefore at all medium sensitivity receptors of **minor adverse** significance.

99. **Table A25.104** shows the calculated change in traffic flow on the road links identified by the transport assessment as carrying construction traffic (see **Chapter 26 Traffic and Transport**) for the year 2026 under Scenario 1.

Table A25.104 Construction Road Traffic Flows – 2026 Scenario 1

Link ID	Description	2026 Baseline flows AAWT		2026 Baseline + Scenario 1		Overall Change (%)	
		Total Vehicles	Total HGVs	Total Vehicles	Total HGVs	Total Vehicles	Total HGVs
1	A12 north of the B1122	14,326	1,320	14,803	1,643	3.3	24.4
2	A12 between the B1122 and A1094	12,174	1,187	12,577	1,509	3.3	27.2
3	A12 south of the A1094	19,195	1,153	19,680	1,476	2.5	28.0
4	B1122 from the A12 to Lover's Lane	3,103	262	3,439	414	10.8	58.0
5	B1121 from the A12 to Friston	1,364	62	1,435	62	5.2	0.0
6	A1094 from the A12 to the B1121/B1069	8,396	529	8,850	833	5.4	57.3
7	B1122 from Friston to the A1094	1,373	71	1,415	71	3.0	0.0
8	A1094 from the B1121/B1069 to Aldeburgh	6,048	271	6,173	325	2.1	20.2
9	B1069 from the A1094 to Coldfair Green	4,433	205	5,035	473	13.6	130.5

Link ID	Description	2026 Baseline flows AAWT		2026 Baseline + Scenario 1		Overall Change (%)	
		Total Vehicles	Total HGVs	Total Vehicles	Total HGVs	Total Vehicles	Total HGVs
10	B1122 from Aldeburgh to the B1353	3,734	185	3,859	240	3.3	29.5
11	B1353 from the B1122 to Thorpeness	2,321	92	2,408	137	3.8	48.8
12	Lover's Lane / Sizewell Gap	3,403	118	3,761	270	10.5	128.4
13	Aldringham Lane	2,778	121	2,816	121	1.4	0.0
14	B1069 from Lovers Lane to B1119	3,103	262	3,303	262	6.5	0.0
15	B1069 from Coldfair Green to B1119	4,433	205	4,628	205	4.4	0.0

100. Road links likely to experience an increase in traffic flows greater than 25% were assessed further by undertaking calculations of BNL (**Table A25.105** 2026 Baseline versus a 2026 Baseline plus Scenario 1).

Table A25.105 Calculated BNL – 2026 Baseline vs. 2026 Baseline + Scenario 1 Traffic

Link ID	Description	Speed (mph)	2026 Baseline BNL, dBA L _{10,18hr}	2026 Baseline + Development Scenario 1 BNL, dBA, L _{10,18hr}	Overall Change dBA	Impact Magnitude
1	A12 north of the B1122	30.0	70.6	71.1	0.5	Negligible
		40.0	71.8	72.3	0.5	Negligible
2	A12 between the B1122 and A1094	30.0	70.0	70.6	0.6	Negligible
		50.0	72.6	73.1	0.5	Negligible
		60.0	73.9	74.4	0.5	Negligible
3	A12 south of the A1094	30.0	71.0	71.5	0.5	Negligible
		50.0	73.9	74.3	0.4	Negligible
4	B1122 from the A12 to Lover's Lane	30.0	63.8	65.0	1.2	Minor
		40.0	65.1	66.2	1.1	Minor
		60.0	67.8	68.8	1.0	Negligible
5		30.0	59.1	59.3	0.2	Negligible

Link ID	Description	Speed (mph)	2026 Baseline BNL, dBA L _{10,18hr}	2026 Baseline + Development Scenario 1 BNL, dBA, L _{10,18hr}	Overall Change dBA	Impact Magnitude
	B1121 from the A12 to Friston	40.0	60.6	60.8	0.2	Negligible
		60.0	63.6	63.7	0.1	Negligible
6	A1094 from the A12 to the B1121/B1069	30.0	67.5	68.5	1.0	Minor
		40.0	68.9	69.8	0.9	Negligible
7	B1122 from Friston to the A1094	30.0	59.4	59.4	0.0	No change
		60.0	63.7	63.8	0.1	Negligible
8	A1094 from the B1121/B1069 to Aldeburgh	30.0	65.6	65.9	0.3	Negligible
		60.0	70.0	70.3	0.3	Negligible
9	B1069 from the A1094 to Coldfair Green	30.0	64.3	66.1	1.8	Minor
		40.0	65.7	67.3	1.6	Minor
10	B1122 from Aldeburgh to the B1353	30.0	63.6	64.1	0.5	Negligible
		40.0	65.1	65.5	0.4	Negligible
		60.0	68.0	68.4	0.4	Negligible
11	B1353 from the B1122 to Thorpeness	30.0	61.3	61.9	0.6	Negligible
		60.0	65.8	66.2	0.4	Negligible
12	Lover's Lane / Sizewell Gap	60.0	67.3	68.4	1.1	Minor
13	Aldringham Lane	30.0	62.2	62.2	0.0	No change
		40.0	63.6	63.7	0.1	Negligible
14	B1069 from Lovers Lane to B1119	30.0	63.8	63.9	0.1	Negligible
15	B1069 from Coldfair Green to B1119	30.0	64.3	64.4	0.1	Negligible
		40.0	65.7	65.9	0.2	Negligible

