

**Redevelopment at the Avondale
Drive Estate, Hayes:
Aviation Safeguarding Assessment
Addendum to Report
EAS/P1238/R1/Issue 1**

KLG192/R1/Rev 2

Report prepared on behalf of London Borough of Hillingdon

October 2025



Authorisation Sheet

Report Title:	Redevelopment at the Avondale Drive Estate, Hayes: Aviation Safeguarding Assessment Addendum to Report EAS/P1238/R1/Issue 1
Client:	London Borough of Hillingdon
Project Reference:	KLG192
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Prepared by:	Kate Grant		27 th October 2025
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Summary

This Aviation Safeguarding Report Addendum, prepared by K L Grant Consulting Limited on behalf of the London Borough of Hillingdon supports a Section 73 application for the redevelopment of Avondale Drive Estate (UB3 3NR). Higgins are working with LB Hillingdon (as their development partner) to deliver the regeneration of the Estate.

The Avondale Drive Estate is situated in Hayes, between Avondale Drive and Hitherbroom Park, within an established residential neighbourhood. Its proximity to schools, parks, and extensive open fields with sports facilities renders it a suitable location for family housing. The approved redevelopment proposals include the demolition of three existing council tower blocks and the delivery of approximately 240 new homes, alongside a new pocket park, associated landscaping, and podium parking.

The extant consent is a hybrid planning permission, with a detailed element (Phase 1a) comprising a 30 home residential block (Block A) and an outline element (Phase 1b and Phase 2) with all matters reserved. Following the discharge of relevant planning conditions and the approval of a number of non-material amendment applications, Block A is now complete on site, with handover anticipated in September 2025.

An Aviation Safeguarding Assessment of the proposed development at the site was undertaken in November 2021 to accompany the planning application, setting out the case for its acceptability from the perspective of the requirements for safeguarding operations at London Heathrow Airport and RAF Northolt Aerodrome. Following the approval of the application, amendments have been made to the proposed development and an S73 application is now being submitted. This Aviation Safeguarding Report Addendum has assessed the amended proposed development from an aviation safeguarding perspective.

Review of the revised parameter plans has determined that the following proposed changes to the massing and heights of the outline element of the existing consent are of relevance to this review:

- The proposed outline parameter heights within Phase 1B of the original proposal, located at the eastern end of the site, will increase from 63 m AOD to 66.65 m AOD, with a further identified allowance for roof plant up to 69.05 m AOD.
- The proposed outline parameter heights and overall massing within Phase 2 of the original proposal, located in the middle of the site, will increase slightly from 53.8 m AOD at either end up to a uniform block height of 54.35 m AOD, with a further identified allowance for roof plant up to 56.75 m AOD.

Assessment of these proposed changes has determined that the amended proposed development heights would not result in any material change to the previous physical and operational safeguarding assessment conclusions.

NATS have been consulted regarding the proposed changes and have confirmed that the technical safeguarding assessment conclusions will not be changed as a result of these minor changes to the proposed massing and heights.

Therefore, the amended proposed development remains acceptable from an aviation safeguarding perspective and development up to a maximum height of 69.05 m AOD would not affect the safety or efficiency of aviation operations.

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1 Introduction

This Aviation Safeguarding Report Addendum, prepared by K L Grant Consulting Limited on behalf of the London Borough of Hillingdon supports a Section 73 application for the redevelopment of Avondale Drive Estate (UB3 3NR). Higgins are working with LB Hillingdon (as their development partner) to deliver the regeneration of the Estate.

The Avondale Drive Estate is situated in Hayes, between Avondale Drive and Hitherbroom Park, within an established residential neighbourhood. Its proximity to schools, parks, and extensive open fields with sports facilities renders it a suitable location for family housing. The approved redevelopment proposals include the demolition of three existing council tower blocks and the delivery of approximately 240 new homes, alongside a new pocket park, associated landscaping, and podium parking.

