ERCD Technical Note: Gatwick Airport 2024 Noise Action Plan contours (May 2025)

Introduction

1. The Environmental Research and Consultancy Department (ERCD) of the Civil Aviation Authority (CAA) was commissioned by Gatwick Airport Limited (GAL) to produce Gatwick noise contours for the 2024 annual period to meet the requirements of the latest adopted Noise Action Plan.

2. This technical note details the noise modelling methodology used and the subsequent noise contour modelling results.

3. The metrics and contour levels plotted are:

   - 2024 annual 12-hour L_{day}, from 54-69 dB in 3 dB steps.
   - 2024 annual 4-hour $L_{evening}$, from 54-69 dB in 3 dB steps.
   - 2024 annual 8-hour L_{night}, from 48-66 dB in 3 dB steps.
   - 2024 annual 24-hour L_{den}, from 55-75 dB in 5 dB steps.
   - 2024 annual 16-hour day L_{Aeq}, from 54-69 dB in 3 dB steps.
   - 2024 annual 16-hour day N65, at levels 20, 50, 100, 200 and 500 events.
   - 2024 annual 8-hour night N60, at 10, 20 and 50 events.

4. The above contour levels for the L_{day}, $L_{evening}$, L_{night}, L_{den} and $L_{Aeq,16h}$ metrics are in line with those produced for the Environmental Noise Directive Round 4 noise mapping.

Noise Modelling Methodology

5. The contours were modelled using the latest version of ANCON (v2.4).

6. Traffic data for the 2024 annual period were extracted from the Gatwick ANOMS system. Movements by ANCON aircraft type for the annual average 12-hour day, 4-hour evening, 8-hour night, 24-hour period and 16-hour day are summarised in **Tables A1-A5** of **Appendix A**. A full description of ANCON types can be found in **Table A6**.

7. The contours were modelled with the departure and arrival mean tracks and flight profiles previously calculated for the 2024 summer period contours. The summer daytime mean tracks were used for L_{day} and $L_{evening}$, and the summer night-time mean tracks for L_{night}. The same flight profiles were used for all metrics.

8. There was no usage of the standby runway (08L/26R) during the 12-hour day period. However, there were standby runway movements during the 4-hour evening and 8-hour night periods, which were modelled.

9. The actual runway modal splits for each metric are summarised in **Table 1**.

Table 1 – 2024 annual average runway modal splits

Metric	Time period (local)	Runway modal split
L_{day}	12-hour day (07:00-19:00)	72% W / 28% E
$L_{evening}$	4-hour evening (19:00-23:00)	73% W / 27% E
L_{night}, N60	8-hour night (23:00-07:00)	72% W / 28% E
L_{den}	24-hour (00:00-24:00)	72% W / 28% E
$L_{Aeq,16h}$, N65	16-hour day (07:00-23:00)	72% W / 28% E

10. The effects of the surrounding topography were modelled using *Meridian 2 Gridded Heights* terrain data from Ordnance Survey.

Results

11. The 2024 annual L_{day}, $L_{evening}$, L_{night}, L_{den} and $L_{Aeq,16h}$ contours are shown in **Figures 1-5**.

12. The 2024 annual 16-hour N65 and 8-hour N60 contours are shown in **Figures 6-7**.

13. Estimates of area, population and households using the 2024 population database (updated from the 2021 Census) supplied by CACI Ltd, are provided in **Tables B1-B5** for the L_{day}, $L_{evening}$, L_{night}, L_{den} and $L_{Aeq,16h}$ contours, and in **Tables B6-B7** for the N65 and N60 contours.

14. Estimates of noise sensitive buildings (i.e. community buildings, hospitals, schools and places of worship) using 2024 PointX data are provided in **Tables C1-C5** for the L_{day}, $L_{evening}$, L_{night}, L_{den} and $L_{Aeq,16h}$ contours, and in **Tables C6-C7** for the N65 and N60 contours.

Conclusions

15. Gatwick Airport Noise Action Plan contours for the 2024 annual period have been produced for the metrics L_{day}, $L_{evening}$, L_{night}, L_{den}, $L_{Aeq,16h}$, N65 and N60.

16. Results at key levels were as follows:

- The 54 dB L_{day} contour enclosed an area of 57.0 km^2 and a population count of 6,700.
- The 54 dB $L_{evening}$ contour enclosed an area of 43.3 km^2 and a population count of 4,100.
- The 48 dB L_{night} contour enclosed an area of 50.1 km^2 and a population count of 5,800.
- The 55 dB L_{den} contour enclosed an area of 73.2 km^2 and a population count of 9,100.
- The 54 dB $L_{Aeq,16h}$ contour enclosed an area of 53.6 km^2 and a population count of 6,000.
- The 20-event annual 16-hour N65 contour enclosed an area of 127.4 km^2 and a population count of 18,500.
- The 10-event annual 8-hour N60 contour enclosed an area of 138.1 km^2 and a population count of 14,900.

