



DCO Submission

Environmental Statement

Chapter 5: Noise and Vibration
Appendix 5.13: Operation Noise Predictions

Document 6.5M
Rev A

On behalf of
Oxfordshire Railfreight Limited

Prepared by Vanguardia Ltd
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Appendix 5.13

Operational Noise Predictions

Table 1 Main Site operational noise impact for Opening Year – Modal background sound levels – Daytime 07:00–23:00

Receptor		Under broadly westerly winds			Under broadly easterly winds		
Reference, name and façade	Height (m)	Rating Level* dB L _{Ar,1hr}	Modal Background Sound Level dB L _{A90,15min}	Rating Level - Background Sound Level	Rating Level* dB L _{Ar,1hr}	Modal Background Sound Level dB L _{A90,15min}	Rating Level - Background Sound Level
(R00) Property in Woods - South	1.5	40	44	-4	40	55	-15
(R02) Forge Place - West	1.5	14	41	-27	14	46	-32
(R03) 100 East Street - South	1.5	27	41	-14	27	46	-19
(R05-S) Crossroads Farm - South	1.5	35	40	-5	35	47	-12
(R06-E) Quarry Cottages - East	1.5	41	36	5	38	49	-11
(R06-S) Quarry Cottages - South	1.5	41	36	5	38	49	-11
(R12) Castle Fields - South	1.5	35	41	-6	35	46	-11
(R13-S) Manor Farm Ardley - South	1.5	33	44	-11	33	55	-22
(R14-W) Church Road - West	1.5	35	44	-9	35	55	-20
(R15) Orchard Cottage - South	1.5	37	44	-7	37	55	-18
(R24-W) 3 Station Road - West	1.5	33	44	-11	33	55	-22
(R25) Wood View - South	1.5	36	54	-18	36	55	-19
(R26-S) The Bungalow - South	1.5	37	54	-17	37	55	-18
(R26-W) The Bungalow - West	1.5	37	54	-17	37	55	-18
(R27-S) Upland Cottage - South	1.5	39	54	-15	39	55	-16
(R27-W) Upland Cottage - West	1.5	38	54	-16	38	55	-17
(R28-W) Ardley Field Farm Cottages - West	1.5	43	52	-9	43	54	-11
(R30-E) Upper Heyford - East	1.5	35	38	-3	35	42	-7
(R30-S) Upper Heyford - South	1.5	35	38	-3	35	42	-7
(R30-W) Upper Heyford - West	1.5	33	38	-5	33	42	-9
(R30A) Upper Heyford	1.5	31	38	-7	31	42	-11
(R31) Camp Road - East	1.5	30	37	-7	30	41	-11
(R32) Heyford Grange - East	1.5	30	37	-7	30	41	-11
(R33) 42 Trenchford Close - East	1.5	30	37	-7	30	41	-11
(R34) PYE Homes - East	1.5	31	37	-6	31	41	-10
(R34A) Richborough Estates	1.5	31	38	-7	31	42	-11
(R35-E) 50 Duvall Park - East	1.5	30	37	-7	30	41	-11
(R36) Manor Farm - North	1.5	27	41	-14	27	50	-23
(R37-N) Manor Farm Cottages - North	1.5	28	44	-16	28	45	-17
(R37-E) Manor Farm Cottages - East	1.5	28	44	-16	28	45	-17
(R39-W) Dewars Farm - West	1.5	28	44	-16	28	45	-17
(O4) Ardley Woods	1.5	42	36	6	39	49	-10
(O5) Ardley Fields Quarry LWS	1.5	52	40	12	52	47	5
(O6) Ardley Fields Ponds West LWS	1.5	41	52	-11	41	54	-13
(O7) The Heath pDWS	1.5	33	37	-4	33	41	-8
(O8) Upper Heyford Airfield LWS	1.5	43	38	5	40	42	-2

Notes:

* Where a +3 dB(A) correction is included in the rating level to account for sound features that are likely to be readily distinctive against the residual acoustic environment, the rating level value text is in bold and the cell is shaded grey.

