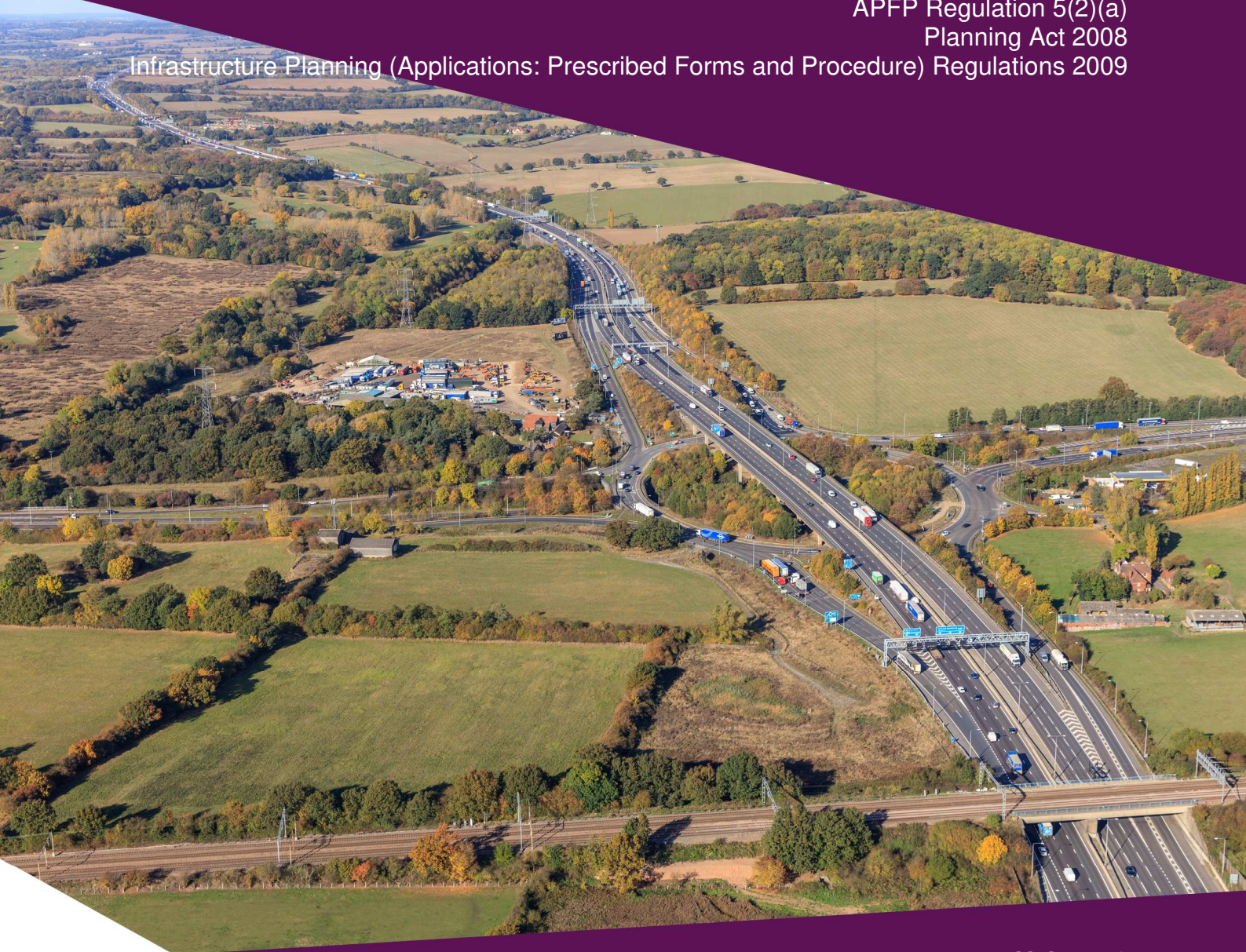


**M25 Junction 28 improvement scheme  
TR010029  
6.3 Environmental Statement  
Appendix 6.2: Construction noise and  
vibration**

APFP Regulation 5(2)(a)  
Planning Act 2008

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



# Infrastructure Planning

## Planning Act 2008

### The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

#### M25 junction 28 scheme Development Consent Order 202[x ]

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#### 6.2 ENVIRONMENTAL STATEMENT APPENDIX 6.3 CONSTRUCTION NOISE AND VIBRATION

