

June 2023

London Luton Airport Expansion

Planning Inspectorate Scheme Ref: TR020001

Volume 5 Environmental Statement and Related Documents
5.03 Chapter 16 Noise and Vibration Figures 16.101 - 16.104

Application Document Ref: TR020001/APP/5.03
APFP Regulation: 5(2)(a)

The Planning Act 2008

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

London Luton Airport Expansion Development Consent Order 202x

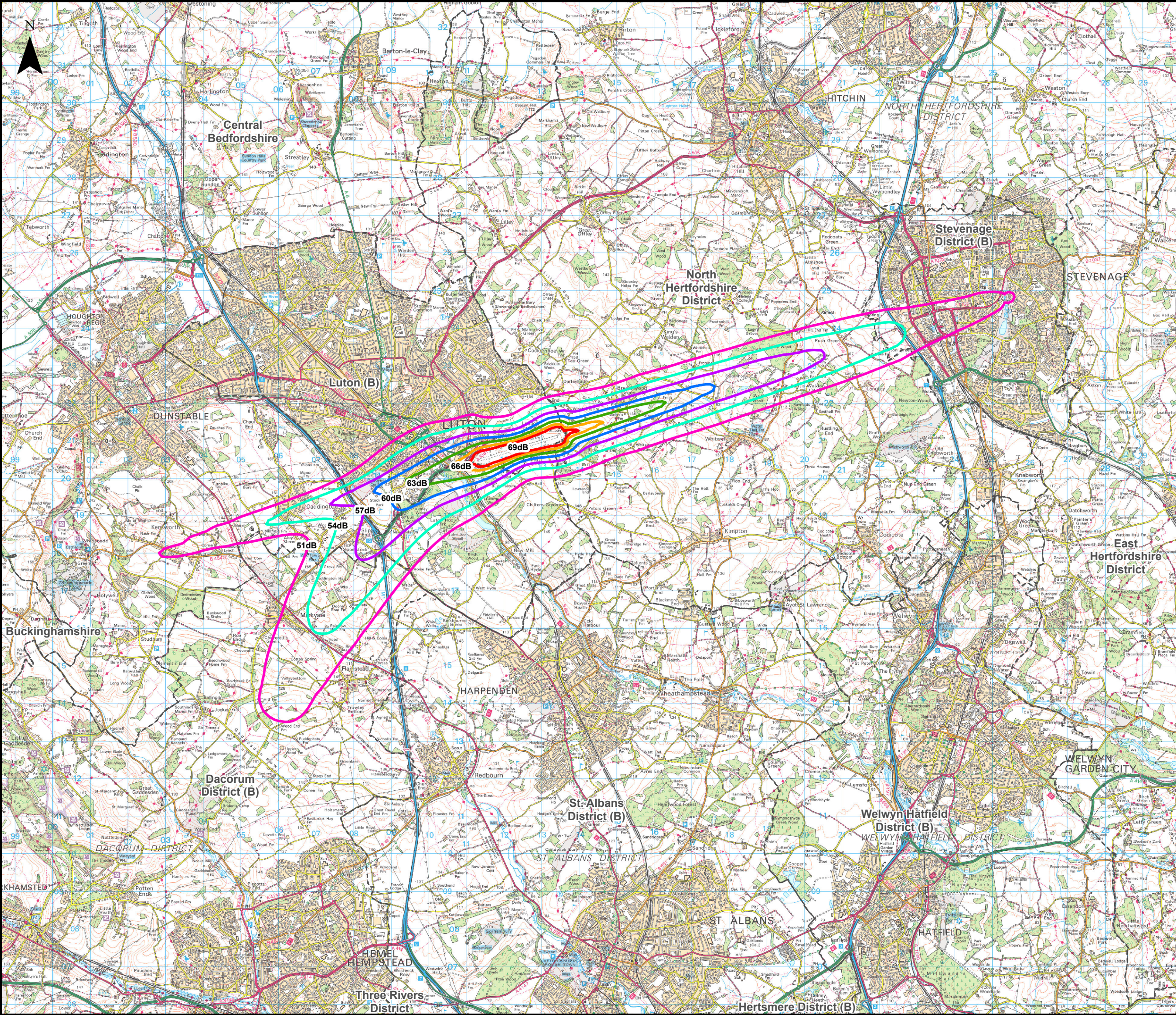
5.03 ENVIRONMENTAL STATEMENT CHAPTER 16 NOISE AND VIBRATION FIGURES 16.101 – 16.104

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|---|--------------------|
| Regulation number: | Regulation 5(2)(a) |
| Planning Inspectorate Scheme Reference: | TR020001 |
| Document Reference: | TR020001/APP/5.03 |
| Author: | Luton Rising |

| Version | Date | Status of Version |
|-------------|---------------|---|
| Issue 01 | February 2023 | Application issue |
| Revision 01 | June 2023 | Additional submissions (updated in response to Rule 9 letter) |
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All structure positions are indicative. The proposed works will be subject to detailed design development. The changes will be within limits of deviation specified in the Development Consent Order.

