

January 2024

London Luton Airport Expansion

Planning Inspectorate Scheme Ref: TR020001

Volume 8 Additional Submissions (Examination)

**8.152 Applicant's Response to Written Questions - Physical
Effects of Development and Operation**

Infrastructure Planning (Examination Procedure) Rules 2010

Application Document Ref: TR020001/APP/8.152

The Planning Act 2008

The Infrastructure Planning (Examination Procedure) Rules 2010

**London Luton Airport Expansion Development Consent
Order 202x**

**8.152 APPLICANT'S RESPONSE TO WRITTEN QUESTIONS –
PHYSICAL EFFECTS OF DEVELOPMENT AND OPERATION**

Deadline:	Deadline 7
Planning Inspectorate Scheme Reference:	TR020001
Document Reference:	TR020001/APP/8.152
Author:	Luton Rising

Version	Date	Status of Version
Issue 1	January 2024	Additional Submissions – Deadline 7

Contents

	Page
1 Response to Examining Authority written questions (Physical Effects of Development and Operation)	1
References	15

1 RESPONSE TO EXAMINING AUTHORITY WRITTEN QUESTIONS (PHYSICAL EFFECTS OF DEVELOPMENT AND OPERATION)

Table 1.1: Responses to the Examining Authority's Written Questions (Physical effects of development and operation)

PINS ID	Question / Response
Design	
PED.2.1	<p>Question:</p> <p>Design Codes At ISH8 [EV15-001], it was stated by LBC that the development of Heathrow Terminal 5 benefited from a Design Code.</p> <p>Given the previous use of a Design Code for the expansion of a UK airport and concerns raised in submissions from parties regarding the generality of the Design Principles [REP5-034], explain further why you do not consider such a mechanism would be necessary (in addition to the reasons provided in your response to Action Point 31 for ISH6) [REP4-070].</p> <p>Response:</p> <p>For the reasons set out in response to Action Point 31 from ISH6 [REP4-070] the Applicant does not consider that a Design Code mechanism is necessary. In addition to those reasons [REP4-070], further clarity is provided supporting the Applicant's position:</p> <ul style="list-style-type: none"> • The Host Authorities and in particular HCC and LBC acknowledge that the Design Principles submitted by the Applicant at Deadline 5 [REP5-034] were similar in terms of the level of detail to those used by other DCO projects (meeting of 3 November 2023) with no further reference made to Design Principles in Deadline 6 documents ([REP6-093] and [REP6-107]). • The Design Principles document, which will remain open until the end of the Examination process, has been strengthened with regard to design quality at Deadline 7. Illustrative material has also been introduced in response to stakeholder requests for a stronger indication of design intent; • The Applicant has now agreed to an independent Design Review process in relation to the key public facing buildings, including Terminal 2, the plaza and the hotel. This approach was advocated by the Host Authorities, including LBC, as providing the most effective mechanism to secure good design at the detailed design stage. This process is set out in the updated version of the Design Principles submitted at Deadline 7. <p>The Applicant therefore believes that the strengthened Design Principles document and the process of independent Design Review for key buildings provides a strong framework for achieving good design and there is no need to add a further layer of Design Codes.</p> <p>In addition to these points the Applicant believes it is important to understand the significant differences between the Heathrow Terminal 5 project and the Proposed Development. Heathrow Terminal 5 is the hub terminal for the UK flag national carrier airline, British Airways (and partner airlines), and comprises a terminal and two satellites handling 32 mppa in 2018. As such it is the gateway terminal for the UK.</p> <p>While recognising that London Luton Airport is the fifth busiest airport in the UK and the Proposed Development is a Nationally Significant Infrastructure Project, Luton Terminal 2 will handle 12 mppa, with the larger number of passengers continuing to be handled in the existing Terminal 1. It is also relevant that the majority of airline users of London Luton Airport are expected to be in the low cost sector and the requirements of these carriers is for a lower cost efficient operation, which is very different from the requirements for Terminal 5 at Heathrow. Although required to meet international airport design standards as set out in Volume II of the Design and Access Statement [AS-124], the building will necessarily have a much simpler form.</p> <p>The Applicant is committed to delivering high-quality, well-designed public buildings in-line with its wider vision for the airport. The approach to design needs to draw on the particular characteristics of the place and the requirements of the airport rather than seeking to replicate design approaches taken by other projects</p>

PINS ID	Question / Response
	<p>which reflect different circumstances. It is also noted that Terminal 2 will not be designed until the early 2030s and it would be wrong to be prescriptive now about such items as materials and finishes and why appropriate references have been included in the Design Principles.</p>
PED.2.2	<p>Question:</p> <p>Design principles The updated Design Principles [REP5-034] contains a number of references to design aspects complying with existing industry standards or technical design criteria, such as, but not limited to, Civil Aviation requirements and the Design Manual for Roads and Bridges (DMRB).</p> <ol style="list-style-type: none"> 1. Given these are existing standards that any detailed design would be required to follow, explain what value adding references to these has to the Design Principles and how it would contribute to securing good design. 2. Has any consideration been given as to whether any of the standards referred to may not be appropriate, or would be contrary to, securing good design and placemaking (ie which require functional solutions that may not be visually appealing)? <p>Response:</p> <p><i>Rationale for including existing industry standards and design criteria</i></p> <p>Although not directly applicable, paragraphs 4.29 to 4.34 of the Airports National Policy Statement (ANPS) (Ref 1) set out the criteria for 'good design' in aviation projects. These include not just visual appearance and aesthetics but also a wider range of technical criteria concerned with energy use, operational efficiency and functionality, addressing regulatory constraints, as well as security, customs and immigration requirements.</p> <p>Paragraph 4.34 specifically states that <i>"The Examining Authority and Secretary of State will consider the ultimate purpose of the infrastructure and bear in mind the operational, safety and security standards which the design must satisfy."</i></p> <p>It is clear from this that securing good design of the Proposed Development needs to address all these criteria. Including all the relevant standards and requirements in the Design Principles document is therefore considered appropriate in achieving good design in the detailed design stages.</p> <p>Whilst a key purpose of the Design Principles is to help secure good design, it is also intended to reassure stakeholders as noted in paragraph 1.1.1 of the version published at Deadline 5 [REP5-034]. The document has been drafted with a view to ease of use by the end-users, i.e., future designers, to signpost them to the relevant standards.</p> <p>Omitting references to relevant industry standards or technical design criteria could create the impression that these standards are less important than those relating to visual appearance. The Applicant's preference is therefore to retain those Design Principles referencing industry standards and technical design criteria.</p> <p><i>Potential for any standards not to be appropriate or in conflict with good design and placemaking</i></p> <p>Standards such as civil aviation guidance and Design Manual for Roads and Bridges (DMRB) (Ref 2) are considered mandatory and as such they are considered appropriate. Civil aviation standards predominantly focus on the layout, scale and requirements of the airfield which is a functional, operational and potentially hazardous space which should not be considered as public realm in comparison to the landside areas of the terminals. Furthermore, the airport licence holder must adhere to these standards when undertaking any changes to ensure approval by the regulator.</p>

