

- ★ Existing HOAC Site
- ◆ Schools and Groups
- ◆ Individual Memberships
- ▭ London Borough of Hillingdon
- ▭ 10km buffer ASA
- ▭ 20km buffer

HOAC Users



April 2025 Created by: Quod

Scale: 1:200,000 @ A4

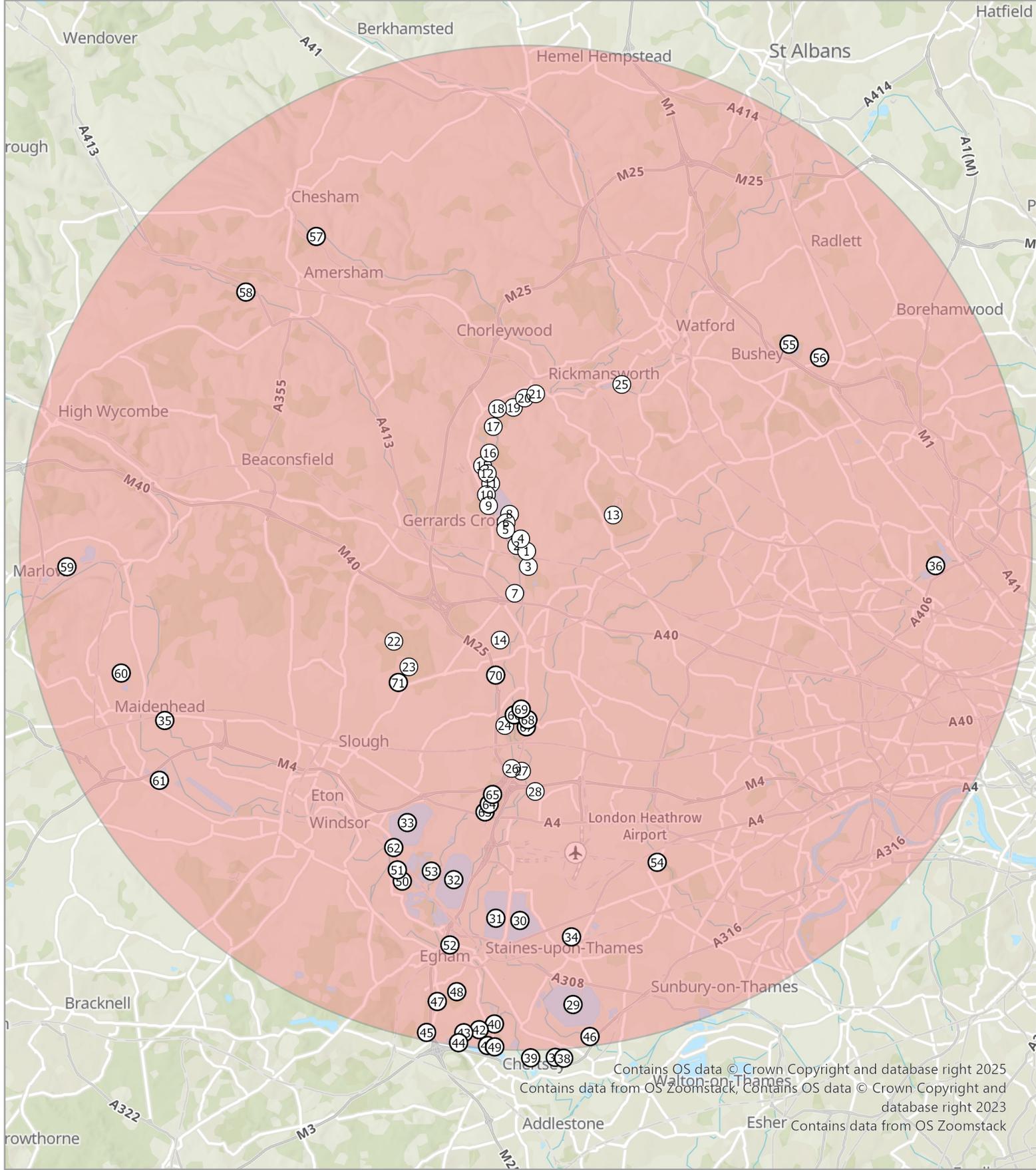


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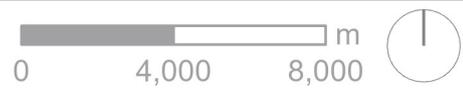
Appendix 6 – Map of 20-kilometre search area



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 Contains data from OS Zoomstack

Legend

- Study Area
- Longlist Sites



Date: May 2025

Scale: 1:200,000 @ A4



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Longlist of Sites Location Map

Appendix 7 – Noise and Air Quality Assessment of longlist sites



HWSFAC

Alternative Sites - Noise

12 June 2025

Introduction

Noise Screening Methodology

Site-by-site Review

NOISE SCREENING METHODOLOGY

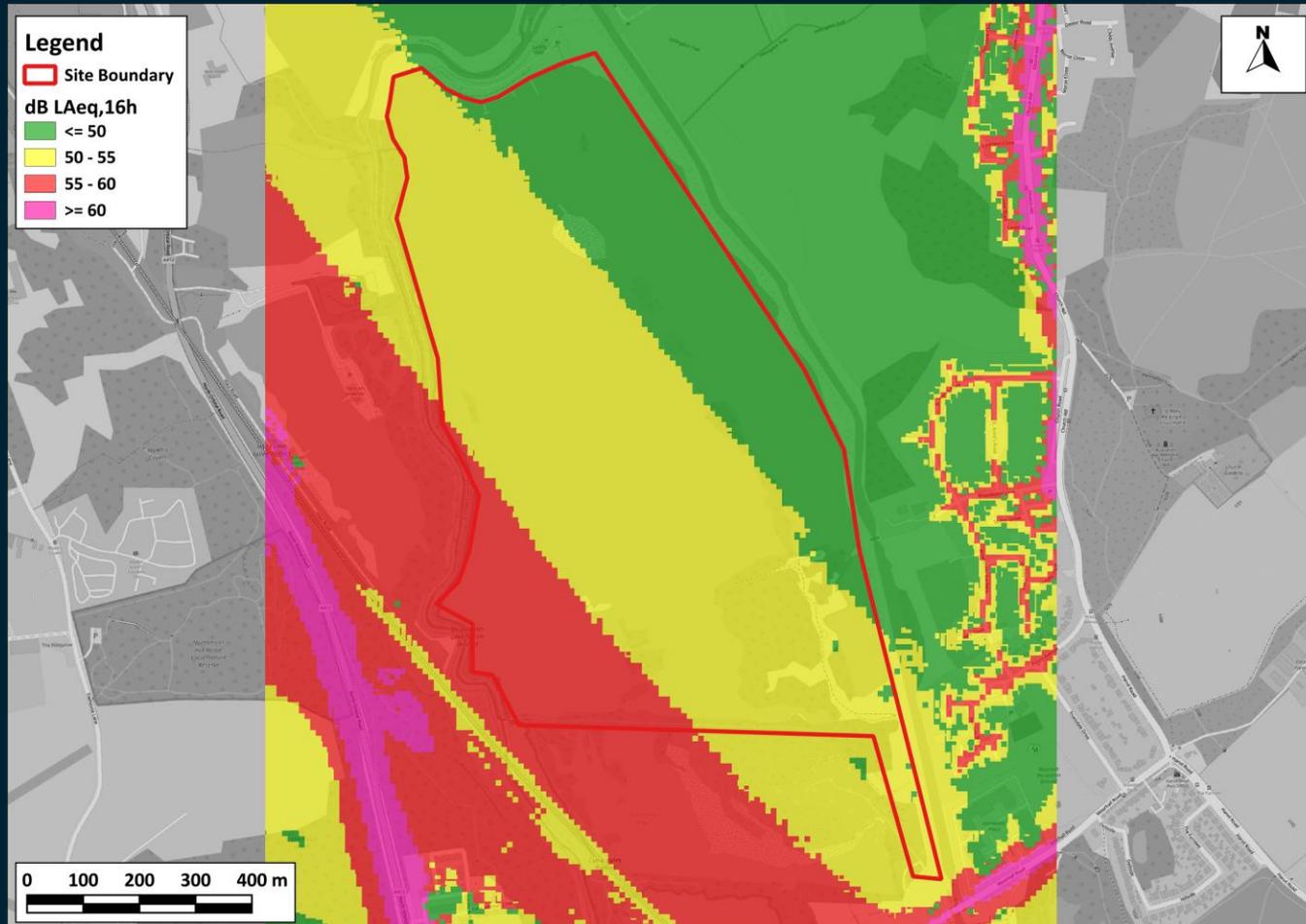
Initial Criteria

- NCL have utilised publicly available sources of noise mapping data in GIS software to evaluate noise constraints at each of the 34 identified alternative sites. Data sources include:
 - DEFRA Round 4 Strategic Noise Mapping (road traffic and railway noise)¹
 - Heathrow Noise Contours²
- Upper screening criteria - An initial screening criterion of 55 dB $L_{Aeq,16h}$ has been adopted in relation to the main waterbody having regards to safety in respect of verbal communication from instructors etc.
- Lower screening criteria - For sites which are predominantly below 55 dB $L_{Aeq,16h}$, further consideration was given the provision of a reasonably sized area below 50 dB $L_{Aeq,16h}$ for outdoor teaching and communication purposes, as well as any specific hearing-related sensitivities. Consideration has also been given to adjacent land areas however ownership and other constraints would need to be considered by others.
- These criteria generally accord with the Acoustics of Schools: A Design Guide which states “*noise levels in unoccupied playgrounds, playing fields and other outdoor areas should not exceed 55 dB $L_{Aeq,30min}$ and there should be at least one area suitable for outdoor teaching activities where noise levels are below 50 dB $L_{Aeq,30min}$* ”.