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<b>Regulation Number:</b>	Regulation 5(2)(a)
<b>Planning Inspectorate Scheme Reference:</b>	TR010029
<b>Application Document Reference:</b>	TR010029/APP/6.3
<b>Author:</b>	M25 junction 28 scheme, Project Team, Highways England

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# **Appendix 6.2**

## **Construction noise and vibration**

## **6. Construction noise and vibration**

### **6.1 Introduction**

- 6.1.1 This document presents the data used to predict the daytime and night-time construction noise levels for the Scheme that are presented in the Noise and Vibration chapter (Chapter 6) of ES (application document TR010029/APP/6.1) and monthly breakdown of highest daily daytime and night-time construction noise levels month with and without mitigation.
- 6.1.2 Information relating to the proposed construction activities, plant lists, on-times, and construction phasing was provided by the buildability contractor, along with an indicative construction programme. Noise data from BS 5228:2009 + A1:2014 has been assigned to the named items of plant in order to calculate the activity noise level. Other data sources, such as measurement data, have been used where a similar item of plant could not be found in BS 5228.
- 6.1.3 For further information regarding the assessment methodology and assumptions, please refer to Noise and Vibration chapter (Chapter 6) of ES (application document TR010029/APP/6.1).

### **6.2 Construction noise**

- 6.2.1 Table 6.1 shows the construction activity considered for the study and the associated plant list and the respective noise levels, quantity percentage on-time and corrections.

**Table 6.1: Construction equipment list per activity**

Construction Activity	Plant	Total L <sub>Aeq</sub> at 10m (dB)	Quantity	Percentage on-time (%)	Correction (dB)	L <sub>Aeq</sub> corrected (dB)
Site enabling works	Tracked excavator (14T)	69	1	85	-0.7	68.3
	4 axled tipper wagon	80	2	85	-0.7	82.3
Utilities diversion	Tracked excavator (14T)	69	1	85	-0.7	68.3
	Dumper (6T)	79	1	85	-0.7	78.3
	Water pump	68	2	100	0.0	71.0
Site compound set-up	Tracked excavator (25T)	77	2	85	-0.7	79.3
	Tracked dozer D6 (20T)	83	2	85	-0.7	85.3
	Articulated dump truck	81	4	85	-0.7	86.3
	4 axled tipper wagon	80	2	85	-0.7	82.3
	Dumper (6T)	79	2	85	-0.7	81.3
	Roller (12T)	84	2	40	-4.0	83.0
	Concrete mixer truck	80	1	40	-4.0	76.0
	Poker vibrator	78	1	85	-0.7	77.3
	Road roller	80	2	85	-0.7	82.3
	Asphalt paver	77	1	85	-0.7	76.3
Site compounds maintenance	4 axled tipper wagon	80	10	85	-10.0	80.0
	Tracked excavator (25T)	77	3	85	-10.0	71.8
	Diesel generator	66	2	100	0.0	69.0
	Road sweeper	76	1	40	-10.0	66.0
	Wheeled loader	79	2	20	-10.0	72.0
	Telescopic handler	79	2	85	-10.0	72.0
	Fuel tanker lorry	76	1	20	-10.0	66.0

Construction Activity	Plant	Total L <sub>Aeq</sub> at 10m (dB)	Quantity	Percentage on-time (%)	Correction (dB)	L <sub>Aeq</sub> corrected (dB)
Cadent and UKPN gas diversion works	Tracked excavator (14T)	69	1	85	-0.7	68.3
	Wheeled mobile telescopic crane (400T)	78	2	40	-4.0	77.0
	Large lorry	80	2	85	-0.7	82.3
	Angle grinder	80	1	20	-7.0	73.0
	Dumper (6T)	79	2	85	-0.7	81.3
	Water pump	68	2	100	0.0	71.0
Traffic management	Lorry	80	2	20	-7.0	76.0
Earthworks	Tracked excavator (25T)	77	3	85	-0.7	81.1
	Tracked dozer D6 (20T)	83	1	85	-0.7	82.3
	Articulated dump truck	81	2	85	-0.7	83.3
	4 axled tipper wagon	80	2	85	-0.7	82.3
	Roller (12T)	84	2	40	-4.0	83.0
Drainage	Tracked excavator (14T)	69	1	85	-0.7	68.3
	Roller (1.5T)	77	1	40	-4.0	73.0
	Dumper (6T)	79	2	85	-0.7	81.3
	4 axled tipper wagon	80	2	85	-0.7	82.3
Retaining walls	Water pump	68	1	100	0.0	68.0
	Piling rig	77	1	85	-0.7	76.3
	Concrete mixer truck	80	1	40	-4.0	76.0
	Tracked excavator (14T)	69	2	85	-0.7	71.3
	Dumper (6T)	79	1	85	-0.7	78.3
	Poker vibrator	78	1	40	-4.0	74.0