Legend

Local Authority Boundaries

Air Noise Contours in Decibels (dB) (2043 Do-Something Next Generation Daytime LAeq,16h)

- 51dB - Lowest Observed Adverse Effect Level (LOAEL)
- 54dB
- 57dB
- 60dB
- 63dB - Significant Observed Adverse Effect Level (SOAEL)
- 66dB
- 69dB - Unacceptable Adverse Effect Level (UAE)

| | | | | | |
|---|-------|---------|----------|----------|------|
| Additional submissions (updated in response to Rule 9 letter) | LP | CS | CS | 22/06/23 | P02 |
| First Issue | LP | CS | CS | 31/01/23 | P01 |
| Revision History | Drawn | Checked | Approved | Date | Rev. |

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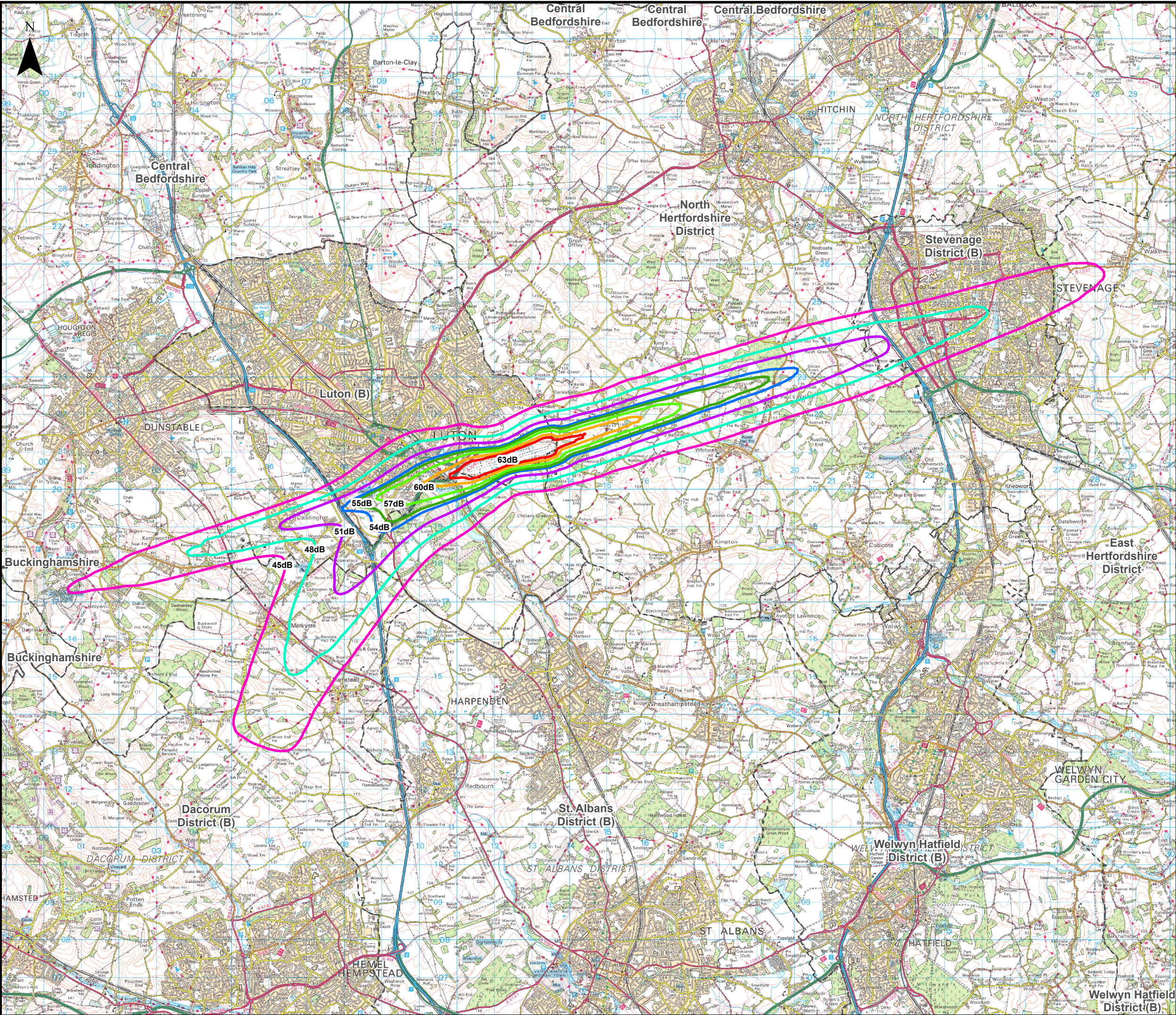
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Drawing Title
Figure 16.101
Extent of 2043 Do-Something Daytime LAeq,16h
Next Generation Air Noise Contours