¹ <https://www.gov.uk/government/publications/strategic-noise-mapping-2022>

² <https://www.heathrow.com/company/local-community/noise/data/reports>

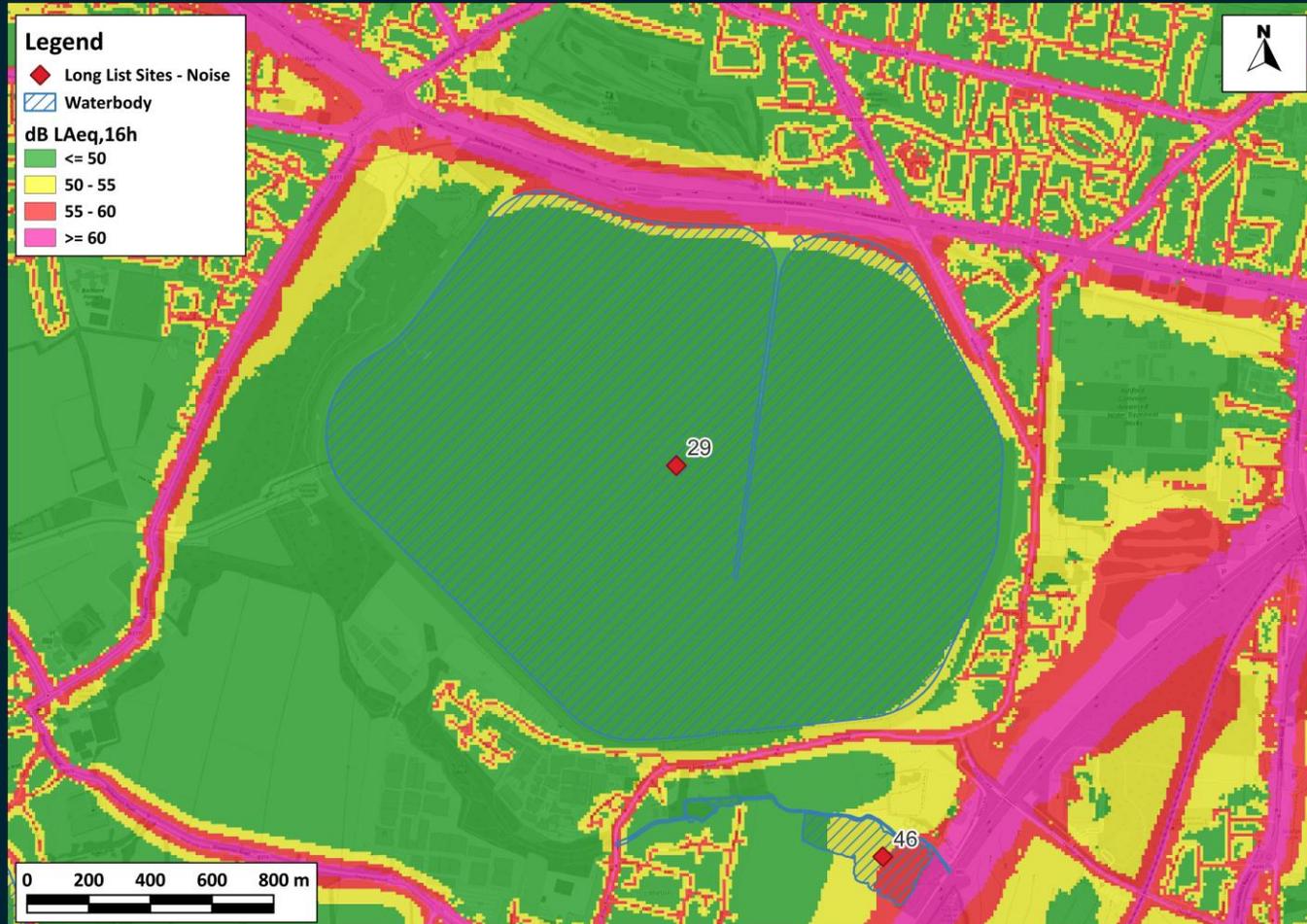
Broadwater Lake



Summary

- An initial screening of the cumulative (Road, Rail, and HS2) noise levels at the Broadwater Lake site demonstrates a large area of the Site falls below the 55 dB $L_{Aeq,16h}$.
- Additionally, areas along the eastern boundary achieve levels below 50 dB $L_{Aeq,16h}$ (suitable for outdoor teaching and communication purposes, as well as any specific hearing-related sensitivities).

Site – 29 (Queen Mary Reservoir)



Summary

- Only a small area of Site 29 exceeds 55 dB $L_{Aeq,16h}$,
- 98% of the area below the screening criterion is also below 50 dB $L_{Aeq,16h}$.
 - This Site aligns with the adopted criteria.

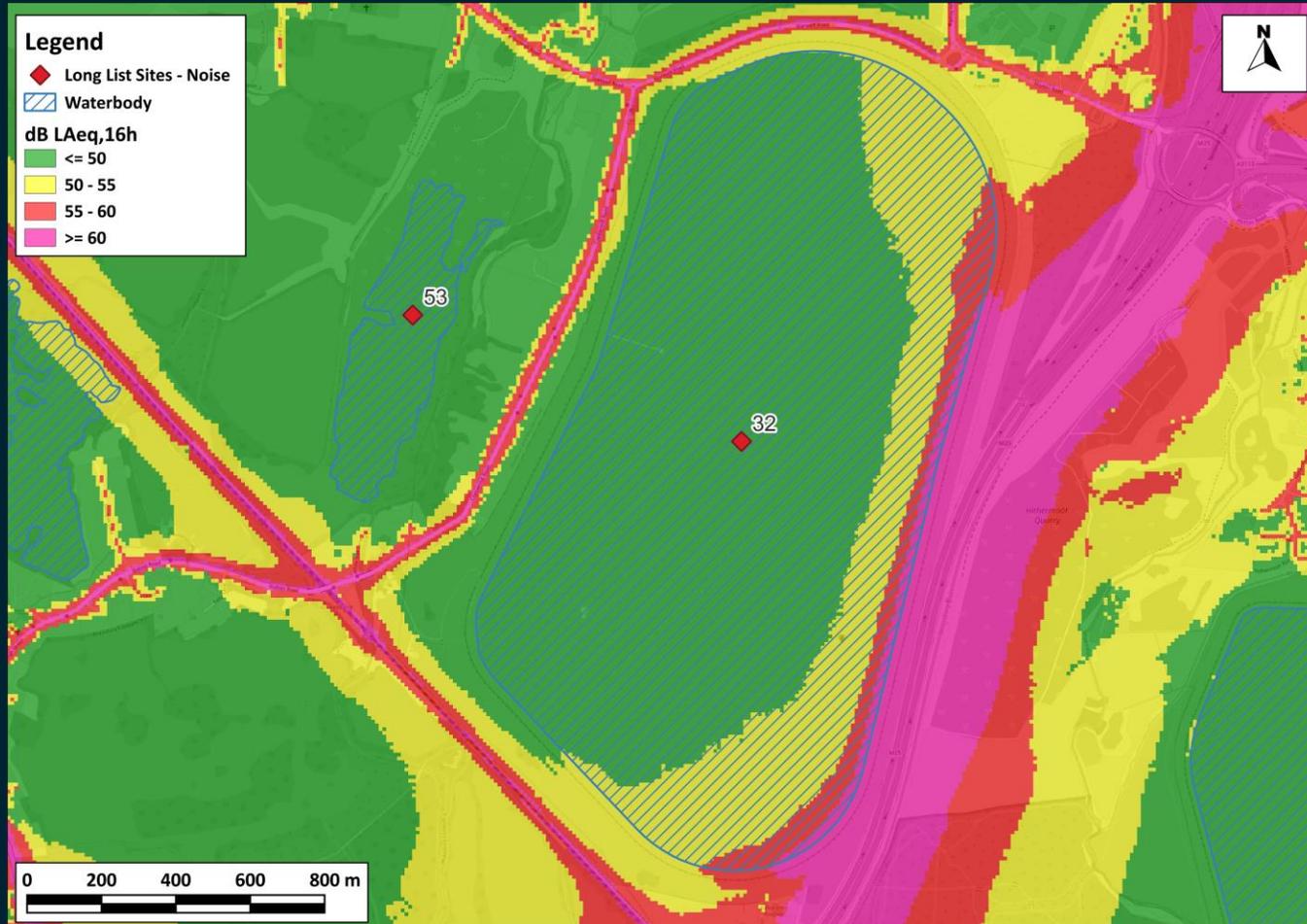
Site – 30 – 31 (Staines & King George VI Reservoir)



Summary

- Round 4 Strategic Noise Maps indicate only a small area of Site 30 exceeds 55 dB $L_{Aeq,16h}$
- 92% of the area below the screening criterion is also below 50 dB $L_{Aeq,16h}$.
 - However, following review of Heathrow 2023 noise contours air noise levels reach 60 dB $L_{Aeq,16h}$.
 - **This Site does not align with the adopted criteria.**
- Round 4 Strategic Noise Maps indicate only small area of Site 31 exceeds 55 dB $L_{Aeq,16h}$, 94% of the area below the screening criterion is also below 50 dB $L_{Aeq,16h}$.
 - However, following review of Heathrow 2023 noise contours air noise levels reach 60 dB $L_{Aeq,16h}$.
 - **This Site does not align with the adopted criteria.**

