

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 16.49 - 16.56**

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**

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**5.03 ENVIRONMENTAL STATEMENT CHAPTER 16 NOISE AND VIBRATION FIGURES 16.49 – 16.56**

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

<b>Version</b>	<b>Date</b>	<b>Status of Version</b>
Issue 01	February 2023	Application issue
Revision 01	June 2023	Additional submissions (updated in response to Rule 9 letter)

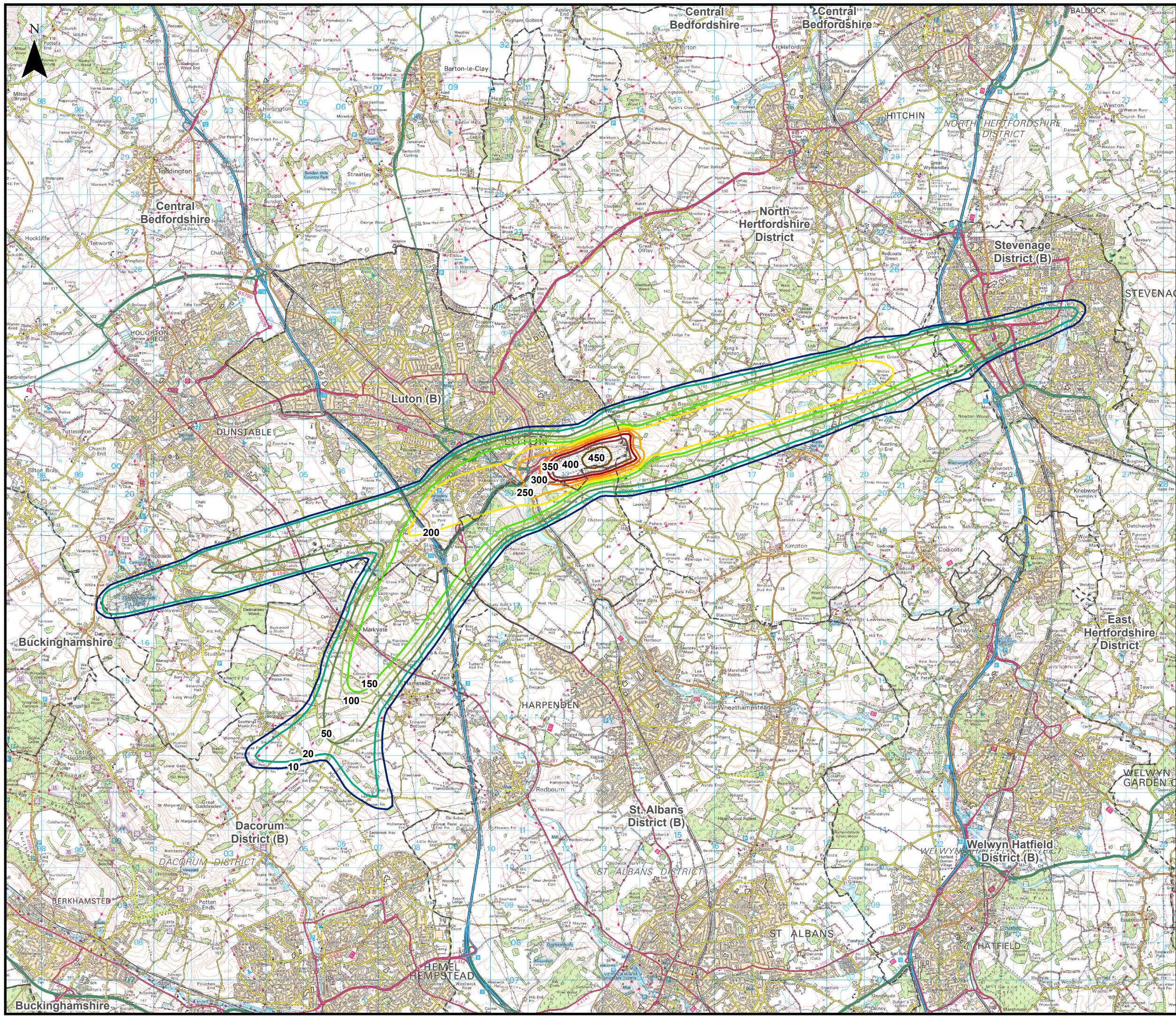


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All structure positions are indicative. The proposed works will be subject to detailed design development. The changes will be within limits of deviation specified in the Development Consent Order.

**Legend**

Local Authority Boundaries

**Noise Contours (2039 Do-Something Daytime number of aircraft above 65 Decibels (dB) LASmax (N65))**

- 10
- 20
- 50
- 100
- 150
- 200
- 250
- 300
- 350
- 400
- 450

Additional submissions (updated in response to Rule 9 letter)	LP	CSH	CS	20/06/23	P02
First Issue	MAB	CSH	CS	31/01/23	P01
Revision History	Drawn	Checked	Approved	Date	Rev.