The extant consent is a hybrid planning permission, with a detailed element (Phase 1a) comprising a 30 home residential block (Block A) and an outline element (Phase 1b and Phase 2) with all matters reserved. Following the discharge of relevant planning conditions and the approval of a number of non-material amendment applications, Block A is now complete on site, with handover anticipated in September 2025.

This Section 73 application seeks to revise specific conditions of the original planning consent (reference 76551/APP/2021/4502), including conditions 3 (approved plans), 4 (approved documents), 5 (land use/quantum), 6 (housing mix), 7 (phasing plan), 9 (density), and 10 (building heights).

The proposed Section 73 amendments encompass the following key changes to the outline area:

- An increase of 56 residential units overall, including an uplift of 33 affordable homes.
- Removal of the existing parking court and an increase in podium size, intended to enhance active frontages along Avondale Drive and improve site security.
- A revised height strategy to establish a lower-level frontage along Avondale Drive and mitigate overshadowing impacts on Hitherbroom Park.
- Deletion of vehicle access around Phase 1B, aimed at improving the quality of the public realm.
- Increased separation distances between Phases 1B and 2 to create a new public square, facilitating the relocation of playspace to a safer, off-road position.

An Aviation Safeguarding Assessment of the proposed development at the site was undertaken in November 2021 to accompany the planning application, setting out the case for its acceptability from the perspective of the requirements for safeguarding operations at London Heathrow Airport and RAF Northolt Aerodrome.

This Report Addendum focuses on identifying the relevant proposed changes from the approved scheme from an aviation safeguarding perspective and assessing the potential impact of those changes on the conclusions of the previous assessment. The structure of this Addendum mirrors the original assessment and focuses on the impact of the proposed changes only. It should be read in conjunction with the original Aviation Safeguarding Assessment, P1238/R1/Issue 1, November 2021 [1].