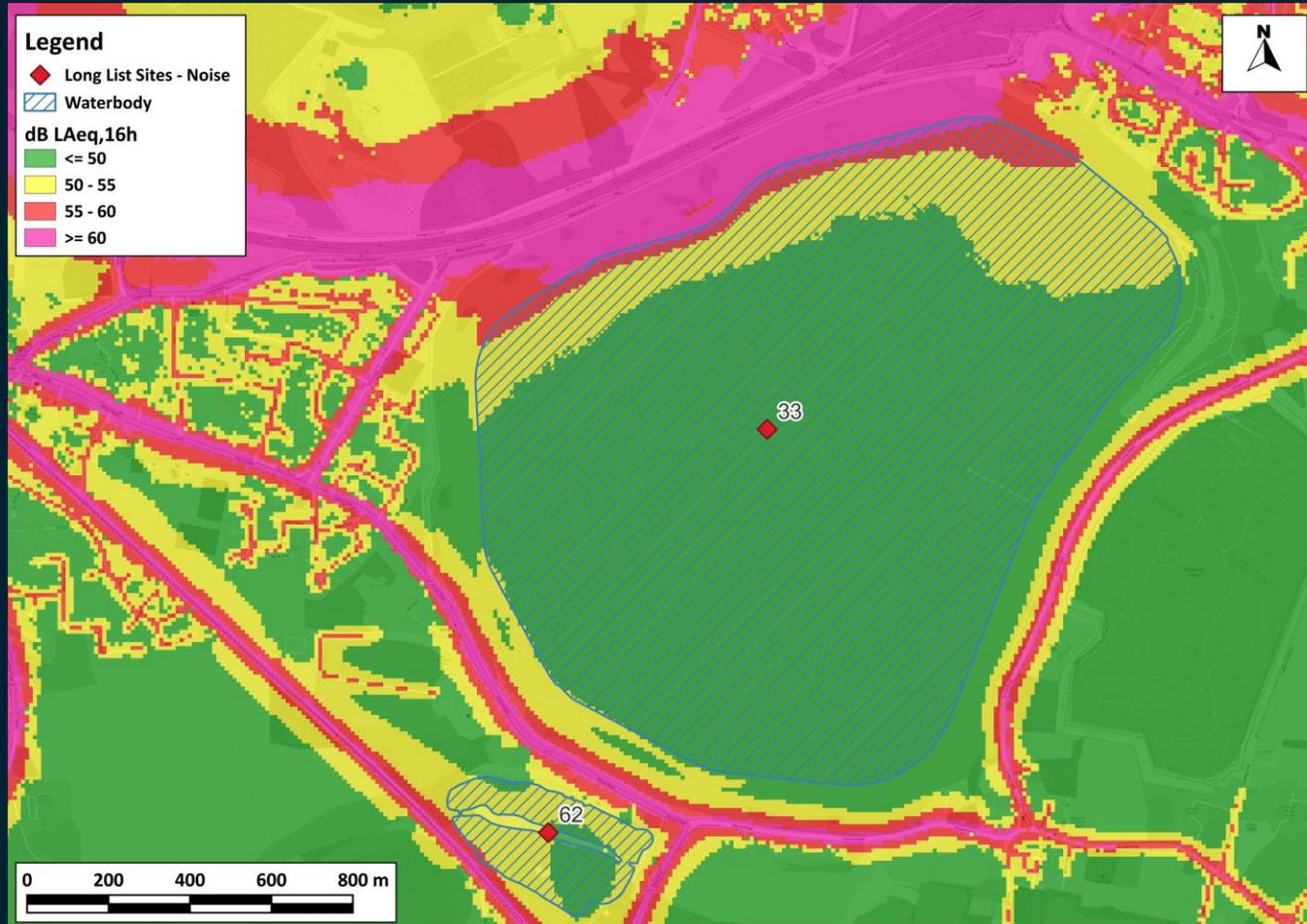
Site – 32 (Wraysbury Reservoir)



Summary

- Round 4 Strategic Noise Maps indicate a modest area of Site 32 exceeds 55 dB $L_{Aeq,16h}$, 77% of the area below the screening criterion is also below 50 dB $L_{Aeq,16h}$.
- However, following review of Heathrow 2023 noise contours air noise levels reach 63 dB $L_{Aeq,16h}$ based on average modal split contours, 66 dB $L_{Aeq,16h}$ during westerly operations.
- This Site does not align with the adopted criteria.

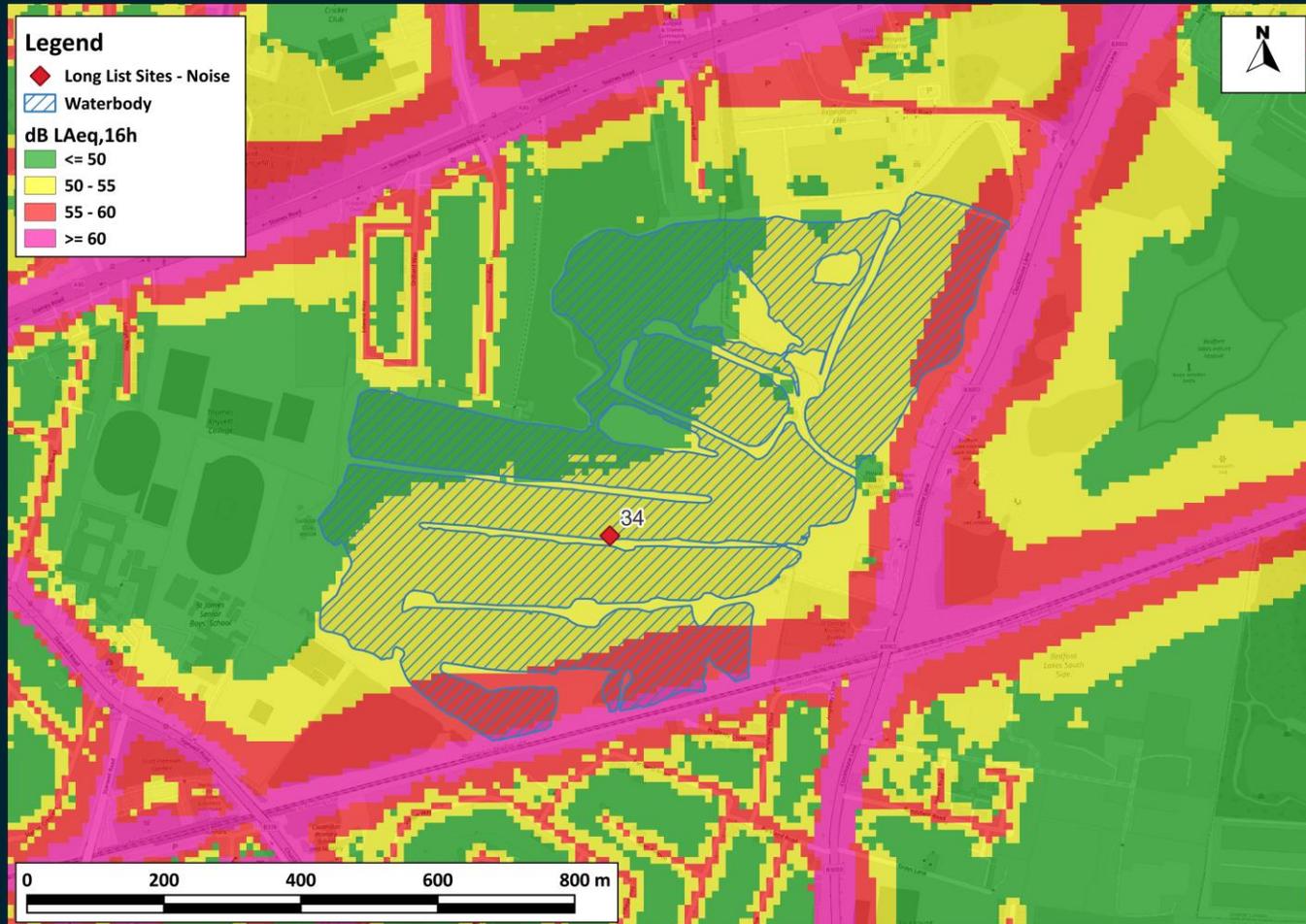
Site – 33 (The Queen Mother Reservoir)



Summary

- Round 4 Strategic Noise Maps indicate a modest area of Site 33 exceeds 55 dB $L_{Aeq,16h}$, 84% of the area below the screening criterion is also below 50 dB $L_{Aeq,16h}$.
- However, following review of Heathrow 2023 noise contours air noise levels reach 60 dB $L_{Aeq,16h}$ based on average modal split contours, 63 dB $L_{Aeq,16h}$ during westerly operations.
- This Site does not align with the adopted criteria.