PINS ID	Question / Response
	<p>Having said that, in developing the detailed design of public facing buildings and spaces it is very likely that there will be trade-offs to be made between different design objectives and functional or other requirements. Design Principles have therefore been included to safeguard good design objectives where these could conflict with other functional requirements. These include, for example, Design Principles requiring:</p> <ul style="list-style-type: none"> • active frontage along the ground floor of Terminal 2 to create a strong visual relationship with the Plaza; • considered design of the multi-storey car park elevation facing Terminal 2 to ensure successful integration with the Plaza; • security features to be designed as an integral part of the public realm at the Plaza and related spaces; • the integration of public realm design around the hotel and associated car park so spaces relate well to the Coach Station and Plaza; • appropriate architectural surface finishes to Terminal 2, the Terminal 2 Luton DART Station, Coach Station and Hangars to reduce visual impact on views from the wider area. <p>It is considered helpful to identify the full range of Design Principles in a single document so that future design and technical teams can work together to develop detailed designs that achieve the best overall outcome. If there are specific potential conflicts of concern to the ExA or other stakeholders, then the Applicant is open to refining the Design Principles document further to address these.</p>
PED.2.3	<p>Question:</p> <p>Design principles – site wide works With reference to Design Principle SW.01 [REP5-034], explain why the detailed design of earthworks being in accordance with DMRB and which particular aspects of DMRB, would ensure good design.</p> <p>Response:</p> <p>The inclusion of this reference is not in the context of Good Design but rather to signpost future designers to relevant technical standards, as per the response to PED 2.2, above.</p> <p>The DMRB (Ref 3) is a suite of documents which contains requirements and advice relating to works on motorway and all-purpose trunk roads for which one of the Overseeing Organisations¹ is highway or road authority.</p> <p>The reference to DMRB in the context of this project relates to good practice guidance for large earthworks and the general management of ground risks. The process described is aligned to that described in BS EN 1977 (Eurocode 7: Geotechnical Design) (Ref 4) and other British Standards.</p>
PED.2.4	<p>Question:</p> <p>Design principles – highway works Applicant: Design Principle HW.01 [REP5-034] refers to the detailed design being in accordance with the DMRB and Local Authority Highway Design Requirements. Has any consideration been given to design being in accordance with the DfT guidance Manual for Streets, particularly in areas where public realm functions are proposed? If not, why not?</p> <p>Local Authorities: Are there any aspects of Manual for Streets where the design of highway works would be applicable or should be applied in your respective areas? If so, indicate where and if not, why not?</p>

¹ The following organisations (or their successors): National Highways; Transport Scotland; The Welsh Government; Department for Infrastructure (Northern Ireland). NOTE 1: Where any document within the DMRB refers to any of the above organisations, this can be taken to mean the named organisation or its successors. NOTE 2: Where a local highway/road authority decides to use the DMRB in whole or part for development of its own highway/road network, the Overseeing Organisation is defined in accordance with their own procedures. NOTE 3: This can also be another organisation that assumes the roles, responsibilities and duties of the Overseeing Organisation through delegation by the Overseeing Organisation.