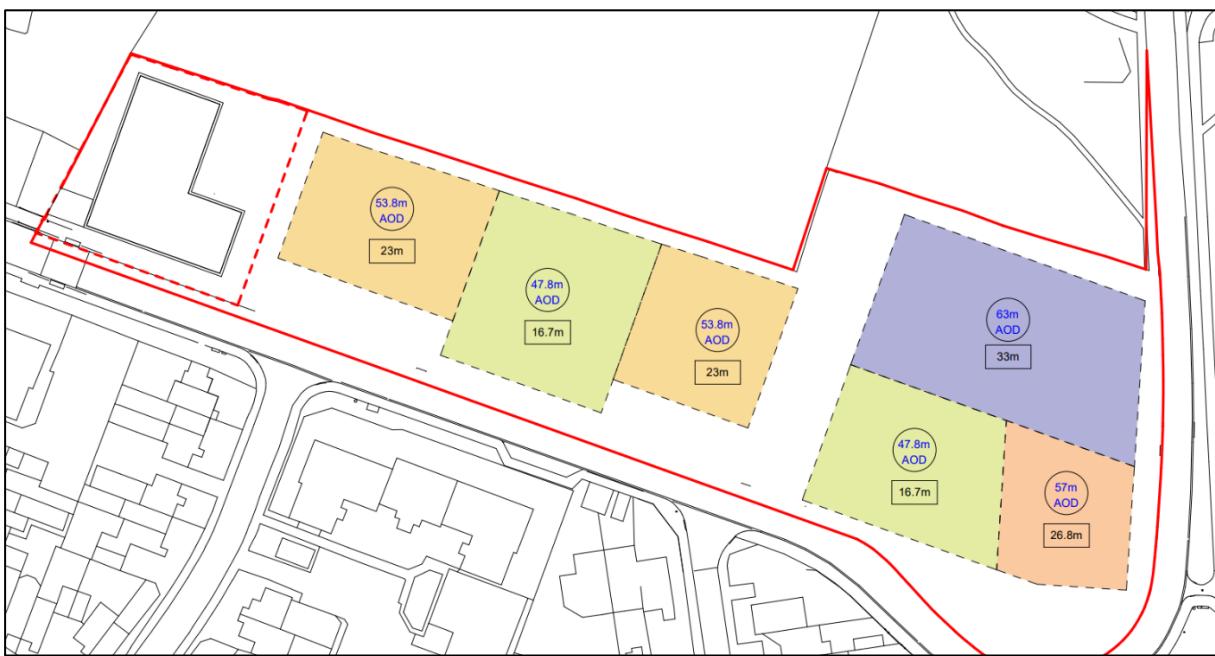
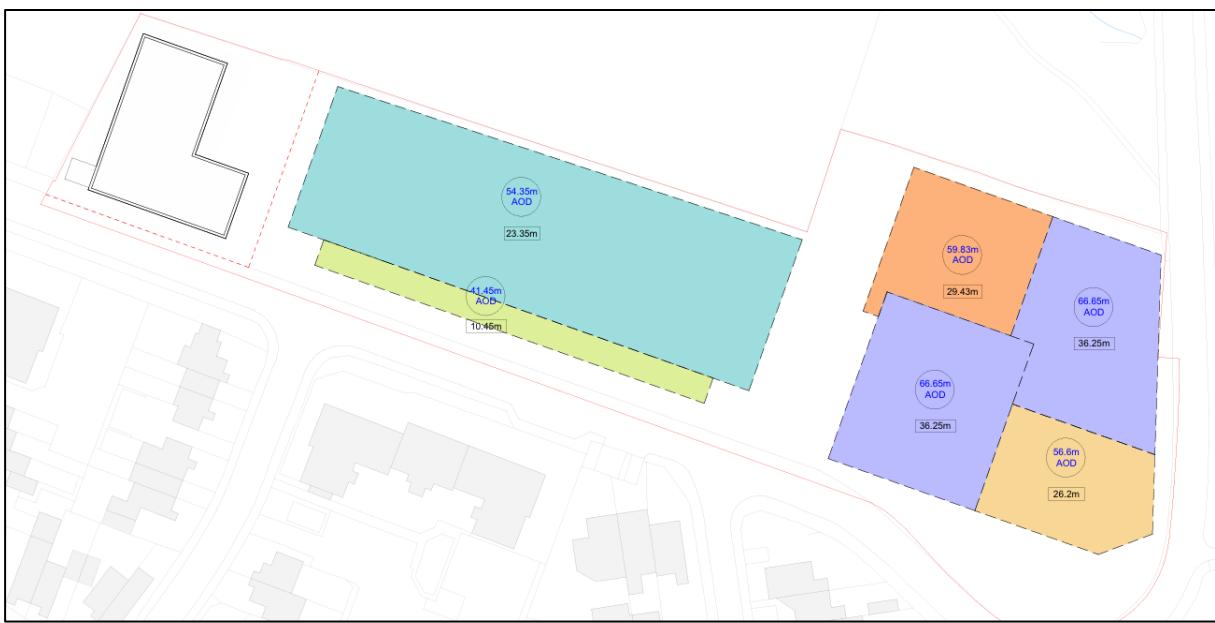
2 Development Proposal

The site location and boundary as described in the November 2021 Aviation Safeguarding Assessment, remains valid.

The amendments to the building maximum parameters of relevance to aviation safeguarding assessment, comprise the following:

- The proposed outline parameter heights within Phase 1B of the original proposal, located at the eastern end of the site, will increase from 63 m AOD to 66.65 m AOD, with a further identified allowance for roof plant up to 69.05 m AOD.
- The proposed outline parameter heights and overall massing within Phase 2 of the original proposal, located in the middle of the site, will increase slightly from 53.8 m AOD at either end up to a uniform block height of 54.35 m AOD, with a further identified allowance for roof plant up to 56.75 m AOD.

For comparison purposes, Figures 1 and 2 show the maximum heights parameter plans for the consented and proposed amended schemes, respectively. It is evident that whilst some of the heights have increased slightly and the massing arrangement has changed, from an aviation safety perspective, the changes do not appear to be significant.