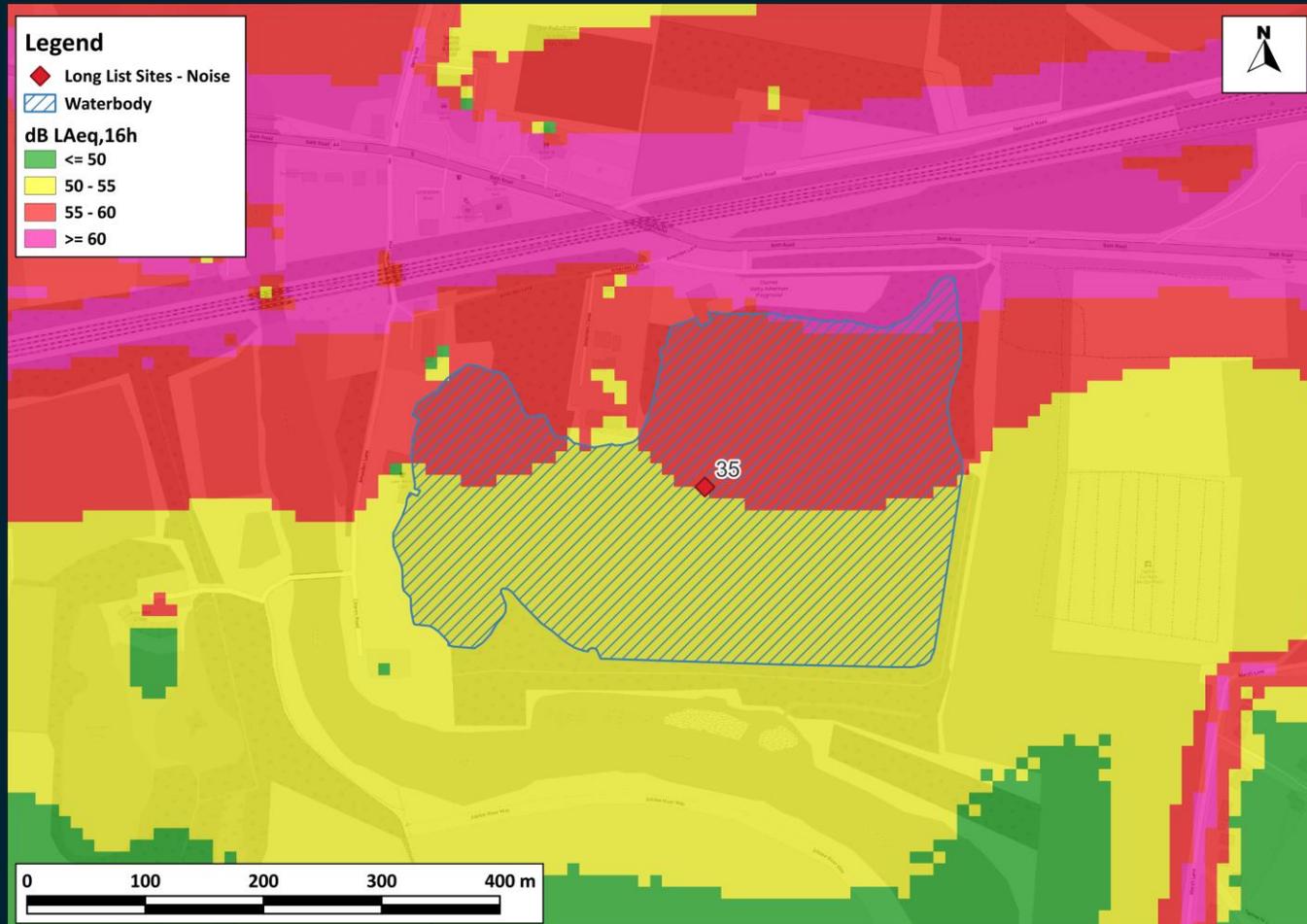
Site – 34 (???)



Summary

- Round 4 Strategic Noise Maps indicate a modest area of Site 34 exceeds 55 dB $L_{Aeq,16h}$, 30% of the area below the screening criterion is also below 50 dB $L_{Aeq,16h}$.
 - This Site aligns with the adopted criteria.

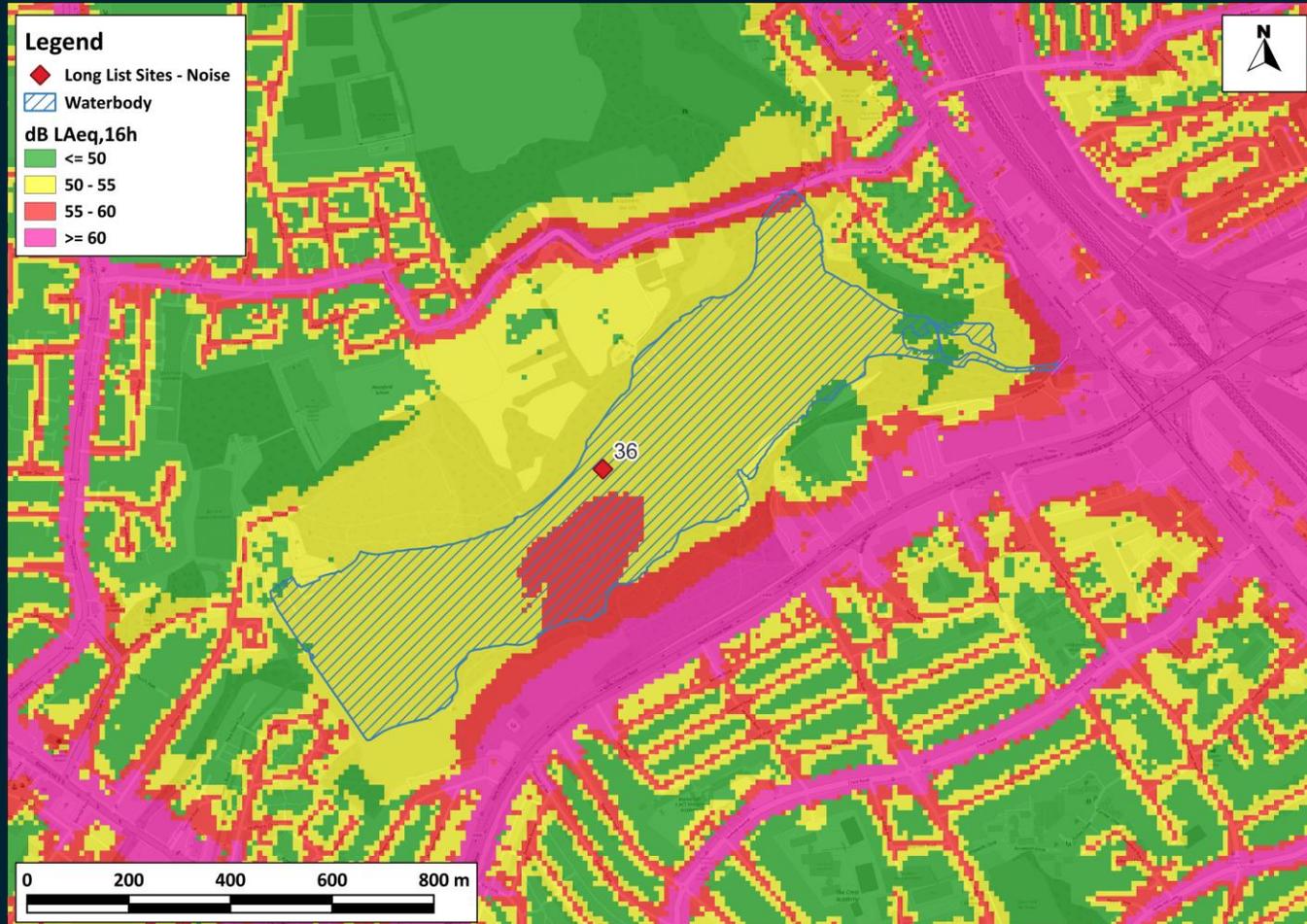
Site – 35 (Taplow Lake)



Summary

- Round 4 Strategic Noise Maps indicate there is only 6.7 Ha of Site 35 below 55 dB $L_{Aeq,16h}$ and no area below 50 dB $L_{Aeq,16h}$.
- This Site does not align with the adopted criteria.

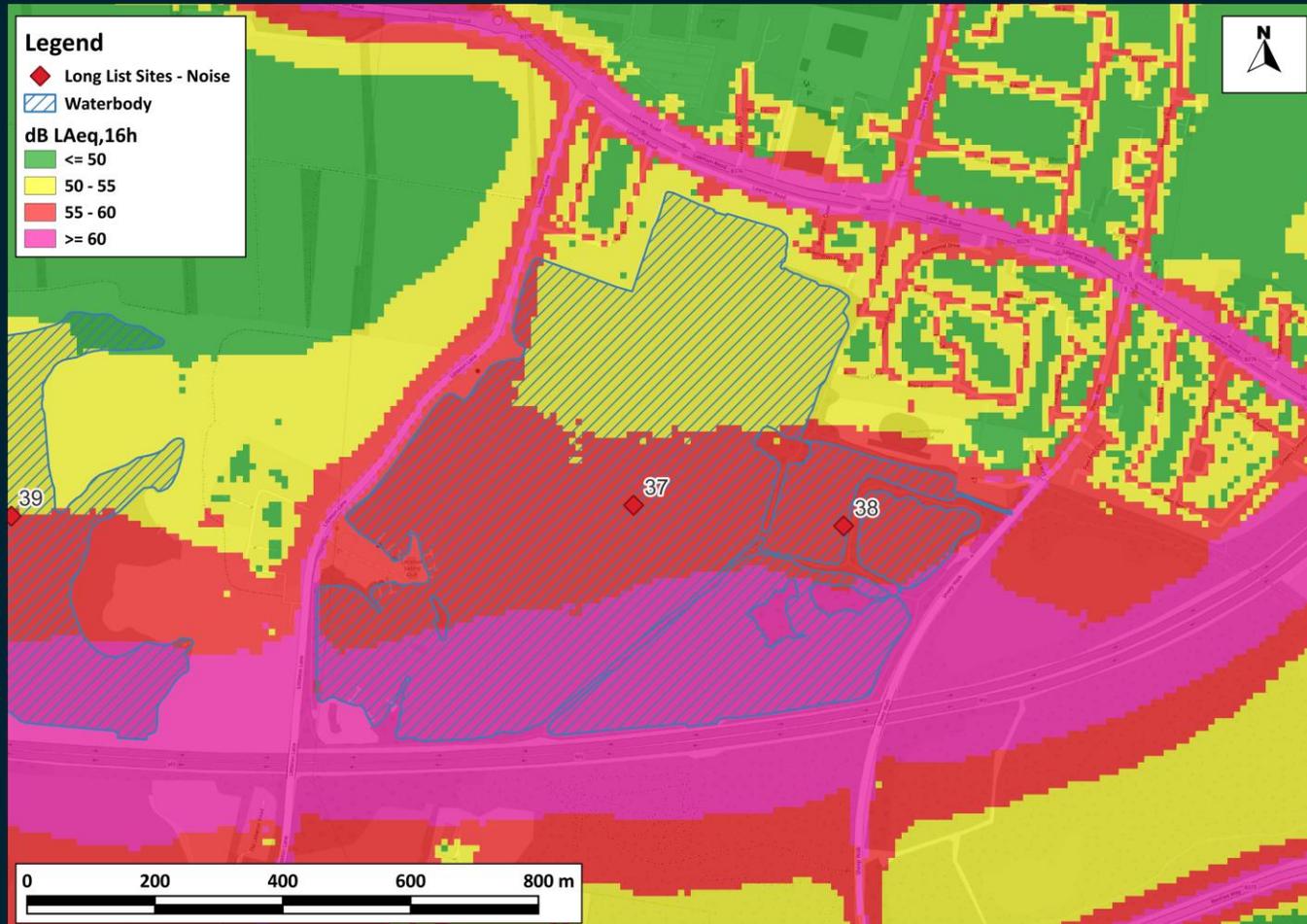
Site – 36 (Brent Reservoir)



Summary

- Round 4 Strategic Noise Maps indicate there is a large area of Site 35 below 55 dB $L_{Aeq,16h}$
- Only 2% of this area is below 50 dB $L_{Aeq,16h}$, however there are some pockets on land.
 - This Site is not ideal and is subject to appreciable noise constraints.