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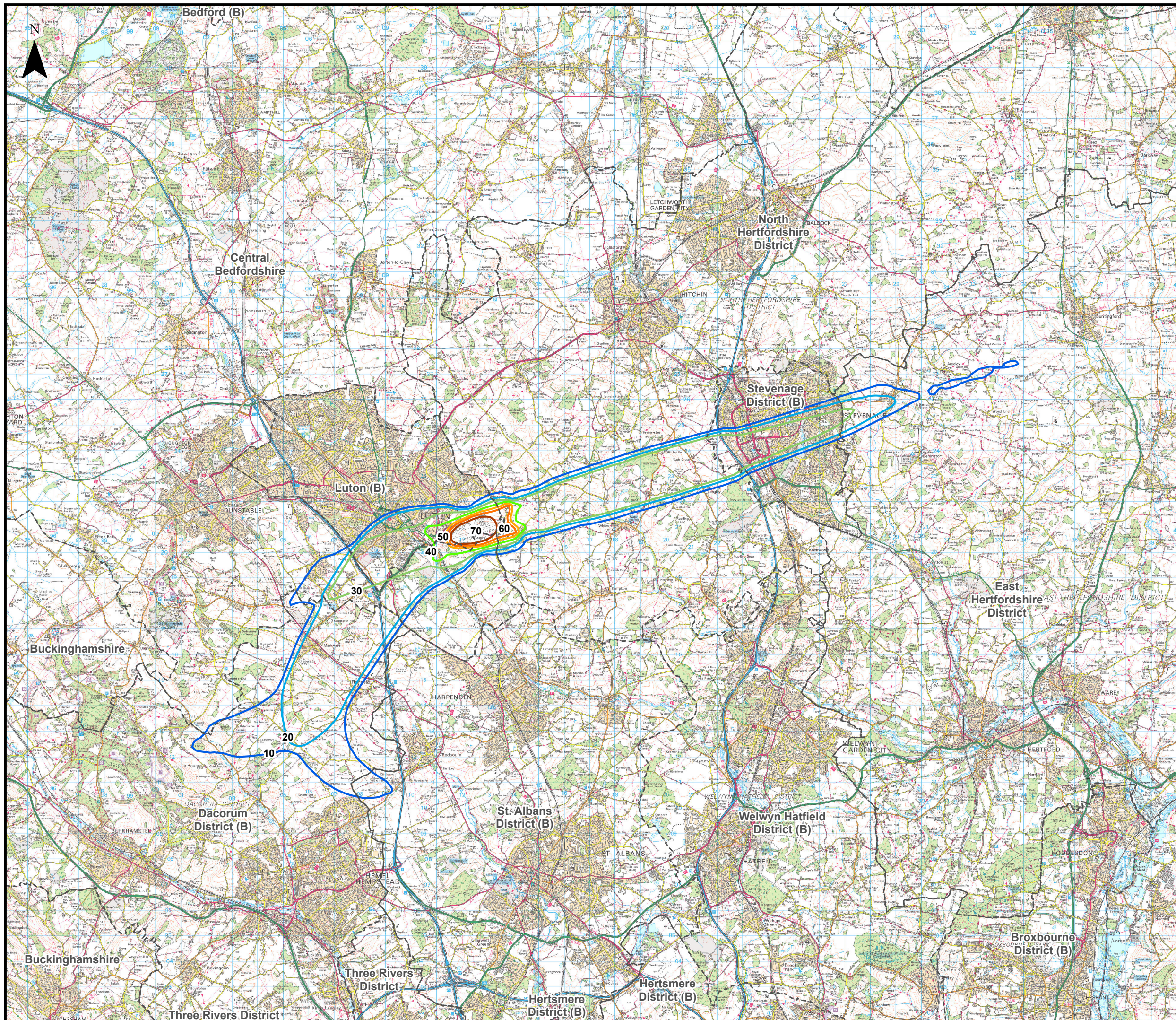
Drawing Title: Figure 16.49  
 Extent of 2039 Do-something Daytime number of aircraft above 65 Decibels (dB) LASmax (N65) Noise Contours

Purpose of issue	Additional submissions (updated in response to Rule 9 letter)				Suitability
Drawn	Checked	Approved	Date	Scale	Size
MAB	CSH	CS	20/06/23	1:95,000	A3

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

Drawing Number	Revision
LLADCO-3C-AEC-00-00-DR-YE-0049	P02
Project - Phase - Originator - Asset/Zone - Sub Asset - Type- Discp. - Number	





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**Legend**

Local Authority Boundaries

**Noise Contours (2039 Do-Something Night-time number of aircraft above 60 Decibels (dB) LASmax (N60))**

- 10
- 20
- 30
- 40
- 50
- 60
- 70

Additional submissions (updated in response to Rule 9 letter)	LP	CSh	CS	20/06/23	P02
First Issue	MAB	CSh	CS	31/01/23	P01
Revision History	Drawn	Checked	Approved	Date	Rev.