PINS ID	Question / Response
	<p>Response:</p> <p>Generally, the highway mitigation is designed with DMRB standards (Ref 3) as the key consideration, as these typically represent the most onerous requirements in terms of visibility and other design aspects, and therefore determine a more onerous Order Limit. However, as the designs are taken through the detailed design process, the Applicant will continue to work with the relevant local authorities in developing the designs, and this could- subject to agreement of relevant local highway authorities- include the application of Manual for Streets Ref 5) principles at certain junctions where appropriate.</p>
PED.2.5	<p>Question:</p> <p>Lighting mitigation The Light Obtrusion Assessment - Part A [APP-052] contains a mitigation measure in section 7.1 for shielding by structure on car parks. Identify where this is included in the Design Principles [REP5-034]. If this hasn't been included, why not and should it be?</p> <p>Response:</p> <p>The structure of the car park has not been detailed at this stage and was only represented within the model as a simple slab under which the luminaires were mounted for the purposes of the simulation. However, in reality the slab will be supported by substantial concrete or steel structural elements which extend down beneath the slab and will be of greater depth than the luminaires. Therefore, these beams will be of sufficient depth to obstruct horizontal light spill from the sides of the car park lighting luminaires.</p> <p>Principle ASF.23 has been added to the Design Principles [TR020001/APP/7.09] submitted at Deadline 7 to reflect the above.</p>
PED.2.6	<p>Question:</p> <p>Errata Confirm whether the 'waste and recycling centre' excluded from Appendix 4.1 Construction Method Statement [AS-082] in the D5 Errata document [REP5-036] is the Tidy Tip. Confirm if as a result of this whether the Tidy Tip should be excluded from the red line boundary and, if so, please update the relevant plans.</p> <p>Response:</p> <p>The 'waste and recycling centre' excluded from Appendix 4.1 Construction Method Statement [AS-082] in the Deadline 5 Errata Report [REP5-036] is not referring to the 'Tidy Tip' (otherwise known as Eaton Green Civic Amenity Site), it is referring to a separate waste and recycling centre that has since been removed from the Proposed Development.</p> <p>The Tidy Tip should remain within the Order Limits due to access road updates (introduced in Phase 2a).</p>
Historical Environment	
PED.2.7	<p>Question: to Historic England</p> <p>Increased frequency of flights and impacts on designated heritage assets Question 14 in [EV15-013] asked the Applicant to explain why the assessment for Luton Hoo in Chapter 10 of the ES [AS-077] has considered how the increased frequency of aviation noise would affect the aesthetic appreciation of that asset (in addition to changes in noise contours) but this has not been considered for other designated assets scoped into the assessment, particularly those located under the flight paths.</p> <p>Should the assessment of effects and harm on designated heritage assets, in particular Registered Parks and Gardens (RPG), consider the implication of increased frequency of flights and how this would or would not impact on the setting of individual assets? If not, why not?</p>

PINS ID	Question / Response
	<p>Response:</p> <p>The Applicant notes that this question is directed to Historic England but considers it may assist the ExA if it also provided a response.</p> <p>The Applicant's methodology for assessing impacts through changes to the setting as a result of noise, is in line with current guidance and best practice and was agreed with statutory consultees including Historic England. The Applicant has considered impacts from all aspects of potential noise, as set out in Chapter 16 Noise and Vibration of the ES [REP1-003]. This includes the increased frequency of aviation noise which forms part of the operational phase. This has been applied to all heritage assets and where a potential impact as a result of noise has been identified, this is identified in the ES.</p>
PED.2.8	<p>Question:</p> <p>Excavation of Roman settlement (HER 10808) Originally the Applicant proposed that the Late Iron Age/ Early Roman and Roman occupation site (Historic Environment Record (HER) 10808) would be preserved in situ. However, following a request from the Archaeology Advisor for CBC, section 9.1 of the Cultural Heritage Management Plan [REP4-020] includes a methodology for archaeological excavation of the site. The Cultural Heritage Gazetteer (CHG) [REP4-017] considers there would be a minor adverse/ not significant residual effect in the ES and a less than substantial harm on this asset.</p> <p>Applicant:</p> <ol style="list-style-type: none"> Given the proposal would now result in the loss of this heritage asset, justify the assessments provided on page 75 of the CHG [REP4-017]. <p>CBC:</p> <ol style="list-style-type: none"> Are you in agreement with the assessments on this asset provided by the Applicant in the CHG? If not, why not? Noting the content of footnote 68 on page 57 of the NPPF, is this non-designated heritage asset of archaeological interest demonstrably of equivalent significance to scheduled monuments? If it is does would this change the conclusions of the assessment and if not, why not? <p>Applicant and CBC:</p> <ol style="list-style-type: none"> Provide justification for the loss of this non-designated heritage asset against relevant policies in the NPPF, Airports National Policy Statement (ANPS) and development plan. Given the proposed excavation of this heritage asset, in accordance with paragraph 205 of the NPPF, would there be an opportunity for the understanding of the asset and archaeology in this part of the Proposed Development to be advanced through measures incorporated into the Strategic Landscape Masterplan? <p>Response:</p> <ol style="list-style-type: none"> The Central Bedfordshire Council (CBC) Archaeologist provided comments on the draft Cultural Heritage Management Plan (CHMP) dated November 2022 and did not agree with the Applicant's initial proposals for preservation in-situ of the Roman settlement site (HER 10808). The CBC Archaeologist raised concerns that the remains are already in a fragile state and the earthworks required including machine movements and construction traffic are likely to result in below ground impacts which could damage these remains. There is the potential that the remains of the Roman Settlement Site (HER 10808) would be physically removed during the proposed works. As such it has been agreed in consultation with the Archaeology Advisor for CBC that the remains will be subject to detailed archaeological excavation and recording in advance of works. The archaeological excavation would result in the permanent loss of the physical remains, however the excavation and subsequent recording of the remains will be used to further enhance understanding of Roman activity in the area. As set out in the ES, this would not minimise the physical impact to the asset, as the archaeological evidence would still be removed, but would compensate for their loss by preserving them by record. The residual effect following the successful completion of the archaeological mitigation would be minor adverse and not significant, as set out in the ES [AS-077] and Gazetteer [REP4-017].