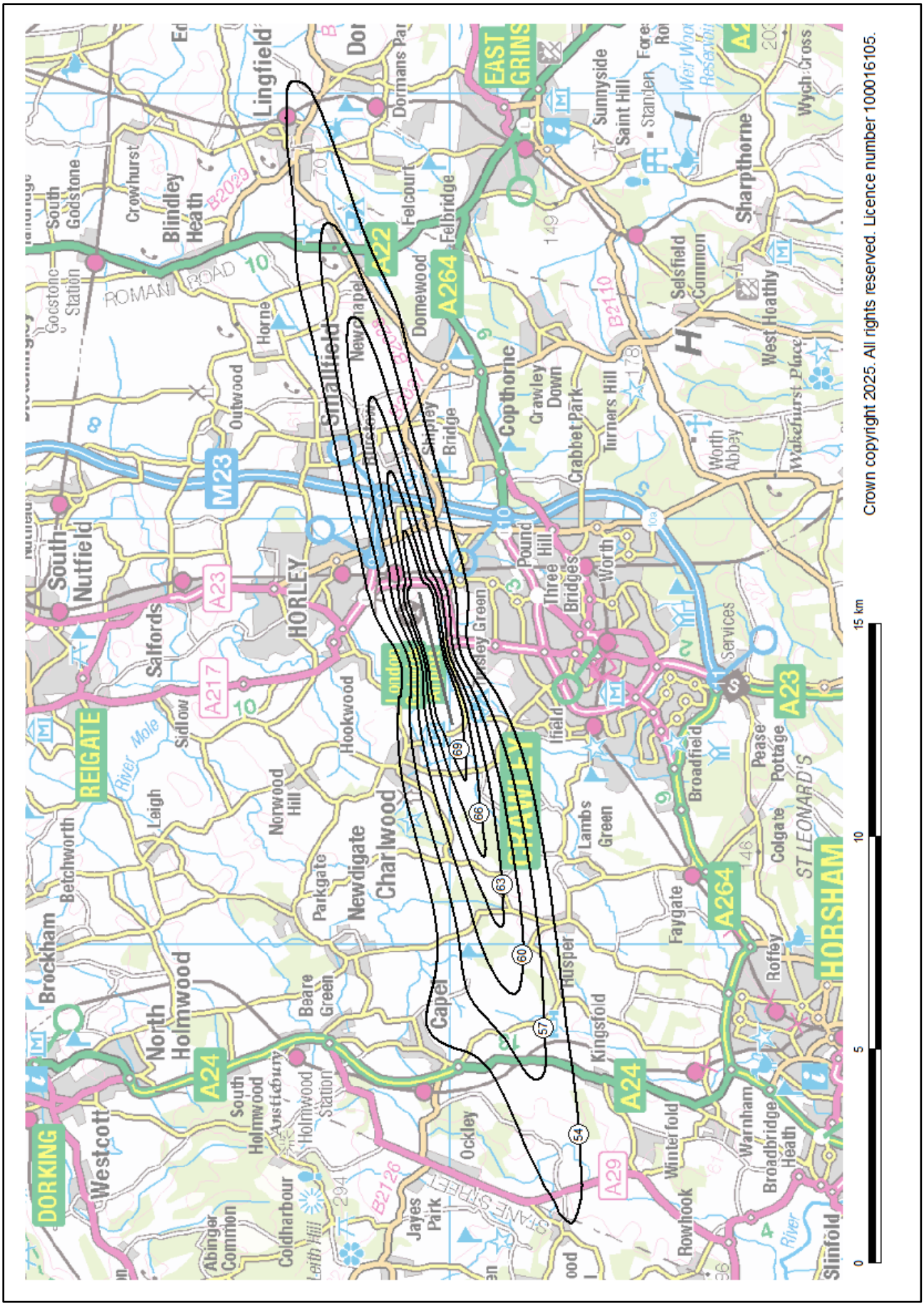

Figure 1 – 2024 annual L_{day} contours

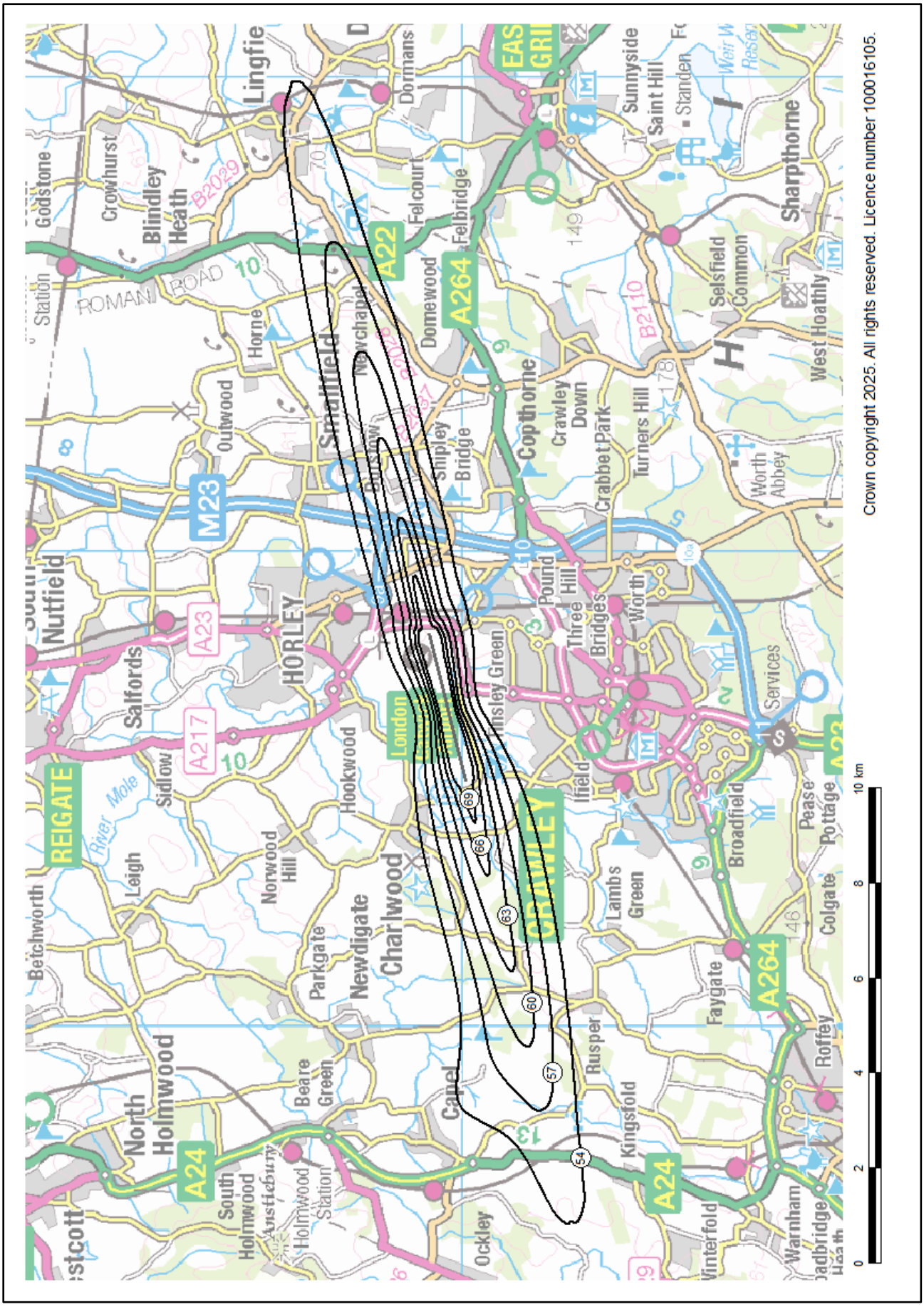

Figure 2 – 2024 annual $L_{evening}$ contours

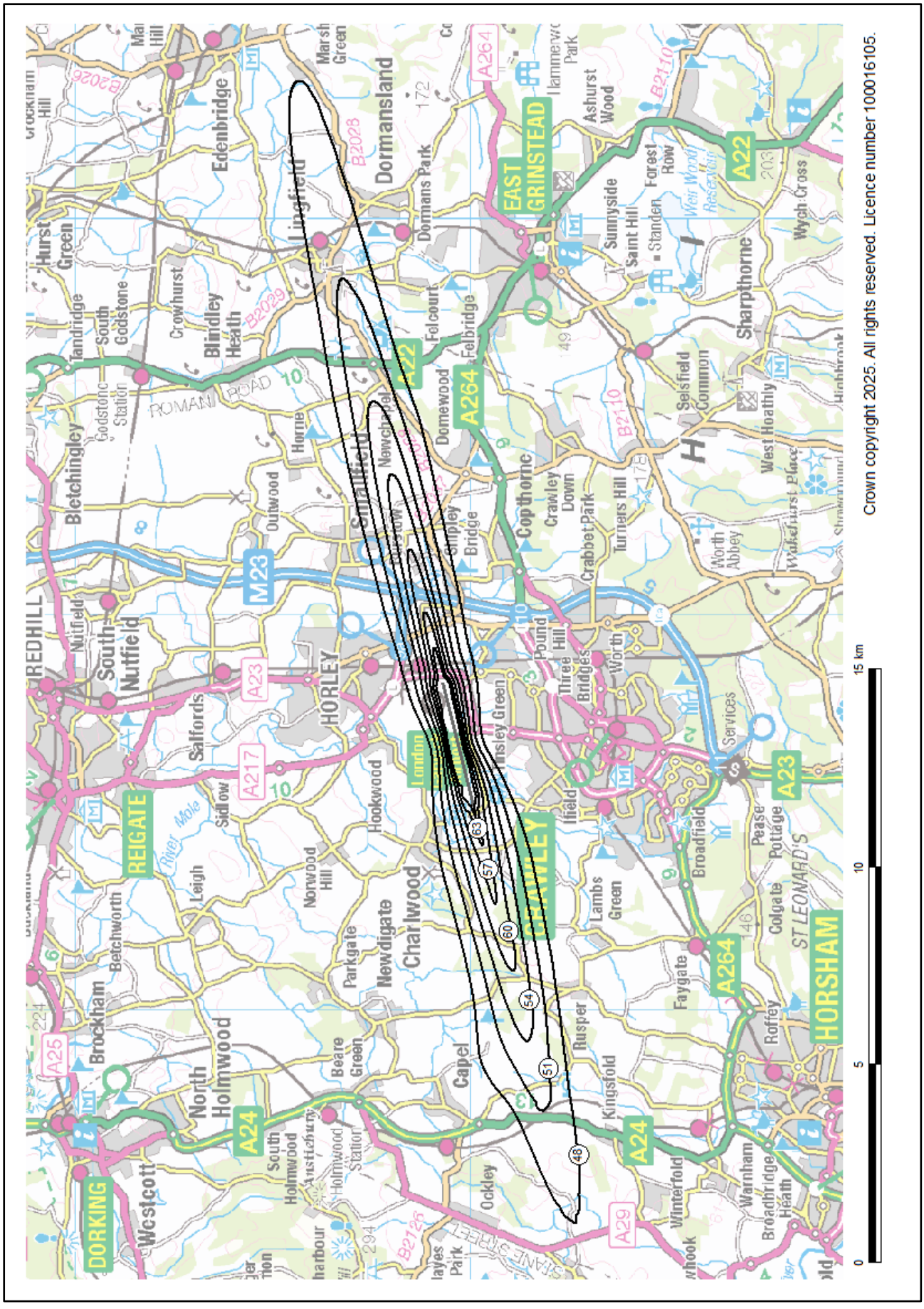

Figure 3 – 2024 annual L_{night} contours

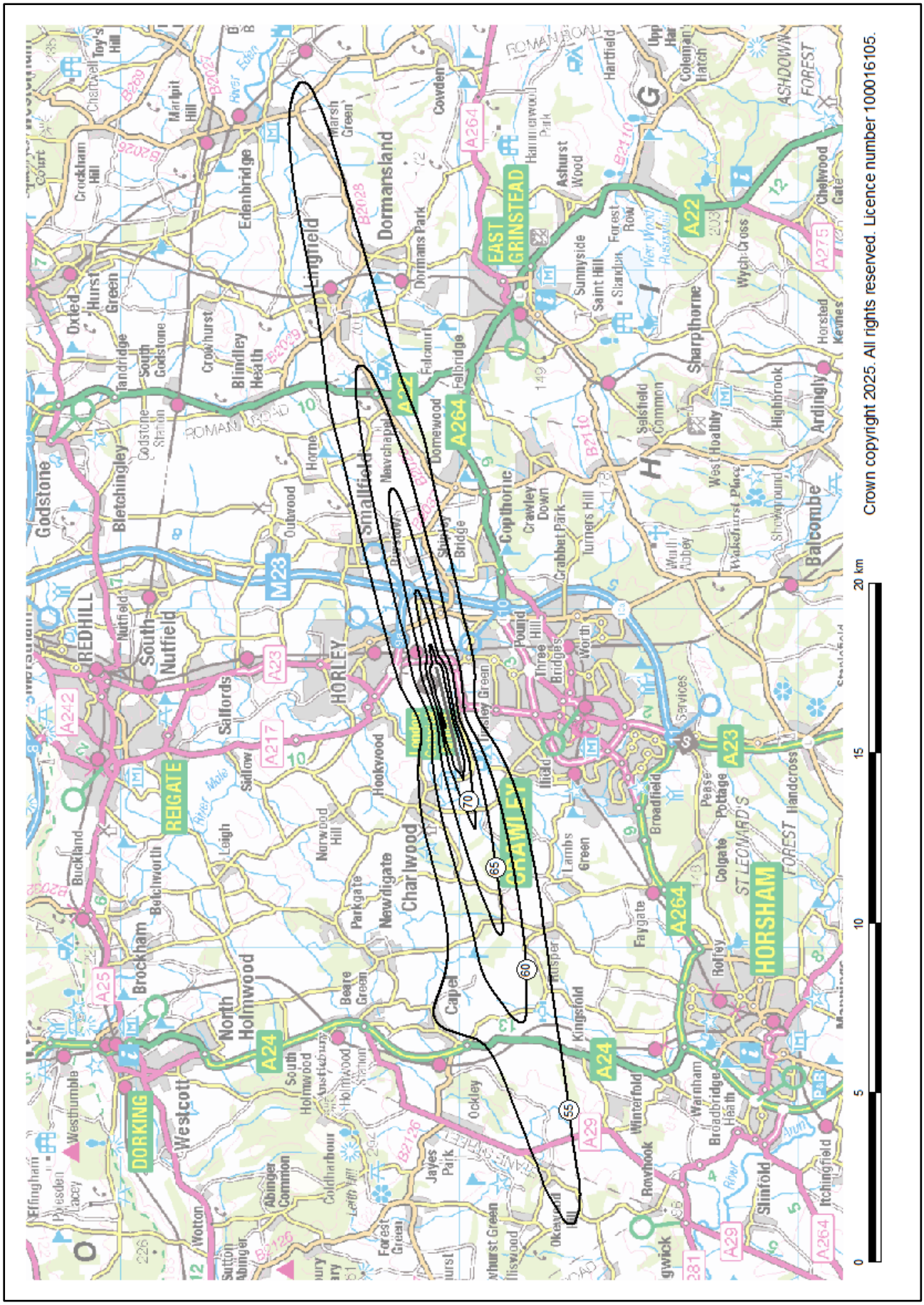

Figure 4 – 2024 annual L_{den} contours