Construction Activity	Plant	Total L <sub>Aeq</sub> at 10m (dB)	Quantity	Percentage on-time (%)	Correction (dB)	L <sub>Aeq</sub> corrected (dB)
Road formation level	Concrete pump	80	1	20	-7.0	73.0
	Tracked excavator (25T)	77	3	85	-0.7	81.1
	Tracked dozer D6 (20T)	83	1	85	-0.7	82.3
	Grader	81	2	85	-0.7	83.3
	Articulated dump truck	81	2	85	-0.7	83.3
	4 axled tipper wagon	80	2	85	-0.7	82.3
	Roller (12T)	84	2	40	-4.0	83.0
Paving and surface course	Road planer	82	1	85	-0.7	81.3
	Power for lighting	65	2	75	-1.2	66.8
	Road roller	80	2	85	-0.7	82.3
	Asphalt paver	77	1	85	-0.7	76.3
	4 axled tipper wagon	80	2	85	-0.7	82.3
Ground stabilisation	Piling rig	77	1	85	-0.7	76.3
	Concrete mixer truck	80	1	40	-4.0	76.0
	Tracked excavator (14T)	69	1	85	-0.7	68.3
	Poker vibrator	78	1	40	-4.0	74.0
	Concrete pump	80	1	20	-7.0	73.0
Abutments and bridges / Piled walls	Water pump	68	1	100	0.0	68.0
	Piling rig	77	1	85	-0.7	76.3
	Concrete mixer truck	80	1	40	-4.0	76.0
	Tracked excavator (14T)	69	2	85	-0.7	71.3
	Dumper (6T)	79	1	85	-0.7	78.3
	Poker vibrator	78	1	40	-4.0	74.0



Construction Activity	Plant	Total L <sub>Aeq</sub> at 10m (dB)	Quantity	Percentage on-time (%)	Correction (dB)	L <sub>Aeq</sub> corrected (dB)
Create piling mats for contig wall	Concrete pump	80	1	20	-7.0	73.0
	Tracked excavator (25T)	77	1	85	-0.7	76.3
	Articulated Dump Truck	81	2	85	-0.7	83.3
	Poker Vibrator	78	1	20	-7.0	71.0
	Concrete pump	80	1	10	-10.0	70.0
	Concrete Mixer Truck	80	1	10	-10.0	70.0
Trim piles	Breaker mounted on wheeled backhoe	92	1	40	-4.0	88.0
	Hydraulic breaker power pack	74	1	40	-4.0	70.0
	Gas cutter	79	1	10	-10.0	69.0
	Tracked Excavator (14T)	69	1	40	-4.0	65.0
	Dumper (6T)	79	1	85	-0.7	78.3
Capping beam / RECO walls	Wheeled mobile telescopic crane 400t	78	2	40	-4.0	74.8
	large Lorry	80	2	85	-0.7	79.4
	Water Pump	68	1	100	0.0	64.5
	Poker Vibrator	78	1	40	-4.0	69.9
	Concrete pump	80	1	20	-7.0	68.4
	Concrete Mixer Truck	80	1	40	-4.0	70.9
Abutment diaphragm walls	Poker Vibrator	78	1	40	-4.0	74.0
	Concrete pump	80	1	20	-7.0	73.0
	Concrete Mixer Truck	80	1	40	-4.0	76.0
String course	Lorry with lifting boom	77	2	40	-4.0	76.0
	Diesel scissor lift	78	2	85	-0.7	80.3