PINS ID	Question / Response
	<p>4. In accordance with paragraph 5.1.95 of the ANPS (Ref 1), the Applicant is encouraged, where opportunities exist, to prepare proposals which can make a positive contribution to the historic environment, and to consider how their scheme takes account of the significance of heritage assets affected. This can include, where possible, considering measures that address those heritage assets that are at risk as a result of the Proposed Development. The Applicant considered mitigation in the form of preservation in-situ for the Roman settlement site (HER 10808) and identified this area for planting and minor landscaping, however the CBC Archaeologist raised concerns that this is still likely to result in below ground impacts due to activities such as plant movements and construction traffic, that could damage these remains. Therefore, preservation by record was agreed with the Applicant and CBC in the form of detailed archaeological excavation and recording, as set out in the CHMP [REP4-020].</p> <p>5. In accordance with paragraph 211 of the National Planning Policy Framework (NPPF) (Ref 6), local planning authorities should require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible. Paragraph 5.210 of the ANPS (Ref 1) sets out that where the loss or whole of a heritage asset's significance is justified, the SoS will require the Applicant to record and advance understanding of the significance of the heritage asset before it is lost (wholly or in part). The extent of the requirement should be proportionate to the nature and level of the asset's significance. The Roman settlement site (HER10808) is assessed as being of low value and the mitigation strategy agreed with the CBC Archaeologist is considered proportionate to the significance of the asset. In addition, an outline public outreach strategy is set out in Section 5 of the CHMP [REP4-020] which requires the Archaeological Contractor to discuss and agree a public outreach strategy with heritage stakeholders including the Archaeology Advisors for Hertfordshire County Council (HCC), CBC and Historic England (where relevant). The aim of the public outreach strategy will be to raise awareness of the significance of heritage asset identified during archaeological excavations undertaken for the Proposed Development, including the excavation of HER 10808, and to encourage the public interaction and engagement with the archaeological process and discoveries arising from the archaeological works. In addition, Section 16 of the CHMP [REP4-020] sets out the Archaeological Contractor's deliverables and specifies that the Archaeological Contractor will ensure that the results of all stages of archaeological investigation are made publicly available. The Applicant considers the proposed measures appropriate and proportionate and no further measures are required to be added to the Strategic Landscape Masterplan [APP-172].</p> <p>Additionally, the Central Bedfordshire Local Plan 'Policy HE1 Archaeology and Scheduled Monuments' sets out the requirement for development proposals to describe the significance of heritage assets and to assess the level of impact that the development proposals will have on those assets. The policy also outlines the Council's requirement for a programme of archaeological investigation where preservation in-situ cannot be achieved. In accordance with this policy, the mitigation strategy of detailed archaeological excavation and recording has been agreed with CBC.</p>
PED.2.9	<p>Question:</p> <p>Written Scheme of Investigation (WSI) for trial trench evaluation in Hertfordshire Paragraph 8.1.2 of the Cultural Heritage Management Plan (CHMP) [REP4-020] states further trial trenching is proposed in areas of the Main Application Site that fall within the administrative area of Hertfordshire County Council (HCC), where the scope was agreed with the Archaeology Advisor for HCC in a WSI prepared by AECOM (2022).</p> <p>Given this is referenced in the application documents, with paragraph 8.1.4 stating that additional trial trenching would be undertaken in accordance with the approved WSI and an updated Site Specific WSI, should the previously approved WSI not form part of the application documents? If not, why not?</p> <p>Response:</p> <p>The Written Scheme of Investigation (WSI) referred to was prepared for the purposes of trial trenching during the pre-examination period to inform studies, assessments and future planning of management. The requirement for further trial trenching is secured within the CHMP [REP4-020] which will require the preparation of its own WSI prepared by the Archaeological Contractor.</p> <p>WSI's are usually valid for 6 months, after which they should be reviewed and updated to ensure compliance with legislation, policy and guidance. Due to the pre-examination trenching being completed and the typical timescale for review, it was not deemed necessary to submit the WSI as part of the application documents.</p>

PINS ID	Question / Response
	Should the Proposed Development gain consent, the Applicant will provide the previously agreed WSI to the Archaeological Contractor undertaking the works at appointment, who will prepare an updated WSI for agreement with the Archaeology Advisor for HCC in advance of the relevant works.
PED.2.10	<p>Question:</p> <p>Trees in Hitchin Pages 79 and 80 of Appendix 14.4: Detailed Landscape Impact Assessment of the ES [AS-086] provides an assessment on the townscape of Hitchin, identifying significant effects due to the permanent loss of some mature trees to accommodate off-site highway improvements (Work Nos. 6e(k), 6e(l) and 6e(m)). Some of these trees are afforded protection due to their location within a Conservation Area,</p> <p>Applicant:</p> <ol style="list-style-type: none"> 1. Confirm how many trees would be lost because of the proposed works and exactly where these trees are located. 2. What the assessment of effects and harm on the Hitchin Conservation Area would be in the absence of this being included on page 49 in the CHG [REP4-017]. <p>Hertfordshire Host Authorities:</p> <ol style="list-style-type: none"> 3. Provide your views on proposed loss of trees, including but not limited to, impacts on the Hitchin Conservation Area and compliance or otherwise with policies in the NPPF and development plan. <p>Response:</p> <p>The exact quantum of trees lost to accommodate Off-site Highway Interventions in Hitchin is not known at this stage. The assessment of effects highlighted in the question assumes the loss of all trees within the Order Limits around the Off-Site Highway Interventions located as shown on Figure 4.2 of the ES [AS-042], this includes the trees in Work No.6e(m) A602 Park Way/Stevenage Rd, including those between the B656 and Hitchin Hill to the immediate north of the junction, and Work 6e(k) A602 Park Way which are in the Conservation Area as show on Figure 10.2 of the ES [APP-150].</p> <p>The character of the Hitchin Conservation Area, as described in the Cultural Heritage Desk-Based Assessment (Appendix 10.1 of the ES [APP-077]), is defined by its development as a historic town from the 12th century and the quality of its architecture. As set out in paragraph 10.7.48 of Chapter 10 Cultural Heritage of the ES [AS-077], it is not anticipated that the minor works associated with the Off-site Highways Interventions, including limited removal of trees will cause a significant effect in relation to the Hitchin Conservation Area.</p>
PED.2.12	<p>Question: to Applicant and all Local Authorities</p> <p>Assessment on harm The CHG [REP4-017] identifies a number of heritage assets where 'less than substantial' harm would arise.</p> <p>What weight should be given to the cumulative impact of several cases of 'less than substantial' harm to heritage assets'?</p> <p>Response:</p> <p>The requirement to assess harm is contained within the NPPF (Ref 6) (paragraph 201) and ANPS (Ref 1) (paragraph 5.913), in addition the PPG (Ref 7) (paragraph 018) provides further guidance on how harm to a heritage asset is to be assessed. This identifies the need to assess the harm to individual heritage assets. The assessment presented within the Appendix 10.2 of the ES Cultural Heritage Gazetteer [REP4-017] identifies less than substantial harm to a range of heritage assets as a result of the Proposed Development. The harm caused is specific to each individual asset and is based on their unique heritage significance. It is therefore not appropriate to raise the level of harm on the historic environment as a whole on a cumulative basis. The NPPF (paragraph 208) and ANPS (paragraph 5.203) places the onus on the decision maker to assess whether the harm identified is outweighed by the benefits of the Proposed</p>