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Drawing Title: Figure 16.50  
 Extent of 2039 Do-Something Night-time number of aircraft above 60 Decibels (dB) LASmax (N60) Noise Contours

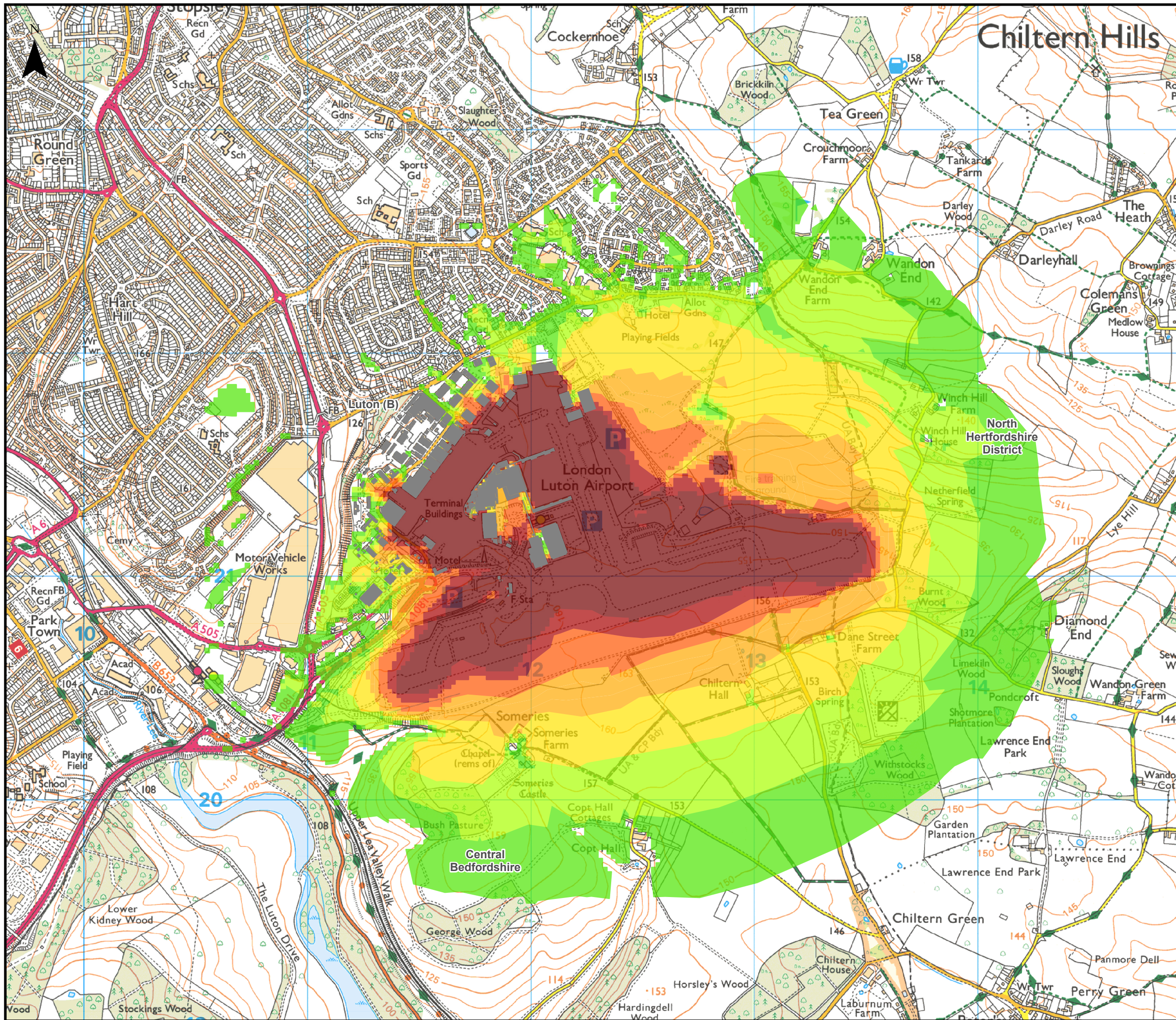
Purpose of issue	Additional submissions (updated in response to Rule 9 letter)				Suitability
Drawn	Checked	Approved	Date	Scale	Size
MAB	CSh	CS	20/06/23	1:140,000	A3

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

Drawing Number	Revision
LLADCO-3C-AEC-00-00-DR-YE-0050	P02

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**Legend**

- Local Authority Boundary
- Airport Site Buildings
- Ground Noise Contours in Decibels (dB) (2039 Do-Minimum 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