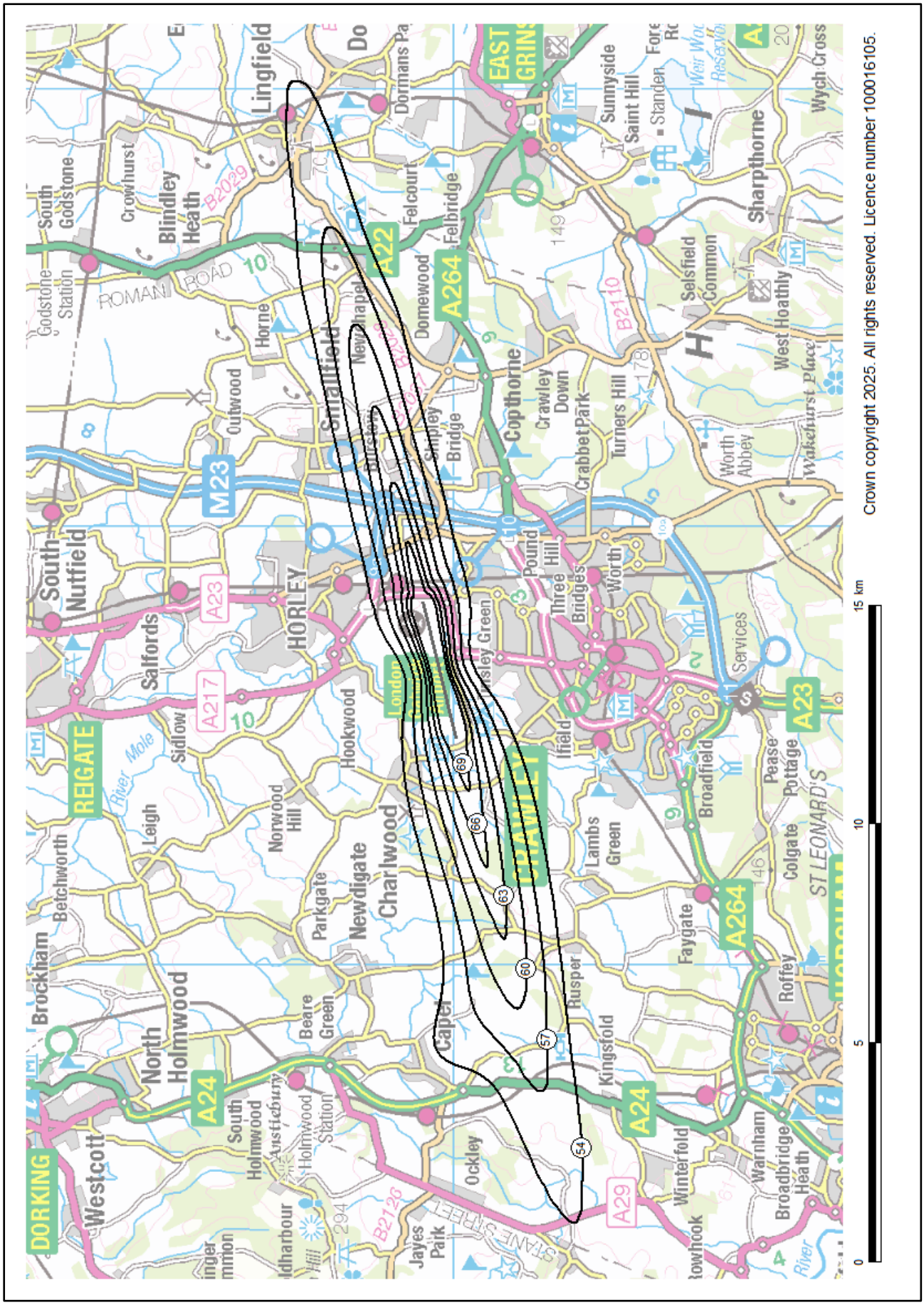

Figure 5 – 2024 annual $L_{Aeq,16h}$ contours

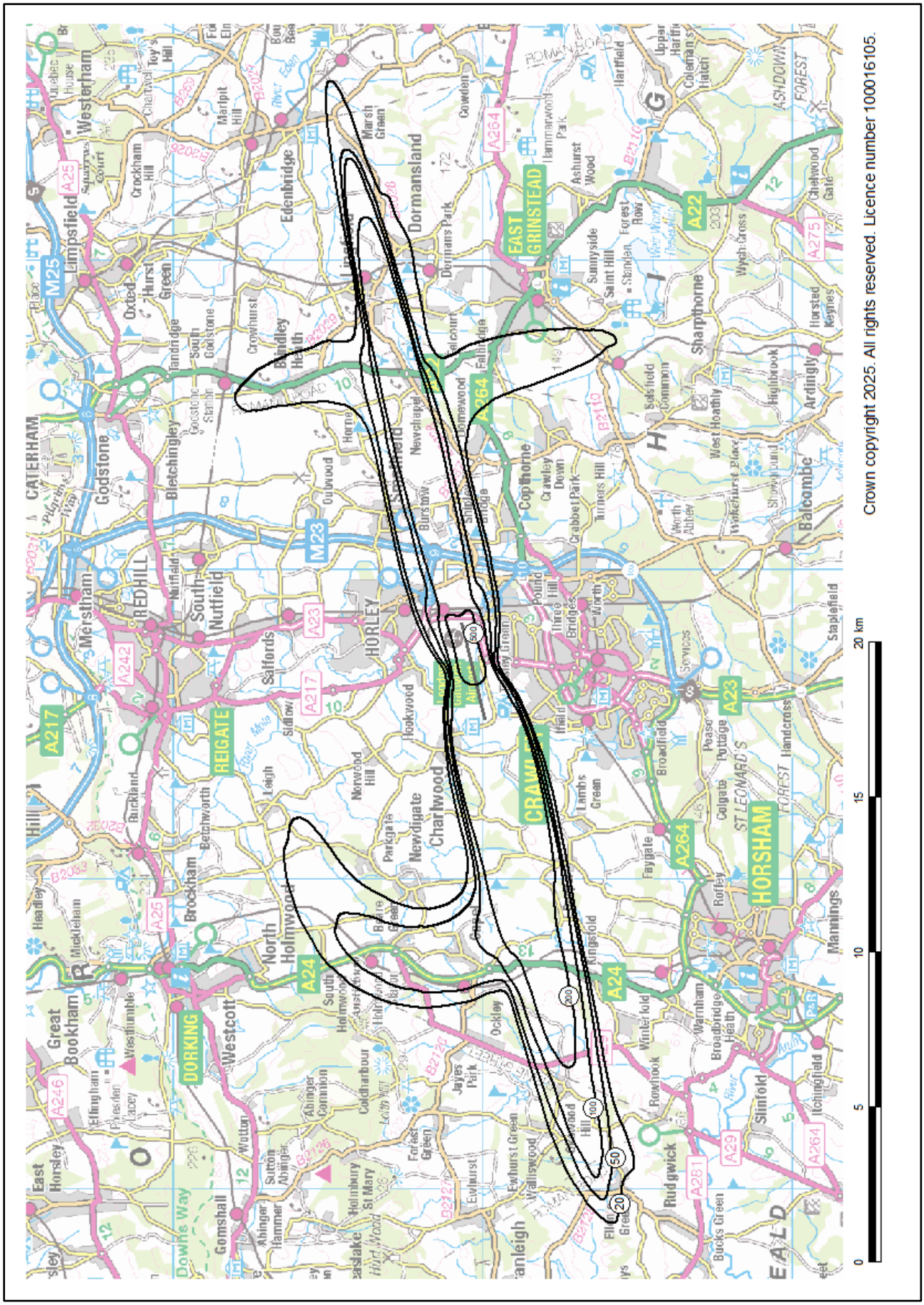

Figure 6 – 2024 annual 16-hour day N65 contours

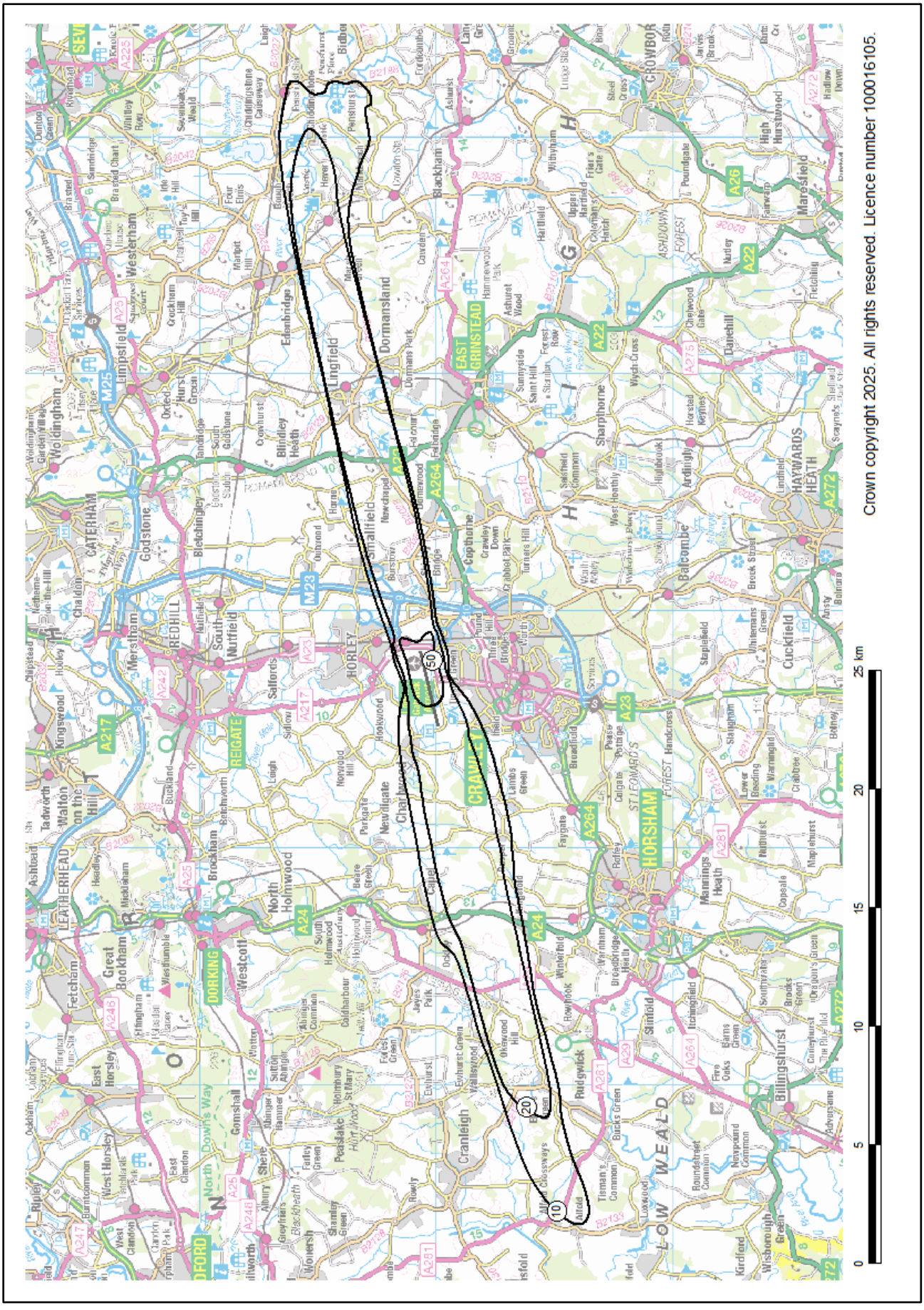

Figure 7 – 2024 annual 8-hour night N60 contours

APPENDIX A

Aircraft movements summary

Table A1 – 2024 annual average 12-hour day movements