Table 2 Main Site operational noise impact for Future Year – Modal background sound levels – Daytime 07:00–23:00

Receptor		Under broadly westerly winds			Under broadly easterly winds		
Reference, name and façade	Height (m)	Rating Level* dB L _{Ar,1hr}	Modal Background Sound Level dB L _{A90,15min}	Rating Level - Background Sound Level	Rating Level* dB L _{Ar,1hr}	Modal Background Sound Level dB L _{A90,15min}	Rating Level - Background Sound Level
(R00) Property in Woods - South	1.5	40	44	-4	40	55	-15
(R02) Forge Place - West	1.5	15	41	-26	15	46	-31
(R03) 100 East Street - South	1.5	27	41	-14	27	46	-19
(R05-S) Crossroads Farm - South	1.5	35	40	-5	35	47	-12
(R06-E) Quarry Cottages - East	1.5	41	36	5	38	49	-11
(R06-S) Quarry Cottages - South	1.5	42	36	6	39	49	-10
(R12) Castle Fields - South	1.5	35	41	-6	35	46	-11
(R13-S) Manor Farm Ardley - South	1.5	34	44	-10	34	55	-21
(R14-W) Church Road - West	1.5	35	44	-9	35	55	-20
(R15) Orchard Cottage - South	1.5	37	44	-7	37	55	-18
(R24-W) 3 Station Road - West	1.5	33	44	-11	33	55	-22
(R25) Wood View - South	1.5	37	54	-17	37	55	-18
(R26-S) The Bungalow - South	1.5	38	54	-16	38	55	-17
(R26-W) The Bungalow - West	1.5	37	54	-17	37	55	-18
(R27-S) Upland Cottage - South	1.5	39	54	-15	39	55	-16
(R27-W) Upland Cottage - West	1.5	38	54	-16	38	55	-17
(R28-W) Ardley Field Farm Cottages - West	1.5	44	52	-8	44	54	-10
(R30-E) Upper Heyford - East	1.5	36	38	-2	36	42	-6
(R30-S) Upper Heyford - South	1.5	35	38	-3	35	42	-7
(R30-W) Upper Heyford - West	1.5	34	38	-4	34	42	-8
(R30A) Upper Heyford	1.5	32	38	-6	32	42	-10
(R31) Camp Road - East	1.5	30	37	-7	30	41	-11
(R32) Heyford Grange - East	1.5	30	37	-7	30	41	-11
(R33) 42 Trenchford Close - East	1.5	30	37	-7	30	41	-11
(R34) PYE Homes - East	1.5	31	37	-6	31	41	-10
(R34A) Richborough Estates	1.5	31	38	-7	31	42	-11
(R35-E) 50 Duvall Park - East	1.5	30	37	-7	30	41	-11
(R36) Manor Farm - North	1.5	28	41	-13	28	50	-22
(R37-N) Manor Farm Cottages - North	1.5	29	44	-15	29	45	-16
(R37-E) Manor Farm Cottages - East	1.5	29	44	-15	29	45	-16
(R39-W) Dewars Farm - West	1.5	29	44	-15	29	45	-16
(O4) Ardley Woods	1.5	42	36	6	39	49	-10
(O5) Ardley Fields Quarry LWS	1.5	55	40	15	55	47	8
(O6) Ardley Fields Ponds West LWS	1.5	42	52	-10	42	54	-12
(O7) The Heath pDWS	1.5	33	37	-4	33	41	-8
(O8) Upper Heyford Airfield LWS	1.5	43	38	5	40	42	-2

Notes:

* Where a +3 dB(A) correction is included in the rating level to account for sound features that are likely to be readily distinctive against the residual acoustic environment, the rating level value text is in bold and the cell is shaded grey.

Table 3 Main Site operational noise impact for Opening Year – Sensitivity test background sound levels – Daytime 07:00–23:00