101. **Table A25.105** shows that predicted impacts are at worst of a minor adverse magnitude at a medium sensitivity receptor and therefore of **minor adverse** significance.

102. **Table A25.106** shows the calculated change in traffic flow on the road links identified by the transport assessment as carrying construction traffic (see **Chapter 26 Traffic and Transport**) for the year 2028 under Scenario 1.

Table A25.106 Construction Road Traffic Flows – 2028 Scenario 1

Link ID	Description	2028 Baseline flows AAWT		2028 Baseline + Scenario 1		Overall Change (%)	
		Total Vehicles	Total HGVs	Total Vehicles	Total HGVs	Total Vehicles	Total HGVs
1	A12 north of the B1122	14,542	1,354	15,019	1,676	3.3	23.8
2	A12 between the B1122 and A1094	12,359	1,217	12,762	1,539	3.3	26.5
3	A12 south of the A1094	19,696	1,182	20,181	1,505	2.5	27.3
4	B1122 from the A12 to Lover's Lane	3,149	269	3,486	421	10.7	56.5
5	B1121 from the A12 to Friston	1,384	64	1,455	64	5.1	0.0
6	A1094 from the A12 to the B1121/B1069	8,520	543	8,974	846	5.3	55.9
7	B1122 from Friston to the A1094	1,393	73	1,435	73	3.0	0.0
8	A1094 from the B1121/B1069 to Aldeburgh	6,137	278	6,261	332	2.0	19.7
9	B1069 from the A1094 to Coldfair Green	4,535	211	5,137	479	13.3	127.3
10	B1122 from Aldeburgh to the B1353	3,788	190	3,913	244	3.3	28.8
11	B1353 from the B1122 to Thorpeness	2,354	95	2,442	140	3.7	47.6
12	Lover's Lane / Sizewell Gap	3,451	121	3,810	273	10.4	125.2
13	Aldringham Lane	2,818	124	2,856	124	1.3	0.0
14	B1069 from Lovers Lane to B1119	3,149	269	3,349	269	6.4	0.0
15	B1069 from Coldfair Green to B1119	4,535	211	4,731	211	4.3	0.0

103. Road links likely to experience an increase in traffic flows greater than 25% were assessed further by undertaking calculations of BNL (**Table A25.107**, 2028 Baseline versus a 2028 Baseline plus Scenario 1).

Table A25.107 Calculated BNL – 2028 Baseline vs. 2028 Baseline + Scenario 1 Traffic

Link ID	Description	Speed (mph)	2028 Baseline BNL, dBA L _{10,18hr}	2028 Baseline + Development Scenario 1 BNL, dBA, L _{10,18hr}	Overall Change dBA	Impact Magnitude
1	A12 north of the B1122	30.0	70.7	71.2	0.5	Negligible
		40.0	71.9	72.4	0.5	Negligible
2	A12 between the B1122 and A1094	30.0	70.1	70.7	0.6	Negligible
		50.0	72.7	73.2	0.5	Negligible
		60.0	74.0	74.5	0.5	Negligible
3	A12 south of the A1094	30.0	71.1	71.6	0.5	Negligible
		50.0	74.0	74.4	0.4	Negligible
4	B1122 from the A12 to Lover's Lane	30.0	63.8	65.0	1.2	Minor
		40.0	65.1	66.2	1.1	Minor
		60.0	67.9	68.8	0.9	Negligible
5	B1121 from the A12 to Friston	30.0	59.2	59.4	0.2	Negligible
		40.0	60.7	60.8	0.1	Negligible
		60.0	63.6	63.8	0.2	Negligible
6	A1094 from the A12 to the B1121/B1069	30.0	67.6	68.6	1.0	Negligible
		40.0	69.0	69.9	0.9	Negligible
7	B1122 from Friston to the A1094	30.0	59.4	59.5	0.1	No change
		60.0	63.8	63.9	0.1	Negligible
8	A1094 from the B1121/B1069 to Aldeburgh	30.0	65.7	66.0	0.3	Negligible
		60.0	70.1	70.3	0.2	Negligible
9	B1069 from the A1094 to Coldfair Green	30.0	64.4	66.1	1.7	Minor
		40.0	65.8	67.4	1.6	Minor
10	B1122 from Aldeburgh to the B1353	30.0	63.7	64.2	0.5	Negligible
		40.0	65.2	65.6	0.4	Negligible
		60.0	68.1	68.4	0.3	Negligible
11	B1353 from the B1122 to Thorpeness	30.0	61.3	62.0	0.7	Negligible
		60.0	65.8	66.3	0.5	Negligible