Construction Activity	Plant	Total L <sub>Aeq</sub> at 10m (dB)	Quantity	Percentage on-time (%)	Correction (dB)	L <sub>Aeq</sub> corrected (dB)
	Air gun	83	2	10	-10.0	76.0
	compressor for air gun	65	2	10	-10.0	58.0
Embankments	Tracked excavator (25T)	77	3	85	-0.7	81.1
	Tracked dozer D6 (20T)	83	1	85	-0.7	82.3
	Articulated dump truck	81	2	85	-0.7	83.3
	4 axled tipper wagon	80	2	85	-0.7	82.3
	Roller (12T)	84	2	40	-4.0	83.0
Watercourse realignment	Tracked excavator (25T)	77	3	85	-0.7	81.1
	Tracked dozer D6 (20T)	83	1	85	-0.7	82.3
	Articulated dump truck	81	2	85	-0.7	83.3
	4 axled tipper wagon	80	2	85	-0.7	82.3
	Roller (12T)	84	2	40	-4.0	83.0
Install culvert	Tracked excavator (25T)	77	3	85	-0.7	81.1
	Tracked dozer D6 (20T)	83	1	85	-0.7	82.3
	Articulated dump truck	81	2	85	-0.7	83.3
	4 axled tipper wagon	80	2	85	-0.7	82.3
	Roller (12T)	84	2	40	-4.0	83.0
Assembly of beams and construction of bridge deck	Wheeled mobile telescopic crane (400T)	78	2	40	-4.0	77.0
	Large lorry	80	2	85	-0.7	82.3
	Air gun	83	2	10	-10.0	76.0
	Compressor for air gun	65	2	10	-10.0	58.0
Road construction	Road planer	82	1	85	-0.7	81.3

Construction Activity	Plant	Total L <sub>Aeq</sub> at 10m (dB)	Quantity	Percentage on-time (%)	Correction (dB)	L <sub>Aeq</sub> corrected (dB)
	Tracked excavator (25T)	77	3	85	-0.7	81.1
	Grader	81	2	85	-0.7	83.3
	Articulated dump truck	81	2	85	-0.7	83.3
	Power for lighting	65	2	75	-1.2	66.8
	Dumper (6T)	79	2	85	-0.7	81.3
	Road roller	80	2	85	-0.7	82.3
	Asphalt paver	77	1	85	-0.7	76.3
	4 axled tipper wagon	80	2	85	-0.7	82.3
Install road restraint system	Mini piling rig	75	2	60	-2.2	75.8
	Mini tracked excavator (3T)	68	2	85	-0.7	70.3
	Impact wrench	83	2	30	-5.2	80.8
	Compressor	75	2	30	-5.2	72.8
	Lorry mounted crane	70	2	20	-7.0	66.0
Installation of ancillary infrastructure	Tracked excavator (14T)	69	1	85	-0.7	68.3
	Dumper (6T)	79	2	85	-0.7	81.3
	Piling rig	77	1	85	-0.7	76.3
	Road roller	80	2	85	-0.7	82.3
Road remarking	Lorry	80	2	75	-1.2	81.8
Disassemble gantry structure	Wheeled mobile telescopic crane (400T)	78	2	40	-4.0	77.0
	Large lorry	80	2	85	-0.7	82.3
	Impact wrench	83	2	30	-5.2	80.8
	Compressor	75	2	30	-5.2	72.8

Construction Activity	Plant	Total L <sub>Aeq</sub> at 10m (dB)	Quantity	Percentage on-time (%)	Correction (dB)	L <sub>Aeq</sub> corrected (dB)
	Angle grinder	80	1	20	-7.0	73.0
	Telescopic handler	79	2	85	-10.0	72.0
	Diesel scissor lift	78	1	40	-4.0	74.0
Demolish gantry base	Tracked excavator (25T)	77	3	85	-0.7	81.1
	Tracked dozer D6 (20T)	83	1	85	-0.7	82.3
	Articulated dump truck	81	2	85	-0.7	83.3
	4 axled tipper wagon	80	2	85	-0.7	82.3
	Roller (12T)	84	2	40	-4.0	83.0
	Hand held circular saw - petrol	84	1	20	-7.0	77.0
	Angle grinder	80	1	20	-7.0	73.0
	Pneumatic breaker	80	1	40	-4.0	76.0
	Wheeled loader	79	2	20	-10.0	72.0
	Construct piled foundation	Tracked excavator (14T)	69	1	85	-0.7
Dumper (6T)		79	2	85	-0.7	81.3
Piling rig		77	1	85	-0.7	76.3
Road roller		80	2	85	-0.7	82.3
Construct gantry base	Water pump	68	1	100	0.0	68.0
	Concrete mixer truck	80	1	40	-4.0	76.0
	Concrete pump	80	1	20	-7.0	73.0
	Poker vibrator	78	1	40	-4.0	74.0
	Tracked excavator (14T)	69	1	85	-0.7	68.3
	Dumper (6T)	79	2	85	-0.7	81.3