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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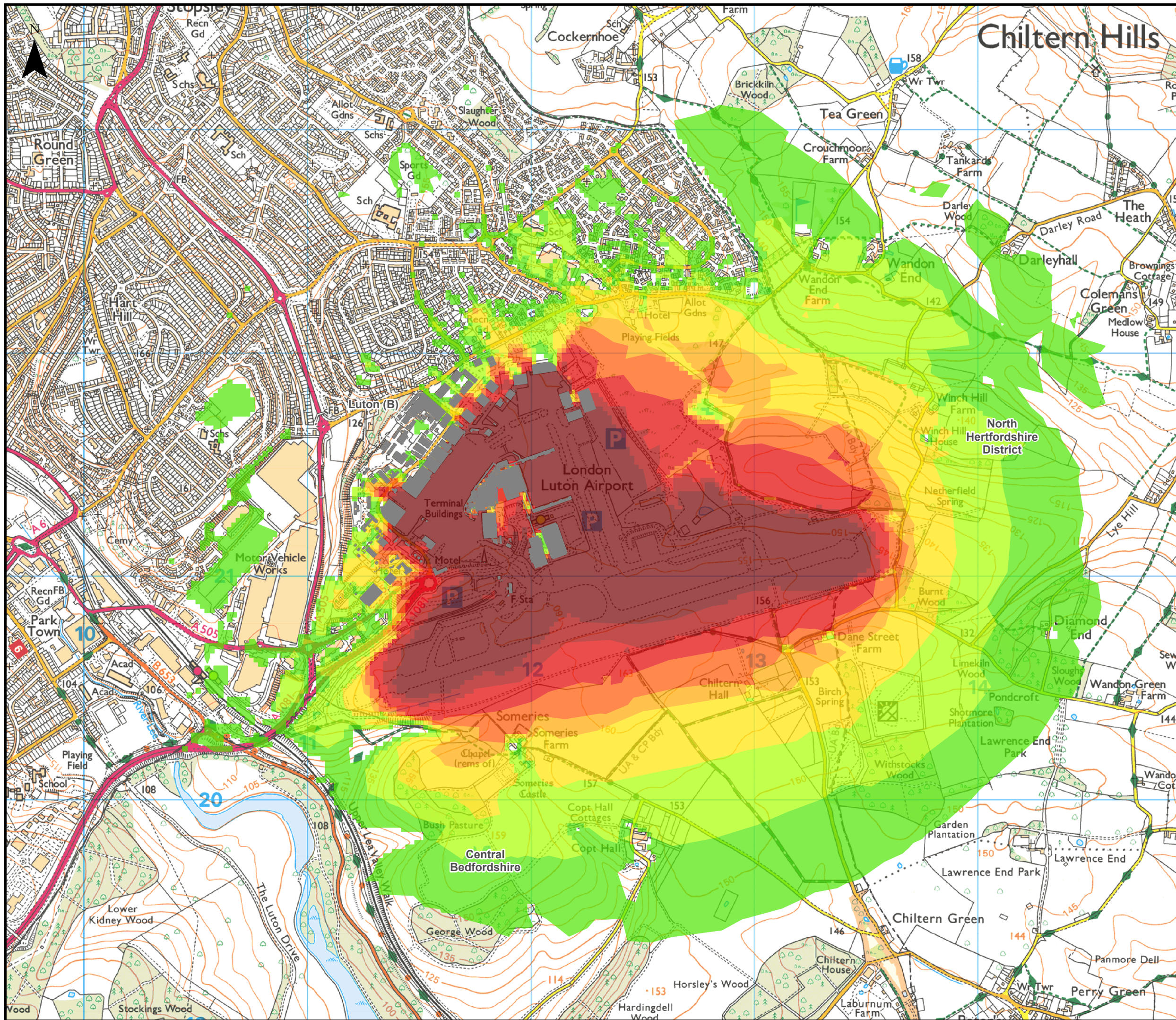
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**Figure 16.51  
 Extent of 2039 Do-Minimum Daytime LAeq,16h  
 Ground Noise Contours**

Purpose of issue				Suitability	
Additional submissions (updated in response to Rule 9 letter)				S2	
Drawn	Checked	Approved	Date	Scale	Size
LP	CSH	CS	22/06/23	1:16,000	A3

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

Drawing Number	Revision
LLADCO-3C-AEC-00-00-DR-YE-0051	P02
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**Legend**

- Local Authority Boundary
- Airport Site Buildings
- Ground Noise Contours in Decibels (dB) (2039 Do-Minimum 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)	LP	CSH	CS	22/06/23	P02
First Issue	LP	CSH	CS	31/01/23	P01
Revision History	Drawn	Checked	Approved	Date	Rev.