ANCON type	Departures	Arrivals	Total
B733	0.0	0.0	0.1
B736	0.0	0.0	0.0
B738	24.1	23.5	47.6
B738MAX	9.5	8.3	17.8
B739MAX	0.3	0.3	0.6
B753	0.0	0.0	0.0
B757E	0.1	0.1	0.1
B763G	0.3	0.3	0.6
B763P	0.3	0.3	0.7
B772G	5.0	3.8	8.8
B772R	4.6	3.7	8.3
B773G	1.7	0.9	2.6
B773R	0.2	0.0	0.3
B7810	0.2	0.2	0.4
B788	4.0	3.9	8.0
B789	5.8	3.7	9.4
CRJ	0.0	0.0	0.0
CRJ900	0.1	0.1	0.2
E190E2	0.0	0.1	0.2
EA221	0.1	0.1	0.2
EA223	2.0	2.2	4.2
EA319C	52.1	46.3	98.4
EA319V	0.0	0.0	0.1
EA320C	63.4	52.6	116.0
EA320NC	16.5	12.5	29.0
EA320NP	3.2	3.4	6.5
EA320V	23.5	17.2	40.7
EA321C	0.4	0.4	0.9
EA321NC	11.0	8.0	19.0
EA321NP	16.7	15.3	32.0
EA321V	16.4	10.5	26.9
EA33	1.5	1.0	2.4
EA33NEO	0.4	0.2	0.6