Construction Activity	Plant	Total L <sub>Aeq</sub> at 10m (dB)	Quantity	Percentage on-time (%)	Correction (dB)	L <sub>Aeq</sub> corrected (dB)
Install steel works	Wheeled mobile telescopic crane (400T)	78	2	40	-4.0	77.0
	Large lorry	80	2	85	-0.7	82.3
	Impact wrench	83	2	30	-5.2	80.8
	Compressor	75	2	30	-5.2	72.8
	Angle grinder	80	1	20	-7.0	73.0
	Telescopic handler	79	2	85	-10.0	72.0
	Diesel scissor lift	78	1	40	-4.0	74.0
Install/Remove sign plates and equipment	Impact wrench	83	2	30	-5.2	80.8
	Compressor	75	2	30	-5.2	72.8
	Angle grinder	80	1	20	-7.0	73.0
	Telescopic handler	79	2	85	-10.0	72.0
	Diesel scissor lift	78	1	40	-4.0	74.0
Landscaping	Tracked excavator (17T)	73	1	85	-0.7	72.3
	Dumper (6T)	79	2	85	-0.7	81.3

6.2.2 Table 6.2 shows the predicted highest daily daytime ( $L_{Aeq}$ , dB) construction noise levels without mitigation at selected representative sensitive receptors in the study area.

**Table 6.2: Predicted highest daily daytime construction noise levels at selected location – No mitigation**

Sensitive Receptor	Construction noise levels ( $L_{Aeq}$ ,dB)																														
	2022												2023												2024						
	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Grove Farm, CM14 5NG	67	67	57	78	78	78	72	72	72	74	73	73	73	74	74	69	76	74	78	78	70	76	78	77	77	74	74	74	70	53	68
Maylands Cottages, RM3 0AZ	61	61	75	63	64	64	64	63	64	63	63	63	63	63	63	64	66	66	66	65	65	63	63	63	63	63	63	63	62	62	
Caravan Park, RM3 0AW	64	64	56	72	72	72	73	70	75	73	72	72	71	71	71	72	72	72	68	68	70	70	71	70	70	67	67	62	61	62	63
17 Colchester Road, RM3 0AW	61	61	72	60	63	65	63	63	63	60	61	60	60	60	60	69	72	64	64	63	63	60	59	59	60	59	59	59	58	58	
12, Craven Gardens, RM3 0DF	51	51	61	54	56	56	57	56	58	56	57	56	55	55	55	57	60	57	57	56	56	55	54	54	55	54	52	52	52	51	
Gardens of Peace Muslim Cemetery	55	55	61	58	60	60	62	60	62	61	62	62	60	60	60	59	59	61	62	62	61	61	58	57	57	57	57	54	54	53	53
10, Woodstock	48	48	58	52	53	53	54	53	55	54	54	54	52	53	53	53	54	55	55	55	54	55	53	52	52	53	52	51	50	50	49