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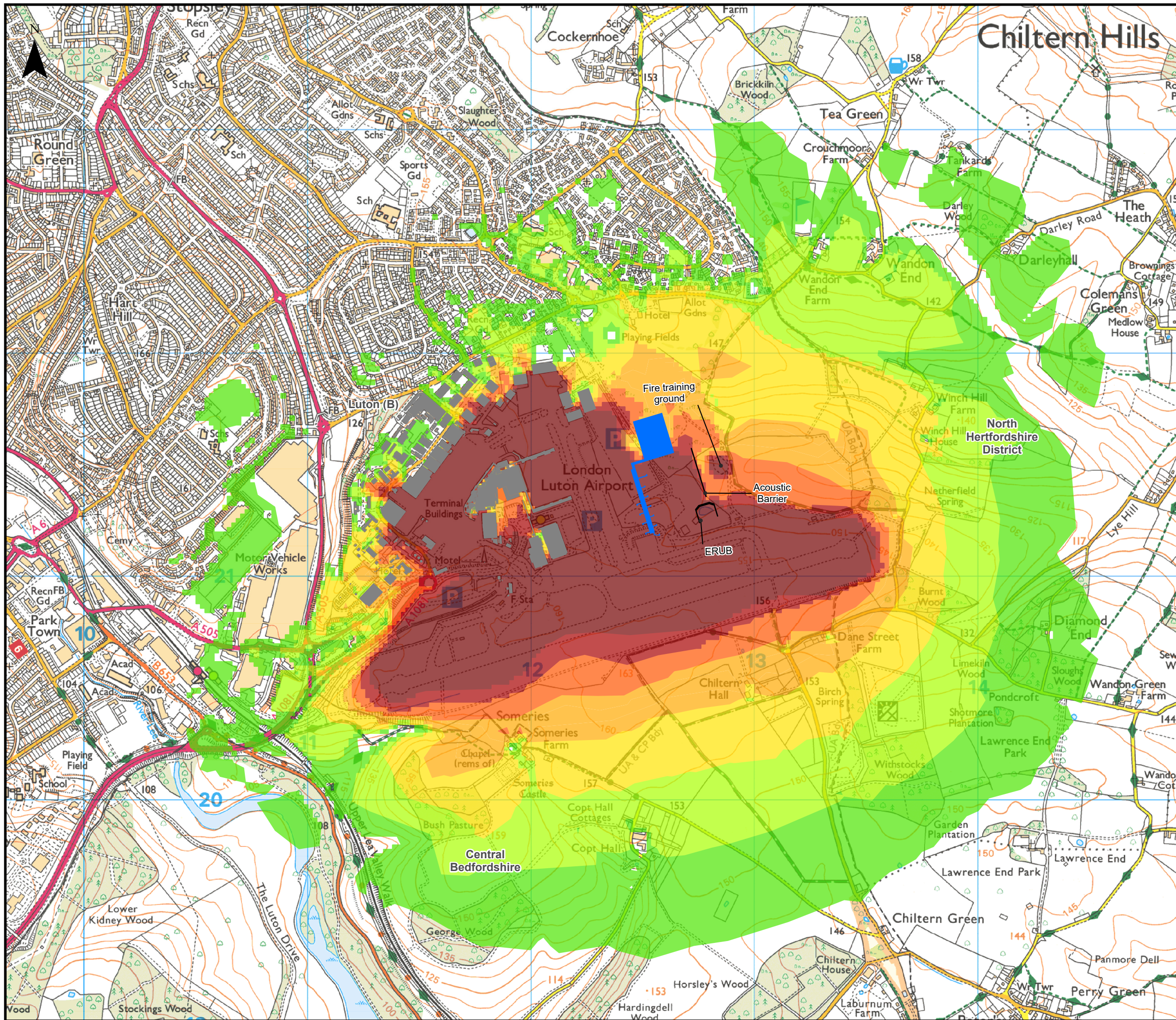
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 Extent of 2039 Do-Minimum Night-time LAeq,8h Ground Noise Contours

Purpose of issue				Suitability	
Additional submissions (updated in response to Rule 9 letter)				S2	
Drawn	Checked	Approved	Date	Scale	Size
LP	CSH	CS	22/06/23	1:16,000	A3

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

Drawing Number	Revision
LLADCO-3C-AEC-00-00-DR-YE-0054	P02
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**Legend**

- Local Authority Boundary
- Proposed Terminal - Assessment Phase 2a
- Airport Site Buildings

**Ground Noise Contours in Decibels (dB) (2039 Do-Something 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

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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Drawing Title  
 Figure 16.53  
 Extent of 2039 Do-Something Daytime LAeq,16h Ground Noise Contours