Receptor		Under broadly westerly winds			Under broadly easterly winds		
Reference, name and façade	Height (m)	Rating Level* dB L _{Ar,1hr}	Sensitivity Test Background Sound Level dB L _{A90,15min}	Rating Level - Background Sound Level	Rating Level dB L _{Ar,1hr}	Sensitivity Test Background Sound Level dB L _{A90,15min}	Rating Level - Background Sound Level
(R00) Property in Woods - South	1.5	40	N/A	-	40	52	-12
(R02) Forge Place - West	1.5	14	37	-23	14	40	-26
(R03) 100 East Street - South	1.5	27	37	-10	27	40	-13
(R05-S) Crossroads Farm - South	1.5	35	37	-2	35	42	-7
(R06-E) Quarry Cottages - East	1.5	38	N/A	-	38	46	-8
(R06-S) Quarry Cottages - South	1.5	38	N/A	-	38	46	-8
(R12) Castle Fields - South	1.5	35	37	-2	35	40	-5
(R13-S) Manor Farm Ardley - South	1.5	33	N/A	-	33	52	-19
(R14-W) Church Road - West	1.5	35	N/A	-	35	52	-17
(R15) Orchard Cottage - South	1.5	37	N/A	-	37	52	-15
(R24-W) 3 Station Road - West	1.5	33	N/A	-	33	52	-19
(R25) Wood View - South	1.5	36	47	-11	36	48	-12
(R26-S) The Bungalow - South	1.5	37	47	-10	37	48	-11
(R26-W) The Bungalow - West	1.5	37	47	-10	37	48	-11
(R27-S) Upland Cottage - South	1.5	39	47	-8	39	48	-9
(R27-W) Upland Cottage - West	1.5	38	47	-9	38	48	-10
(R28-W) Ardley Field Farm Cottages - West	1.5	43	45	-2	43	51	-8
(R30-E) Upper Heyford - East	1.5	38	35	3	35	N/A	-
(R30-S) Upper Heyford - South	1.5	38	35	3	35	N/A	-
(R30-W) Upper Heyford - West	1.5	33	35	-2	33	N/A	-
(R30A) Upper Heyford	1.5	31	35	-4	31	N/A	-
(R31) Camp Road - East	1.5	30	N/A	-	30	38	-8
(R32) Heyford Grange - East	1.5	30	N/A	-	30	38	-8
(R33) 42 Trenchford Close - East	1.5	30	N/A	-	30	38	-8
(R34) PYE Homes - East	1.5	31	N/A	-	31	38	-7
(R34A) Richborough Estates	1.5	31	35	-4	31	N/A	-
(R35-E) 50 Duvall Park - East	1.5	30	N/A	-	30	38	-8
(R36) Manor Farm - North	1.5	27	38	-11	27	45	-18
(R37-N) Manor Farm Cottages - North	1.5	28	N/A	-	28	N/A	-
(R37-E) Manor Farm Cottages - East	1.5	28	N/A	-	28	N/A	-
(R39-W) Dewars Farm - West	1.5	28	N/A	-	28	N/A	-
(O4) Ardley Woods	1.5	39	N/A	-	39	46	-7
(O5) Ardley Fields Quarry LWS	1.5	52	37	15	52	42	10
(O6) Ardley Fields Ponds West LWS	1.5	41	45	-4	41	51	-10
(O7) The Heath pDWS	1.5	33	N/A	-	33	38	-5
(O8) Upper Heyford Airfield LWS	1.5	43	35	8	40	N/A	-

Notes:

* Where a +3 dB(A) correction is included in the rating level to account for sound features that are likely to be readily distinctive against the residual acoustic environment, the rating level value text is in bold and the cell is shaded grey.

Table 4 Main Site operational noise impact for Future Year – Sensitivity test background sound levels – Daytime 07:00–23:00