ANCON type	Departures	Arrivals	Total
EA34	0.0	0.0	0.1
EA3510	0.0	0.0	0.0
EA359	2.5	0.5	3.0
EA38GP	1.4	1.4	2.8
EA38R	0.2	0.3	0.4
ERJ	0.0	0.0	0.0
ERJ170	0.1	0.0	0.1
ERJ190	1.4	1.7	3.2
EXE3	0.3	0.3	0.6
LTT	6.5	7.6	14.1
SP	0.0	0.0	0.0
STP	0.0	0.0	0.0
STT	0.0	0.0	0.0
Total	**275.9**	**230.9**	**506.8**

Note: Totals are calculated from unrounded numbers.

Table A2 – 2024 annual average 4-hour evening movements

ANCON type	Departures	Arrivals	Total
B733	0.0	0.0	0.0
B736	0.0	0.0	0.0
B738	8.5	8.3	16.8
B738MAX	1.9	2.3	4.3
B772G	0.0	0.0	0.0
B772R	0.7	0.0	0.7
B773G	0.2	0.0	0.2
B788	2.3	0.8	3.0
B789	0.5	0.3	0.8
E190E2	0.2	0.0	0.2
EA221	0.0	0.0	0.1
EA223	0.2	0.1	0.3
EA319C	10.7	17.0	27.6
EA319V	0.0	0.0	0.0
EA320C	13.8	20.4	34.2
EA320NC	2.5	4.4	6.9
EA320NP	1.2	1.0	2.2
EA320V	3.6	8.2	11.9
EA321C	0.2	0.1	0.3
EA321NC	1.6	2.6	4.2
EA321NP	5.1	5.3	10.4
EA321V	1.6	4.9	6.4
EA33	0.0	0.0	0.0
EA33NEO	0.0	0.0	0.0
EA34	0.0	0.0	0.0
EA3510	0.0	0.0	0.0
EA359	0.0	0.0	0.1
EA38GP	0.5	0.3	0.8
EA38R	0.4	0.3	0.7
ERJ	0.0	0.0	0.0
ERJ170	0.0	0.0	0.1
ERJ190	0.6	0.3	0.9
EXE3	0.0	0.0	0.1

ANCON type	Departures	Arrivals	Total
LTT	1.9	0.8	2.7
SP	0.0	0.0	0.0
STP	0.0	0.0	0.0
Total	**58.4**	**77.7**	**136.1**

Note: Totals are calculated from unrounded numbers.

Table A3 – 2024 annual average 8-hour night movements

ANCON type	Departures	Arrivals	Total
B733	0.0	0.0	0.0
B736	0.0	0.0	0.0
B738	1.8	2.6	4.4
B738MAX	0.8	1.6	2.4
B757E	0.0	0.0	0.0
B763G	0.0	0.0	0.0
B772G	0.0	1.3	1.3
B772R	0.0	1.6	1.6
B773G	0.0	0.9	0.9
B773R	0.0	0.2	0.2
B788	0.4	2.0	2.4
B789	0.0	2.3	2.4
CRJ	0.0	0.0	0.0
EA223	0.0	0.0	0.0
EA319C	6.7	6.2	12.9
EA319V	0.0	0.0	0.0
EA320C	7.2	11.6	18.8
EA320NC	3.2	5.2	8.4
EA320NP	0.1	0.1	0.2
EA320V	1.6	3.4	5.1
EA321C	0.0	0.0	0.0
EA321NC	2.2	4.1	6.2
EA321NP	2.8	4.0	6.8
EA321V	1.0	3.6	4.6
EA33	0.0	0.5	0.5
EA33NEO	0.0	0.3	0.3
EA34	0.0	0.0	0.0
EA359	0.0	2.0	2.0
EA38GP	0.0	0.2	0.2
EA38R	0.0	0.1	0.1
ERJ	0.0	0.0	0.0
ERJ170	0.0	0.0	0.0
ERJ190	0.0	0.0	0.0

ANCON type	Departures	Arrivals	Total
EXE3	0.0	0.0	0.1
LTT	0.0	0.0	0.0
STP	0.0	0.0	0.0
Total	**28.2**	**54.0**	**82.1**

Note: Totals are calculated from unrounded numbers.

Table A4 – 2024 annual average 24-hour period movements

ANCON type	Departures	Arrivals	Total
B733	0.1	0.1	0.1
B736	0.0	0.0	0.0
B738	34.5	34.5	68.9
B738MAX	12.2	12.2	24.4
B739MAX	0.3	0.3	0.6
B753	0.0	0.0	0.0
B757E	0.1	0.1	0.1
B763G	0.3	0.3	0.6
B763P	0.3	0.3	0.7
B772G	5.0	5.0	10.1
B772R	5.3	5.3	10.6
B773G	1.9	1.8	3.7
B773R	0.2	0.2	0.5
B7810	0.2	0.2	0.4
B788	6.7	6.7	13.4
B789	6.3	6.3	12.6
CRJ	0.0	0.0	0.0
CRJ900	0.1	0.1	0.2
E190E2	0.2	0.2	0.3
EA221	0.1	0.1	0.2
EA223	2.2	2.2	4.4
EA319C	69.5	69.5	139.0
EA319V	0.0	0.0	0.1
EA320C	84.5	84.5	169.0
EA320NC	22.2	22.2	44.3
EA320NP	4.5	4.5	9.0
EA320V	28.8	28.8	57.6
EA321C	0.6	0.6	1.2
EA321NC	14.7	14.7	29.5
EA321NP	24.6	24.6	49.1
EA321V	19.0	19.0	38.0
EA33	1.5	1.5	2.9
EA33NEO	0.5	0.5	0.9

ANCON type	Departures	Arrivals	Total
EA34	0.1	0.1	0.1
EA3510	0.0	0.0	0.0
EA359	2.6	2.6	5.1
EA38GP	1.9	1.9	3.8
EA38R	0.6	0.6	1.3
ERJ	0.0	0.0	0.1
ERJ170	0.1	0.1	0.2
ERJ190	2.1	2.1	4.1
EXE3	0.4	0.4	0.7
LTT	8.4	8.4	16.9
SP	0.0	0.0	0.0
STP	0.0	0.0	0.1
STT	0.0	0.0	0.0
Total	**362.5**	**362.5**	**725.0**

Note: Totals are calculated from unrounded numbers.