PINS ID	Question / Response
	<p>Development. In line with paragraph 208 of the NPPF 'where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal'. The Planning Statement [REP5-016] summarises the Applicant's assessment of harm to the historic environment at Section 8.13 and concludes at paragraph 8.13.25 that the less than substantial harm arising as a result of the Proposed Development should be afforded limited negative weight in the planning balance. There is no requirement within the policies or guidance to take into account the cumulative harm to the historic environment.</p>
PED.2.13	<p>Question:</p> <p>Policy assessment for Luton Hoo Grade II* RPG Page 218 of the planning policy compliance table [REP5-018] advises that there are a number of designated assets and structures within the RPG, such as the Grade I listed house and Luton Hoo Conservation Area. The compliance commentary states: "While the setting of these assets, namely the park, will experience change as a result of the operational assessment phase of the Proposed Development, there will be no harm to the significance of the assets themselves. Therefore, this matter is considered policy compliant".</p> <p>However, the assessment of impact and harm in the Heritage Statement in Appendix D of the Planning Statement [APP-198] concludes that the Proposed Development would result in 'less than substantial harm' to the significance of this asset. Clarify how this is compliant with Paragraph 200 of the NPPF, which states "Any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting), should require clear and convincing justification" and explain further the 'clear and convincing justification' that exists.</p> <p>Response:</p> <p>The Applicant can confirm that the assessment of impact and harm in the Heritage Statement in Appendix D of the Planning Statement [APP-198] is correct. Less than substantial harm will be caused to the Luton Hoo RPG. As less than substantial harm is caused, paragraph 206 of the NPPF (Ref 6) applies and clear and convincing justification is required. This justification is presented in the Need Case [AS-125]. The NPPF (Ref 6) (paragraph 208) and ANPS (Ref 1) (paragraph 5.203) place the onus on the decision maker to assess whether the harm identified is outweighed by the benefits of the Proposed Development.</p>
PED.2.14	<p>Question:</p> <p>Luton Hoo Grade II* RPG Your response to paragraph 5.4.20 of Central Bedfordshire Council's Local Impact Report states, in respect of noise to Luton Hoo RPG, "The impact of noise from the Proposed Development has been assessed and all reasonably practicable measures have been explored to reduce noise impacts. Further details can be found in Chapter 16 of the ES".</p> <p>Explain exactly what the 'reasonably practicable measures' in Chapter 16 are that would apply to Luton Hoo.</p> <p>Response:</p> <p>The measures that apply to Luton Hoo are those that control aviation noise, as secured by the legally binding framework of noise contour area Limits in the Green Controlled Growth (GCG) Framework [TR020001/APP/7.08] and the aircraft noise controls in the Air Noise Management Plan [TR020001/APP/7.08], both re-submitted at Deadline 7. As Luton Hoo is an outdoor environment, being a Registered Park and Garden, there are no other practical mitigation measures which can be specifically applied, consistent with all other outdoor receptors. As noted in the Applicant's ISH9 post hearing submission [REP6-067] in the context of the Chilterns National Landscape, the principles of GCG are to limit and control the overall adverse noise impacts which means that all receptors experiencing noise impacts will benefit from the controls in GCG but there is no single receptor or area that is specifically addressed by the noise controls in GCG in favour of any other receptor. This principle also applies to Luton Hoo.</p>
PED.2.16	<p>Question:</p> <p>Bendish Conservation Area</p>