Receptor		Under broadly westerly winds			Under broadly easterly winds		
Reference, name and façade	Height (m)	Rating Level* dB L _{Ar,1hr}	Sensitivity Test Background Sound Level dB L _{A90,15min}	Rating Level - Background Sound Level	Rating Level dB L _{Ar,1hr}	Sensitivity Test Background Sound Level dB L _{A90,15min}	Rating Level - Background Sound Level
(R00) Property in Woods - South	1.5	40	N/A	-	40	52	-12
(R02) Forge Place - West	1.5	15	37	-22	15	40	-25
(R03) 100 East Street - South	1.5	27	37	-10	27	40	-13
(R05-S) Crossroads Farm - South	1.5	35	37	-2	35	42	-7
(R06-E) Quarry Cottages - East	1.5	38	N/A	-	38	46	-8
(R06-S) Quarry Cottages - South	1.5	39	N/A	-	39	46	-7
(R12) Castle Fields - South	1.5	35	37	-2	35	40	-5
(R13-S) Manor Farm Ardley - South	1.5	34	N/A	-	34	52	-18
(R14-W) Church Road - West	1.5	35	N/A	-	35	52	-17
(R15) Orchard Cottage - South	1.5	37	N/A	-	37	52	-15
(R24-W) 3 Station Road - West	1.5	33	N/A	-	33	52	-19
(R25) Wood View - South	1.5	37	47	-10	37	48	-11
(R26-S) The Bungalow - South	1.5	38	47	-9	38	48	-10
(R26-W) The Bungalow - West	1.5	37	47	-10	37	48	-11
(R27-S) Upland Cottage - South	1.5	39	47	-8	39	48	-9
(R27-W) Upland Cottage - West	1.5	38	47	-9	38	48	-10
(R28-W) Ardley Field Farm Cottages - West	1.5	44	45	-1	44	51	-7
(R30-E) Upper Heyford - East	1.5	39	35	4	36	N/A	-
(R30-S) Upper Heyford - South	1.5	38	35	3	35	N/A	-
(R30-W) Upper Heyford - West	1.5	34	35	-1	34	N/A	-
(R30A) Upper Heyford	1.5	32	35	-3	32	N/A	-
(R31) Camp Road - East	1.5	30	N/A	-	30	38	-8
(R32) Heyford Grange - East	1.5	30	N/A	-	30	38	-8
(R33) 42 Trenchford Close - East	1.5	30	N/A	-	30	38	-8
(R34) PYE Homes - East	1.5	31	N/A	-	31	38	-7
(R34A) Richborough Estates Residential Development	1.5	31	35	-4	31	N/A	-
(R35-E) 50 Duvall Park - East	1.5	30	N/A	-	30	38	-8
(R36) Manor Farm - North	1.5	28	38	-10	28	45	-17
(R37-N) Manor Farm Cottages - North	1.5	29	N/A	-	29	N/A	-
(R37-E) Manor Farm Cottages - East	1.5	29	N/A	-	29	N/A	-
(R39-W) Dewars Farm - West	1.5	29	N/A	-	29	N/A	-
(O4) Ardley Woods	1.5	39	N/A	-	39	46	-7
(O5) Ardley Fields Quarry LWS	1.5	55	37	18	55	42	13
(O6) Ardley Fields Ponds West LWS	1.5	42	45	-3	42	51	-9
(O7) The Heath pDWS	1.5	33	N/A	-	33	38	-5
(O8) Upper Heyford Airfield LWS	1.5	43	35	8	40	N/A	-

Notes:

* Where a +3 dB(A) correction is included in the rating level to account for sound features that are likely to be readily distinctive against the residual acoustic environment, the rating level value text is in bold and the cell is shaded grey.

Table 5 Main Site operational noise impact for Opening Year – Modal background sound levels – Night time 23:00-07:00