Link ID	Description	Speed (mph)	2028 Baseline BNL, dBA L _{10,18hr}	2028 Baseline + Development Scenario 1 BNL, dBA, L _{10,18hr}	Overall Change dBA	Impact Magnitude
12	Lover's Lane / Sizewell Gap	60.0	67.4	68.5	1.1	Minor
13	Aldringham Lane	30.0	62.2	62.3	0.1	Negligible
		40.0	63.7	63.8	0.1	Negligible
14	B1069 from Lovers Lane to B1119	30.0	63.8	64.0	0.2	Negligible
15	B1069 from Coldfair Green to B1119	30.0	64.4	64.5	0.1	Negligible
		40.0	65.8	66.0	0.2	Negligible

104. **Table A25.107** shows that predicted impacts are at worst of a minor adverse magnitude at a medium sensitivity receptor and therefore of **minor adverse** significance.

25.11 Conclusion

105. For the assessed proposed East Anglia TWO project construction phases, daytime impacts are predicted to be negligible at all sensitive receptors with the inclusion of embedded mitigation detailed in the CoCP; therefore, no residual impact is anticipated.
106. For the assessed proposed East Anglia TWO project construction phases, weekend (Saturday 13:00 to 19:00) impacts with the inclusion of embedded mitigation (detailed in the CoCP) are predicted to range from no impact to high impact magnitude at a medium sensitivity receptor and therefore as a worst case of **major** adverse significance. Details of possible enhanced mitigation measures are provided in **section 25.6.1.2** of **Chapter 25 Noise and Vibration**. With the implementation of localised enhanced mitigation would therefore result in no residual impact.
107. Construction traffic impacts for the year 2024 (worst case scenario) under the proposed East Anglia TWO project are predicted for links 4, and 9, with a maximum 1.5dBA change in noise level (link 9); therefore the worst case impact significance of **Minor Adverse**.
108. For the assessed Scenario 2 (the proposed East Anglia ONE North project) construction phases, daytime impacts are predicted to be negligible at all

sensitive receptors with the inclusion of embedded mitigation detailed in the CoCP; therefore, no residual impact is anticipated.

109. For the assessed Scenario 2 (proposed East Anglia ONE North project) construction phases, weekend (Saturday 13:00 to 19:00) impacts with the inclusion of embedded mitigation (detailed in the CoCP) are predicted to range from no impact to high impact magnitude at a medium sensitivity receptor and therefore as a worst case of **major** adverse significance. Details of possible enhanced mitigation measures are provided in **section 25.6.1.2 of Chapter 25 Noise and Vibration**. With the implementation of localised enhanced mitigation would therefore result in no residual impact.
110. Construction traffic impacts for the year 2024 (worst case scenario) under Scenario 2 are predicted for links 4 and 9, with a maximum 1.5dBA change in noise level (link 9); therefore, the worst case impact significance of **Minor Adverse**.
111. For the assessed Scenario 1 (construction of the proposed East Anglia TWO project and proposed East Anglia ONE North project simultaneously) construction phases, daytime impacts are predicted to be negligible at all sensitive receptors with the inclusion of embedded mitigation detailed in the CoCP; therefore, no residual impact is anticipated.
112. For the assessed Scenario 1 (construction of the proposed East Anglia TWO project and proposed East Anglia ONE North project simultaneously) construction phases, weekend (Saturday 13:00 to 19:00) impacts with the inclusion of embedded mitigation (detailed in the CoCP) are predicted to range from no impact to high impact magnitude at a medium sensitivity receptor and therefore as a worst case of **major** adverse significance. Details of possible enhanced mitigation measures are provided in **section 25.6.1.2 of Chapter 25 Noise and Vibration**. With the implementation of localised enhanced mitigation would therefore result in no residual impact.
113. Construction traffic impacts for the year 2024 (worst case scenario) under Scenario 2 are predicted for links 4, 6, 9 and 12, with a maximum 1.8dBA change in noise level (link 9); therefore the worst case impact significance of **Minor Adverse**.

25.12References

BSI, (2014) British Standards Institution [BS] 5228-1:2009+A1:2014 “Code of practice for noise and vibration control on construction and open sites – Part 1: Noise”.

BSI, (2014) British Standards Institution [BS] 5228-2: 2009+A1:2014 “Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration”.

Department of Transport, Welsh Office, (1988) Calculation of Road Traffic Noise HMSO, London.

Highways Agency, (2011) Design Manual for Roads and Bridges, Volume 11, Section 3, Part 7: Noise and Vibration. The Highways Agency.