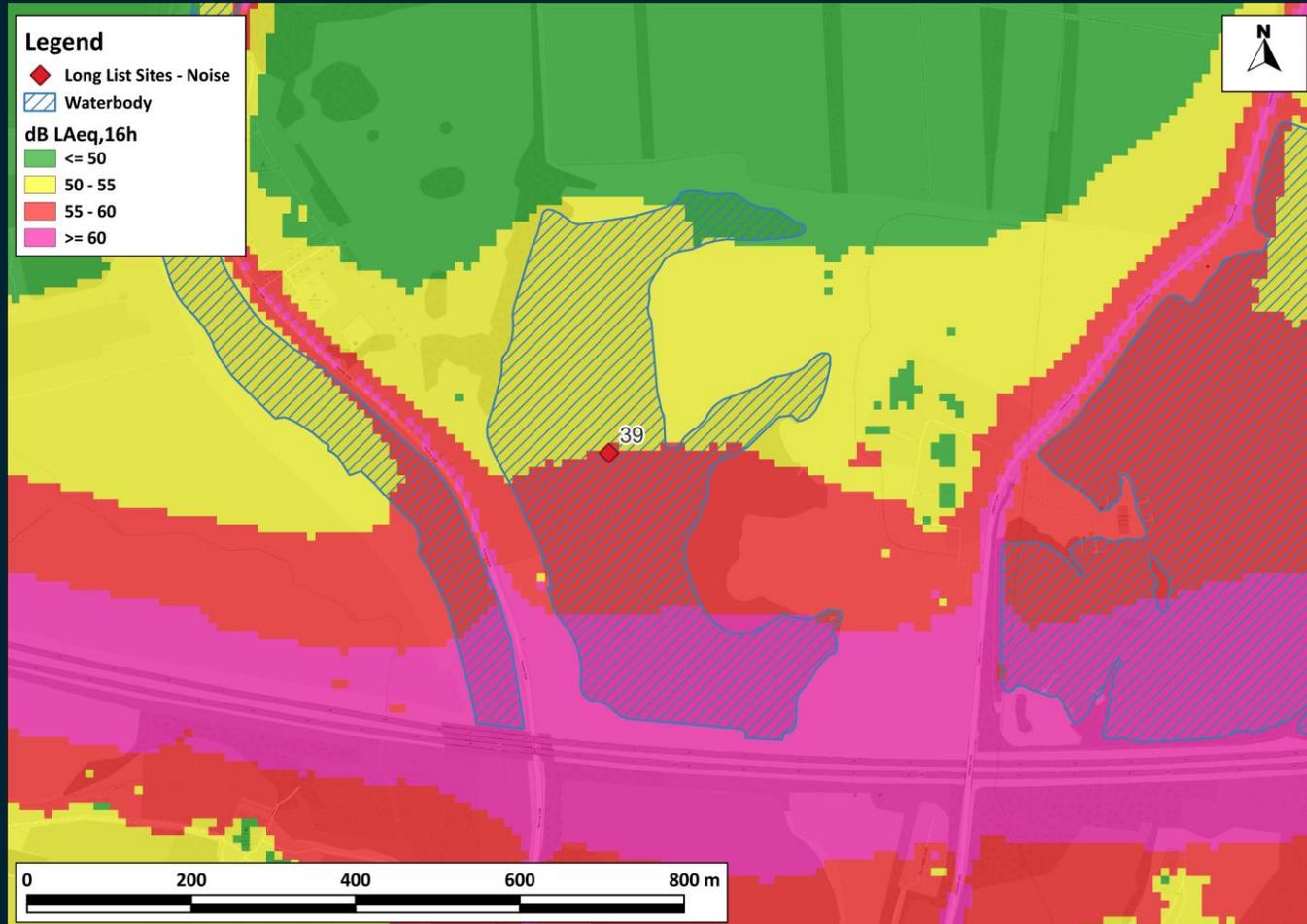
Site – 37 – 38 (Littleton Lake and The Gravel Pits)



Summary

- Round 4 Strategic Noise Maps indicate large area of Site 37 exceeds 55 dB $L_{Aeq,16h}$, and no area below the lower screening criterion.
 - This Site does not align with the adopted criteria.
- Round 4 Strategic Noise Maps indicate large areas of Site 38 exceeds 55 dB $L_{Aeq,16h}$, and no areas below the lower screening criterion.
 - This Site does not align with the adopted criteria.

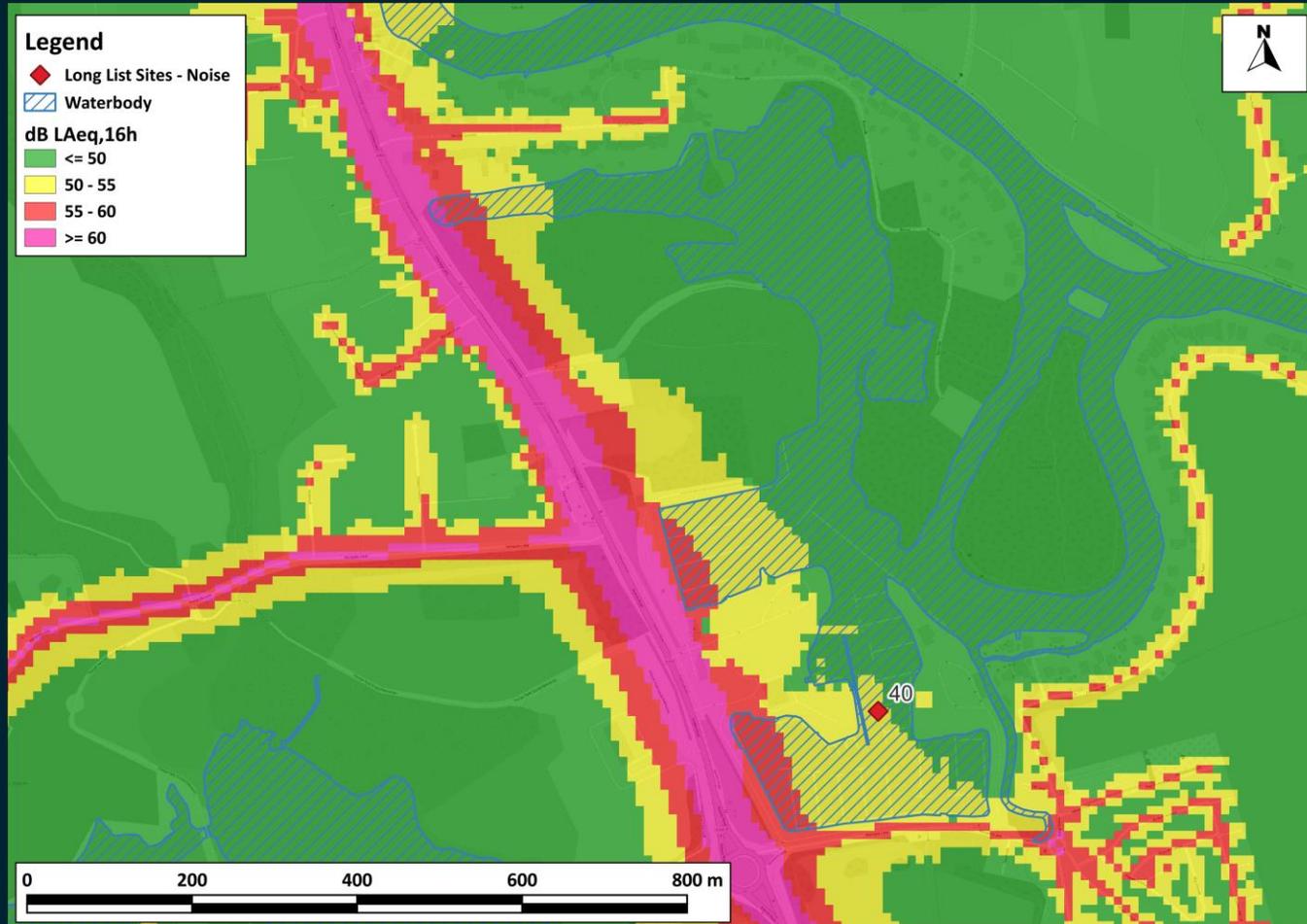
Site – 39 (???)



Summary

- Round 4 Strategic Noise Maps indicate large area of Site 39 exceeds 55 dB $L_{Aeq,16h}$, only 9% of the area below the screening criterion is also below 50 dB $L_{Aeq,16h}$
 - This Site is not ideal and is subject to appreciable noise constraints.