| | | | | | |
|---|---------|----------|----------|-------------------|------|
| Purpose of issue Additional submissions (updated in response to Rule 9 letter) | | | | Suitability S2 | |
| Drawn | Checked | Approved | Date | Scale | Size |
| LP | CS | CS | 22/06/23 | 1:95,000 | A3 |

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| DCO Application Ref. TR020001 | APFP Regulation APFP 5(2)(a) | DCO Document Ref. TR020001/APP/5.03 |
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| Drawing Number LLADCO-3C-AEC-00-00-DR-YE-0111 | Revision P02 |
| Project - Phase - Originator - Asset/Zone - Sub Asset - Type- Discp. - Number | |



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Legend

- Local Authority Boundary
- Air Noise Contours in Decibels (dB) (2043 Do-Something Next Generation Night-time LAeq,8h)**
- 45dB - Lowest Observed Adverse Effect Level (LOAEL)
 - 48dB
 - 51dB
 - 54dB
 - 55dB - Significant Observed Adverse Effect Level (SOAEL)
 - 57dB
 - 60dB
 - 63dB - Unacceptable Adverse Effect Level (UAEI)

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|---|-------|---------|----------|----------|------|
| Additional submissions (updated in response to Rule 9 letter) | LP | CS | CS | 22/06/23 | P02 |
| First Issue | LP | CS | CS | 31/01/23 | P01 |
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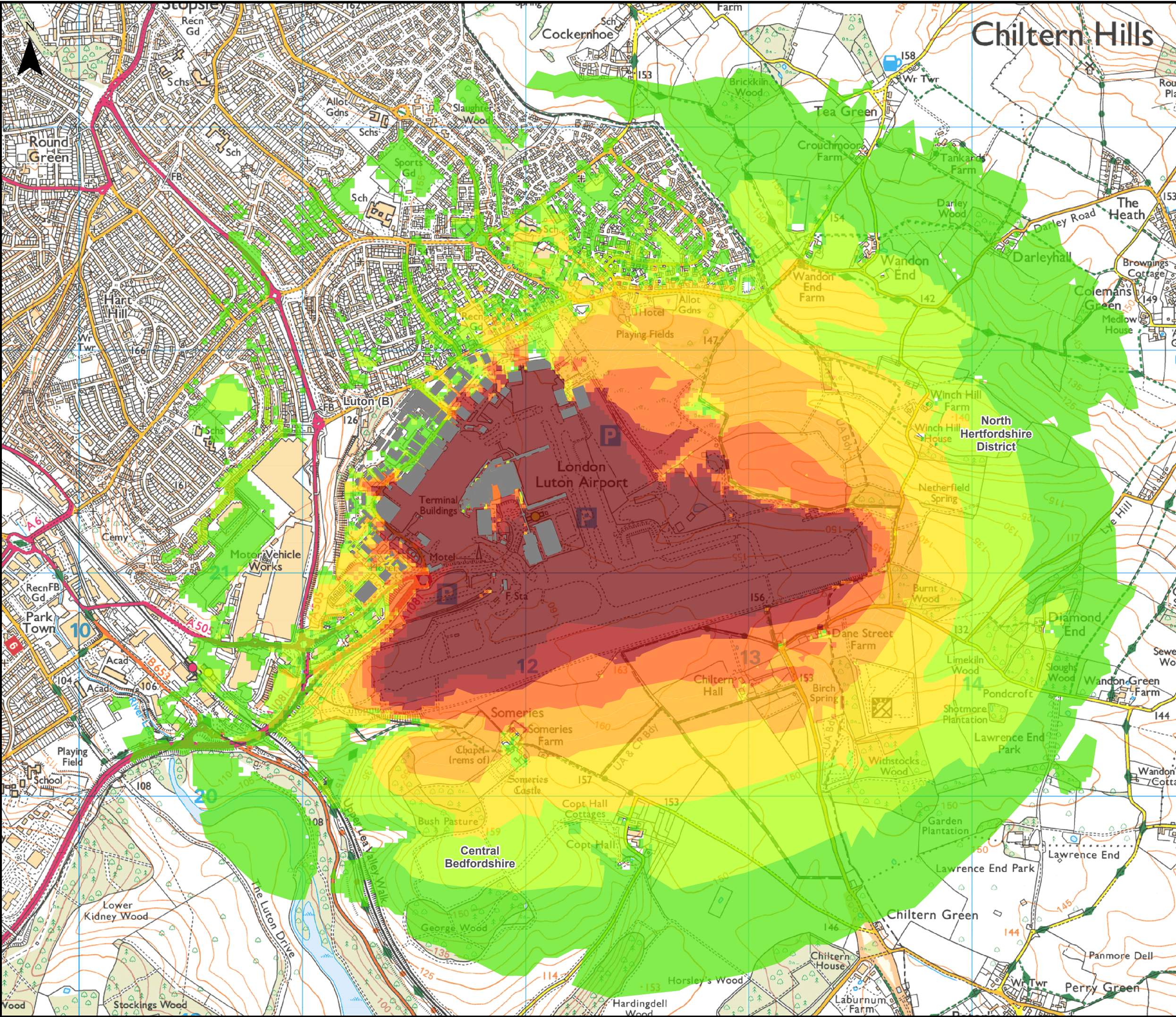
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Drawing Title
Figure 16.102
Extent of 2043 Do-Something Daytime LAeq,16h
Next Generation Air Noise Contours