Sensitive Receptor	Construction noise levels (L <sub>Aeq</sub> ,dB)																														
	2022												2023												2024						
	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Avenue, RM3 9NF																															
42, Woodstock Avenue, RM3 9NF	49	49	58	52	54	54	54	53	55	54	54	53	52	53	53	53	54	56	56	55	55	53	52	52	53	52	51	50	50	49	
63 Brook Street, CM14 5NA	46	46	49	55	55	55	56	55	57	56	56	56	55	56	56	54	54	55	55	56	52	56	58	56	57	58	56	54	44	49	
60 Brook Street, CM14 5ND	48	48	49	56	57	56	57	56	58	57	57	57	56	57	57	55	54	56	57	57	53	57	59	58	58	59	57	54	46	48	
13 Nag's Head Lane, CM14 5NJ	30	30	34	40	41	40	42	41	43	43	43	42	41	42	42	41	39	40	41	41	39	42	43	42	43	43	41	40	38	32	36
31, Wingrave Crescent, CM14 5PA	36	36	43	47	47	47	49	48	50	49	49	49	48	49	49	48	46	48	47	48	45	48	50	48	49	50	48	48	46	39	42
7, Leonard Way, CM14 5PD	35	35	42	45	46	46	48	47	49	48	48	47	47	48	48	47	45	47	46	46	44	47	48	47	48	49	47	46	44	38	40
12, Talbrook, CM14 4PY	32	32	39	43	44	44	45	44	46	46	45	45	44	45	45	44	43	44	43	44	42	44	46	44	45	46	44	43	42	36	38

Sensitive Receptor	Construction noise levels (L <sub>Aeq</sub> ,dB)																														
	2022												2023												2024						
	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Weald Hall, Wigley Bush Lane, CM14 5QP	35	35	42	46	47	46	49	47	49	49	49	48	48	48	48	48	46	47	46	47	44	48	48	47	48	49	47	46	44	38	40
Legend																															
SOAEL exceedance														LOAEL exceedance																	

6.2.3 Table 6.3 shows the predicted highest daily night-time (L<sub>Aeq</sub>, dB) construction noise levels without mitigation at selected representative sensitive receptors in the study area.

**Table 6.3: Predicted highest daily night-time construction noise levels at selected location – No mitigation**

Sensitive Receptor	Construction noise levels (L <sub>Aeq</sub> ,dB)																														
	2022												2023												2024						
	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Grove Farm, CM14 5NG	0	0	10	62	58	54	52	54	54	42	40	37	39	41	41	39	53	53	39	39	48	75	72	65	65	65	68	66	66	47	65
Maylands Cottages, RM3 0AZ	0	0	10	50	51	51	51	50	50	49	49	49	49	49	49	52	52	49	49	60	60	50	50	51	54	52	52	52	50	51	



Sensitive Receptor	Construction noise levels (L <sub>Aeq</sub> ,dB)																														
	2022												2023												2024						
	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Caravan Park, RM3 0AW	0	0	10	61	56	55	53	57	59	55	49	35	48	51	51	48	56	56	48	48	60	61	52	50	52	61	58	54	54	46	61
17 Colchester Road, RM3 0AW	0	0	10	47	53	55	53	53	53	45	45	45	45	45	45	59	59	45	45	60	60	47	47	49	64	50	50	50	47	49	
12, Craven Gardens, RM3 0DF	0	0	10	41	44	45	43	42	42	39	38	37	37	38	38	37	46	46	37	37	52	53	43	43	45	52	47	47	47	43	46
Gardens of Peace Muslim Cemetery	0	0	10	44	48	48	47	45	45	41	39	38	39	39	38	46	46	38	38	58	59	45	45	47	54	50	49	49	44	48	
10, Woodstock Avenue, RM3 9NF	0	0	10	38	40	40	39	38	38	37	36	35	35	36	36	35	41	41	35	35	50	51	42	42	44	46	46	46	46	42	45
42, Woodstock Avenue, RM3 9NF	0	0	10	39	41	41	40	39	39	36	36	35	35	35	35	39	39	35	35	52	53	42	42	44	49	46	46	46	46	42	45
63 Brook Street, CM14 5NA	0	0	10	44	39	39	37	38	37	34	32	30	28	30	30	29	39	39	29	29	42	54	51	52	53	56	54	56	56	49	48