Figure 1: Maximum parameter plan assessed in November 2021**Figure 2: Revised Maximum parameter plan for S73 application**

3 OLS Physical Safeguarding Assessment

No new relevant guidance or policy changes have been identified since undertaking the 2021 Aviation Safeguarding Assessment that would have any material impact on the conclusions of that assessment. Accordingly, the constraints and assessment method presented in the November 2021 Aviation Safeguarding Assessment remain valid for the amended proposed development. An update to CAP738 [2] which has recently been implemented is the need for all proposals to be checked for impacts on Instrument Flight Procedures (IFPs) by the airport's Approved Procedure Design Organisation (APDO). Therefore, whilst the conclusions of the assessment are not expected to have changed, London Heathrow Airport may require the developer to procure this check ahead of planning consent being granted. Depending on resource availability during statutory consultation, this requirement may be addressed by a suitably worded planning condition.

The November 2021 Aviation Safeguarding Assessment is based on the overall maximum proposed height of 63 m AOD and determined that at that maximum height it would be below the OLS at London Heathrow Airport.

For the revised proposals, this conclusion remains unchanged. All of the proposed development will be below London Heathrow Airport's conical surface, and therefore, the development is not expected to have any significant impact on aviation operations at London Heathrow.

The November 2021 Aviation Safeguarding Assessment concluded that the development site is located under the Conical surface of the OLS for RAF Northolt and it was determined to have a height of approximately 122 m AMSL at the site location, significantly higher than the proposed development and higher than the OLS for London Heathrow. Therefore, on this basis, the revised proposals and heights meet this safeguarding criterion and will have no impact on flight operations at RAF Northolt.

4 Operational Safeguarding

The November 2021 Aviation Safeguarding Assessment concludes that "*Given the considerable lateral displacement of the site to the north of these flight paths, it is to be expected that obstacle heights that are substantially higher than the inner horizontal surface can be accommodated without any adverse impact on aircraft operations*"

In this context, it is evident that there will be sufficient headroom above the finished building heights to accommodate construction cranes. The 6 m height increase identified, will have no significant impact on the available headroom from construction cranes across the site. It is evident from google earth satellite images that construction cranes which are significantly higher than the proposed maximum development height, have been erected successfully to facilitate construction at the nearby former Nestle factory site and the North Hyde Gardens site. For example, a crane identified as 20240117129 at the latter site has a listed height of 125 m AOD and is located approximately 1 km closer to the airport.

5 Technical Safeguarding

NATS undertook a Technical and Operation Pre-Planning Assessment in support of the November 2021 Aviation Safeguarding Assessment for buildings up to the maximum height of 63 m AOD [3] This report concluded:

"the risk of the proposal causing the radar signal to be reflected, and remain of sufficient strength to trigger aircraft transponders is considered to be very low."

"It follows that NATS does not anticipate objecting to a planning application for this scheme."

The NATS report identifies some shielding of the development from view of the H10 radar at London Heathrow by existing development and also development that is under construction at the former Nestle factory. This analysis confirmed that the risk of reflections is considered to be very low.

NATS has been consulted and have confirmed that they do not expect the proposed revisions to change the conclusions of their previous study. A record of this consultation is provided in Appendix 1.

6 Other Safeguarding Issues

Lighting

The proposed minor revisions to the outline heights and massing will not have any impact on the potential for lighting at the site to impact aviation operations. Given the site location well to the side of flight paths it can readily be concluded that lighting at it can be expected not to represent any threat to the safety of operations at London Heathrow Airport.

Bird Hazard Management

None of the proposed amendments to the proposed development will impact the bird hazard management risk. As previously concluded, the scope for the introduction of any significant additional bird hazard impacts appears to be very limited such that specific bird hazard management plans would appear not to be necessary.

7 Conclusions

Review of the revised parameter plans has determined that the following proposed changes to the massing and heights of the outline element of the existing consent are of relevance to this review:

- The proposed outline parameter heights within Phase 1B of the original proposal, located at the eastern end of the site, will increase from 63 m AOD to 66.65 m AOD, with a further identified allowance for roof plant up to 69.05 m AOD.
- The proposed outline parameter heights and overall massing within Phase 2 of the original proposal, located in the middle of the site, will increase slightly from 53.8 m AOD at either end up to a uniform block height of 54.35 m AOD, with a further identified allowance for roof plant up to 56.75 m AOD.