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|---|-------------|----------|----------|----------|------|
| Purpose of issue | Suitability | | | | |
| Additional submissions (updated in response to Rule 9 letter) | S2 | | | | |
| Drawn | Checked | Approved | Date | Scale | Size |
| LP | CS | CS | 22/06/23 | 1:95,000 | A3 |

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| DCO Application Ref. | APFP Regulation | DCO Document Ref. |
| TR020001 | APFP 5(2)(a) | TR020001/APP/5.03 |

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| Drawing Number | Revision |
| LLADCO-3C-AEC-00-00-DR-YE-0112 | P02 |
| Project - Phase - Originator - Asset/Zone - Sub Asset - Type - Discp. - Number | |



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Legend

Local Authority Boundaries

Airport Site Buildings

Ground Noise Contours in Decibels (dB) (2019 Actuals Daytime LAeq,16h)

LOAEL - 53 dB

54 dB - 56 dB

57 dB - 59 dB

60 dB - 62 dB

SOAEL - 65 dB

66 dB - 68 dB

≥ UAEL

Lowest Observed Adverse Effect

Level (LOAEL) = 51 dB

Significant Observed Adverse Effect

Level (SOAEL) = 63 dB

Unacceptable Adverse Effect Level

(UAEL) = 69 dB

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| Additional submissions (updated in response to Rule 9 letter) | LP | CSh | CS | 22/06/23 | P02 |
| First Issue | LP | CSh | CS | 31/01/23 | P01 |
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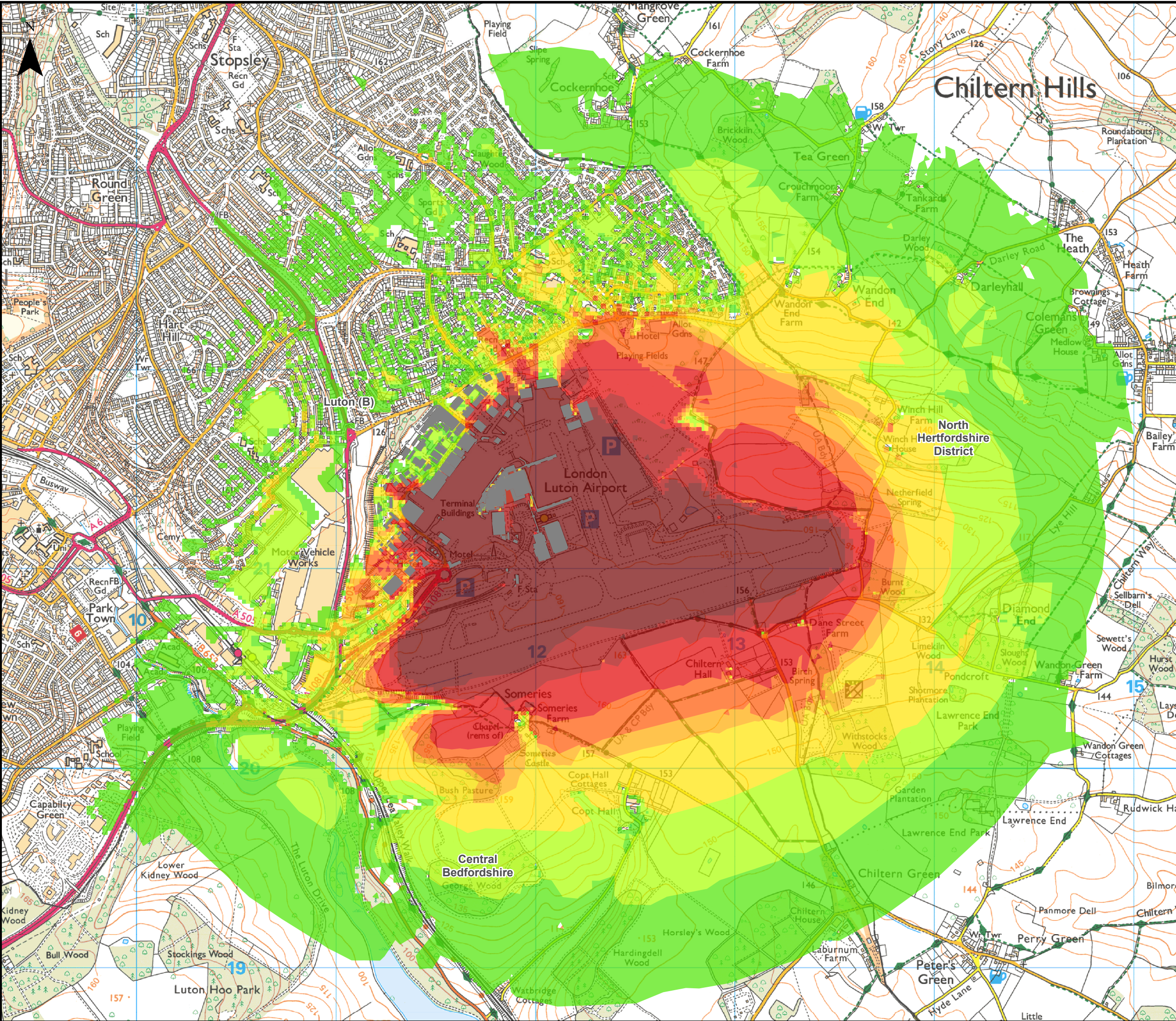
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Drawing Title
Figure 16.103
Extent of 2019 Actuals Daytime LAeq,16h
Ground Noise Contours

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|--|----------------|---------------------------------|------------------|--|-----------------|
| Purpose of issue Additional submissions (updated in response to Rule 9 letter) | | | | Suitability S2 | |