PINS ID	Question / Response
	<p>Table 10.11 in Chapter 10 of the ES [AS-077] includes this asset in the impact assessment because the potential for impact arising from aural intrusion was identified. However, there appears to be no specific assessment on this asset in paragraphs 10.9.95 – 10.9.99 of Chapter 10. Page 3 of the CHG [REP4-017] scopes this asset out of the ES because it is concluded that it would not be harmed by the Proposed Development.</p> <ol style="list-style-type: none"> Applicant: Given that this asset would experience a change in noise contours, in addition to its position under the flightpath, explain why no assessment of this asset has been included in paragraphs 10.9.95 – 10.9.99 in Chapter 10 of the ES [AS-077], the reasons for scoping out this asset in the CHG [REP4-017] and how the conclusion on harm was reached. North Herts Council: Is further assessment on the effects of this asset required? If not, why not? <p>Response:</p> <p>Chapter 10 Cultural Heritage of the ES [AS-077] considered the potential for aural intrusion to impact on the significance of all heritage assets within the noise contours; however, only those assets where a change in noise would result in an impact were considered further. The Bendish Conservation Area was identified within the air noise contours resulting from aircraft movements (between Lowest and Significant Observed Adverse Effect Levels) and therefore was noted in Table 10.11. However, the change in noise levels was assessed to be negligible and therefore no harm to the heritage significance caused.</p>
PED.2.18	<p>Question:</p> <p>Hedgerows Work No. 5e proposes planting hedgerows alongside public footpaths across nearby fields as proposed 'additional mitigation' to screen the Proposed Development. However, it was noted during site inspections [EV1-021] that a number of these would be planted within open fields where views of the wider landscape, including towards the airport, could be considered to form part of the enjoyment and recreational value of these receptors.</p> <ol style="list-style-type: none"> Applicant: To what extent has this been considered in determining the suitability of planting hedgerows as a mitigation measure? Local Authorities: Are there any areas of proposed hedgerow located within your areas that raise concern in this respect? <p>Response:</p> <p>The planting of hedgerows provides an opportunity for interconnected landscape and biodiversity enhancements responding positively to and offering opportunities for Landscape Character restoration. Landscape and Visual Impact Assessment (Chapter 14 Landscape and Visual of the ES [AS-079]) provides an objective and not a subjective approach to the landscape and wider views. Mitigation is designed and is intended throughout the construction activities as well as the future operation.</p>
PED.2.19	<p>Question:</p> <p>Hedgerow and hedgerow tree planting to footpath KW 005 The ExA undertook a site inspection along the route of footpath KW 005 where it observed the undulating landform in views towards the airport and existing tree planting [EV1-021]. The ExA also note the content of pages 123-125 of the assessment of effects in Chapter 14.5 of the ES [AS-139] and that the mitigation would be required to reduce significant effects during the construction phases.</p> <p>In addition to PED.2.18 above, the ExA wishes to understand in more detail the justification for additional hedgerow and hedgerow tree planting at this location, given the land is proposed to be compulsorily acquired.</p> <ol style="list-style-type: none"> Applicant: Provide further details of the visibility of the Proposed Development along this footpath, the extent to which planting the hedgerows would affect views of the surrounding landscape and justify in detail why the hedgerow is required. North Herts Council: Do you consider the proposed hedgerow and tree planting works in this location would be required and, if so, why?

PINS ID	Question / Response
	<p>Response:</p> <p>1. The Detailed Visual Assessment [AS-139] identifies construction phase moderate adverse effects to the Users of footpaths near Lye Hill (including users of footpaths Kings Walden 003; Kings Walden 005; and Kings Walden 051) (pg. 123 of Appendix 14.5 Detailed Visual Assessment of the ES [AS-139]). Therefore mitigation planting was identified at this location to manage this effect and the content of pages 123-125 states that in Phase 2a: <i>'Additional hedgerow and hedgerow tree planting proposed adjoining footpath Kings Walden 005 would have established to largely screen the Proposed Development during this assessment Phase. The magnitude of visual impact on this receptor is accordingly judged to reduce to low adverse'</i>. The mitigation in this location has been proposed to reduce a significant moderate adverse effect down to a minor adverse, which is not significant.</p>
PED.2.20	<p>Question:</p> <p>Photomontages Representative Viewpoint 17A (2nd Floor, Luton Hoo House) [REP3-010] refers to Appendix 14.6 of the ES for the corresponding viewpoint information. However, this has not been included in [AS-090] or the preceding [APP-095].</p> <p>Please submit this information or signpost to where in the application documents this information is contained.</p> <p>Response:</p> <p>Appendix 14.7 provides a selection of Accurate Visual Representations. Viewpoint 17A was taken to illustrate the view from an internal private room (2nd floor) of Luton Hoo. It is not however representative of the Users of Luton Hoo Hotel and Parkland for the purposes of the assessment of visual effects (identified as Representative Viewpoints 5, 17, 18, 19, and 44).</p> <p>The statement in the header of pages 18 and 19 of Appendix 14.7 [REP3-010] cross referring to Appendix 14.6 is included in error. This will be corrected and Appendix 14.7 re-submitted at Deadline 8.</p>
PED.2.21	<p>Question:</p> <p>Ash dieback Has the potential effect of ash dieback and the implications this could have on the proposed mitigation measures been considered in the Landscape and Visual Impact Assessment? If not, why not and should it be?</p> <p>Response:</p> <p>- Environmental Statement Appendix 14.3 Arboricultural Impact Assessment [AS-085] identifies 619 Ash trees, 437 of these trees are proposed to be retained with 182no. identified for removal to facilitate the Proposed Development. Therefore, approximately 70% of the identified Ash trees will be retained.</p> <p>The Landscape and Visual Impact Assessment [AS-079] assesses the baseline situation with regards the existing vegetation and the assessment phasing takes into account any proposed loss of vegetation to facilitate Proposed Development, as is normal best practice for assessing the impact of a proposed development. It is not reasonable to attempt to estimate or consider the future loss of other trees due to disease given the variable nature and uncertainty regarding location and extent this may or may not occur in the future, with or without the Proposed Development . Proposed mitigation measures will not include planting Ash trees due to ash dieback.</p>
PED.2.22	<p>Question:</p> <p>Glint and glare Your response at D6 [REP6-056] to CBC D5 submission [REP5-066] states the mitigation proposed in the Glint and Glare assessment [REP4-040] to reduce the impact on airport operations would also reduce any impact that there may be on the sensitive landscape.</p>