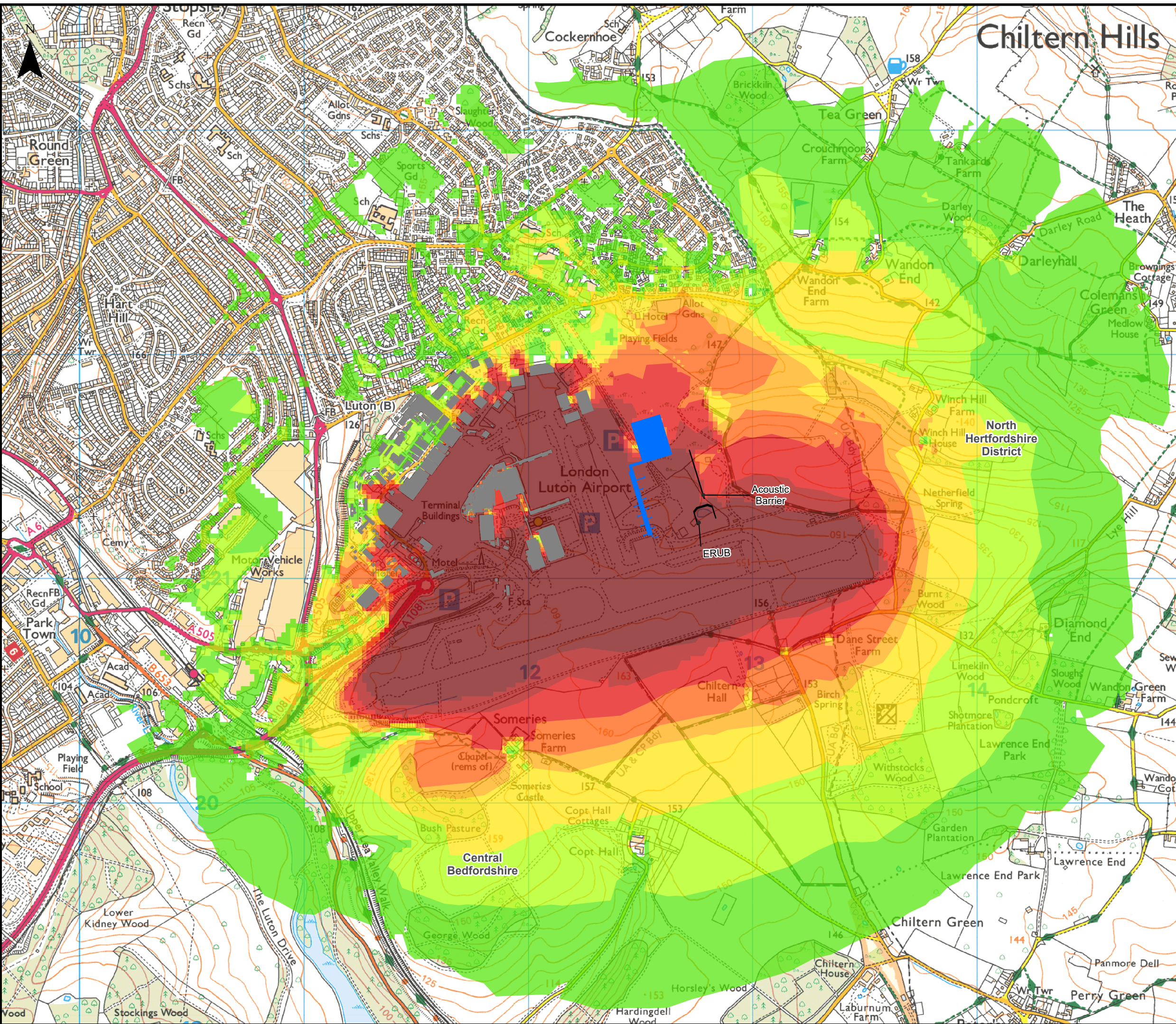
Purpose of issue	Additional submissions (updated in response to Rule 9 letter)					Suitability
Drawn	Checked	Approved	Date	Scale	Size	S2
LP	CS	CS	22/06/23	1:16,000	A3	

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

Drawing Number	Revision
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**Legend**

- Local Authority Boundary
- Airport Site Buildings
- Proposed Terminal - Assessment Phase 2a
- Ground Noise Contours in Decibels (dB) (2039 Do-Something 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)	LP	CSH	CS	22/06/23	P02
First Issue	LP	CSH	CS	31/01/23	P01
Revision History	Drawn	Checked	Approved	Date	Rev.