| Drawn LP | Checked CSh | Approved CS | Date 22/06/23 | Scale 1:16,000 | Size A3 |
| DCO Application Ref. TR020001 | | APFP Regulation APFP 5(2)(a) | | DCO Document Ref. TR020001/APP/5.03 | |
| Drawing Number LLADCO-3C-AEC-00-00-DR-YE-0113 | | | | | Revision P02 |
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Legend


- Local Authority Boundary
- Airport Site Buildings

Ground Noise Contours in Decibels (dB)
(2019 Actuals Night-time LAeq,8h)

- LOAEL - 47 dB
- 48 dB - 50 dB
- 51 dB - 53 dB
- 54 dB
- SOAEL - 56 dB
- 57 dB - 59 dB
- 60 - 62 dB
- ≥ UAEL

Lowest Observed Adverse Effect Level (LOAEL) = 45 dB
Significant Observed Adverse Effect Level (SOAEL) = 55 dB
Unacceptable Adverse Effect Level (UAEL) = 63 dB

| | | | | | |
|---|-------|---------|----------|----------|------|
| Additional submissions (updated in response to Rule 9 letter) | HW | CSH | CS | 15/06/23 | P02 |
| First Issue | LP | CSH | CS | 31/01/23 | P01 |
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Drawing Title
Figure 16.104
Extent of 2019 Actuals Night-time LAeq,8h
Ground Noise Contours

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|------------------|---|----------|----------|----------|-------------|--|
| Purpose of issue | Additional submissions (updated in response to Rule 9 letter) | | | | Suitability | |
| Drawn | Checked | Approved | Date | Scale | Size | |
| HW | CSH | CS | 15/06/23 | 1:18,000 | A3 | |

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|----------------------|-----------------|-------------------|
| DCO Application Ref. | APFP Regulation | DCO Document Ref. |
| TR020001 | APFP 5(2)(a) | TR020001/APP/5.03 |

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|---|----------|
| Drawing Number | Revision |
| LLADCO-3C-AEC-00-00-DR-YE-0114 | P02 |
| Project - Phase - Originator - Asset/Zone - Sub Asset - Type- Discp. - Number | |