PINS ID	Question / Response
	<p>1. Applicant: Explain how you have come to this conclusion in the absence of reference to landscape within the assessment.</p> <p>2. CBC: Does this response address your concerns?</p> <p>Response:</p> <p>The Glint and Glare Assessment [REP4-040] defines the 'Effects of Glint and Glare' (section 3.2). It later describes the 'Angle of Incidence' (section 3.4) and paragraph 3.4.2 notes that <i>"This angle changes as the sun moves across the sky during the day and time of year."</i> Section 3.6 describes 'Types of Receptors'.</p> <p>The Applicant's response at Deadline 6 [REP6-056] notes that the review focussed on <i>"the primary sensitive receptors namely air traffic using the runway, the air traffic control tower and road traffic using adjacent major routes. These receptors are based on best practise guidance."</i> These receptors are the focus of the assessment as the impact of glint and/or glare on these receptors poses a potentially significant hazard, for example a car driver being temporarily unable to see ahead which could be a safety critical matter.</p> <p>The mitigation proposed in REP4-040 would be beneficial to any receptor irrespective of setting, by reducing the area of photovoltaic panels) arranged at a similar angle and thus reducing the extent of reflection.</p> <p>In relation to the impact of reflection on the landscape the Applicant would note:</p> <ol style="list-style-type: none"> 1. A receptor (i.e. a visitor enjoying a site) is unlikely to be impacted by glare in a manner that is safety critical. The receptor would have the option to move or turn away from the reflection, unlike a road user or airline pilot. 2. As noted in Section 3.4 of REP4-040, with the changing angle of the sun any glare would be temporary and of limited duration. 3. The effect of glare is observed on bodies of water or other reflective surfaces so can already be experienced at many locations. <p>The photovoltaics are located within a proposed recess within the landscape and any views experienced will be across and above this installation and will be largely screened by landform, existing and proposed vegetation.</p>
PED.2.23	<p>Question:</p> <p>Viewpoint accuracy Representative Viewpoint 10B [REP3-010] at Phase 1 illustrates Work No. 3a(01) Terminal 1 New Pier C and External Canopy. Given this work is proposed alongside the multi-storey car park which is not evident in the photo, clarify if this annotation is correct.</p> <p>Response:</p> <p>The labelling of Representative Viewpoint 10B [REP3-010] at assessment Phase 1 is correct. The Accurate Visual Representation (AVR) shows a Rochdale Envelope approach to modelling the extents of the proposed built form of Terminal 1 New Pier C. The Multistorey Car Park Work No 4j would be located behind the terminal pier and therefore not visible from Representative Viewpoint 10B.</p>
PED.2.24	<p>Question:</p> <p>Additional viewpoint request at Luton Hoo Appendix 1 of the post hearing submission for ISH6 from CBC [REP3-087] requests additional viewpoints within the grounds of Luton Hoo because Capability Brown's work would be most evident at these positions. A response to Question 17 from the Action Points to ISH8 [EV15-013] from CBC is provided in [REP6-090].</p>

PINS ID	Question / Response
	<p>Please provide your position on this matter and explain any reasons why you agree or disagree with the request.</p> <p>Response:</p> <p>The Applicant considers that Chapter 14 Landscape and Visual of the ES [AS-079] has a sufficient number of representative viewpoints (5no.) to fully consider and assess the effects on Luton Hoo as a receptor. Chapter 10 Cultural Heritage of the ES [AS-077] also provides a full and robust assessment of effects on Luton Hoo. The LVIA Working Group was set up for a wide variety of matters that included the number and locations of viewpoints to inform the LVIA. Further viewpoints are not considered proportionate and would not contribute any further to, or change, the assessment of effects reported in the ES.</p>
PED.2.25	<p>Question:</p> <p>Planning Policy Assessment - NPPF The Policy Compliance Table in Appendix E of the Planning Statement [REP5-018], under the topic of Landscape and Visual on page 240, provides no assessment as to whether the proposed development complies with paragraph 174(a) of the NPPF and the reference to protecting and enhancing valued landscapes, nor paragraph 176 which requires 'great weight' to be given to conserving and enhancing landscape and scenic beauty in Areas of Outstanding Natural Beauty (AONB) (now National Landscapes) amongst other designations.</p> <p>Please provide this.</p> <p>Response:</p> <p>The Applicant considers that NPPF (Ref 6) paragraph 174a (now paragraph 180a in the NPPF as updated December 2023) has limited relevance to the Proposed Development having regard to the distance between the Proposed Development and the Area of Outstanding Natural Beauty (AONB), the topography, the scale of development proposed and the nature of existing intervening and surrounding built form. Although the Proposed Development would not strictly conserve or enhance the landscape and scenic beauty of the AONB, nor would it have any significant impacts upon it with the exception of effects arising from increased aircraft movements over the AONB from Phase 2b onwards [AS-079], and not on its Special Qualities [TR020001/APP/8.144]. Whilst the Proposed Development is not in strict accordance with NPPF 180a, nor is there any strong policy conflict. Notwithstanding that great weight is to be given to conserving and enhancing landscape and scenic beauty of AONBs, the Applicant considers that this issue does not weigh heavily in the planning balance for the Proposed Development due to its limited relevance given the nature and scale of the assessed impacts.</p>
PED.2.26	<p>Question:</p> <p>Planning Policy Assessment - ANPS The assessments against paragraphs 5.219 and 5.222 of the ANPS on pages 73 and 74 of the Policy Compliance Table in Appendix E of the Planning Statement [REP5-018] do not explain whether or not the proposed development would comply with these paragraphs.</p> <p>Please provide this.</p> <p>Response:</p> <p>ANPS (Ref 1) paragraph 5.219 is specifically concerned with development proposed within nationally designated areas and is therefore not directly relevant to the Proposed Development. However, it is engaged by virtue of ANPS paragraph 5.222 which establishes a duty to have regard to the purposes of nationally designated areas when considering applications for projects outside the boundaries of these areas which may have impacts within them.</p>