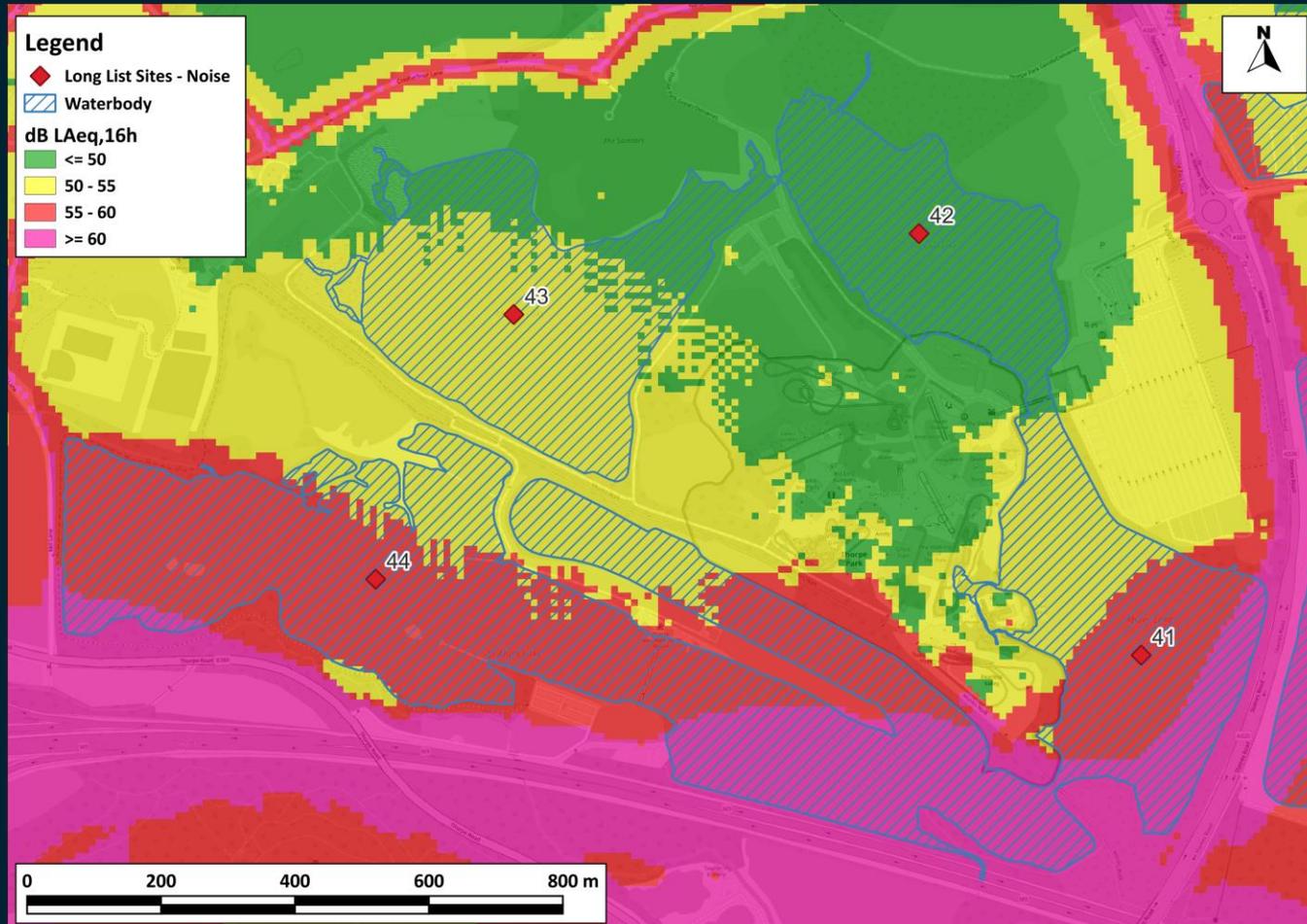
Site – 40 (Penton Hook Marina)



Summary

- Round 4 Strategic Noise Maps indicate small areas of Site 40 exceed 55 dB $L_{Aeq,16h}$, 75% of the area below the screening criterion is also below 50 dB $L_{Aeq,16h}$
 - This Site aligns with the adopted criteria

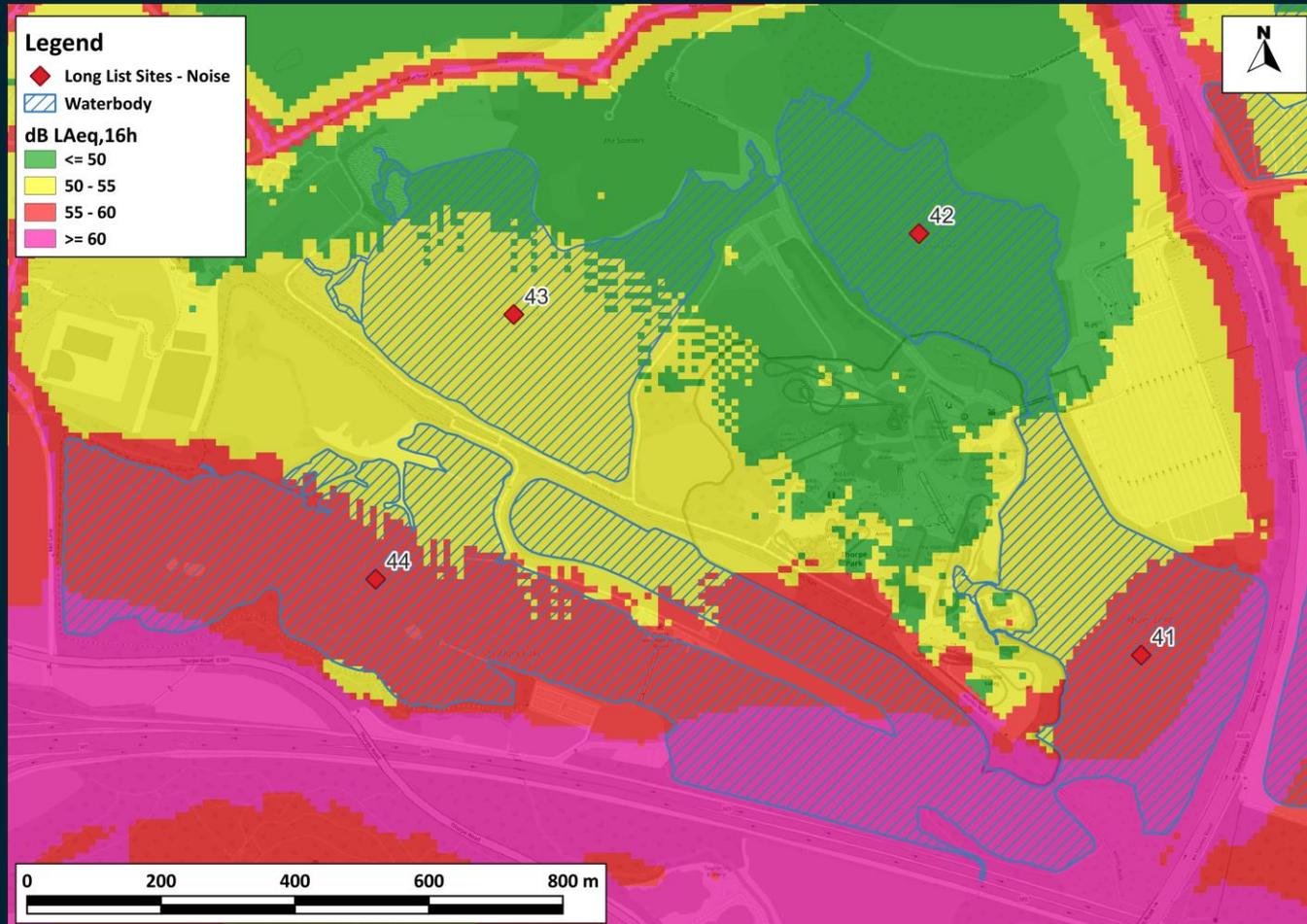
Site – 41 – 44 (Abbey Lake, Fleet Lake, Manor Lake and St Ann's Lake)



Summary

- Round 4 Strategic Noise Maps indicate a large area of Site 41 exceeds 55 dB $L_{Aeq,16h}$,
- only 3% of the area below the screening criterion is also below 50 dB $L_{Aeq,16h}$ however, there are some pockets on land.
 - This Site is not ideal and is subject to appreciable noise constraints.
 - Noise from Thorpe Park may also be a consideration, which is not included in the noise mapping.
- Round 4 Strategic Noise Maps indicate no area of Site 42 exceeds 55 dB $L_{Aeq,16h}$, 100% of the area below the screening criterion is also below 50 dB $L_{Aeq,16h}$.
 - Following review of Heathrow 2023 noise contours air noise levels reach 54 dB $L_{Aeq,16h}$. During westerly operations.
 - This Site aligns with the adopted criteria
 - Noise from Thorpe Park may also be a consideration, which is not included in the noise mapping.