Table A5 – 2024 annual average 16-hour day movements

ANCON type	Departures	Arrivals	Total
B733	0.0	0.0	0.1
B736	0.0	0.0	0.0
B738	32.6	31.9	64.5
B738MAX	11.4	10.6	22.0
B739MAX	0.3	0.3	0.6
B753	0.0	0.0	0.0
B757E	0.1	0.1	0.1
B763G	0.3	0.3	0.6
B763P	0.3	0.3	0.7
B772G	5.0	3.8	8.8
B772R	5.3	3.7	9.0
B773G	1.8	0.9	2.8
B773R	0.2	0.0	0.3
B7810	0.2	0.2	0.4
B788	6.3	4.7	11.0
B789	6.3	4.0	10.2
CRJ	0.0	0.0	0.0
CRJ900	0.1	0.1	0.2
E190E2	0.2	0.2	0.3
EA221	0.1	0.1	0.2
EA223	2.2	2.2	4.4
EA319C	62.8	63.3	126.1
EA319V	0.0	0.0	0.1
EA320C	77.3	73.0	150.2
EA320NC	19.0	16.9	35.9
EA320NP	4.4	4.4	8.8
EA320V	27.2	25.4	52.5
EA321C	0.6	0.6	1.2
EA321NC	12.6	10.7	23.2
EA321NP	21.8	20.6	42.4
EA321V	18.0	15.4	33.4
EA33	1.5	1.0	2.4
EA33NEO	0.5	0.2	0.6

ANCON type	Departures	Arrivals	Total
EA34	0.0	0.0	0.1
EA3510	0.0	0.0	0.0
EA359	2.6	0.5	3.1
EA38GP	1.9	1.7	3.6
EA38R	0.6	0.6	1.2
ERJ	0.0	0.0	0.1
ERJ170	0.1	0.1	0.2
ERJ190	2.0	2.0	4.1
EXE3	0.3	0.3	0.7
LTT	8.4	8.4	16.8
SP	0.0	0.0	0.0
STP	0.0	0.0	0.0
STT	0.0	0.0	0.0
Total	**334.3**	**308.6**	**642.9**

Note: Totals are calculated from unrounded numbers.

Table A6 – ANCON aircraft type descriptions

ANCON type	Description
B717	Boeing 717
B727	Boeing 727 (Chapter 2&3)
B732	Boeing 737-200 (Chapter 2&3)
B733	Boeing 737-300/400/500
B736	Boeing 737-600/700
B738	Boeing 737-800/900
B738MAX	Boeing 737 MAX 8
B739MAX	Boeing 737 MAX 9
B747	Boeing 747-100 & 200/300 series (certificated to Chapter 3)
B744G	Boeing 747-400 with General Electric CF6-80F engines
B744P	Boeing 747-400 with Pratt & Whitney PW4000 engines
B744R	Boeing 747-400 with Rolls-Royce RB211 engines
B747SP	Boeing 747SP
B748	Boeing 747-8
B753	Boeing 757-300
B757C	Boeing 757-200 with Rolls-Royce RB211-535C engines
B757E	Boeing 757-200 with Rolls-Royce RB211-535E4/E4B engines
B757P	Boeing 757-200 with Pratt & Whitney PW2037/2040 engines
B762	Boeing 767-200
B763G	Boeing 767-300 with General Electric CF6-80 engines
B763P	Boeing 767-300 with Pratt & Whitney PW4000 engines
B763R	Boeing 767-300 with Rolls-Royce RB211 engines
B764	Boeing 767-400
B772G	Boeing 777-200 with General Electric GE90 engines
B772P	Boeing 777-200 with Pratt & Whitney PW4000 engines
B772R	Boeing 777-200 with Rolls-Royce Trent 800 engines
B773G	Boeing 777-200LR/300ER with General Electric GE90 engines
B773P	Boeing 777-300 with Pratt & Whitney PW4000 engines
B773R	Boeing 777-300 with Rolls-Royce Trent 800 engines
B788	Boeing 787-8
B789	Boeing 787-9
BA46	BAe 146/Avro RJ series
CRJ	Bombardier CRJ100/200 series

ANCON type	Description
CRJ700	Bombardier CRJ700 series
CRJ900	Bombardier CRJ900 series
DC10	McDonnell Douglas DC-10
EA221	Airbus A220-100
EA223	Airbus A220-300
EA30	Airbus A300
EA31	Airbus A310
EA318	Airbus A318
EA319C	Airbus A319 with CFM56 engines
EA319V	Airbus A319 with IAE V2500 engines
EA320C	Airbus A320 with CFM56 engines
EA320NC	Airbus A320neo with CFM LEAP-1A engines
EA320NP	Airbus A320neo with Pratt & Whitney PW1100G engines
EA320V	Airbus A320 with IAE V2500 engines
EA321C	Airbus A321 with CFM56 engines
EA321NC	Airbus A321neo with CFM LEAP-1A engines
EA321NP	Airbus A321neo with Pratt & Whitney PW1100G engines
EA321V	Airbus A321 with IAE V2500 engines
EA33	Airbus A330
EA34	Airbus A340-200/300
EA346	Airbus A340-500/600
EA359	Airbus A350-900
EA3510	Airbus A350-1000
EA38GP	Airbus A380 with Engine Alliance GP7000 engines
EA38R	Airbus A380 with Rolls-Royce Trent 900 engines
ERJ	Embraer ERJ 135/145
ERJ170	Embraer E-170/175
ERJ190	Embraer E-190/195
EXE2	Chapter 2 executive jets
EXE3	Chapter 3 executive jets
FK10	Fokker 70/100
L101	Lockheed L-1011 TriStar
L4P	Large four-engine propeller
LTT	Large twin-turboprop

ANCON type	Description
MD11	McDonnell Douglas MD-11
MD80	McDonnell Douglas MD-80 series
SP	Single propeller
STP	Small twin-piston
STT	Small twin-turboprop
TU54	Tupolev Tu-154

APPENDIX B

Area, population and household estimates

Table B1 – 2024 annual L_{day} contours

L_{day} (dB)	Area (km^2)	Population	Households
> 54	57.0	6,700	2,700
> 57	31.8	1,900	800
> 60	17.9	1,100	400
> 63	9.6	300	100
> 66	4.9	100	< 100
> 69	2.4	< 100	0

Note: Population and household estimates are given to the nearest 100, and based on 2024 population data updated from the 2021 Census supplied by CACI Ltd.