Receptor		Under broadly westerly winds			Under broadly easterly winds		
Reference, name and façade	Height (m)	Rating Level* dB L _{Ar,15min}	Modal Background Sound Level dB L _{A90,15min}	Rating Level - Background Sound Level	Rating Level dB L _{Ar,15min}	Modal Background Sound Level dB L _{A90,15min}	Rating Level - Background Sound Level
(R00) Property in Woods - South	4.5	44	40	4	41	51	-10
(R02) Forge Place - West	4.5	17	33	-16	17	41	-24
(R03) 100 East Street - South	4.5	28	33	-5	28	41	-13
(R05-S) Crossroads Farm - South	4.5	39	35	4	36	42	-6
(R06-E) Quarry Cottages - East	4.5	41	38	3	38	45	-7
(R06-S) Quarry Cottages - South	4.5	42	38	4	39	45	-6
(R12) Castle Fields - South	4.5	39	33	6	36	41	-5
(R13-S) Manor Farm Ardley - South	4.5	34	40	-6	34	51	-17
(R14-W) Church Road - West	4.5	36	40	-4	36	51	-15
(R15) Orchard Cottage - South	4.5	37	40	-3	37	51	-14
(R24-W) 3 Station Road - West	4.5	34	40	-6	34	51	-17
(R25) Wood View - South	4.5	37	41	-4	37	53	-16
(R26-S) The Bungalow - South	4.5	38	41	-3	38	53	-15
(R26-W) The Bungalow - West	4.5	37	41	-4	37	53	-16
(R27-S) Upland Cottage - South	4.5	40	41	-1	40	53	-13
(R27-W) Upland Cottage - West	4.5	38	41	-3	38	53	-15
(R28-W) Ardley Field Farm Cottages - West	4.5	51	38	13	48	49	-1
(R30-E) Upper Heyford - East	4.5	40	33	7	37	39	-2
(R30A) Upper Heyford	7.5	41	33	8	38	39	-1
(R30-S) Upper Heyford - South	4.5	39	33	6	36	39	-3
(R30-S) Upper Heyford - South	7.5	40	33	7	37	39	-2
(R30-W) Upper Heyford - West	4.5	37	33	4	34	39	-5
(R30-W) Upper Heyford - West	7.5	38	33	5	35	39	-4
(R30A) Upper Heyford	4.5	32	33	-1	32	39	-7
(R30A) Upper Heyford	7.5	36	33	3	33	39	-6
(R31) Camp Road - East	4.5	34	29	5	31	37	-6
(R32) Heyford Grange - East	4.5	34	29	5	31	37	-6
(R33) 42 Trenchford Close - East	1.5	33	29	4	30	37	-7
(R34) PYE Homes - East	4.5	34	29	5	31	37	-6
(R34) PYE Homes - East	7.5	35	29	6	32	37	-5
(R34A) Richborough Estates	4.5	32	33	-1	32	39	-7
(R35-E) 50 Duvall Park - East	1.5	33	29	4	30	37	-7
(R36) Manor Farm - North	4.5	29	34	-5	29	41	-12
(R37-N) Manor Farm Cottages - North	4.5	29	34	-5	29	42	-13
(R37-E) Manor Farm Cottages - East	4.5	29	34	-5	29	42	-13
(R39-W) Dewars Farm - West	4.5	29	34	-5	29	42	-13
(O4) Ardley Woods	1.5	41	38	3	38	45	-7
(O5) Ardley Fields Quarry LWS	1.5	58	35	23	58	42	16
(O6) Ardley Fields Ponds West LWS	1.5	44	38	6	41	49	-8
(O7) The Heath pDWS	1.5	35	29	6	32	37	-5
(O8) Upper Heyford Airfield LWS	1.5	44	33	11	44	39	5

Notes:
* Where a +3 dB(A) correction is included in the rating level to account for sound features that are likely to be readily distinctive against the residual acoustic environment, the rating level value text is in bold and the cell is shaded grey.

Table 6 Main Site operational noise impact for Future Year – Modal background sound levels – Night time 23:00-07:00

Receptor		Under broadly westerly winds			Under broadly easterly winds		
Reference, name and façade	Height (m)	Rating Level* dB L _{Ar,15min}	Modal Background Sound Level dB L _{A90,15min}	Rating Level - Background Sound Level	Rating Level dB L _{Ar,15min}	Modal Background Sound Level dB L _{A90,15min}	Rating Level - Background Sound Level
(R00) Property in Woods - South	4.5	47	40	7	44	51	-7
(R02) Forge Place - West	4.5	19	33	-14	19	41	-22
(R03) 100 East Street - South	4.5	30	33	-3	30	41	-11
(R05-S) Crossroads Farm - South	4.5	41	35	6	38	42	-4
(R06-E) Quarry Cottages - East	4.5	45	38	7	42	45	-3
(R06-S) Quarry Cottages - South	4.5	45	38	7	42	45	-3
(R12) Castle Fields - South	4.5	41	33	8	38	41	-3
(R13-S) Manor Farm Ardley - South	4.5	37	40	-3	37	51	-14
(R14-W) Church Road - West	4.5	38	40	-2	38	51	-13
(R15) Orchard Cottage - South	4.5	39	40	-1	39	51	-12
(R24-W) 3 Station Road - West	4.5	36	40	-4	36	51	-15
(R25) Wood View - South	4.5	39	41	-2	39	53	-14
(R26-S) The Bungalow - South	4.5	40	41	-1	40	53	-13
(R26-W) The Bungalow - West	4.5	39	41	-2	39	53	-14
(R27-S) Upland Cottage - South	4.5	45	41	4	42	53	-11
(R27-W) Upland Cottage - West	4.5	40	41	-1	40	53	-13
(R28-W) Ardley Field Farm Cottages - West	4.5	52	38	14	52	49	3
(R30-E) Upper Heyford - East	4.5	41	33	8	38	39	-1
(R30A) Upper Heyford	7.5	42	33	9	42	39	3
(R30-S) Upper Heyford - South	4.5	41	33	8	38	39	-1
(R30-S) Upper Heyford - South	7.5	42	33	9	42	39	3
(R30-W) Upper Heyford - West	4.5	39	33	6	36	39	-3
(R30-W) Upper Heyford - West	7.5	39	33	6	36	39	-3
(R30A) Upper Heyford	4.5	37	33	4	34	39	-5
(R30A) Upper Heyford	7.5	38	33	5	35	39	-4
(R31) Camp Road - East	4.5	36	29	7	33	37	-4
(R32) Heyford Grange - East	4.5	35	29	6	32	37	-5
(R33) 42 Trenchford Close - East	1.5	34	29	5	31	37	-6
(R34) PYE Homes - East	4.5	36	29	7	33	37	-4
(R34) PYE Homes - East	7.5	36	29	7	33	37	-4
(R34A) Richborough Estates	4.5	37	33	4	34	39	-5
(R35-E) 50 Duvall Park - East	1.5	34	29	5	31	37	-6
(R36) Manor Farm - North	4.5	31	34	-3	31	41	-10
(R37-N) Manor Farm Cottages - North	4.5	30	34	-4	30	42	-12
(R37-E) Manor Farm Cottages - East	4.5	30	34	-4	30	42	-12
(R39-W) Dewars Farm - West	4.5	30	34	-4	30	42	-12
(O4) Ardley Woods	1.5	44	38	6	41	45	-4
(O5) Ardley Fields Quarry LWS	1.5	58	35	23	58	42	16
(O6) Ardley Fields Ponds West LWS	1.5	47	38	9	44	49	-5
(O7) The Heath pDWS	1.5	36	29	7	33	37	-4
(O8) Upper Heyford Airfield LWS	1.5	47	33	14	47	39	8