Sensitive Receptor	Construction noise levels (L <sub>Aeq</sub> , dB)																														
	2022												2023												2024						
	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
60 Brook Street, CM14 5ND	0	0	10	61	40	39	38	38	37	35	33	30	30	32	32	30	40	40	30	30	44	56	52	51	52	50	55	55	55	59	46
13 Nag's Head Lane, CM14 5NJ	0	0	10	32	26	25	24	24	23	22	20	18	18	19	19	18	23	23	18	18	31	39	35	34	37	35	39	39	39	40	36
31, Wingrave Crescent, CM14 5PA	0	0	10	33	32	31	30	30	29	28	26	25	23	24	24	23	31	31	23	23	37	46	42	43	45	44	46	47	47	42	44
7, Leonard Way, CM14 5PD	0	0	10	32	30	30	29	29	28	27	25	24	22	23	23	22	29	29	22	22	36	44	41	42	44	43	45	46	46	41	43
12, Talbrook, CM14 4PY	0	0	10	35	28	27	26	26	25	25	23	22	20	22	22	20	27	27	20	20	34	42	38	39	41	40	42	43	44	39	41
Weald Hall, Wigley Bush Lane, CM14 5QP	0	0	10	38	31	30	29	30	28	27	26	25	22	24	24	22	29	29	22	22	36	45	41	41	45	43	46	47	47	42	45

Legend	
	SOAEL exceedance
	LOAEL exceedance

6.2.4 Table 6.4 shows the predicted highest daily daytime (L<sub>Aeq</sub>, dB) construction noise levels with the recommended mitigation as outlined in the chapter (Chapter 6) of ES (application document TR010029/APP/6.1) at selected representative sensitive receptors

in the study area.

**Table 6.4: Predicted highest daily daytime construction noise levels at selected location – With mitigation**

Sensitive Receptor	Construction noise levels (L <sub>Aeq</sub> ,dB)																														
	2022												2023												2024						
	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Grove Farm, CM14 5NG	67	67	57	68	68	68	62	62	62	64	63	63	63	64	64	59	66	64	68	68	60	66	68	67	67	64	64	64	60	43	58
Maylands Cottages, RM3 0AZ	61	61	75	53	54	54	55	54	55	55	54	54	54	55	55	57	57	58	56	56	57	57	57	55	55	56	56	55	55	54	53
Caravan Park, RM3 0AW	64	64	56	68	69	69	71	70	75	73	72	72	71	71	71	72	72	72	68	68	70	70	71	70	70	67	67	62	61	62	63
17 Colchester Road, RM3 0AW	61	61	72	60	63	65	63	63	63	60	61	60	60	60	60	69	72	64	64	63	63	60	59	59	60	59	59	59	58	58	
12, Craven Gardens, RM3 0DF	51	51	61	54	56	56	57	56	58	56	57	56	55	55	55	57	60	57	57	56	56	55	54	54	55	54	52	52	52	51	
Gardens of Peace Muslim Cemetery	55	55	61	58	60	60	62	60	62	61	62	62	60	60	60	59	59	61	62	62	61	61	58	57	57	57	57	54	54	53	53
10, Woodstock Avenue, RM3 9NF	48	48	58	52	53	53	54	53	55	54	54	54	52	53	53	53	54	55	55	55	54	55	53	52	52	53	52	51	50	50	49
42, Woodstock Avenue, RM3 9NF	49	49	58	52	54	54	54	53	55	54	54	53	52	53	53	53	53	54	56	56	55	55	53	52	52	53	52	51	50	50	49

Sensitive Receptor	Construction noise levels (L <sub>Aeq</sub> ,dB)																														
	2022												2023												2024						
	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
63 Brook Street, CM14 5NA	46	46	49	55	55	55	56	55	57	56	56	56	55	56	56	54	54	55	55	56	52	56	58	56	57	58	56	56	54	44	49
60 Brook Street, CM14 5ND	48	48	49	56	57	56	57	56	58	57	57	57	56	57	57	55	54	56	57	57	53	57	59	58	58	59	57	57	54	46	48
13 Nag's Head Lane, CM14 5NJ	30	30	34	40	41	40	42	41	43	43	43	42	41	42	42	41	39	40	41	41	39	42	43	42	43	43	41	40	38	32	36
31, Wingrave Crescent, CM14 5PA	36	36	43	47	47	47	49	48	50	49	49	49	48	49	49	48	46	48	47	48	45	48	50	48	49	50	48	48	46	39	42
7, Leonard Way, CM14 5PD	35	35	42	45	46	46	48	47	49	48	48	47	47	48	48	47	45	47	46	46	44	47	48	47	48	49	47	46	44	38	40
12, Talbrook, CM14 4PY	32	32	39	43	44	44	45	44	46	46	45	45	44	45	45	44	43	44	43	44	42	44	46	44	45	46	44	43	42	36	38
Weald Hall, Wigley Bush Lane, CM14 5QP	35	35	42	46	47	46	49	47	49	49	49	48	48	48	48	46	47	46	47	44	48	48	47	48	49	47	46	44	38	40	