Table B2 – 2024 annual $L_{evening}$ contours

$L_{evening}$ (dB)	Area (km^2)	Population	Households
> 54	43.3	4,100	1,800
> 57	23.9	1,400	600
> 60	13.2	500	200
> 63	6.8	200	100
> 66	3.4	100	< 100
> 69	1.7	0	0

Note: Population and household estimates are given to the nearest 100, and based on 2024 population data updated from the 2021 Census supplied by CACI Ltd.

Table B3 – 2024 annual L_{night} contours

L_{night} (dB)	Area (km^2)	Population	Households
> 48	50.1	5,800	2,300
> 51	26.9	1,800	800
> 54	14.9	900	400
> 57	7.9	300	100
> 60	4.0	100	< 100
> 63	2.0	0	0
> 66	1.2	0	0

Note: Population and household estimates are given to the nearest 100, and based on 2024 population data updated from the 2021 Census supplied by CACI Ltd.

Table B4 – 2024 annual L_{den} contours

L_{den} (dB)	Area (km^2)	Population	Households
> 55	73.2	9,100	3,600
> 60	25.8	1,600	700
> 65	9.5	400	100
> 70	3.0	100	< 100
> 75	1.2	0	0

Note: Population and household estimates are given to the nearest 100, and based on 2024 population data updated from the 2021 Census supplied by CACI Ltd.

Table B5 – 2024 annual $L_{Aeq,16h}$ contours

$L_{Aeq,16h}$ (dB)	Area (km^2)	Population	Households
> 54	53.6	6,000	2,500
> 57	29.8	1,800	700
> 60	16.8	900	400
> 63	8.9	300	100
> 66	4.5	100	< 100
> 69	2.2	< 100	0

Note: Population and household estimates are given to the nearest 100, and based on 2024 population data updated from the 2021 Census supplied by CACI Ltd.

Table B6 – 2024 annual 16-hour day N65 contours

N65	Area (km^2)	Population	Households
> 20	127.4	18,500	7,600
> 50	84.9	11,900	4,900
> 100	60.0	6,000	2,400
> 200	43.4	4,900	1,900
> 500	1.9	< 100	0

Note: Population and household estimates are given to the nearest 100, and based on 2024 population data updated from the 2021 Census supplied by CACI Ltd.

Table B7 – 2024 annual 8-hour night N60 contours

N60	Area (km^2)	Population	Households
> 10	138.1	14,900	5,900
> 20	94.8	10,200	4,000
> 50	3.6	< 100	0

Note: Population and household estimates are given to the nearest 100, and based on 2024 population data updated from the 2021 Census supplied by CACI Ltd.

APPENDIX C

Noise sensitive building estimates

Table C1 – 2024 annual L_{day} contours

L_{day} (dB)	Community buildings	Hospitals	Schools	Places of worship
> 54	2	0	12	8
> 57	1	0	4	3
> 60	0	0	1	3
> 63	0	0	1	3
> 66	0	0	0	1
> 69	0	0	0	0

Note: Noise sensitive building estimates are based on 2024 PointX data.

Table C2 – 2024 annual $L_{evening}$ contours

$L_{evening}$ (dB)	Community buildings	Hospitals	Schools	Places of worship
> 54	2	0	8	6
> 57	1	0	1	3
> 60	0	0	1	3
> 63	0	0	0	2
> 66	0	0	0	1
> 69	0	0	0	0

Note: Noise sensitive building estimates are based on 2024 PointX data.

Table C3 – 2024 annual L_{night} contours

L_{night} (dB)	Community buildings	Hospitals	Schools	Places of worship
> 48	2	0	14	7
> 51	1	0	2	3
> 54	1	0	1	3
> 57	0	0	0	2
> 60	0	0	0	1
> 63	0	0	0	0
> 66	0	0	0	0

Note: Noise sensitive building estimates are based on 2024 PointX data.

Table C4 – 2024 annual L_{den} contours

L_{den} (dB)	Community buildings	Hospitals	Schools	Places of worship
> 55	3	0	15	11
> 60	1	0	2	3
> 65	0	0	1	2
> 70	0	0	0	1
> 75	0	0	0	0

Note: Noise sensitive building estimates are based on 2024 PointX data.

Table C5 – 2024 annual $L_{Aeq,16h}$ contours

$L_{Aeq,16h}$ (dB)	Community buildings	Hospitals	Schools	Places of worship
> 54	2	0	10	7
> 57	1	0	4	3
> 60	0	0	1	3
> 63	0	0	1	3
> 66	0	0	0	1
> 69	0	0	0	0

Note: Noise sensitive building estimates are based on 2024 PointX data.

Table C6 – 2024 annual 16-hour day N65 contours

N65	Community buildings	Hospitals	Schools	Places of worship
> 20	8	0	23	21
> 50	6	0	18	10
> 100	3	0	12	8
> 200	2	0	7	8
> 500	0	0	0	0

Note: Noise sensitive building estimates are based on 2024 PointX data.

Table C7 – 2024 annual 8-hour night N60 contours

N60	Community buildings	Hospitals	Schools	Places of worship
> 10	8	1	21	15
> 20	5	1	19	11
> 50	0	0	1	1

Note: Noise sensitive building estimates are based on 2024 PointX data.

Glossary

Technical terms and abbreviations	
ANCON	The CAA's civil aircraft noise contour model.
CAA	Civil Aviation Authority
dB	Decibel units describing sound level or changes of sound level.
dBA	Units of sound level on the A-weighted scale, which incorporates a frequency weighting approximating the characteristics of human hearing.
ERCD	Environmental Research and Consultancy Department of the CAA
GAL	Gatwick Airport Ltd
L_{Aeq}	Equivalent sound level of aircraft noise in dBA, often called 'equivalent continuous sound level'.
$L_{Aeq,16h}$	Equivalent sound level of aircraft noise in dBA for the 07:00-23:00 local time period.
L_{day}	Equivalent sound level of aircraft noise in dBA for the annual average 12-hour day period (07:00-19:00 local time).
L_{den}	Equivalent sound level of aircraft noise in dBA for the annual average 24-hour period with 5 dB weightings for $L_{evening}$ and 10 dB weightings for L_{night}.
$L_{evening}$	Equivalent sound level of aircraft noise in dBA for the annual average 4-hour evening period (19:00-23:00 local time).
L_{night}	Equivalent sound level of aircraft noise in dBA for the annual average 8-hour night period (23:00-07:00 local time).
N60	Number of aircraft noise events exceeding 60 dB $L_{Amax.}$
N65	Number of aircraft noise events exceeding 65 dB $L_{Amax.}$