PINS ID	Question / Response
	<p>ANPS paragraph 5.222 also sets out that development should aim to avoid compromising the purposes of designation, and such projects should be designed sensitively given the various siting, operational, and other relevant constraints.</p> <p>The Proposed Development has been designed sensitively and having regard to various factors, including the distance between the Proposed Development and the AONB, the topography, the scale of development proposed and the nature of existing intervening and surrounding built form. The Proposed Development does not compromise the purposes of the designation of the AONB as set out in the Chilterns AONB Special Qualities Assessment [TR020001/APP/8.144] and is compliant with ANPS 5.222.</p> <p>Similar to the response to PED.2.25 above concerning NPPF (Ref 6) 174a (now 180a), whilst the Proposed Development is not in strict accordance with ANPS 5.219, nor is there any strong policy conflict. Notwithstanding that great weight is to be given to conserving and enhancing landscape and scenic beauty of AONBs, the Applicant considers that this issue does not weigh heavily in the planning balance for the Proposed Development due to its limited relevance given the nature and scale of the assessed impacts.</p>
PED.2.27	<p>Question:</p> <p>Planning Policy Assessment - ANPS With respect to the assessment against paragraph 5.223 of the ANPS on page 75 of [REP5-018] which refers to landscapes and townscapes that are highly valued:</p> <ol style="list-style-type: none"> 1. Explain where in section 14.7 of Chapter 14 of the ES [AS-079], aside from the Chilterns National Landscape, the areas of landscape that are highly valued locally are identified. 2. How the assessment in Chapter 14.9 of the ES, which informs judgements on the value of a landscape receptor and the magnitude of impact on a landscape receptor, demonstrates compliance with policy. <p>Response:</p> <p>Areas of landscape that are highly valued locally and/or protected by a local landscape/visual designation are identified in Section 14.7 of Chapter 14 Landscape and Visual of the ES [AS-079], in paragraphs; 14.7.14, 14.7.38, 14.7.39. Figure 14.7 Landscape and Visual Impact Assessment (LVIA) Constraints Plan [REP4-037] shows the locations of the relevant local landscape designations within the study area. Areas of landscape that are highly valued locally are also identified in the descriptions of the landscape receptors set out in Appendix 14.4 Detailed Landscape Assessment of the ES [AS-086]. These include: LBLCA Area 4c (Lea Valley Lower) which notes that the southern end of the area is designated as an Area of Local Landscape Value (ALLV); LBLCA Area 13 (Wigmore Rural) which notes that part of the area is an ALLV; and LBLCA Area 22 (Stockwood Park) which notes the area includes an Area of Great Landscape Value (AGLV).</p> <p>The assessment in Chapter 14 Landscape and Visual of the ES [AS-079] has considered the locally designated landscapes as part of the assessment of effects on landscape receptors, which include landscape character areas. These areas are based on character areas defined in published local landscape character studies which have informed local planning policy. For example, landscape receptor LBLCA13 (Wigmore Rural) is based on a landscape character area defined in the Luton Landscape Character Assessment (Ref 8) which was used to identify areas of local landscape importance which have been included in the Luton Local Plan (the ALLV's and ALGV's referred to above). The Assessment therefore complies with the requirement of para. 5.223 of the ANPS (Ref 1) to consider landscapes and townscapes that are highly valued locally.</p>
PED.2.28	<p>Question:</p> <p>Chilterns AONB Draft Special Qualities Assessment [REP6-075] To what extent has consideration been given to the Landscape Institute's 'Tranquillity – An Overview, Technical Information Note 1/17' or guidance from the local authorities, such as the Central Bedfordshire Tranquillity Strategy, when considering relative tranquillity in the draft assessment?</p>

PINS ID	Question / Response
	<p data-bbox="457 300 1590 331">Should the assessment incorporate guidance from these documents? If not, why not?</p> <p data-bbox="457 443 617 474">Response:</p> <p data-bbox="457 531 2599 667">The methodology used in the Draft Chilterns AONB Special Qualities Assessment [REP6-075] has had regard to the Landscape Institute's 'Tranquillity – An Overview, Technical Information Note 1/17 (Ref 9). Tranquillity has been factored into the assessment of effects on landscape receptors (specifically where identifying the value of a landscape receptor and when considering the magnitude of landscape impacts on that receptor) as outlined in Section 3 of the Draft Special Qualities Assessment.</p> <p data-bbox="457 684 2599 821">LI Technical Information Note 1/17 (Ref 9) and the Central Bedfordshire Tranquillity Strategy (Ref 10) both acknowledge that there is no overarching methodology on how to quantify tranquillity (or the impacts on it). The Draft Special Qualities Assessment has therefore utilised sources such as CPRE tranquillity and dark skies mapping and Natural England's indicators of relative tranquillity to inform the assessment on relative tranquillity as shown in Figures to 6.7 to 6.14 of that draft assessment [REP6-075].</p> <p data-bbox="457 837 2599 869">The Applicant notes that the final version of the Chilterns AONB Draft Special Qualities Assessment has been submitted at Deadline 7 [TR020001/APP/8.144].</p>

REFERENCES

- Ref 1 Department for Transport (2018) Airports National Policy Statement (ANPS)
- Ref 2 National Highways. Design Manual for Roads and Bridge. Online. London
- Ref 3 Standards for Highways, Design Manual for Roads and Bridges (DMRB)
www.standardsforhighways.co.uk/dmrb
- Ref 4 The European Union Per Regulation 305/2011, Directive 98/34/EC, Directive 2004/18/EC, Eurocode 7: Geotechnical Design
- Ref 5 Department for Transport, Manual for Streets, online, London
- Ref 6 Department for Levelling Up, Housing and Communities (2023) National Planning Policy Framework (NPPF)
- Ref 7 Department for Levelling Up, Housing and Communities; and Ministry of Housing, Communities and Local Government (2019) Planning Practice Guidance (PPG)
- Ref 8 The Greensand Trust (2014) Luton Borough Landscape Character Assessment
- Ref 9 Landscape Institute (2017) Technical Information Note, Tranquillity – An Overview, January 2017
- Ref 10 Central Bedfordshire Council (2022) Central Bedfordshire Tranquillity Strategy Supporting the Assessment of Relative Tranquillity, Final report Prepared by LUC August 2022