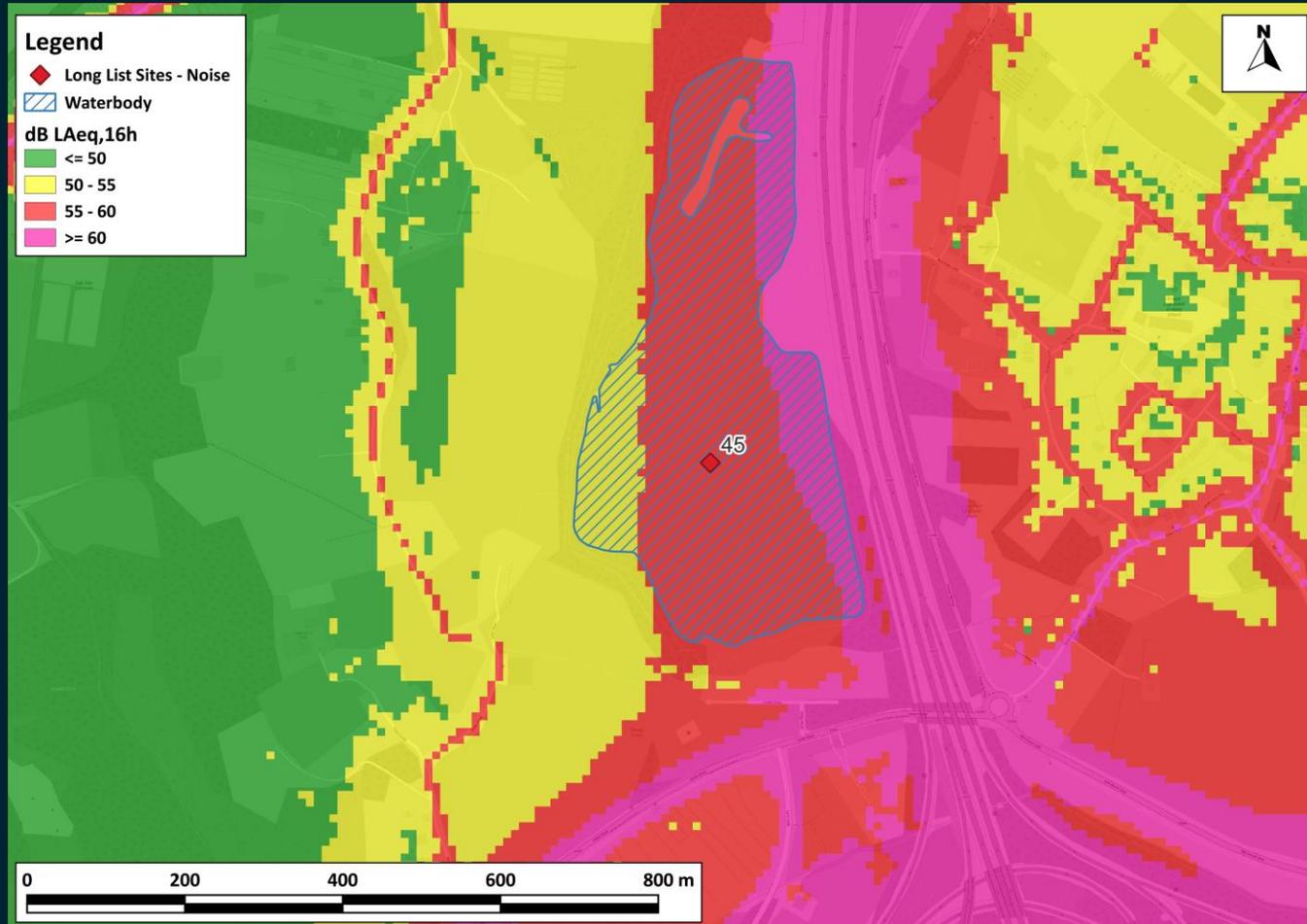
Site – 41 – 44 (Abbey Lake, Fleet Lake, Manor Lake and St Ann's Lake)



Summary

- Round 4 Strategic Noise Maps indicate no area of Site 43 exceeds 55 dB $L_{Aeq,16h}$, 31% of the area below the screening criterion is also below 50 dB $L_{Aeq,16h}$.
 - Following review of Heathrow 2023 noise contours air noise levels reach 54 dB $L_{Aeq,16h}$ During westerly operations.
 - This Site aligns with the adopted criteria
 - Noise from Thorpe Park may also be a consideration, which is not included in the noise mapping.
- Round 4 Strategic Noise Maps indicate a large area of Site 44 exceeds 55 dB $L_{Aeq,16h}$, there is no area below 50 dB $L_{Aeq,16h}$.
 - This Site does not align with the adopted criteria.

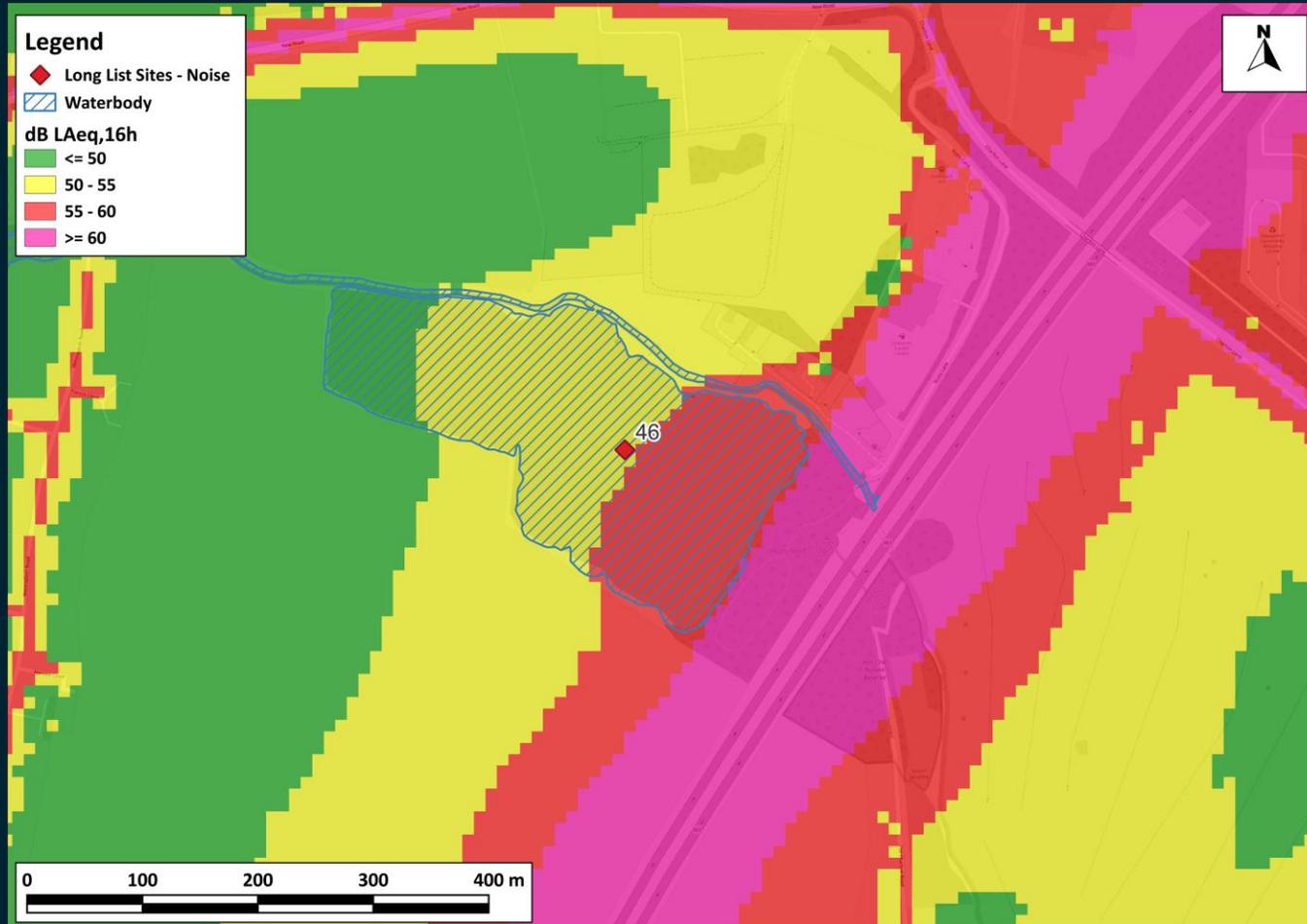
Site – 45 (Longside Lake)



Summary

- Round 4 Strategic Noise Maps indicate large area of Site 45 exceeds 55 dB $L_{Aeq,16h}$, there are no areas below 50 dB $L_{Aeq,16h}$
 - This Site does not align with the adopted criteria.

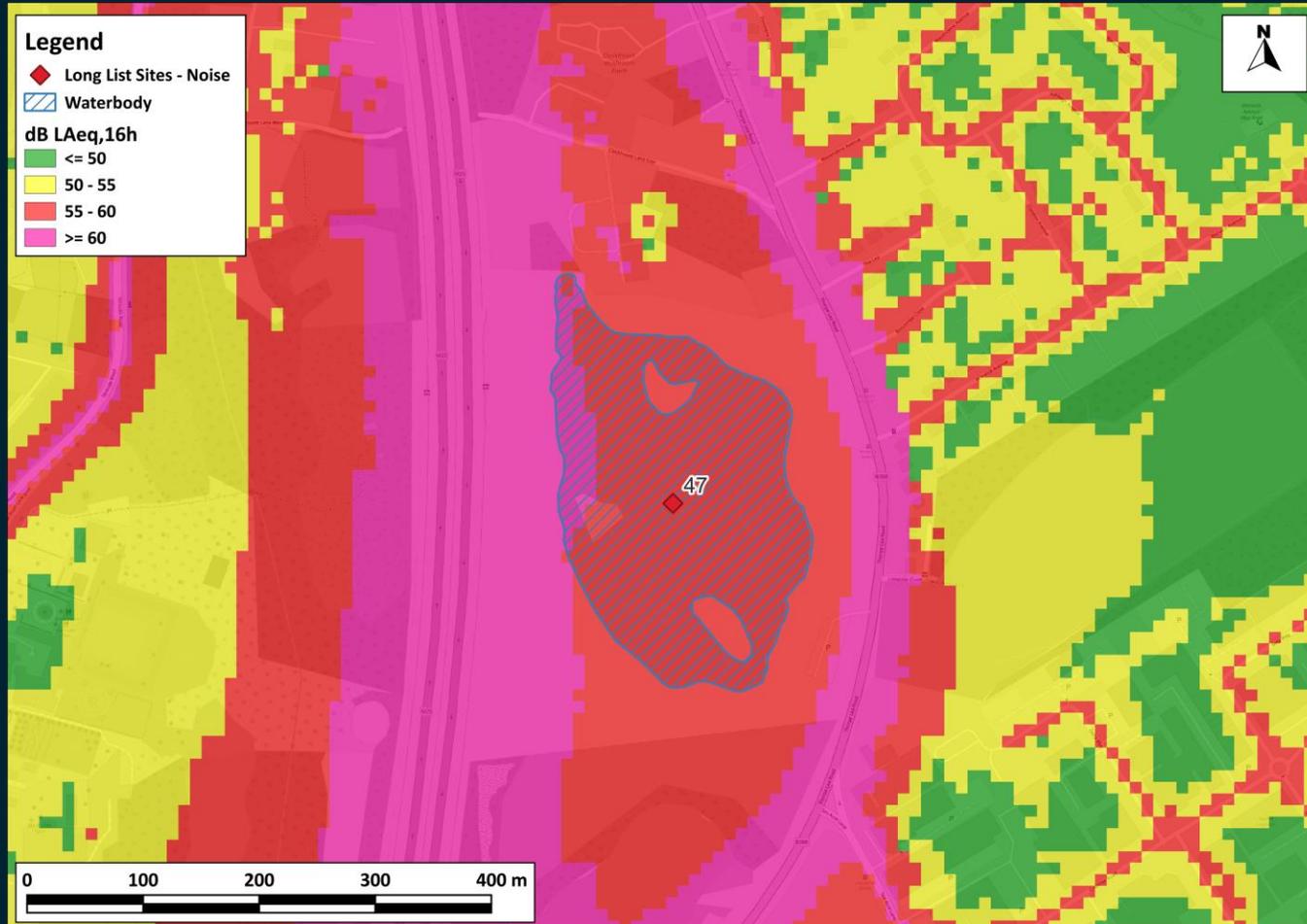
Site – 46 (River Ash)



Summary

- Round 4 Strategic Noise Maps indicate there is only 4.8 Ha of Site 46 below 55 dB $L_{Aeq,16h}$, 32% of the area below the screening criterion is also below 50 dB $L_{Aeq,16h}$ however there are some pockets on land to the west.
- This Site is not ideal and is subject to appreciable noise constraints.