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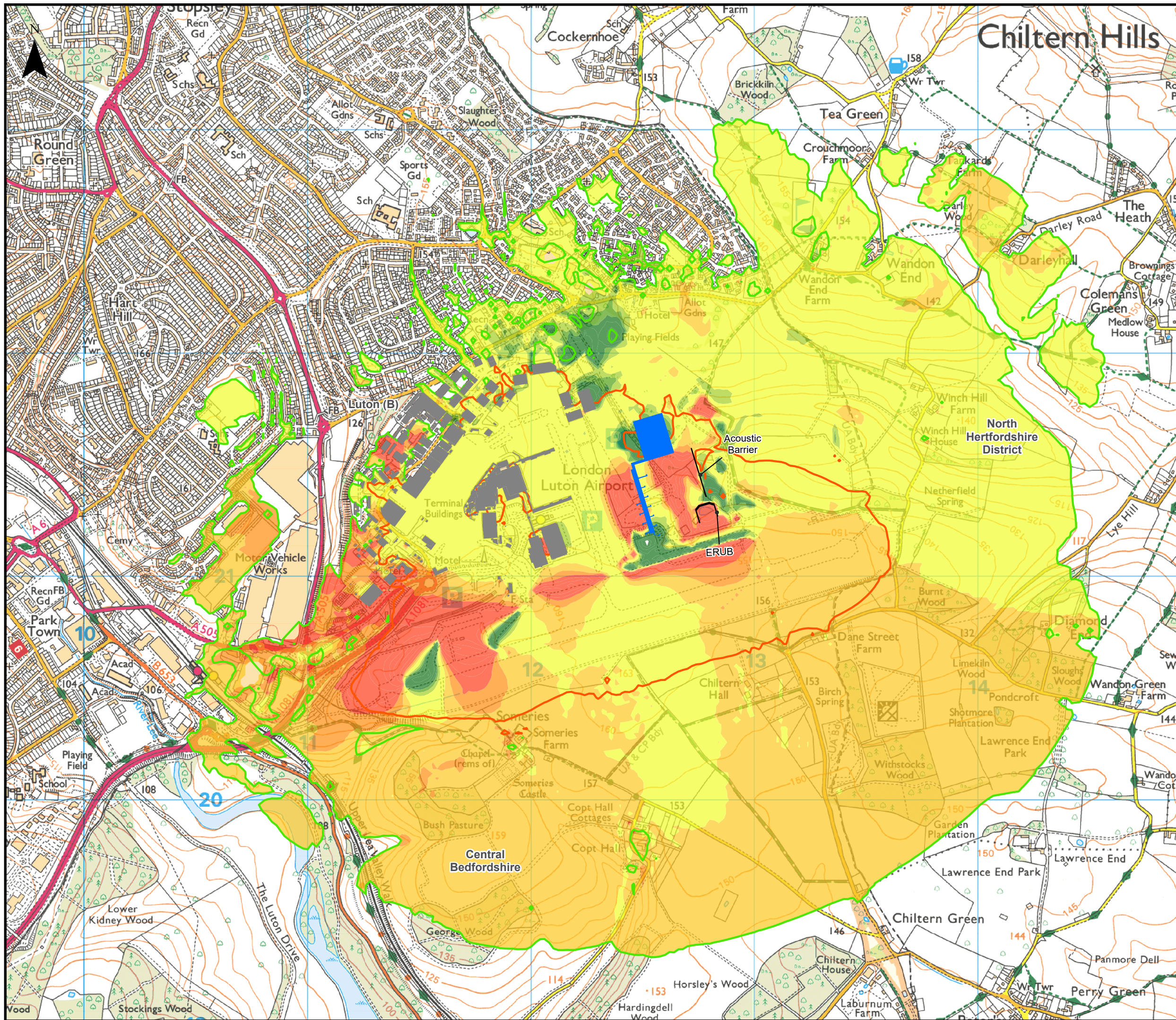
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 Extent of 2039 Do-Something Night-time LAeq,8h Ground Noise Contours

Purpose of issue				Suitability	
Additional submissions (updated in response to Rule 9 letter)				S2	
Drawn	Checked	Approved	Date	Scale	Size
LP	CSH	CS	22/06/23	1:16,000	A3

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

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**Legend**

- Local Authority Boundaries
- Airport Site Buildings
- Proposed Terminal - Assessment Phase 2a

**Change in 2039 Do-Something - Do-Minimum Daytime LAeq,16h Ground Noise Contours**

- 3.0 dB or more decrease
- 2.0 - 2.9 dB decrease
- 1.0 - 1.9 dB decrease
- 1.0 dB decrease - 1.0 dB increase
- 1.0 - 1.9 dB increase
- 2.0 - 2.9 dB increase
- 3.0 dB or more increase

**Ground Noise Contours in Decibels (dB) (2039 Do-Something Daytime LAeq,16h)**

- 51 dB - Lowest Observed Adverse Effect Level (LOAEL)
- 63 dB - Significant Observed Adverse Effect Level (SOAEL)

Additional submissions (updated in response to Rule 9 letter)	LP	CSH	CS	26/06/23	P02
First Issue	LP	CSH	CS	31/01/23	P01
Revision History	Drawn	Checked	Approved	Date	Rev.