Note:

* Where a +3 dB(A) correction is included in the rating level to account for sound features that are likely to be readily distinctive against the residual acoustic environment, the rating level value text is in bold and the cell is shaded grey.

Table 7 Main Site operational noise impact for Opening Year – Sensitivity test background sound levels – Night time 23:00-07:00

Receptor		Opening Year					
		Under broadly westerly winds			Under broadly easterly winds		
Reference, name and façade	Height (m)	Rating Level* dB L _{Ar,15min}	Sensitivity Test Background Sound Level dB L _{A90,15min}	Rating Level - Background Sound Level	Rating Level dB L _{Ar,15min}	Sensitivity Test Background Sound Level dB L _{A90,15min}	Rating Level - Background Sound Level
(R00) Property in Woods - South	4.5	41	N/A	-	41	46	-5
(R02) Forge Place - West	4.5	17	34	-17	17	39	-22
(R03) 100 East Street - South	4.5	28	34	-6	28	39	-11
(R05-S) Crossroads Farm - South	4.5	36	N/A	-	36	39	-3
(R06-E) Quarry Cottages - East	4.5	41	34	7	38	42	-4
(R06-S) Quarry Cottages - South	4.5	42	34	8	39	42	-3
(R12) Castle Fields - South	4.5	39	34	5	36	39	-3
(R13-S) Manor Farm Ardley - South	4.5	34	N/A	-	34	46	-12
(R14-W) Church Road - West	4.5	36	N/A	-	36	46	-10
(R15) Orchard Cottage - South	4.5	37	N/A	-	37	46	-9
(R24-W) 3 Station Road - West	4.5	34	N/A	-	34	46	-12
(R25) Wood View - South	4.5	37	N/A	-	37	41	-4
(R26-S) The Bungalow - South	4.5	38	N/A	-	38	41	-3
(R26-W) The Bungalow - West	4.5	37	N/A	-	37	41	-4
(R27-S) Upland Cottage - South	4.5	40	N/A	-	40	41	-1
(R27-W) Upland Cottage - West	4.5	38	N/A	-	38	41	-3
(R28-W) Ardley Field Farm Cottages - West	4.5	48	N/A	-	51	44	7
(R30-E) Upper Heyford - East	4.5	37	N/A	-	37	N/A	-
(R30A) Upper Heyford	7.5	38	N/A	-	38	N/A	-
(R30-S) Upper Heyford - South	4.5	36	N/A	-	36	N/A	-
(R30-S) Upper Heyford - South	7.5	37	N/A	-	37	N/A	-
(R30-W) Upper Heyford - West	4.5	34	N/A	-	34	N/A	-
(R30-W) Upper Heyford - West	7.5	35	N/A	-	35	N/A	-
(R30A) Upper Heyford	4.5	32	N/A	-	32	N/A	-
(R30A) Upper Heyford	7.5	33	N/A	-	33	N/A	-
(R31) Camp Road - East	4.5	31	N/A	-	31	N/A	-
(R32) Heyford Grange - East	4.5	31	N/A	-	31	N/A	-
(R33) 42 Trenchford Close - East	1.5	30	N/A	-	30	N/A	-
(R34) PYE Homes - East	4.5	31	N/A	-	31	N/A	-
(R34) PYE Homes - East	7.5	32	N/A	-	32	N/A	-
(R34A) Richborough Estates	4.5	32	N/A	-	32	N/A	-
(R35-E) 50 Duvall Park - East	1.5	30	N/A	-	30	N/A	-
(R36) Manor Farm - North	4.5	29	N/A	-	29	N/A	-
(R37-N) Manor Farm Cottages - North	4.5	29	N/A	-	29	N/A	-
(R37-E) Manor Farm Cottages - East	4.5	29	N/A	-	29	N/A	-
(R39-W) Dewars Farm - West	4.5	29	N/A	-	29	N/A	-
(O4) Ardley Woods	1.5	41	34	7	38	42	-4
(O5) Ardley Fields Quarry LWS	1.5	55	N/A	-	58	39	19
(O6) Ardley Fields Ponds West LWS	1.5	41	N/A	-	41	44	-3
(O7) The Heath pDWS	1.5	32	N/A	-	32	N/A	-
(O8) Upper Heyford Airfield LWS	1.5	41	N/A	-	41	N/A	-