Assessment of these proposed changes has determined that the amended proposed development heights would not result in any material change to the previous physical and operational safeguarding assessment conclusions.

NATS have been consulted regarding the proposed changes and have confirmed that the technical safeguarding assessment conclusions will not be changed as a result of these minor changes to the proposed massing and heights.

Therefore, the amended proposed development remains acceptable from an aviation safeguarding perspective and development up to a maximum height of 69.05 m AOD would not affect the safety or efficiency of aviation operations.

References

1 Eddowes Aviation Safety Ltd Report Reference EAS/P1238/R1/Issue 1, November 2021, Redevelopment at the Avondale Drive Estate, Hayes: Aviation Safeguarding Assessment

2 CAP738 Safeguarding of Aerodromes, 3rd Edition, October 2020, Civil Aviation Authority

3 NATS Pre-Planning Assessment Report ref: SG31969 Avondale Drive Estate (AVD) Hayes, October 2021

Appendix 1: NATS Consultation Regarding Amended Proposed Development, 23rd September 2025

From: ROSSI, Sacha <Sacha.Rossi@nats.co.uk>

Sent: 23 September 2025 16:14

To: kate klgrantconsulting.co.uk <kate@klgrantconsulting.co.uk>

Cc: NATS Safeguarding <NATSSafeguarding@nats.co.uk>

Subject: RE: Avondale Drive, Hayes, Updated outline plan [SG31969]

Hi Kate, this amendment is also acceptable. This site is further away, and the increase in height is minimal and this site benefits from the lower part of the radar beam, likely being better shielded by airport obstructions. As such, I don't anticipate our position being affected.