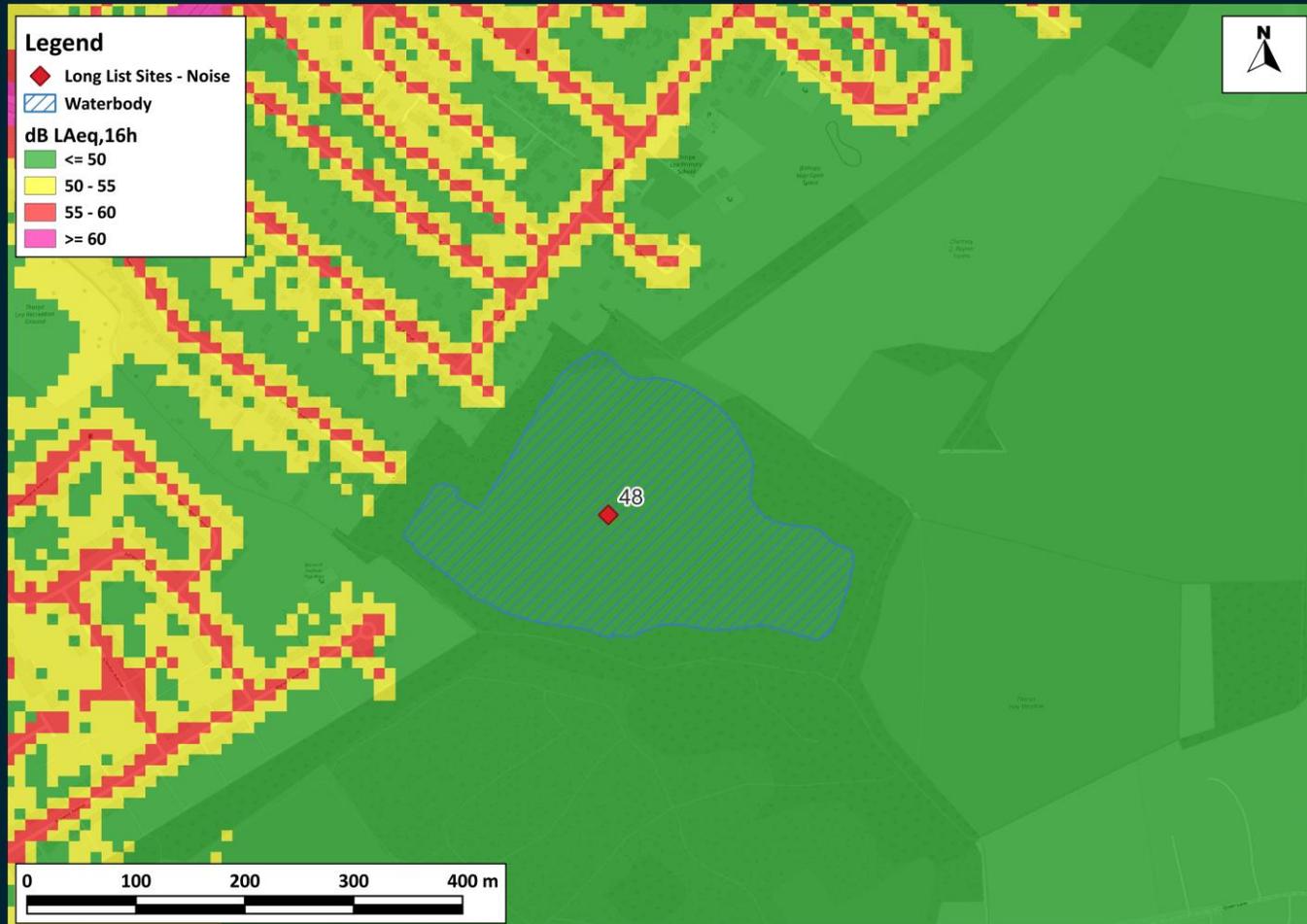
Site – 47 (Thorpe Lea Fishery)



Summary

- Round 4 Strategic Noise Maps indicate the entirety of Site 47 exceeds 55 dB $L_{Aeq,16h}$.
- This Site does not align with the adopted criteria.

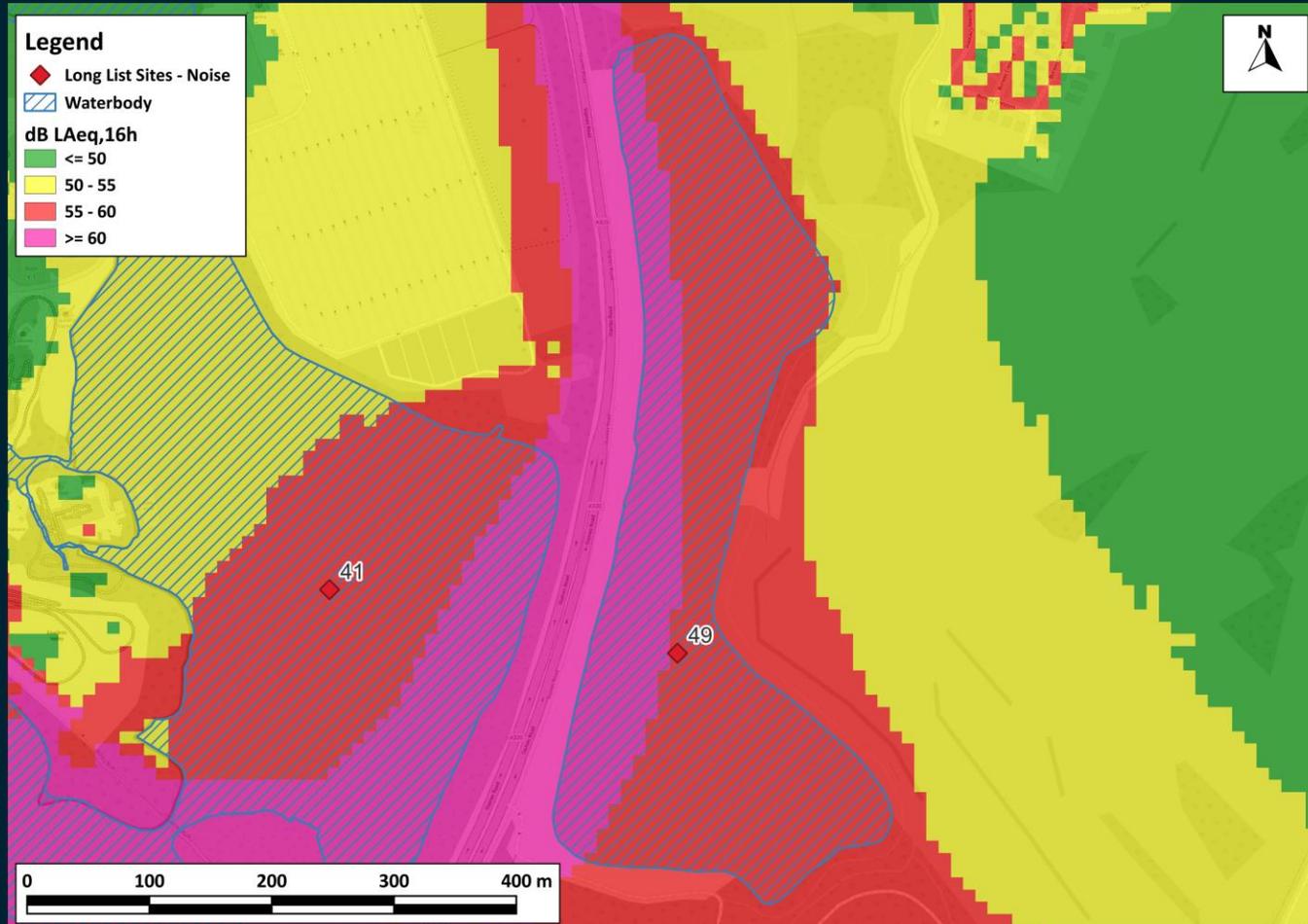
Site – 48 (Mead Lake)



Summary

- Round 4 Strategic Noise Maps indicate the entirety of Site 48 also below 50 dB $L_{Aeq,16h}$.
- However, following review of Heathrow 2023 noise contours air noise levels reach 54 dB $L_{Aeq,16h}$ based on average modal split contours, 54 dB $L_{Aeq,16h}$ during westerly operations.
- Site 48 is also only 6.4 Ha.
- This Site does not align with the adopted criteria.

Site – 49 (???)



Summary

- Round 4 Strategic Noise Maps indicate the entirety of Site 49 exceeds 55 dB $L_{Aeq,16h}$.
- This Site does not align with the adopted criteria.