Notes:

* Where a +3 dB(A) correction is included in the rating level to account for sound features that are likely to be readily distinctive against the residual acoustic environment, the rating level value text is in bold and the cell is shaded grey.

Table 8 Main Site operational noise impact for Future Year – Sensitivity test background sound levels – Night time 23:00-07:00

Receptor		Under broadly westerly winds			Under broadly easterly winds		
Reference, name and façade	Height (m)	Rating Level*	Sensitivity Test Background Sound Level	Rating Level - Background Sound Level	Rating Level	Sensitivity Test Background Sound Level	Rating Level - Background Sound Level
		dB L _{Ar,15min}	dB L _{A90,15min}		dB L _{Ar,15min}	dB L _{A90,15min}	
(R00) Property in Woods - South	4.5	44	N/A	-	44	46	-2
(R02) Forge Place - West	4.5	19	34	-15	19	39	-20
(R03) 100 East Street - South	4.5	30	34	-4	30	39	-9
(R05-S) Crossroads Farm - South	4.5	38	N/A	-	38	39	-1
(R06-E) Quarry Cottages - East	4.5	45	34	11	45	42	3
(R06-S) Quarry Cottages - South	4.5	45	34	11	45	42	3
(R12) Castle Fields - South	4.5	41	34	7	38	39	-1
(R13-S) Manor Farm Ardley - South	4.5	37	N/A	-	37	46	-9
(R14-W) Church Road - West	4.5	38	N/A	-	38	46	-8
(R15) Orchard Cottage - South	4.5	39	N/A	-	39	46	-7
(R24-W) 3 Station Road - West	4.5	36	N/A	-	36	46	-10
(R25) Wood View - South	4.5	39	N/A	-	39	41	-2
(R26-S) The Bungalow - South	4.5	40	N/A	-	40	41	-1
(R26-W) The Bungalow - West	4.5	39	N/A	-	39	41	-2
(R27-S) Upland Cottage - South	4.5	42	N/A	-	45	41	4
(R27-W) Upland Cottage - West	4.5	40	N/A	-	40	41	-1
(R28-W) Ardley Field Farm Cottages - West	4.5	49	N/A	-	52	44	8
(R30-E) Upper Heyford - East	4.5	38	N/A	-	38	N/A	-
(R30A) Upper Heyford	7.5	39	N/A	-	39	N/A	-
(R30-S) Upper Heyford - South	4.5	38	N/A	-	38	N/A	-
(R30-S) Upper Heyford - South	7.5	39	N/A	-	39	N/A	-
(R30-W) Upper Heyford - West	4.5	36	N/A	-	36	N/A	-
(R30-W) Upper Heyford - West	7.5	36	N/A	-	36	N/A	-
(R30A) Upper Heyford	4.5	34	N/A	-	34	N/A	-
(R30A) Upper Heyford	7.5	35	N/A	-	35	N/A	-
(R31) Camp Road - East	4.5	33	N/A	-	33	N/A	-
(R32) Heyford Grange - East	4.5	32	N/A	-	32	N/A	-
(R33) 42 Trenchford Close - East	1.5	31	N/A	-	31	N/A	-
(R34) PYE Homes - East	4.5	33	N/A	-	33	N/A	-
(R34) PYE Homes - East	7.5	33	N/A	-	33	N/A	-
(R34A) Richborough Estates Residential Development	4.5	34	N/A	-	34	N/A	-
(R35-E) 50 Duvall Park - East	1.5	31	N/A	-	31	N/A	-
(R36) Manor Farm - North	4.5	31	N/A	-	31	N/A	-
(R37-N) Manor Farm Cottages - North	4.5	30	N/A	-	30	N/A	-
(R37-E) Manor Farm Cottages - East	4.5	30	N/A	-	30	N/A	-
(R39-W) Dewars Farm - West	4.5	30	N/A	-	30	N/A	-
(O4) Ardley Woods	1.5	44	34	10	41	42	-1
(O5) Ardley Fields Quarry LWS	1.5	55	N/A	-	58	39	19
(O6) Ardley Fields Ponds West LWS	1.5	44	N/A	-	47	44	3
(O7) The Heath pDWS	1.5	33	N/A	-	33	N/A	-
(O8) Upper Heyford Airfield LWS	1.5	44	N/A	-	44	N/A	-