Regards

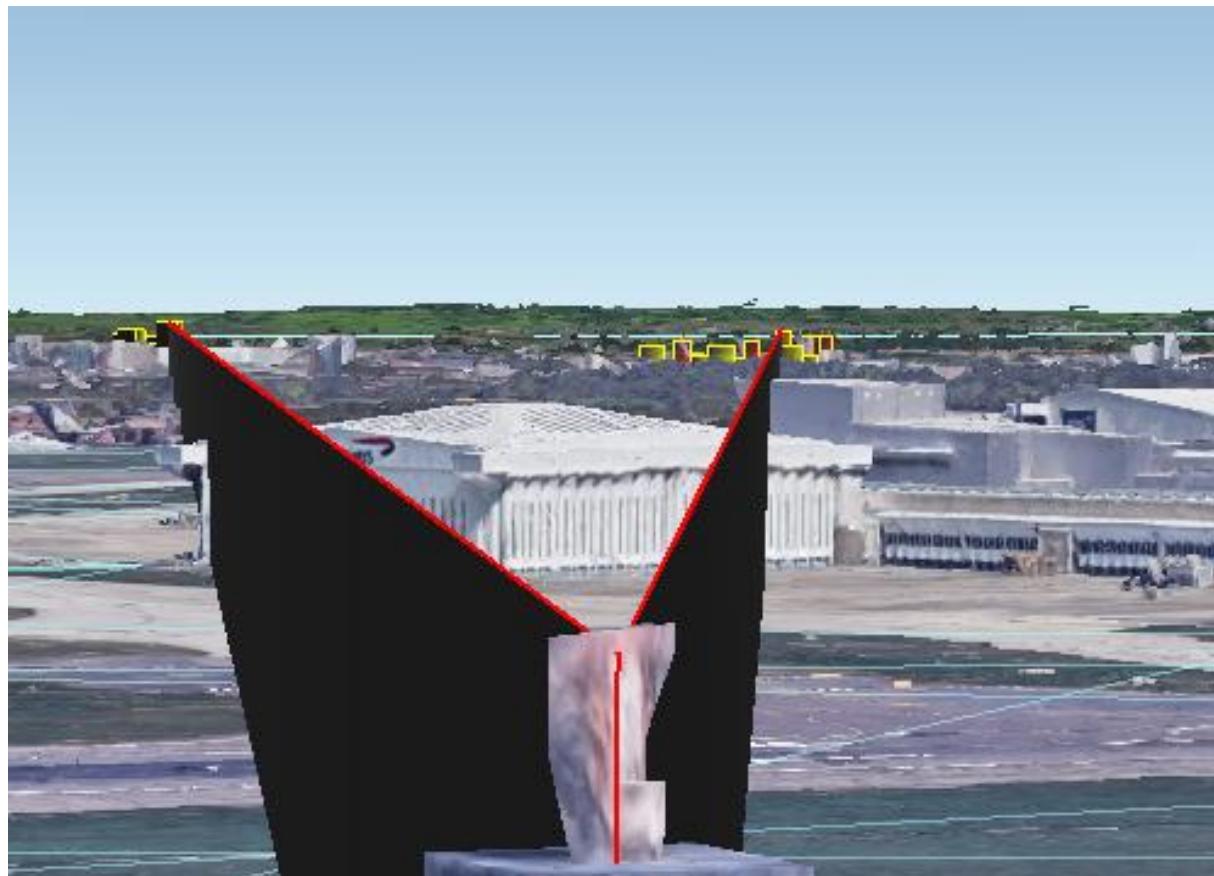
Sacha

NATS Safeguarding Office

NATS

Sacha Rossi

ATC Systems Safeguarding Engineer



From: kate klgrantconsulting.co.uk <kate@klgrantconsulting.co.uk>

Sent: 22 September 2025 16:46

To: ROSSI, Sacha <Sacha.Rossi@nats.co.uk>

Subject: Avondale Drive, Hayes, Updated outline plan [SG31969]

Hi Sacha,

Higgins are preparing an S73 application for some minor amendments to the heights and massing for the Avondale Drive Estate redevelopment.

Mark prepared an aviation safeguarding assessment for the scheme back in November 2021 and it was approved in March 2022. As part of the aviation safeguarding assessment, Mark contracted yourselves to undertake a TOPA assessment. NATs Ref: SG31969.

In 2023, I was approached to provide an Aviation Safeguarding Assessment Addendum in support of their S73 application. We exchanged emails at that time, and you confirmed that the proposed increase in the massing would not change your conclusions regarding the potential impact on H10 radar, i.e. you do not expect this proposed development to impact the radar.

I understand that the addendum in 2023 was never submitted, and Higgins are now looking to submit a section 73 application with slightly increased heights and massing. I have been asked to prepare a revised Addendum to accompany this application.

I attach the original (AVD-PTE-VD-XX-DR-A-10006-1.0-.pdf) and proposed (AVD-PRP-PZZZ-ZZ-GA-A-20004 Parameter Plan 2_P5.pdf) outline plans for comparison. Through conversations with the design team, the revised plan also provides an indication of allowance for roof plant and lift overruns which were not fully considered/accounted for in the outline parameter plan previously. The maximum outline parameter plan height has increased from 63 m AOD to 66.65 m AOD. Roof plant allowance is still to be confirmed but will not be >2.4 m. I suspect that the roof parapet heights are probably of most relevance to you, whereas, for physical safeguarding, I was keen to assess the overall max heights taking account of roof plant and lift overruns.

My expectation is that the proposed changes will not make a significant difference to the overall conclusions of your assessment, as you indicated in the previous report that "the risk of the proposal causing the radar signal to be reflected, and remain of sufficient strength to trigger aircraft transponders is considered to be very low". However, I would appreciate if you could take a look at the revisions to confirm if your previous assessment will remain valid.

The client is looking to submit the application at the end of September (they forgot to get in touch with me earlier), so if you are able to get back to me promptly it would be much appreciated as I would like to be able to issue my Addendum report as soon as possible.

Many thanks,

Kate Grant