Legend	
	SOAEL exceedance
	LOAEL exceedance

6.2.5 Table 6.5 shows the predicted highest daily daytime (L<sub>Aeq</sub>, dB) construction noise levels with the recommended mitigation as outlined in the Noise and Vibration chapter in Volume 1 at selected representative sensitive receptors in the study area.

**Table 6.5: Predicted highest daily night-time construction noise levels at selected location – With mitigation**

Sensitive Receptor	Construction noise levels (L <sub>Aeq</sub> ,dB)																														
	2022												2023												2024						
	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Grove Farm, CM14 5NG	0	0	10	52	48	44	42	44	44	33	30	27	29	31	31	29	43	43	29	29	38	65	62	55	55	55	58	56	56	37	55
Maylands Cottages, RM3 0AZ	0	0	10	40	41	41	41	41	40	40	39	39	39	39	39	39	42	42	39	39	50	51	43	45	47	52	48	49	49	45	48
Caravan Park, RM3 0AW	0	0	10	61	56	55	53	57	59	55	49	35	48	51	51	48	56	56	48	48	60	61	52	50	52	61	58	54	54	46	61
17 Colchester Road, RM3 0AW	0	0	10	47	53	55	53	53	53	45	45	45	45	45	45	59	59	45	45	60	60	47	47	49	64	50	50	50	47	49	
12, Craven Gardens, RM3 0DF	0	0	10	41	44	45	43	42	42	39	38	37	37	38	38	37	46	46	37	37	52	53	43	43	45	52	47	47	47	43	46
Gardens of Peace Muslim Cemetery	0	0	10	44	48	48	47	45	45	41	39	38	39	39	39	38	46	46	38	38	58	59	45	45	47	55	50	49	49	44	48
10, Woodstock Avenue, RM3 9NF	0	0	10	38	40	40	39	38	38	37	36	35	35	36	36	35	41	41	35	35	50	51	42	42	44	46	46	46	46	42	45
42, Woodstock Avenue, RM3 9NF	0	0	10	39	41	41	40	39	39	36	36	35	35	35	35	39	39	35	35	52	53	42	42	44	49	46	46	46	42	45	

Sensitive Receptor	Construction noise levels (L <sub>Aeq</sub> ,dB)																														
	2022												2023												2024						
	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
63 Brook Street, CM14 5NA	0	0	10	44	39	39	37	38	37	34	32	30	28	30	29	39	39	29	29	42	54	51	52	53	56	54	56	56	49	48	
60 Brook Street, CM14 5ND	0	0	10	61	40	39	38	38	37	35	33	30	30	32	32	30	40	40	30	30	44	56	52	51	52	50	55	55	55	59	46
13 Nag's Head Lane, CM14 5NJ	0	0	10	32	26	25	24	24	23	22	20	18	18	19	19	18	23	23	18	18	31	39	35	34	37	35	39	39	40	36	
31, Wingrave Crescent, CM14 5PA	0	0	10	33	32	31	30	30	29	28	26	25	23	24	24	23	31	31	23	23	37	46	42	43	45	44	46	47	47	42	44
7, Leonard Way, CM14 5PD	0	0	10	32	30	30	29	29	28	27	25	24	22	23	23	22	29	29	22	22	36	44	41	42	44	43	45	46	46	41	43
12, Talbrook, CM14 4PY	0	0	10	35	28	27	26	26	25	25	23	22	20	22	22	20	27	27	20	20	34	42	38	39	41	40	42	43	44	39	41
Weald Hall, Wigley Bush Lane, CM14 5QP	0	0	10	38	31	30	29	29	28	27	26	25	22	24	24	22	29	29	22	22	36	45	41	41	45	43	46	47	47	42	45
<b>Legend</b>																															
												LOAEL exceedance																			

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