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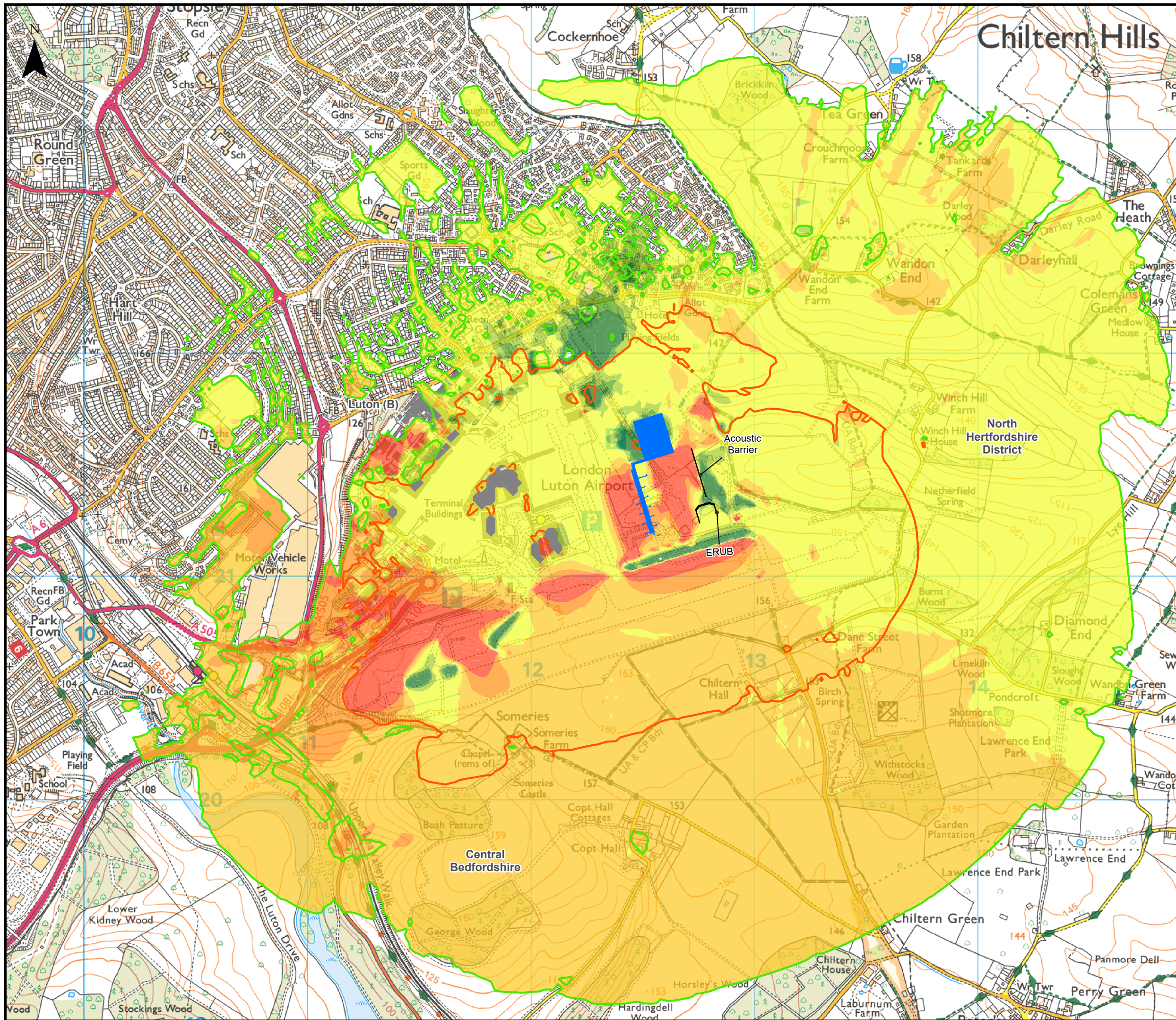
Drawing Title  
 Figure 16.55  
 Change in 2039 Do-Something - Do-Minimum Daytime LAeq,16h Ground Noise Contours

Purpose of issue				Suitability	
Additional submissions (updated in response to Rule 9 letter)				S2	
Drawn	Checked	Approved	Date	Scale	Size
LP	CSH	CS	26/06/23	1:16,000	A3

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

Drawing Number	Revision
LLADCO-3C-AEC-00-00-DR-YE-0055	P02
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- Legend**
- Local Authority Boundaries
  - Airport Site Buildings
  - Proposed Terminal - Assessment Phase 2a

- Change in 2039 Do-Something - Do-Minimum Night-time LAeq,8h Ground Noise Contours**
- 3.0 dB or more decrease
  - 2.0 - 2.9 dB decrease
  - 1.0 - 1.9 dB decrease
  - 1.0 dB decrease - 1.0 dB increase
  - 1.0 - 1.9 dB increase
  - 2.0 - 2.9 dB increase
  - 3.0 dB or more increase

- Ground Noise Contours in Decibels (dB) (2039 Do-Something Night-time LAeq,8h)**
- 45 dB - Lowest Observed Adverse Effect Level (LOAEL)
  - 55 dB - Significant Observed Adverse Effect Level (SOAEL)

Additional submissions (updated in response to Rule 9 letter)	LP	CSH	CS	26/06/23	P02
First Issue	LP	CSH	CS	31/01/23	P01
Revision History	Drawn	Checked	Approved	Date	Rev.

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Drawing Title  
 Figure 16.56  
 Change in 2039 Do-Something - Do-Minimum Night-time LAeq Ground Noise Contours

Purpose of issue					Suitability	
Additional submissions (updated in response to Rule 9 letter)					S2	
Drawn	Checked	Approved	Date	Scale	Size	
HW	CSH	CS	26/06/23	1:16,000	A3	

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

Drawing Number	Revision
LLADCO-3C-AEC-00-00-DR-YE-0056	P02
Project - Phase - Originator - Asset/Zone - Sub Asset - Type- Discp. - Number	