Notes:

* Where a +3 dB(A) correction is included in the rating level to account for sound features that are likely to be readily distinctive against the residual acoustic environment, the rating level value text is in bold and the cell is shaded grey.

Table 9 Predicted maximum short-term sound levels from Main Site and Rail Terminal operations – 23:00-07:00

Receptor		dB L _{AFmax} (façade)
Reference, name and façade	Height (m)	
(R00) Property in Woods - South	4.5	51
(R02) Forge Place - West	4.5	24
(R03) 100 East Street - South	4.5	39
(R05-S) Crossroads Farm - South	4.5	48
(R06-E) Quarry Cottages - East	4.5	51
(R06-S) Quarry Cottages - South	4.5	52
(R12) Castle Fields - South	4.5	47
(R13-S) Manor Farm Ardley - South	4.5	47
(R14-W) Church Road - West	4.5	46
(R15) Orchard Cottage - South	4.5	47
(R24-W) 3 Station Road - West	4.5	46
(R25) Wood View - South	4.5	47
(R26-S) The Bungalow - South	4.5	48
(R26-W) The Bungalow - West	4.5	48
(R27-S) Upland Cottage - South	4.5	49
(R27-W) Upland Cottage - West	4.5	49
(R28-W) Ardley Field Farm Cottages - West	4.5	56
(R30-E) Upper Heyford - East	4.5	47
(R30A) Upper Heyford	7.5	47
(R30-S) Upper Heyford - South	4.5	46
(R30-S) Upper Heyford - South	7.5	47
(R30-W) Upper Heyford - West	4.5	44
(R30-W) Upper Heyford - West	7.5	44
(R30A) Upper Heyford	4.5	42
(R30A) Upper Heyford	7.5	42
(R31) Camp Road - East	4.5	40
(R32) Heyford Grange - East	4.5	39
(R33) 42 Trenchford Close - East	1.5	37
(R34) PYE Homes - East	4.5	40
(R34) PYE Homes - East	7.5	40
(R34A) Richborough Estates Residential Development	4.5	41
(R35-E) 50 Duvall Park - East	1.5	39
(R36) Manor Farm - North	4.5	38
(R37-N) Manor Farm Cottages - North	4.5	35
(R37-E) Manor Farm Cottages - East	4.5	35
(R39-W) Dewars Farm - West	4.5	35
(O4) Ardley Woods	1.5	50
(O5) Ardley Fields Quarry LWS	1.5	44
(O6) Ardley Fields Ponds West LWS	1.5	52
(O7) The Heath pDWS	1.5	39
(O8) Upper Heyford Airfield LWS	1.5	54